

# Fall 2018 Portfolio Report

UConn Student Managed Fund

November 30<sup>th</sup>, 2018

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# UCONN

SCHOOL OF BUSINESS

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# Portfolio Overview

## Investment Managers

Richard Traub  
Aniello Infante  
Joel Thomas  
Anna Simos

Jilleen Livingston  
Daztar Pagdiwala  
Kayla Reuben

Ryan Harrington  
Stephen Grammatico  
Shirley Gu

## Fall Officer Positions

**Co-Lead Managers:** Aniello Infante & Richard Traub

**Portfolio Manager:** Joel Thomas

**Communications Manager:** Anna Simos

**Digital Media Manager:** Jilleen Livingston

**Undergraduate Fund Supervisor:** Paul Gilson

**Fund Director:** Chinmoy Ghosh

## Investment Philosophy

Team Gilson follows a value investing philosophy, outlined by its creators Benjamin Graham and David Dodd and perfected by Warren Buffett. We seek to take this Buffett-approach in our investment decisions, by finding established companies trading at a discount to their intrinsic values with a suitable margin of safety. We perform both quantitative and qualitative analysis on our potential investments before adding them to our portfolio. Our quantitative research aims to evaluate a company's financial performance on both a relative and standalone basis, through the use of several standard valuation methodologies. Further, our qualitative research focuses on a company's management team, competition within its industry, as well as the business model and accompanied risks. This diligence extends beyond measurable characteristics, incorporating intangible assets such as brand quality and intellectual property. Additional market events and macroeconomic conditions, as well as a company's corporate, social, and governance practices, are taken into account when considering an investment in a company.

## Investment Strategy

Our investment strategy aims to identify and invest in undervalued companies with strong competitive advantages while assuming a 10-year holding period. In order to evaluate the performance of the Student Managed Fund, our team will compare our portfolio's returns to the

return of the S&P 500 Index. The table below outlines the quantitative and qualitative factors that drive our investment strategy through a bottom-up approach.

<b>Quantitative</b>	<b>Qualitative</b>
<ul style="list-style-type: none"> <li>● Return on Invested Capital</li> <li>● Dividend Yield</li> <li>● Share Repurchases</li> <li>● Margin of Safety</li> <li>● Operating Margin</li> <li>● Debt/EBITDA</li> <li>● Price/Earnings (relative to industry)</li> <li>● EPS and Revenue Growth</li> </ul>	<ul style="list-style-type: none"> <li>● Catalysts for Growth</li> <li>● Market Share</li> <li>● Competitive Advantages</li> <li>● Quality of Management</li> <li>● Brand Strength</li> <li>● Adaptability and Innovation</li> <li>● Scalability</li> <li>● Economic Cycle</li> <li>● Industry Outlook &amp; Trends</li> </ul>

### **Risk Management**

Risk management plays an important role in our investment approach and strategy. The Student Managed Fund places a strong focus on minimizing the following risks:

**Business Model Risk:** Unsustainable or easily replicated business models

**Balance Sheet Risk:** Unsuitable leverage levels for a company in its industry

**Management Risk:** Poor or unreliable management of the company

**Valuation Risk:** Companies trading at inflated prices relative to a reasonable estimate of its true business value

**Obsolescence Risk:** Companies with products or services that risk being non-existent due to competition, regulation, or consumer trends

**Aggregation Risk:** A portfolio with holdings that share too many of the same risks

Through our rigorous investment selection and screening process, we strive to address all of these risk factors. Two factors, in particular, to highlight for our team are valuation risk and aggregation risk. With our Warren Buffett approach of investing in firms trading below their intrinsic value, we assume a ten-year investment horizon. Nine years into the longest bull market in history, the risk of inflated valuations is high and has led to significant short-term selloffs throughout our holding timeline. To address this, we have a stop-loss of 20% on our investments with a beta less than or equal to 1 and a stop-loss of 25% on our investments with a beta greater

than 1. If a security hits its stop-loss, but we still see a significant discount to the intrinsic value and the original investment thesis holds, then the security is re-evaluated for repurchasing at a new price. We continue to look at the long-term investment horizon, but limit our risk and losses through this stop-loss.

Team Gilson addresses aggregation risks through sector allocation and security selection. Each team member is assigned to two sectors to research throughout the semester, and potentially find attractive investments in. However, our team did not limit each student manager to pitching stocks from that specific sector -- a function of sector weights within the S&P 500, our dedication to a Warren Buffett investing approach, and our views on particular sectors and industries that will be addressed further in this report. We do, however, plan to cover most of the sectors within the S&P 500 once fully invested in order to further limit aggregation risk.

Our portfolio is currently over-exposed to the industrial sector, with a 19% allocation, but the firms themselves represent significantly different business models, from waste collection and disposal to aerospace and defense manufacturing. Because of this large exposure, however, we do not plan to invest in more companies within the industrial sector.

It is of note that our portfolio holdings are only large-capitalization equities. While not entirely limited to this approach, these holdings are a result of our investment criteria, risk tolerance, and role within the University of Connecticut Foundation's equity portfolio. We do however recognize the risks associated with only investing in securities of this market capitalization threshold.

### **Our Investment Process**

Our investment process begins with the research done by the managers assigned to each sector. While managers are not required to pitch a stock from their sector, we wanted to ensure that we first searched for investment opportunities in diversified industries. We thus employ a bottom-up approach, in which the focus is on successful businesses and value-investments, instead of a rigid top-down structure. We then established a pitch schedule in which two managers would work together and provide themselves significant time to research and prepare their finalized presentation.

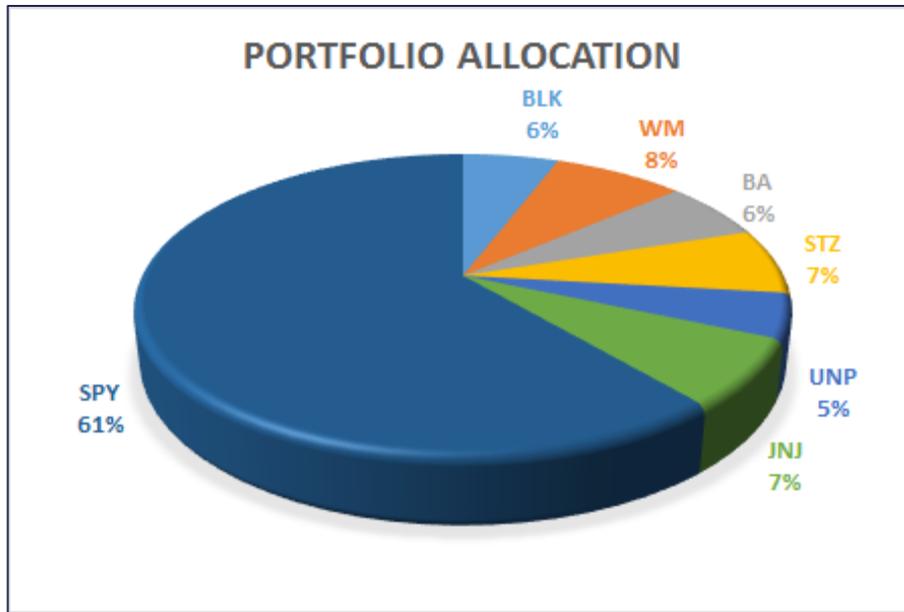
Once a stock has been decided upon by the two managers, it is pitched to the rest of the managers and Professor Gilson during our weekly meeting. Following the presentation, we engage in a Q&A session in which the investment thesis, business model, valuation assumptions and risks are challenged and addressed. If all questions are answered and the team does not need more information provided, the team does a silent vote on the investment idea to mitigate groupthink risk. A company must receive at least 7 out of 10 manager votes to be invested in.

