



**Portfolio Report- Fall 2018**

**December 6th, 2018**

**Team Stamford**

**Table of Contents**

**Portfolio Overview Page No.**

Investment Philosophy 3

Investment Strategy 3

Risk Management 4

Investment Process 5

Sector Assignments 5

Portfolio Allocation 6

Portfolio Performance 7

Portfolio Performance vs S&P 500 8

**Economic Outlook**

US Economy and Monetary Policy 10

Global Economy and Monetary Policy 11

**Sector Outlook**

Communication Services 13

Consumer Discretionary 13

Consumer Staples 14

Energy 15

Financials 15

Healthcare 16

Industrials 17

Information Technology 18

Materials 18

Utilities 19

Real Estate 19

**Current Holdings**

International Flavors and Fragrances (NYSE: IFF) 21

McDonald’s Corporation (NYSE: MCD) 22

Microsoft (NASDAQ: MSFT) 23

The Boeing Company (NYSE: BA) 24

**Lessons Learned** 25

**Investment Managers**

Christian Escotto-Rosado

Yuan Gao

Karthik Gurusamy

Sijie Hu

Jialian Li

Lindsey Lozyniak

Anshul Manglani

Chintan Shah

Di Yang

**Fall Officer Positions**

**Co-Lead Manager:** Anshul Manglani

**Co-Lead Manager:** Di Yang

**Communications Manager:** Sijie Hu

**Digital Media Manager:** Lindsey Lozyniak

**PORTFOLIO OVERVIEW**

**Investment Philosophy**

The UConn Student Managed Fund follows the investment philosophies of Benjamin Graham, David Dodd, 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.*”* Investment philosophies established by these experts have formed a strong foundation for how we evaluate investment opportunities. Positions are added to our portfolio after conducting both qualitative and quantitative research to identify stocks that have a high margin of safety, wide economic moat and an excellent business model. Our qualitative research focuses on understanding the business’ quality, potential catalysts for long-term growth, position within the competitive landscape, and 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, macroeconomic environment, financial condition, and performance when compared to peers. When making investment decisions, the primary focus is on the qualitative factors that will drive long-term value creation for the business**.**

**Investment Strategy**

Our investment strategy aims to take advantage of the long-term time horizon mandated by the prospectus. As such, we consider a 10-year time horizon for all investments. We choose to invest in great businesses with wide economic moats and outstanding financials. Amongst other factors, a business is deemed ideal to invest in when it has healthy financial conditions, strong leadership, strong potential for growth, and a competitive advantage compared to its peers. We invest in a variety of industries in order to construct a diversified portfolio and lower the portfolio’s risk.

We consider the following factors when evaluating investment opportunities:

|  |  |
| --- | --- |
| **Quantitative** | **Qualitative** |
| * Dividend yield
* EPS growth rate
* Return on Invested Capital
* Enterprise Value to EBITDA
* Price to Earnings ratio
* Debt to EBITDA
* EBITDA to Interest Expense
* Discounted Free Cash Flow Model
* Margin of safety
 | * Competitive Advantages
* Management quality
* Environment, Social and Corporate Governance
* Merger and Acquisition considerations
* Share Buyback considerations
* Risk
* Industry Outlook
* Barriers to Entry
 |

**Risk Management**

“Risk comes from not knowing what you are doing” - Warren Buffett.

Research analysts are expected to have a thorough understanding of various business and financial risks associated with their investment. Additionally, several risk metrics such as Margin of Safety, Net Debt/EBITDA, EBITDA/Interest Expense are considered to measure the soundness of the investment. Analysts also look at the credit rating and market-based risk measures such as credit spreads to weigh their investment decisions. Once an investment is made, research analysts are responsible for following up on any news events or economic developments and assessing the impact on their investments.

From a portfolio perspective, all of our investments must have a minimum Margin of Safety of 15%. An appropriate stop loss (average is 15%-20%) is placed on each stock that is purchased. However, some of our holdings have higher stop loss to account for stock’s volatility and market conditions. Our team also focuses on diversifying our portfolio holdings by investing in different sectors.