Following the decision to invest, we then determined the allocation on the basis of the percentage of a “full stake”. In order to contribute alpha while also maintaining a diversified portfolio of equities, we set our target estimate of securities invested in by the end of the year at 15. With the current balance of our portfolio, this computed to an \$80,000 investment if the securities were equal weighted, or a roughly 6.25% allocation. An investment receiving 10 out of 10 votes would receive 100% of this full stake, 9 votes for 90%, 8 votes for 80%, and 7 votes for 70% of this stake. This target of 15 holdings is not an absolute constraint, but it provided our team with a methodology of asset allocation that reflected the team’s confidence in the investment itself. The final aspect of the investment process was the actual placement of the investment order. Adhering to the principles of value investing, the price at which the security is bought is a critical component, particularly when the current market conditions are taken into account. Short-term volatility in security prices led us to pursue more conservative order methods instead of market orders or one total order. The type or timing of the order would also depend on the volatility of the stock itself, as well as any significant short-term price changes.

Our primary approach was to split the investment into two orders, with 50% or 66.6% of the order being placed at market prices after the pitch was passed. We would then wait to invest at an agreed-upon lower price point via a limit order, in order to lower our cost-basis. These limit orders were evaluated on at least a weekly basis during our regular meetings, and if the stock did not reach our target purchase price within a decided amount of time (varying based on the stock in question), we would place a market order for the remainder. The number of tranches that we would divide the orders into would depend on the stock itself, with less stable stocks requiring more tranches. This approach played a significant role in lowering our cost-basis for each investment.

### **Equity Portfolio & Allocation**

Team Gilson has 38.6% of the portfolio currently invested, with the remaining 61.4% in the SPY ETF. Our cash balance contributes a negligible amount to our portfolio, representing less than one basis point. We also have an outstanding limit order of \$72,000 for NVDA, which will increase our active weight to 45.3% once filled. We have 6 total holdings outside of the S&P 500 ETF; the largest of which is Waste Management (7.8%, \$83,910), followed by Johnson and Johnson (7.2%, \$77,120). The average allocation of these positions is approximately 6.4% of the overall portfolio. We are well-positioned to attain our goal of 100% investment in individual equity holdings by the end of the spring semester. Our current allocation is outlined in the following figure.



## Performance

The charts below depict the performance of the portfolio from September 26th, 2018 to November 30th, 2018.

## **Total Current Portfolio:**

*Total Portfolio Unrealized Gains*

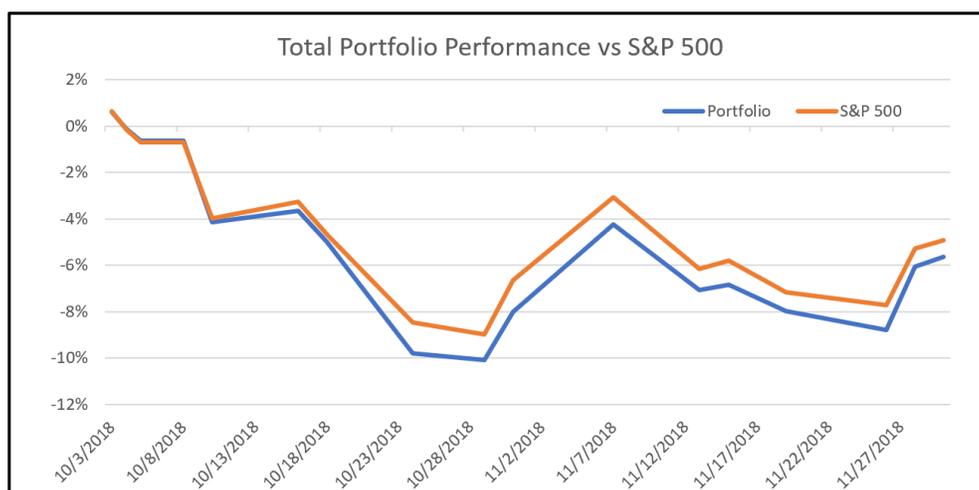
Ticker	Name	Shares	Price	Cost Basis	Market Value	% of Portfolio	Change	% Change
BLK	BLACKROCK INC	142	\$ 428.01	\$ 62,004.30	\$ 60,777.42	5.65%	\$ (1,226.88)	-1.98%
WM	WASTE MANAGEMENT INC	895	\$ 93.75	\$ 80,039.85	\$ 83,906.25	7.80%	\$ 3,866.40	4.83%
BA	BOEING CORP.	200	\$ 346.76	\$ 71,576.00	\$ 69,352.00	6.45%	\$ (2,224.00)	-3.11%
STZ	CONSTELLATION BRANDS INC	371	\$ 195.76	\$ 74,177.74	\$ 72,626.96	6.75%	\$ (1,550.78)	-2.09%
UNP	UNION PACIFIC CO.	335	\$ 153.78	\$ 49,563.25	\$ 51,516.30	4.79%	\$ 1,953.05	3.94%
JNJ	JOHNSON & JOHNSON	525	\$ 146.90	\$ 76,135.50	\$ 77,122.50	7.17%	\$ 987.00	1.30%
SPY	SPDR S&P 500 ETF	2397	\$ 275.65	\$ 671,847.94	\$ 660,733.05	61.40%	\$ (11,114.89)	-1.65%
				\$1,085,344.58	\$ 1,076,034.48	100%	\$ (9,310.10)	-0.86%

## **Equity Current Portfolio:**

*Equity Portfolio Unrealized Gains*

Ticker	Name	Shares	Price	Cost Basis	Market Value	% of Portfolio	Change	% Change
BLK	BLACKROCK INC	142	\$ 428.01	\$ 62,004.30	\$ 60,777.42	14.63%	\$ (1,226.88)	-1.98%
WM	WASTE MANAGEMENT INC	895	\$ 93.75	\$ 80,039.85	\$ 83,906.25	20.20%	\$ 3,866.40	4.83%
BA	BOEING CORP.	200	\$ 346.76	\$ 71,576.00	\$ 69,352.00	16.70%	\$ (2,224.00)	-3.11%
STZ	CONSTELLATION BRANDS INC	371	\$ 195.76	\$ 74,177.74	\$ 72,626.96	17.49%	\$ (1,550.78)	-2.09%
UNP	UNION PACIFIC CO.	335	\$ 153.78	\$ 49,563.25	\$ 51,516.30	12.40%	\$ 1,953.05	3.94%
JNJ	JOHNSON & JOHNSON	525	\$ 146.90	\$ 76,135.50	\$ 77,122.50	18.57%	\$ 987.00	1.30%
				\$ 413,496.64	\$ 415,301.43	100%	\$ 1,804.79	0.44%

## **Total Portfolio Performance vs. S&P 500**



The current market conditions and the timing in which our trades were placed had a significant impact on our overall portfolio. While we attempted to mitigate some of the price volatility incurred by stocks since the beginning of our investing period (through the use of cost averaging), we experienced a significant decrease in value due to buying stocks at the market peak. For example, we purchased BlackRock first with one half at \$472, and the other half at \$402, but the stock dropped below \$375 a few weeks later. It has since rallied 11% to its current price, and had the BlackRock pitch been later in the pitching schedule, we would be facing a significant gain instead of a loss. Timing the market is not our philosophy, however, which is why we look at undervalued companies that we believe have significant long-term intrinsic value. The overall market, as well as individual stock price volatility, can cause unrealized losses in the short run, but our underlying investment theses remain poised for long-term price appreciation.

### **Individual Stock Performance**

Overall, our portfolio has underperformed the S&P 500 by approximately 0.82%, returning -5.53% compared to the benchmark's -4.71%. This can be attributed to a few individual holdings that depreciated significantly amongst the market volatility and global events. Our portfolio laggard was Nvidia (NVDA), which hit our stop-loss of 25% (share price of about \$199) on October 24th, 2018. The semiconductor industry was found to face issues of oversupply and weakening demand, catching the market by surprise and causing investors to sell out of their positions rapidly. Our long-term investment thesis of Nvidia remains in-tact, and we remain poised to re-enter our position at a favorable price. We realized a loss of \$22,954 on this investment, significantly impacting our overall portfolio performance. Another underperforming stock was Boeing (BA). Our investment in Boeing occurred on the exact same day as the news

was released regarding the Lion Air Indonesia Boeing 737 plane crash. Investors have been concerned regarding Boeing's accountability for this accident, driving the price down significantly more than the market in the short-term. Our long-term investment thesis has not changed, however.

The leading holding of our portfolio has been Waste Management (WM), which has returned 4.83% and significantly outperformed the S&P over that time-span. We remain very confident in Waste Management as an investment, and it currently occupies the largest allocation of our portfolio.

## **Economic Overview & Impact**

### **Current Market Conditions**

In order to consider the current market conditions, we first have to consider which factors are relevant to the overall market sentiment. We determine these factors by monitoring the price of oil, risk-free debt, market volatility, a safe-haven asset, and our benchmark (the S&P 500 Index), which gives us a better picture of where the market currently stands. By making predictions on the directions of these assets, we might be able to better predict the overall market direction. Compared to the first trading day of the year, the S&P 500 as of the November 30th close is slightly up, with a total price change of +2.39%. The majority of this year's gains were walked back recently amongst decreased investor confidence. Much of this pessimism can be attributed to fluctuating opinions on trade tensions, decreasing oil prices, rising interest rates, and late cycle sentiments amongst above-average equity valuations. Current volatility as demonstrated by the VIX fluctuates around 20, twice the measure of this time last year. WTI U.S crude trades around \$51 per barrel, down from a high of \$77 per barrel in early October. The yield curve continues to be a concern for many investors, with the U.S. 2-year yield at 2.79% and the 10-year at 2.99%, as of November 30th. Fears of a flattening and even inverting yield curve continue to ripple through markets, and further contribute to the late-cycle fears that are driving present investing behaviors and strategies.

### **U.S Economic Outlook**

The U.S. economy appears to be healthy and we expect it to continue growing. However, we are aware of the factors that allude to a potential slowdown, and this is something we are monitoring closely. The last two quarters of 2018 have proven to be very positive in terms of GDP growth, with real GDP increasing by a 4.2% in Q2 and 3.5% in Q3. These growth rates are some of the highest on record, and have contributed to the investor sentiments that have pushed market indices to all-time highs. Unemployment, as of October, was measured at 3.7%, noticeably

below the Federal Reserve's target range of 4.0% - 4.6%. This tightening of the labor market has started to translate into wage increases, which saw a 4.6% increase in September 2018. This flow of capital and prosperity through the economy has pushed inflation above the Fed's long-term target of 2.0%, as inflation for October was measured at 2.5%. This increase has allowed the Fed to further justify its rate hiking policy, as evidenced by the federal funds rate reaching 2.25% this November. It is our belief that the Fed will continue its policy of gradual rate hikes through 2018 and into 2019, as a means of curtailing inflation and tightening monetary policy. From all of these figures, we can conclude that the current state of the U.S. economy is that of prosperity.

Despite the positive metrics previously listed, recent economic data also alludes to an impending slowdown in growth going forward. The most pertinent evidence of this is the recent decline in the consumer confidence index. Peaking at 137.9 in October 2018, the index has since fallen to 135.7 as of November. This pullback in confidence is also reflected in the capital markets, with the S&P 500 erasing the majority of its gains for the year after the market peaked in September. Growing unrest surrounding trade tensions, rising interest rates, and slowing GDP growth from Q2 to Q3 continue to upset consumer confidence. We believe the U.S. economy has matured to the later end of its cycle, and we have been tailoring our investments to reflect this with caution. Therefore, we have been seeking investment opportunities with a focus on fair valuations and stable business models, as such businesses have the highest potential for success should a slowdown occur within the near future.

### **The Global Economy**

Global growth for 2018-2019 is projected to remain steady, but at less vigorous levels than those observed in 2017, according to the IMF. As of April 2018, the IMF estimated global growth at 3.9% for 2018-2019. However, that number was revised downward to 3.7% as of October amongst increasing downside risks and receding upside potential across the greater macro economy. Some of the reasons for pessimism cited in the IMF's World Economic Outlook include uncertainties around trade, lower-than-expected global inflation, and the unwinding of the fiscal stimulus. The Student Fund Managers are aware of this data, and we have made a concerted effort to consider the global influences of each of our proposed investments.

Global trade has become the forefront of economic discussions surrounding the long-term outlook. Following the escalating sanctions between the U.S. and China, the future of the North American Free Trade Agreement has also come into question. While the United States continues negotiations with Canada and Mexico, the threats of escalation still loom. Further, although sentiment has generally remained strong in the wake of trade disputes, surveys of purchasing managers in China, the Euro area, Japan, and the United States point to softer growth in export orders. Global core inflation remains below the central bank's targets in most advanced economies. It has eclipsed 2% in the United States and the United Kingdom, but the same cannot be said in other strong economies. In the euro area and Japan, core inflation remains weak at

about 1% in the euro area and 0.3% in Japan. However, headline inflation was higher at the beginning of the year due to rising energy prices but is expected to decrease due to the recent pullback in oil prices.

The unwinding of fiscal catalyst in developed economies is likely to translate to a diminishing global growth rate -- expected to remain steady at 3.7% by 2020 according to the World Economic Outlook. Economic growth is declining due to the unwinding of the US fiscal stimulus and the fading of the favorable spillovers from US demand to trading partners. However, this is being offset by a pickup in emerging markets and developing economy growth. Thereafter, global growth is projected to slow to 3.6 percent by 2022–23, largely reflecting a moderation in advanced economy growth toward the potential of that group. However, our group recently observed global growth numbers out of Europe on 12/14/18 that raise major concerns about the continuing growth of the global economy going forward. We will be monitoring this recent development closely.

## **Oil**

Furthermore, the price of oil (Brent) seems particularly important to the global economy because its effects undoubtedly touch all corners of the globe. Oil prices can have a tremendous impact on the growth of all economies, the margins of most businesses, and the political decisions in many of the tensest geopolitical situations across the world. Therefore, we also considered the OPEC countries and other large oil suppliers such as Brazil. While the situation is very complex and it is near impossible for us to predict an exact price over any time horizon, we believe it is much easier to accurately predict the range it will trade over the next 24 months by considering the incentives of the players involved. An accurate range would then allow us to at least get a reference point and attempt to deduce the effects of these prices. Or conversely, what needs to happen for this range to get broken, and subsequently, how would these events also impact our investments?

We quickly realized the goal of all companies/countries involved is generally to produce and sell as much oil as possible, however, because the ability to supply is significantly larger than the current demand, game theory indicates that the players in the oil market have tremendous incentive to collude and or manipulate the market. The OPEC countries, which combined supply about 40% of the total world oil, have long stated their desire to decrease production across the board in the pursuit of higher prices. Despite previous agreements, however, each country is incentivized to produce as much as possible. Similarly, the top three gross oil producers in the world (United States, Russia, and Saudi Arabia) which combine to produce more than 45% of the world's supply, have recently demonstrated through both their statements and actions that they have no desire to decrease production within their own countries in the foreseeable future. Thus, the price of oil in the short and medium term is essentially controlled by three men;

Donald Trump, Vladimir Putin, and Mohammed Bin Salman (MBS), with minimal effects expected by OPEC (due to lack of incentive to change their strategy).

In Russia and the United States, we have seen many recent, large investments by oil companies in drilling and pipelines -- meaning they would be unlikely to willingly decrease production after such large capital outlays. In the United States, (and to some extent, even Russia) it is unclear that any central power has the ability to compel private companies to stop pumping oil, even if they wanted to. Furthermore, President Trump has been clear that he wants low oil prices and has shown a desire to use his power to influence the market when possible, perhaps at the detriment of his other stated goals. This provides some evidence as to his where his administration's priorities lie. (i.e. by granting more Iranian Oil exemptions than predicted, he likely decreased his bargaining power in terms of re-negotiating the Iranian Nuclear Deal, however, much more supply was added into the oil market than analysts expected, subsequently lowering prices). In Saudi Arabia, the International Monetary Fund estimates that at current production rates, oil needs a price of \$85-87 for Saudi Arabia to achieve a balanced budget. However, that is not a stated goal of theirs until 2023, leaving much room for leeway. In addition, we believe there are significant political levers that are being successfully used by the United States to sustain and increase Saudi production, and we expect that to continue into the future. In regard to Russia, while Putin has said that oil in the \$65-75 range would “completely suit him”, game theory again indicates that he has no incentive to force a decrease in Russian production unless others are also willing and able to.