**Investment Process**

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

Teams pitches 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 7/9 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 allow a second vote at a revised position size.

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 present a "sell pitch" and the team will discuss and vote on the proposal. The required vote for approval is 5/9.

**Sector Assignments**

**Basic Materials:** Karthik Gurusamy, Anshul Manglani

**Consumer Discretionary:** Christian Escotto-Rosado, Yuan Gao

**Consumer Staples:** Jialian Li, Lindsey Lozyniak

**Financials:** Karthik Gurusamy, Sijie Hu

**Energy:** Yuan Gao, Anshul Manglani

**Healthcare:**Sijie Hu,Anshul Manglani,

**Industrials:** Chintan Shah, Di Yang

**Information Technology:** Jailian Li, Chintan Shah

**Real Estate:** Christian Escotto-Rosado, Lindsey Lozyniak

**Telecommunications:** Christian Escotto-Rosado, Yuan Gao

**Utilities:** Karthik Gurusamy, Di Yang

**Portfolio Allocation**

The chart below illustrates the portfolio allocation based on the market value of the securities as of November 30, 2018.





**Portfolio Performance**

The tables below depict our portfolio performance from Oct 16, 2018 to Nov 30, 2018:

**Total Portfolio Unrealized Gains/(Losses)**





Our portfolio has outperformed S&P 500 during this period. As our investment horizon is 10 years, and we are more focused on analyzing and investing in companies that are selling at discount to their intrinsic value.

**Portfolio Unrealized Gains/(Losses)**



**Portfolio Performance vs S&P 500**



Below is the weekly performance comparison between our portfolio and the SPY ETF.



Our account was funded on Oct 3, 2018 and our first investment in IFF was on Oct 16, 2018. We initially assumed that our account was funded in SPY as mentioned in the prospectus, but later realized we were holding cash. Due to some operational difficulties, it took a while for us to get invested in SPDR S&P ETF, to be in accordance with the investment policy of the fund. Below is the table of transactions for perusal.



\*SPDR ETF: SPDR S&P 500 ETF; IFF: International Flavors and Fragrances; MSFT: Microsoft

**Comparison with Theoretical Portfolio\***

**\****This is for drawing an easier comparison with the other SMF teams' performance. This is not to inflate our past performance.*

Theoretical portfolio is the portfolio formed with the assumption that the initial funds were already invested in S&P 500 as of day 1 (i.e. Sept 4, 2018)



Below is the weekly performance comparison between our theoretical portfolio and the SPY ETF.



**ECONOMIC OUTLOOK**

Having a holistic view on macroeconomic conditions is the cornerstone for our fundamental analysis. We analyze both U.S. and foreign economic conditions and developments. We also monitor their impact on our existing investments and potential opportunities.

**US Economy & Monetary Policy**

GDP

The U.S. economy has experienced a significant economic expansion for nearly a decade. As we move towards the end of the economic cycle, the U.S. economy is continuing to expand with real GDP growing at an annual rate of 3.5% in the third quarter of 2018. After growth picked up in the second quarter, due in part to consumer expenditures rising at a moderate pace, it slowed in the third quarter similar to the rate in the first half of the year. Personal Consumption Expenditure (PCE) is increasing at a steady rate. Real PCE increased 0.3% and Disposable Personal Income (DPI) increased 0.1% as of the September report. These increases are mainly driven by increases in wages, salaries, and government social benefits. However, after the effect of the recent hurricanes, we expect the growth rate of spending to pick up in the fourth quarter. This is consistent with the University of Michigan Consumer Sentiment Survey. The recent trade tensions with China are expected to exert a downward pressure on GDP growth due to an increase in input prices and a decrease in foreign demand for goods and services.