By looking at the incentives of each player involved on the supply side of the market, we conclude that production is very likely to avoid a serious decline. In fact, we believe that it might even continue growing in the aggregate for 24 months. Therefore, without substantially increased in demand, we think oil will not likely surpass the middle of Putin’s target for any sustained period of time before other major players inevitably break their agreements and put more oil into the market. However, we believe that if the price of oil falls too low, all parties would be better off selling relatively less oil at relatively higher prices; therefore successful collusion to achieve this becomes much more likely because everyone's interests align for the time being. We estimate that it is very unlikely oil will trade below \$40 because of this. We have confidence that each party involved has a particular interest to not let oil fall below \$40 or rise above \$70.

The range of oil prices thus plays a significant role in our analysis of investments, particularly for companies that rely on petroleum-based inputs. For example, before investing, members of our team have raised questions such as how would an oil price of \$40 effect Boeing or Union Pacific, versus a price of \$70. Waste Management, whose fleet runs on diesel fuel, is also susceptible to changes in oil prices. We thus strive to monitor the price of oil as well as how our current and future individual holdings can be influenced by it. We also recognize its importance to the overall global economy. The lower oil prices translate to lower gasoline prices for

consumers and businesses across the board. The result would be decreasing global manufacturing and production costs, and more discretionary income for the consumer. Furthermore, lower oil prices generally lead to lower measurements of inflation and can decrease the need for central banks across the world to increase interest rates -- leading to larger levels of economic growth.

### **Global Trade Concerns**

Unrest in global trade remains a concern in American markets, and such variables are worth close monitoring by money managers. The chief concern is the ongoing tensions between the United States and China. As of November, the U.S. has now imposed \$250 billion of tariffs on Chinese imports, with the most affected ranging from industrial inputs and raw materials, to agricultural tools and food products. In retaliation, the Chinese have ramped up their tariffs applied exclusively to the United States to \$110 billion. The exports particularly targeted are consumer goods including wheat, pork, soy, and wine. Finished industrial goods are also facing price hikes as well. Issues with trade do not end in the Asia-Pacific region, as economic unrest is now growing in the Middle East following recently enacted sanctions on Iran. Following President Trump's enactment of oil sanctions this year, more than 3 million Iranians have been unable to find work as a result. The country's currency, the Iranian Rial, has fallen to record lows against the dollar. Such sanctions on the region may not be felt directly within the United States, but their contribution to global unrest and continued negotiations with China are of serious concern.

The United States and China are currently engaged in talks regarding the progression of the current trade tensions. The results of such negotiations are paramount to the continued economic fortune experienced since the trough of the financial crisis. Should officials from both nations not reach some sort of ceasefire agreement soon, the tariffs imposed by the US will continue to increase over the coming months. Of the \$250 billion currently imposed, \$200 billion worth of those goods will be hiked an additional 25% by the first of next year. In addition, the Trump administration has already begun tendering tariff plans for an additional \$250 billion of Chinese imports should tensions continue to escalate. While the two parties have recently reached a 90-day trade truce, tensions remain high and similar issues will remain to be resolved following the truce period.

# Sector Analysis

We are currently invested in four sectors within the S&P 500 index. The following table illustrates our sector exposure for the total and equity portfolios, the benchmark sector allocation, and our own target sector allocation. As bottom-up investors, we seek diversification but do not limit ourselves to exact allocations in particular sectors. We aim to outperform our benchmark, and therefore set our target weights equal to those in the S&P 500. We did provide coverage on each of the sectors, however, as part of our due diligence as investors.

Sector	% of Total Portfolio	% of Invested Portfolio	S&P 500 Sector Weight	Target Weight
Consumer Staples	7%	17%	7%	7%
Financials	6%	14%	14%	14%
Industrials	19%	49%	9%	9%
Healthcare	7%	19%	15%	15%
Basic Materials	0%	0%	3%	3%
Consumer Discretionary	0%	0%	10%	10%
Energy	0%	0%	6%	6%
Information Technology	0%	0%	21%	21%
Communication Services	0%	0%	10%	10%
Real Estate	0%	0%	3%	3%
Utilities	0%	0%	3%	3%
Total	39%	100%	100%	100%

Our coverage for these sectors is the following:

**Consumer Staples** - Joel Thomas, Daztar Pagdiwala

**Financial Institutions** - Aniello Infante, Richard Traub

**Industrials** - Ryan Harrington, Kayla Reuben

**Healthcare** - Jilleen Livingston, Daztar Pagdiwala

**Basic Materials** - Kayla Reuben, Anna Simos

**Consumer Discretionary** - Aniello Infante, Richard Traub

**Energy** - Joel Thomas, Anna Simos

**Information Technology** - Stephen Grammatico, Anna Simos

**Communication Services** - Jilleen Livingston, Shirley Gu

**Real Estate** - Stephen Grammatico, Shirley Gu

**Utilities** - Ryan Harrington, Jilleen Livingston

## **Consumer Staples**

The Consumer Staples sector is composed of companies whose primary lines of business are food, beverages, tobacco, and other household items. Unlike other areas of the economy, even during the economically slow times the demand for products made by consumer staples companies does not significantly slow. The sector has a relatively low beta and low correlation to the overall market. It offers investors an opportunity to diversify their portfolio or helps investors to sustain in market fluctuations. Although Consumer Staples is quite stable, there are several important factors relevant to grow the business and ultimately grow the stock price. Cost cutting, price reduction, and product differentiation are three primary catalysts for growth in this sector as companies continue to increase profit margins.

Year-to-date the Consumer Staples sector has decreased by 5.41%, which is lower than the S&P 500 return of 2.39%. Breaking down into industries, tobacco and food products are the two main industries to drag Consumer Staples down. Global trends towards pursuing a healthier lifestyle are the main cause to lower the expectation for the tobacco industry. Additionally, increasing labor and transportation costs press the profit margins in the food products industry, negatively affecting the stock performance.

Overall, the outlook of the sector is to underperform when compared to the S&P 500. Typically, the Consumer Staples sector will underperform while the business cycle is in rebound, and tends to perform better when business cycles mature and enter into a recession. U.S. businesses are currently in late-expansion stages and thus considering investment in consumer staples will be a viable option to prepare for the following market downturn.

Current Holdings: Constellation Brands Inc. (NYSE: STZ)

## **Financial Institutions**

The Financial sector consists of firms and institutions that provide financial services to commercial and retail customers. It consists of investment banks, investment funds, insurance companies, and real estate. This sector comprises a rather large portion of the S&P 500 and tends to see a large increase in returns during an economic upswing, where these financial institutions are benefiting greatly from additional investments. When the economy holds steady, there is an increase in demand for more capital projects and individual investing. Financing becomes required for new projects, whether it is for municipalities or corporations, which therefore leads to a greater number of loans needed.

Due to this, financial stocks have become very popular investments for portfolios during times where the economy is strong, healthy, and continuously expanding. Their investments are usually a strong indicator of investor's opinions regarding where the economy may currently stand. Over the last 10 years, the financial sector has seen a -1% overall return for investors, due

to the 2008 financial crisis. However, within the last five years, the Financial sector has seen compounded annual returns of 10.55%. Although this has shown to slightly underperform with the S&P, which returned around 11.1% annually during this time frame, investors still are provided the opportunity to be successful in this low-interest environment our economy has been in.

According to Charles Schwab and various other analysts, the Financials sector is currently at market perform. Their current year-to-date performance has shown a -5.2% return. From December 2017 to June 2018, we have seen a trend of Financials outperforming the S&P, only to begin underperforming following June 2018 to present. Further, since our last elections, the S&P has been up 35% compared to the financial sector's return of 42%. Lower regulation expectations due to political factors are what drove financial services to outperform, as well as the hope for a trend towards rising interest rates -- which would tend to provide higher profit margins to banks and financial institutions. However, many investors were disappointed to find that interest rates did not affect margins in the way they were hoping, and regulation became somewhat insignificant to these large institutions. Because of this, the Financial sector illustrated a very strong performance between 2016 and 2017, but we have seen the industry somewhat slowing down in 2018.

Current Holdings: BlackRock, Inc. (NYSE: BLK)

### **Industrials**

The Industrials sector includes companies that deal with construction, manufacturing, and distribution of capital goods. Industrials performance is largely driven by supply and demand with outperformance early in the business cycle and lagging returns later in the cycle and in recessions as companies postpone expansion and produce fewer goods. Some sub-sectors such as aerospace can see long bullish periods before downturns, while others such as waste management firms have slow and steady growth. The industry is currently about 400 basis points below the S&P but this loss comes from a few sub-sectors such as Building Materials, Construction and Engineering, and Machinery.

Global manufacturing may have leveled off, but American industrial companies remain strong. The threat of a trade war under the current administration has hurt the industry, but a trade war would also be harmful to the entire economy, so the U.S. will try to prevent this as long as it can. There is still room for growth from productivity gains and accommodative monetary policy which helps the sector. Threats include rising interest rates and trade concerns particularly against tariffs on raw materials.

What we liked from industrial companies were their solid business models and steady returns even during recessionary periods. Waste Management has been a strong performer for us and we

believe this will continue due to its business model which gives steady returns in all economic conditions. Boeing is also positioned to bring in strong returns as the United States increases its defense budget and as long as Boeing remains the only American firm in its oligopoly. Union Pacific was another strong firm we added because of the steady returns that railroads give as a part of the transportation sector. We felt the industrial stocks were a strong component of our value investing method. The industrial stocks currently in our portfolio were companies that we believe can succeed in each stage of the business cycle and outperform the benchmark.

Current Holdings: Waste Management (NYSE: WM), Boeing (NYSE: BA), Union Pacific (NYSE: UNP)

### **Healthcare**

The Healthcare sector includes all companies that produce healthcare equipment and supplies, and provide related services. These services include healthcare distributors, providers of basic healthcare services, and owners and operators of healthcare institutions and organizations. In addition, some secondary services provided by these companies help to facilitate biotechnology research and drug manufacturing.

Year-to-date, the Healthcare sector has increased by 9.87%, which is higher than the S&P 500 return of 2.39%. This sector is quite substantial, with a market capitalization of \$5.45 trillion and a market weight of 15.61%. Looking at a historical analysis, the Healthcare sector typically underperforms in the early stages of an economic cycle and consistently outperforms in both the late and recessionary stages of an economic cycle.

Overall, the outlook of this sector remains strong as companies have improved their cost structures, and increased funding in Medicare and Medicaid means that individuals will have more available to spend on healthcare goods and services. However, we can expect some volatility within the sector as current healthcare policies such as the Affordable Care Act (ACA) go through reform, though the situation has eased in recent months.

Current Holdings: Johnson and Johnson (NYSE: JNJ)

### **Basic Materials**

Commodity prices have flattened recently as concerns about trade and the global economy grow. As it looks more like the economy is about to enter a recession, our concerns with the sector increase. As indebted governments focus on internal economic growth, this could be a tailwind to Materials. Basic Materials similarly to the Energy industry does well in situations of economic recovery so it will have slower growth if we are beyond the peak in the growth cycle.

A trade war is a significant risk for this sector because the raw materials it creates are so dependent on international trade and the current administration is in the middle of a trade dispute with China. Chinese economic growth has slowed down in the past few years as they are producing more of their own materials and exporting some such as steel. There are also larger stockpiles of materials inventory in China, which will take them a long time to work through. This threatens the industry as they are a major importer of American goods.

Current Holdings: N/A

### **Consumer Discretionary**

The Consumer Discretionary sector includes companies who provide both goods and services that are not essential to consumers but are demanded when individuals have sufficient disposable income. Two subsegments make up this sector: a manufacturing segment and a service segment. The manufacturing segment includes automotive, household durable goods, textiles & apparel and leisure equipment. The service segment includes hotels, restaurants, and other leisure facilities, media production and services, and consumer retailing and services.

Seeing as the success of companies within this sector closely follows the broad market, the financial performance of companies that produce consumer discretionary goods is meager in a poor economy and robust during a strong economy. Thus, this sector is one of the most sensitive to business cycles.

Year-to-date, the Consumer Discretionary sector has increased by 6.83%, which is higher than the S&P 500 return of 2.39%. This sector is quite substantial, with a market capitalization of \$4.51 trillion and a market weight of 9.73%. Looking at a historical analysis, the Consumer Discretionary sector typically outperforms in the early stages of an economic cycle, and underperforms in the late stages of an economic cycle. Overall, the outlook of this sector remains strong as unemployment stays low, consumer confidence remains high, and wages continue to grow. Though retail spending has fallen slightly, and competition among retailers may hinder probability, the sector stands to perform well.

Current Holdings: N/A

### **Energy**

The Energy sector is a category of stocks that relate to producing or supplying energy. This sector includes companies involved in the exploration and development of oil or gas reserves, oil and gas drilling and refining, or integrated power utility companies including renewable energy and coal. There are several different ways for investors to gain exposure to the Energy sector, depending on their preferences and specific views about the growth and earnings prospects across the value chain. The Energy sector is bigger and more diversified than just the oil and gas

industry. Many investors feel renewable and alternative energy sources will be important in the future as the popularity of electric cars grows.

Energy stocks tend to perform well early in the economic cycle in stages of economic recovery because the industry depends on prices of raw materials. The industry does well under inflationary pressures as raw materials used in energy rise in price. These stocks also do well late in the business cycle as they are slow to respond to changes in the economy. The Energy sector has been the worst performer in the S&P over the past month as there are worries in global growth and has been very volatile over the past year.

Rising geopolitical tensions could result in higher oil prices but on the other hand, an increase in energy supply could flood the market and oversupply the world. Increased conservation efforts as people look to reduce their energy consumption by using renewable resources and energy use restrictions in polluted countries are also threats that could result in decreased demand for energy.

Current Holdings: N/A

### **Information Technology**

The Information Technology sector consists of businesses that manufacture electronics, create software and computers, or provide products/services relating to information technology. The consumer goods produced within this sector include personal computers, smartphones, and wearable technology among others. This sector has shown to be one of the most attractive and popular sectors for investment and has seen an extremely strong return throughout the past 25 years. Some of the big industries within the technology sector include semiconductors, software, networking, internet, and hardware.

In 2017, the Technology sector offered the greatest return amongst all other sectors, at 34.28%. In 2018, it has seen a relatively strong outperformance against the S&P 500, with a YTD return of positive 3.4%. In recent years, we have also seen an increase in trends and research going into areas like artificial intelligence, blockchain and self-driving technologies. Consumers are now more willing to spend money on technology, and consumer confidence is at its highest point since 2000. Balance sheets in the IT sector remain solid with large cash balances and relatively low debt. There has also been a trend in this sector in which more companies are increasing their dividend payments.

Within the Technology sector, we are seeing a higher increase in technology spending, as well as wage increases. However, this sector still is known to be the most volatile and risky, particularly with a high exposure to elements like increasing global competition, regulation, and potential trade wars.

Prior/Future Holdings: Nvidia Corporation (NYSE: NVDA)

### **Telecommunications Services**

The Telecom sector consists of various companies that fall into two specific segments: Wireless and Wired Telecommunications services. Companies in the Wireless industry operate and maintain switching and transmission facilities to provide direct communications through airwaves. The services these companies offer include mobile phone services, paging services, wireless internet, and wireless video access. Companies in this sector also specialize and provide networks for voice, data and high-density data channels. The outlook for this industry is to largely remain strong despite the increasingly competitive landscape as the fight to compete for already existing subscribers continues due to market saturation. Overall the industry is projected to see continued annual growth of over 2% due to the strength of consumer demand for wireless telephone services.