Employment

The unemployment rate has decreased significantly since the last recession. It is down to 3.7% and has moved below estimates of u\*, indicating that the economy is at maximum employment. Initial jobless claims have followed the same trend and have decreased to around 231,000 claims as of December 6th. The spread between U-3 and U-6 has continually tightened during the same period. We see this as a positive sign as a smaller proportion of the workforce is engaged in part-time work for economic reasons, indicating that more favorable economic conditions are driving the tighter labor market. The steady decline in the Labor Force Participation Rate that began around the turn of the century shows signs of stabilizing, with the latest number showing a modest increase to 62.9%.

Inflation

Headline Consumer Price Index rose 2.5% year over year as of the November release. The core CPI rose 2.1%. The headline PCE Price Index increased by 2% year over year, which represents slower growth in the index compared to the previous period.  Core PCE remained at a 2% year over year growth for the fifth consecutive month. Decreased energy prices during the period contributed to the decreased growth rate of Headline PCE compared to Core PCE.  The Core PCE numbers indicate that inflation is stabilizing at 2%. TIPS are a market-based measure of inflation where the yield is determined by changes in CPI. Breakeven Inflation (BEI), which serves as a barometer of the market’s inflation expectations, shows signs of stabilizing at 1.94% and 2.03% for the 10 and the 30-year BEI.  The employment and inflation indicators show that the economy is experiencing moderate inflationary pressure from the tightening labor market and the expanding economy. Wages are growing steadily, and indicators of inflation are stabilizing around the Fed’s symmetric 2% target.

**Global Economy and Monetary Policy**

As the Federal Reserve continues to tighten monetary policy and exits from a more accommodative phase, some foreign economies are also slowing down their quantitative easing but remain at an accommodative monetary policy stance. The rising interest rates in the U.S. are driving capital outflows from emerging economies. This creates a downward pressure on the foreign currency and increased volatility in the financial markets overseas. It has also created stress on some countries with U.S. dollar denominated debt. This is especially a concern over some of the EU markets.

China

The Chinese economy has been on a robust growth path for the last few decades and is currently ranked second to the U.S. in nominal GDP with $9.2 trillion as of 2017. Real GDP growth was 6.9% at the end of 2017 but has recently been trending lower to 6.5% in the 3rd quarter of 2018. Industrial production for September grew 5.8% year over year; retail sales increased 9.2% year over year, and fixed-asset investment for the first three quarters grew 5.4% year over year. However, despite the growing middle class, which is driving consumer spending, the country is experiencing a deleveraging phase (Debt to GDP posted at 256% by Mid-2017), and the overall growth rate is expected to slow down substantially. According to the Bloomberg forecast, Debt to GDP will reach 330% by 2022. On top of the high debt and slow growth problem, current trade tensions between the U.S. and China are escalating and will further hinder Chinese production levels, and its economic development overall. As the actual effects from the trade tensions are starting to surface, we will closely monitor our exposure in the Chinese market and assess any risk to our investments accordingly.

Eurozone

Currently, the Eurozone GDP is growing at 2.3%. This trend moderated despite strong domestic consumer expenditures in the first half of 2018 due to weaker external trade, reflecting the impact of the recent strengthening of the Euro. In the medium term, the fundamentals remain strong as the ECB remains in an accommodative mode. The labor market is continuing to tighten, and subdued inflation has just increased up to 2.2%. With the looming Brexit uncertainties and weaker pound, U.K. GDP growth is projected to slow to 1.5% in 2018. The German economy has generally performed well and is projected to grow GDP at 1.8% this year, with higher wages and higher price levels. France, Belgium, and Austria are all experiencing an expansion early this year and continue to show higher employment numbers. There are, however, looming concerns over Italy’s foreign currency denominated debts. This contributed to increased volatility in February. We believe it is important to closely watch these developments over time and revisit our risk exposures accordingly.

Trade

The escalating trade tensions between the U.S. and other trade partners (trade tensions with China in particular) have caused market concerns. We view this as a large risk factor for our investments because a large portion of our investments have exposure in China and their businesses are very sensitive to any new trade policies. We believe the two countries will come to an agreement over time, but the process will cause significant volatility in trade sensitive industries. We will closely monitor developments and set our risk exposure at a manageable level.