The second segment that falls inside the sector is Wired Telecommunications. This industry provides consumers with local, long-distance and international voice communication services using public switched telephone network. Additionally, they provide private network services and wholesale access to their networks for voice communication. The outlook for the Wired Telecommunication industry is suffering and will continue to decline over 3% annually. This decline is largely attributable to the continued rise in internet demand, which hinders landline services, and the shift in consumer preferences away from wired telephony toward newer technology developments.

Overall the Telecommunications sector has raised tremendously uncertainty - as the sector is incredibly dependent on technological advancements and competition is steep. Therefore, the increasing weariness is at the root of the team's decision to leave this sector out of our current holdings.

Current Holdings: N/A

### **Real Estate**

The Real Estate sector is composed of retail, industrial and office segments. The retail segment is agile by the market, with the largest disruptor being demographics. Most big-box retailer closings have occurred in secondary markets, some of which have seen declines in both population and wealth. Industrial real estate, however, is agile by asset type. Big-box warehouses are at its prime, from tenant and capital demand perspectives. Overall megatrends point to this demand continuing, but expenses for building or purchasing big-box real estate have risen. The office segment is agile by capital structure. The best-performing markets of the current

expansion include some that can be highly volatile in a downturn but given the historical cyclicity of the industry, the best time to spend is during a downturn.

Year-to-date the Real Estate sector is up 0.88%, which is lower than the S&P 500 return of 2.39%. Breaking down into industries, the growth was seen on equity real-estate investment trusts and the decline was seen on real estate management and investment.

Overall, the outlook of this sector is to outperform when compared to the S&P 500. While the Real Estate sector has been underperforming since the beginning of the year, it has the potential to rebound and outperform the S&P 500 index.

Current Holdings: N/A

### **Utilities**

The Utility sector is comprised of companies that are engaged in the provision of utility services such as electric power, natural gas, steam supply, and water supply. Although comprised of several service activities, the sector is dominated by the performance of the electric power generation and electric power transmission industries. Despite the sector having experienced relatively stagnant growth partially due to the declines in the price of natural gas, the tremendous emphasis on clean energy regulation benefited many in the electricity-generation industry cluster. However, population growth has slowed and household consumers have shifted to using more energy-efficient appliances, lowering the demand for this market. Overall, the outlook for the sector is expected grow at an annual rate of approximately 3% due to increasing gas prices and continuing electric power consumption.

Ultimately, due to the fragmentation of this sector, its domination at the regional level and the uncertainty of future power consumption alternatives, we have chosen not to include a company in this sector in our current holdings.

Current Holdings: N/A

# Portfolio Positions

## Waste Management Inc. (NYSE: WM)

On September 26th, we purchased 444 shares of WM at \$90.22 per share for a combined investment of \$40,059.90. On October 4th, we purchased an additional 451 shares of WM through a limit order at \$88.63 per share for a further investment of \$39,972.94. This second order was set through a limit intentionally, as we wanted to acquire the second tranche of our investment at a slightly discounted price. We believed there was a strong probability the per share price of WM would dip with market volatility, and we knew this slight discount would be beneficial for our return on this position.

Waste Management, Inc. (WM) is the largest disposal and residential recycler in North America, servicing 21 million municipal, commercial and industrial customers in the U.S. and Canada. They also recover gas from landfills to generate electricity. The company has the largest fleet of trucks and networks of recycling facilities, transfer stations and landfills in the industry. Collection contracts come from municipal or commercial clients who have long-term contracts with the company. They offer specialized disposal services and products for construction, healthcare, manufacturing, and industrial clients. Waste Management provides removal for non-hazardous and hazardous waste including medical and industrial. The solid waste industry is their most profitable with 53% of revenue coming from collections and 19% from landfills. Waste Management also makes 9% of their revenue from transfer stations, due in part to other companies paying to utilize these stations as well. Aside from the solid waste part of their business, which has seen increases in revenue from increasing collections, is the recycling part of their business where commodities found in recyclables are sold on the open market to countries in East Asia.

Our investment thesis centers around three main points. First, WM has been able to produce steady free cash flows on a consistent basis at diminishing costs. This has allowed the company to exercise its goal of returning capital to shareholders, both through increasing dividends and share repurchases. Second, WM has been able to grow its business steadily while maintaining a low debt to enterprise value of 20%, coupled with a high credit rating. Third, Waste Management is a recession-resilient company that leads an industry with high barriers to entry, making it an ideal candidate for late-cycle investing. On top of our thesis, we were also intrigued by the competitive advantage of Waste Management as the dominant player in the market. Waste Management commands roughly 21.9% of the solid waste market and is considerably bigger than even its second closest competitors, Republic Services Inc. (RSG) and Waste Connection Inc. (WCN).

In addition to currently being the most successful player in the solid waste arena, we believe Waste Management's position is secured by the business landscape in which it operates. The

threat of new entrants in the waste industry is low, given that the barriers to entry and costs of expansion are high in this business. This is mainly due to the massive sunk costs associated with trucking fleets and landfills, all of which have already been established and organized to generate profit for Waste Management. Environmental regulation has also deterred new entrants.

The risks we see most impacting Waste Management include competitive risk from the market for waste volumes. The company is also subject to risk from fluctuations in oil prices, increased regulation, and commodity risk. Trade tensions are a factor worth considering as well, as the industrials sector is exposed to global trade, both for the importing of raw materials and the exporting of goods. In Waste Management's case, trade risk comes into play as the company exports the majority of its recyclable waste to the Asia-Pacific region, with its largest customer for recyclables being China.

As of November 30<sup>th</sup>, 2018 we have an unrealized gain of 4.83% on WM.

### **BlackRock (NYSE: BLK)**

On October 3<sup>rd</sup>, 2018 we purchased 68 shares at a market order of BlackRock at a price of \$473.68. Anticipating the price to likely decline after their earnings on October 16<sup>th</sup> (due to a temporary slowdown in asset inflows), we then purchased the second half of our investment with 74 shares at a market price of \$402.49. In doing so, we were able to lower our cost average to \$436.65 for a cost basis of \$62,004.78.

BlackRock, Inc. is an investment management company that provides a wide range of investment and risk management services to institutional and retail clients globally. Its diverse platform of active and passive investment strategies across asset classes enables the company to adapt its investment outcomes and asset allocation solutions for clients. Its product offerings include portfolios investing in equities, fixed income, alternatives and money market instruments. These products are offered directly and through intermediaries, through securities including open-end and closed-end mutual funds, iShares exchange-traded funds (ETFs), collective investment funds and other pooled investment securities. Its Aladdin platform provides risk management, outsourcing, advisory, and technology services to institutional investors and wealth management under the BlackRock Solutions name.

BlackRock operates within the asset management industry in the financial sector -- an industry that is undergoing significant changes. Both retail and institutional investors are seeking lower-cost funds and passive strategies, as well as better liquidity. For active management, investment management firms are supplementing their traditional stock-picking methods with advanced analytical techniques and alternative datasets to stay ahead of the curve. Exchange-traded-funds have been the recent investment vehicle of choice, with assets under management growing at 21% per year since 2005.

BlackRock is positioned to maintain its stance as the global leader in asset management, with over \$6.3 trillion managed. Its dominant iShares ETF platform capitalizes on the industry trends of lower fees and passive strategies, with a 39% market share and compounded growth in assets under management of over 10%. BlackRock also distinguishes itself from an operational standpoint, with exemplary leadership under Larry Fink and high operating profit margins and return on invested capital. Lastly, BlackRock's growing Aladdin platform for risk management as well as its strategic partnerships allow it to retain its enormous client base and gain a competitive advantage and moat.

The main competitors to BlackRock are Vanguard, State Street and Fidelity, who notably came out with two index funds with zero fees. However, the overall industry is fragmented, with the firms competing for assets from both retail and institutional investors. BlackRock distinguishes itself with its wide set of innovative products that allow it to be both an asset and risk manager for its clients. Its ability to adapt to changing investor needs, as well as its strategic partnerships and acquisitions, have driven its assets under management growth, and it remains the world's largest asset manager.