**Our Outlook**

Under the steady hand of the Federal Reserve, we believe the trend of low unemployment rates and stable inflation will continue in the next few years. Based on the major components of GDP, there are signs pointing to a positive trend in the short term. The latest forecast issued by GDPNOW\* from the Atlanta Fed for the third quarter is at 2.7% as of December 6th for the end of 2018, which is down from the last update due to the worsening trade deficit. Over the short term, we believe the effect of recent fiscal stimulus (2018 tax overhaul) will fade away and create a downward pressure on demand. Therefore, GDP growth will revert to its recent average of 2-2.5%. Despite the continued tightening in the labor market and improvement of the labor force participation rate, the demographics in the U.S. are worsening as aging baby boomers exit from the labor force. In addition, the productivity level in the U.S. remains at a historical low with no signs of improvement for the next few years. Therefore, we believe US GDP growth will decrease to a lower level in the long term.

**SECTOR OUTLOOK**

**Communication Services**

As of November 30, 2018, Communication Services accounted for 9.9% of the S&P 500 index. There are nine sub-industries in this sector: Interactive Media & Services is the largest, recently accounting for 46%, while Publishing & Printing was the smallest at 0.3%. EPS computations for the sector are not meaningful at this point, due to the September 2018 composition changes. The sector's price-to-earnings ratio of 17.3x, based on consensus operating EPS estimates for the next 12 months, is above S&P 500's forward P/E of 16.3x. Consensus long-term EPS growth estimate for this sector is 14% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.2x, which is equal to the broader market's PEG. Also, the sector recently had an indicated dividend yield of 1.5%, compared with the yield of 2.0% for the S&P 500.

*Outlook*

Our team has not invested in the Communication Services sector yet, however analysts are constantly monitoring this sector for possible opportunities. The Communication Services industry consists of companies that provide a range of communication services including wireless, wireline and Internet communications for voice and data to businesses and consumers. With the emergence of fifth-generation wireless network technology (5G), there will be a tremendous change in the entire mobile ecosystem, as well as society and the economy overall. According to the estimates from Deloitte, 5G will bring more than 370,000 new jobs and $150 billion in GDP. Furthermore, another critical engine for future growth is Internet of Things (IoT), such as connected car, connected home monitoring and control, and entertainment. Telecom carriers are looking for the opportunities in IoT through M&A deals and partnerships.

**Consumer Discretionary**

As of November 30, 2018, Consumer Discretionary accounted for 9.9% of the S&P 500 index. There are 30 sub-industries in this sector. Internet & Direct Marketing Retail is the largest, representing slightly less than one-third of the sector's market value. The Consumer Discretionary sector is projected to record a 15.4% year over year increase in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. In addition, revenues for the sector are forecasted to increase by 8.6% in 2018 versus the S&P 500's projected rise of 8.3%. The sector's price-to-earnings ratio of 22.2x, based on the consensus forward 12-month operating EPS estimate, is above the S&P 500's forward P/E of 16.3x. S&P Capital IQ also reports that the consensus long-term EPS growth estimate for this sector is 24.1% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 0.9x, which is below the broader market's PEG of 1.2x. Finally, this sector pays a dividend yield of 1.2%, as compared with the yield of 2% for the S&P 500.

*Outlook*

The indicators of continuous economic growth show a positive outlook of the Consumer Discretionary Sector in 2018 and 2019. Continued low interest rates support consumer borrowing and spending. Because of friendly monetary policy, future increases of interest rates are expected to be slow and gradual, which will allow consumers to absorb them relatively easily. The U.S. unemployment rate is low in 2018. According to U.S. Bureau of Labor Statistics latest numbers, the unemployment rate remained at 3.7% in November 2018. Over the year, the unemployment rate and the number of unemployed persons declined by 0.4%. Average hourly earnings have increased by 3.1% over the past 12 months. Additionally, wages are increasing in a growing number of areas. The reading for the Conference Board's shows Consumer Confidence Index remained near an 18-year high at 135.7. Moreover, the report from the Census Bureau disclosed that the October retail sales got a solid 4.3% year over year gain. Finally, the tax overhaul in 2018 could help to boost consumer spending as well as investing in the discretionary sector.