BlackRock faces several risks as an asset manager, however. Poor market conditions and performance could lead to a decrease in assets under management, which could result in a decline in revenue from their fee base. Additionally, competition entering the market could result in a lower market share and drive expense ratios lower. Lastly, changes in consumer preferences regarding investment strategies could impact their product range and negatively affect their margins.

As of November 30<sup>th</sup>, 2018 we have an unrealized loss of 1.98% on BLK.

### **Nvidia (NASDAQ: NVDA)**

We entered Nvidia in five different tranches from October 4<sup>th</sup> to October 10<sup>th</sup>, and one additional tranche of \$15,000 on October 18<sup>th</sup>, 2018 in addition to our initial stake. Our total cost average for the investment was \$262.61. We sold out of Nvidia on October 24<sup>th</sup> because the stock hit our stop-loss order, and began reinvestment on December 14<sup>th</sup>, 2018.

Nvidia Corporation (NVDA) was the inventor of the first graphic processing units (GPU) in 1999, allowing a single computer chip to simultaneously perform two separate computing tasks. Today, it dominates the industry and is renowned as the producer of the most efficient and powerful GPUs, for example, a Nvidia GPU can increase the performance of a computer by up to 140 times its current speed. Because of this position, Nvidia's GPUs are commonly used - and *required* - at the forefront of the technology curve in Artificial Intelligence, Cloud Computing, Medical Research, Autonomous Transportation, among many other applications.

Nvidia operates through its two segments; GPU's and Tegra Processor. Nvidia generally focuses on personal computer graphics, graphic processing units, and artificial intelligence. These platforms are catered to address their four markets of Gaming, Professional Visualization, Datacenter, and Automotive. Their GPU products are aimed to focus their specialization on gamers, designers, AI data scientists and researchers. Their Tegra Processor integrates an entire computer onto a single chip to drive a supercomputer for mobile gaming and entertainment.

Our investment thesis outlines the three undeniable pillars we see for Nvidia; superior profitability, growing demand, and financial stability. In 2017, the gaming business alone grew 36%. Recently, it has seen some decline and may continue in the short-term, but we believe this can be more than offset because each of their remaining markets seems extremely likely to grow, regardless of short term events. Put another way, whether China and the United States cease all trade, inflation rates spike, or the corporate tax rate gets raised to 35% - or even if all 3 occur at the same time, it is difficult to imagine a world where the development of artificial intelligence, cloud computing, or autonomous driving is paused or slowed dramatically. Of course, all of these markets are still in their infantile stage and do not have many real-world applications yet. Despite this, artificial intelligence grew 133% in 2017, with revenue of \$1.93 billion. Furthermore, automotive related revenue increased 19% year-over-year, and self-driving cars are still many years from widespread adoption even being possible.

Peer analysis in the semiconductor industry reveals particularly attractive margins and financials for Nvidia. For example, their profit margin of 36.72% is significantly higher than the second highest (Texas Instruments at 29.71%). Furthermore, with historical revenue growth of 38.39% that is almost 20% higher than the next highest peer (Broadcom at 19.61%), Nvidia's current P/E ratio of 21 seems extremely attractive - and is actually less than Broadcom's 23.56 P/E.

As of November 30<sup>th</sup>, 2018 we have a realized loss of 24.1% on NVDA.

### **Boeing (NYSE: BA)**

On October 29<sup>th</sup>, we purchased 140 shares of BA at \$357.11 per share for a total investment of approximately \$50,000. On October 31<sup>st</sup>, we purchased an additional 60 shares at \$359.49 per share, bringing our full principal investment to about \$71,400. We bought the second tranche during a short-term drop in price following news of a commercial plane crash in the south pacific, with the model of the plane being the new Boeing 737 Max.

The Boeing Company (BA) is the world's largest aerospace company and leading manufacturer of commercial jetliners, defense, space and security systems, and service provider of aftermarket support. As America's biggest manufacturing exporter, the company supports airlines and U.S. and allied government customers in more than 150 countries. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense

systems, launch systems, advanced information and communication systems, and performance-based logistics and training. Headquartered in Chicago, Illinois, Boeing employs more than 140,000 people directly with a physical presence and operations in more than 60 countries.

Our investment thesis is rooted in three pillars of strength. First, the Boeing Company has a proven record of creating shareholder value, and management has made it clear they intend to do so into the future. We observed this specifically in share buyback programs and increasing dividends. Second, the Boeing business model is incredibly profitable, and the company's ability to generate cash is unmatched in the industry. Third, the outlook for the aviation business is overwhelmingly positive, across all sections of the industry. Given Boeing's diversified operations across all major product lines, we believe they are set up to capture this increasing value above their nearest competitors.

The Boeing Company dominates the aviation business with their only true competitor being Airbus. As of May 2016, one in every three commercial planes in the sky across the world was made by Boeing. Coming in at second, Airbus has a 27% market share of the global commercial aviation fleet. In the defense sector, Boeing competes mainly with Lockheed Martin for U.S. and allied contracts. Given the massive barriers to entry in the aircraft business, Boeing's position as an industry leader is secure and relatively unchallenged.

The risks facing Boeing are mainly the growth of the aviation business as a whole. Specifically, Boeing faces risks associated with air travel demand driving new orders, potential decreases in defense spending, commodity price shifts, and trade tensions with China. More recently, Boeing has come under fire following the fatal crash of a Boeing 737 Max in the South Pacific being operated by an Indonesian company known as Lion Air. The controversy around the accident has not yet been resolved, but accusations that Boeing's in-flight systems may have been responsible have begun to surface. Upon this news, the stock has been trading steadily downwards, despite the strength of the company's underlying fundamentals.

As of November 30<sup>th</sup>, we have an unrealized loss of 2.91% on BA.

### **Union Pacific Railroad (NYSE: UNP)**

On October 31<sup>st</sup>, 2018 we purchased 335 shares of Union Pacific Railroad at a price of \$147.93.

Union Pacific is one of America's largest and oldest railways. It covers 23 states in the western two-thirds of the United States and ships industrial and agricultural goods and raw materials across North America connecting ports and centers of production to Mexico, Canada, and the American heartland. Revenue is fairly evenly distributed between industries. The company achieves economies of scale through its position as an industry leader and ability to reduce costs of investments. This helps reduce inefficiencies and maintain the lowest operating ratio in its class.

Railroads are used today to ship industrial quantities of goods for which merchants can save on fuel costs as opposed to trucking smaller quantities. The industry is an attractive and stable one as large amounts of goods are shipped across the United States regardless of macroeconomic trends. There are growth opportunities for the railroad, especially with Mexico as the United States will increase its North American free trade through the new USMCA agreement.

The U.S. rail industry has an oligopoly-like structure, with over 80% of revenues generated by the four largest railroads: UNP and Burlington Northern Santa Fe Corp. operating on the West Coast, and CSX Corp. and Norfolk Southern Corp. operating on the East Coast. Railroads simultaneously compete for customers while cooperating by sharing assets, integrating systems and completing customer movements. Railroads also compete with trucking, shipping and pipeline transportation.

A risk for Union Pacific is a decline in traditional energy sources such as coal mining and crude shipments. However, the likelihood of this happening anytime soon is relatively slim as American infrastructure is set up to handle these energy sources and they remain cheaper than other sources of energy. Union Pacific's stock price declined in 2015 as a result of lower natural gas prices which led energy utilities to make the switch.

Union Pacific wants to become even more efficient through infrastructure replacement and innovation. Unless trade collapses, it appears that there will always be a market for railroad transportation.

As of November 30<sup>th</sup>, 2018 we have an unrealized gain of 3.95% on UNP.

### **Constellation Brands (NYSE: STZ)**

On October 31<sup>st</sup>, 2018, we purchased 250 shares at a market order of Constellation Brands at a price of \$199.83. We decided to purchase the second portion of our investment with 120 shares at a market price of \$200.14 after the midterm elections on November 6<sup>th</sup>, 2018. We did this to protect ourselves from an unfavorable swing in the company's stock price if the election results weren't promising.