Technology has changed the consumer landscape in many ways—not only for retailers but also for media companies. Traditional brick-and-mortar stores face growing pressure on margins because of huge operational expenses, serious price competition, and changes in customer’s habits. Many consumers now routinely use computer networks to identify sellers, evaluate products and services, compare prices, and exert market leverage. According to the Census Bureau, U.S. retail e-commerce sales for the third quarter of 2018 increased 14.5% year over year. However, total retail sales increased only 5.3% in the same period.

Current Holdings: McDonald’s (NYSE: MCD)

**Consumer Staples**

As of November 30, 2018, Consumer Staples accounted for 7.4% of the S&P 500 index. The Consumer Staples sector, also called the Consumer Defensive sector, comprises of companies whose businesses are less sensitive to economic cycles. It includes companies that manufacture, produce, and distribute food, beverage, and tobacco products, as well as non-durable household and personal items. Soft drinks are the largest segment, representing 22.8% of the sector's market value, while brewers are the smallest segment, accounting for less than 1% of the sector.

Year-to-date, the Consumer Staples sector has experienced negative growth, (approximately -1.87%), which is relatively lower than SP&500 index (As of November 30, 2018). But in the recent 3 months, the sector has posted 4.5% return. The sector is projected to record an 8.9% year over year increase in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. In addition, revenues for the sector are forecasted to decline by 2.2% in 2018 versus the S&P 500's projected rise of 8.3%. The sector's price-to-earnings ratio of 17.4x, based on the consensus of the next twelve month operating EPS estimate, is above the S&P 500's forward P/E of 16.3x. S&P Capital IQ also reports that the consensus long-term EPS growth estimate for this sector is 9.3% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.9x, which is above the broader market's PEG of 1.2x. Finally, this sector pays a dividend yield of 3.2%, as compared with the yield of 2.0% for the S&P 500.

*Outlook*

The sector will benefit from positive economic growth, rising resident incomes, record low unemployment, and tax cuts in the future. Digital marketing is a key factor for companies to increase performance. Expanding into global markets and aggressive cost cutting initiatives will help consumer staples companies drive growth and improve profitability. However, if trade conflicts continue to escalate, costs could rise for American producers and increase prices for consumers.

**Energy**

As of November 30, 2018, the energy sector accounted for 5.4% of the S&P 500 index. The energy sector consists of two industries: “energy equipment and services” and “oil, gas, and consumable fuels,” weighted 10.54% and 89.36% respectively. There are various sub-industries encompassed in each industry, including: drilling, equipment service, exploration production, refining marketing, and consumable fuels. According to S&P consensus estimates, the sector is projected to record a 92.6% year over year increase in operating earnings-per-share in 2018, compared to the S&P 500's estimated EPS gain of 22.2%. Additionally, revenues for the sector are forecasted to increase by 14.5% in 2018 versus the S&P 500's projected rise of 8.3%. The sector's price-to-earnings ratio of 19.5x, based on consensus next 12-month operating EPS estimates, is above the S&P 500's forward P/E of 16.3x. The consensus long-term EPS growth estimate for this sector is 19.7% versus the S&P 500's 13.0%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.0x, which is below the broader market's PEG of 1.2x. Finally, this sector pays a dividend yield of 2.8%, as compared with the yield of 2.0% for the S&P 500.

*Outlook*

The energy sector is sensitive to the business cycle, and energy equities have largely tracked oil and natural gas prices in 2018. One major factor contributing to the decrease in oil prices is that supply exceeds demand. The risk is increasing in this industry, due to various new restrictions that make drilling and shipping oil very expensive, eventually leading to lower profits in the long-run. Furthermore, energy market projections are subject to significant uncertainty, such as future development in technologies, demographics, and politics that cannot be foreseen with certainty. Continued depreciation of emerging market countries’ currencies will make the cost of crude oil imports more expensive.