Constellation Brands, Inc. is an international producer and marketer of beer, wine, and spirits. In the U.S., they are the number one multi-category supplier and high-end beer company. Additionally, they are the leading premium wine company in the world with dominant imported New Zealand and Italian wine positions in the US. The company has over 80 premium consumer brands with some notable names including: Corona, Modelo, and SVEDKA. Constellation Brands is based in Victor, NY and has 40 facilities across the United States, Mexico, New Zealand, Italy, and Canada.

The Beer, Wine and Spirits industry as a whole is expected to grow at a modest rate over the next 10-year period as wholesaler and grocery stores are intensifying their alcoholic beverage sales. Demand for imported Mexican beer in particular is anticipated to rise as the age demographic for Hispanics is projected to have a compound annual growth rate of approximately 3% until 2025. Additionally, this industry is experiencing shifts towards premium and craft beer, as well as high-margin liquor and wine. Constellation Brands has adapted to these trends by acquiring firms like Funky Buddha Brewery to give them a strong position in the craft brewery market. They also own high-end beer brands such as Modelo and Corona in the United States, making them a leader in the growing premium beer market.

Constellation Brands has delivered exceptional returns to shareholders while maintaining manageable debt levels, which has given it the flexibility to capitalize on favorable opportunities and is poised to continue to do so in the future. They have a significant competitive advantage through strong brands and diversification with a focus on premium products across the beer, wine, and spirits segments. Constellation Brands has also demonstrated their ability to innovate and adapt to changing consumer tastes and stay ahead of industry trends. Further, their success in these areas is maintained by the operational efficiency found in the company, stemming from excellent leadership and high returns on equity and capital.

Constellation Brands competes across all its business segments with Brown-Forman and Diageo, mainly within the United States. In the beer business segment, its major competitors are Molson Coors Brewing Co, Anheuser-Busch InBev, and Heineken Holdings. Constellation Brands distinguishes itself from these competitors by offering higher-quality products that are associated with strong brands such as Corona or Modelo. They have also shown a higher level of adaptability towards consumer preferences through investments or acquisitions in higher-growth beverage areas such as craft breweries (Funky Buddha) or the legal cannabis market (Canopy Growth investment). Their diverse array of premium beverages allows them to deploy capital in an efficient manner and outpace competition.

Constellation Brands, as a producer and distributor of beverages, is subject to fluctuations in commodity prices that are used in the production process, including barley and hops. Additionally, they are reliant on trade between Mexico and the United States for both the production and distribution process. A significant change in trade agreements regarding excise taxes and input products would impact their overall sales. Constellation Brands is also subject to changes in exchange rates between countries, particularly the United States Dollar and the Mexican Peso.

As of November 30<sup>th</sup>, 2018 we have an unrealized loss of 1.84% on STZ.

### **Johnson & Johnson (NYSE: JNJ)**

On November 12<sup>th</sup>, 2018 we purchased 350 shares of Johnson & Johnson at a price of \$145.45. Following our purchasing strategy to reduce our cost average, we purchased 175 shares of Johnson & Johnson at a lower price of \$144.10 on November 15<sup>th</sup>, 2018.

Johnson & Johnson is the premier healthcare and consumer goods company in the world. Recognizable by many, the company strives to provide affordable and accessible products to consumers, with the purpose of improving health and wellness. The company sells a variety of products, including skin lotions, prescription drugs, and advanced medical imaging devices. Its products are purchased by both typical consumers from various drug stores and markets, as well as large healthcare and medical institutions. Johnson & Johnson has three main operating segments: Consumer Products, Medical Devices, and its largest segment, Pharmaceuticals. The company has over 260 operational subsidiaries in more than 60 countries.

Given Johnson and Johnson's diverse business structure, it operates within subsegments of the overall healthcare industry. Though the consumer products market is nearing the maturity stage of its cycle, its growth outlook will be driven by a demand for organic, natural skincare and beauty products. Expected revenue growth within the consumer products market is projected to be 2% over the next few years. Within the medical devices segment, we expect to see high growth rates as the U.S. population continues to age and the costs of inputs for manufacturing to only grow slightly in comparison. Revenue growth within the medical devices segment is projected to be 3.5%. Lastly, we expect to see strong growth in pharmaceuticals as the demand for biologic (homeopathic) drugs increases, along with general international demand, especially in emerging markets. This is due to an increasing consumer base who is more conscious and wary of the different chemicals being used in drugs, and are switching to those which only include more natural alternatives. Pharmaceutical sales are projected to grow at a rate of 2%.

Johnson & Johnson's competitive advantages come from innovation and a strong brand. The Johnson & Johnson Institute functions as an educational service to healthcare providers and clinicians around the world. This is done through virtual seminars, platforms, as well as virtual reality training. With 24 institutes located throughout the world, the company is able to provide both the products which institutions need and more importantly, the training and services needed to use these products most effectively. In addition, Johnson & Johnson has a committee dedicated to advising and recommending drugs which may be required for a patient but are not FDA approved. In all, the Johnson & Johnson brand has been trusted by families for over 100 years and will continue to be a staple company which consumers will look to in the future.

Some of the risks that Johnson & Johnson faces include a decrease in the number of individuals who hold private insurance. Though this may threaten the prescription and medical device segments of the firm, we believe this threat is offset by an increase in funding for Medicare and

Medicaid. This increase will provide individuals with a greater affordability to purchase brand-name drugs. In addition, the threat of an economic recession poses a threat to the future success of the company. Based on historical performance through recessions such as the recent 2008 financial crisis, the company has proven resilient and was able to maintain its revenues. With regards to the ongoing trade war, China eliminated its tariff on drugs this past May.

As of November 30<sup>th</sup>, 2018 we have an unrealized gain of 1.88% on JNJ.

# Lessons Learned & Looking Forward

The University of Connecticut's Student Managed Fund has been an invaluable learning experience for our team. From the classroom aspect, using the Harvard Case Method has taught us how to evaluate a situation or a company using second and third-level thinking. It transitioned well to the investment management aspect of the fund, where we learned how to identify value investments using the same type of thinking. We gained a unique set of quantitative and qualitative skills that we continue to develop throughout the course of the year and several valuable investing lessons that only direct management of investments can grant to the undergraduate student.

Through the accompanying Advanced Issues in Security Analysis course taught by Pat Terrion and Chris Wilkos, as well as in our team's own operations as a fund, we were able to greatly increase our quantitative skill-set. We were able to analyze a company's financial statements, and evaluate firms on the basis of their ability to produce cash through high returns on invested capital. We learned how to use financial databases like Bloomberg, Thomson Reuters, and ValueLine in order to identify key metrics like free cash flow yield and price-to-earnings ratios, at its current level and for several years in the past. Our team also gained valuable experience in using these financial statements and research on the company to calculate its intrinsic value, through methods such as a discounted cash flow model, relative valuation, or dividend discount models.

The quantitative skills gained through participation in the SMF were supplemented by many qualitative skills that we obtained throughout the semester. We learned how to identify competitive advantages among companies, and the importance of excellent management. When analyzing companies, we realized the importance of adaptability and innovation, as well as the danger of complacency. Our team also gained experience in evaluating different business models, and the sustainability that these models can represent. These skills were tested in each stock pitch, in which managers defended the competitive advantages that each company had to offer.

The responsibility of managing assets for the UConn Foundation is not one that we take lightly, and we are very grateful to have this real-world experience. Through direct management of our client's (The UConn Foundation) assets, we learned several valuable lessons. We learned the importance of stop losses as a method for risk management, having hit a stop loss for one of our positions (NVDA). We also had the experience of making investment purchases during a market correction and overall volatility. Being faced with uncertain economic conditions but also seeking to find companies that deliver value over the long-term investment horizon is an incredibly relevant challenge that investors face, and we gained exposure to it from the first day.

Our team was able to navigate the uncertainty and volatility of the stock market through deliberate coordination, collaboration, and organization as an investment group, so that we could come to a collective and informed decision. We seek to build upon these learned skills and gained experiences, as we continue to search for valuable investment opportunities as a team.