**Financials**

As of November 30, 2018, Financials accounted for 13.7% of the S&P 500 index. There are 12 sub-industries in this sector, with diversified banks being the largest, representing 35.5% of the sector's market value, and reinsurance being the smallest, accounting for less than 1% of the sector. The Financials sector is projected to record a 32.0% year over year increase in operating earnings-per-share in 2018, compared to the S&P 500's estimated EPS gain of 22.2%. The sector's price-to-earnings ratio of 12.8x based on S&P Capital IQ consensus next 12-month operating EPS estimates, is well below the S&P 500's forward P/E of 16.3x. The consensus long-term EPS growth estimate for this sector is 10.7% versus the S&P 500's 13.0%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.2x, which is equal to the broader market's PEG of 1.2x. This sector pays a dividend yield of 2.0% which is same for the S&P 500.

*Outlook*

The U.S. banking industry is currently well capitalized, profitable, and returning large amounts of capital to shareholders. Credit quality remains at or near decade highs for many banks. We have a positive view on banks as we expect solid fundamental performance to continue for at least the next twelve months. Across the banking industry, loan growth is positive but slowing and we expect stronger growth in 2019 on further economic growth and loosened regulation. The Federal Reserve’s annual Stress Tests, Comprehensive Capital Analysis, and Review (CCAR) project that U.S. banks would be able to withstand a severely adverse economic scenario and would maintain adequate capital ratios above regulatory minimums. Regulatory relief has raised the threshold for banks requiring annual Dodd-Frank Act Stress Tests to $250 billion.

**Healthcare**

As of November 30, 2018, the Healthcare sector accounted for 15.8% of the S&P 500 index. The Healthcare sector contains six industries including: Healthcare Equipment and Supplies, Health Care Providers and Supplies, Healthcare Technology, Biotechnology, Pharmaceuticals, and Life Sciences, Tools, and Services. Pharmaceuticals is the largest industry, representing 33.47% of the total sector, while Health Care Technology is the smallest representing 0.53% of the sector. The Healthcare sector is projected to record a 30.2% year over year increase in operating earnings per share in 2018, compared to the S&P 500's estimated EPS gain of 22.2%. Additionally, revenues for the sector are expected to increase by 5.3% in 2018 versus the S&P 500's projected increase of 8.3%. The sector's price-to-earnings ratio of 12.8X, based on the consensus of the next twelve-month operating EPS estimates, is well below the S&P 500's forward P/E of 16.3X. The consensus long-term EPS growth estimate for this sector is 12.1% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.1X, which is equal to the broader market's PEG of 1.2X. Finally, this sector pays a dividend yield of 1.8%, compared to the S&P 500 yield of 2%.

*Outlook*

We believe that demographics and innovations are the two main drivers for future growth for the Healthcare sector. There is an increasing proportion of the US population aged 65 and older and healthcare spending continues to rise. The balance sheets of the companies in the Healthcare sector remain strong with large cash assets, increasing the possibility of higher dividend payments, share-enhancing stock buybacks, and mergers and acquisitions. According to U.S. Census Bureau, there will be 78 million people 65 years and older, and 76.7 million (previously 76.4 million) under the age of 18 by 2035. An aging population will require more extensive drug treatments and medical care. Health issues associated with obesity could also boost demand for medical services. According to a research letter in the Journal of the American Medical Association, the rates of obesity rose significantly among adults, from 33.7% to 39.6% in the years between 2007-2008 and 2015-2016. Rates of severe obesity increased during this time from 5.7% to 7.7%. The Trump administration was unsuccessful in its repeal of the Affordable Care Act (ACA), but they succeeded in limiting expansion of the ACA and repealing the individual mandate for 2019, which required most Americans to have health insurance. Future repeal attempts or modification of the ACA will make the industry more volatile.

**Industrials**

As of November 30, 2018, Industrials accounted for 9.4% of the S&P 500 index. There are fourteen industries within the sector: Aerospace & Defense, Building Products, Construction & Engineering, Electrical Equipment, Industrial Conglomerates, Machinery, Trading Companies & Distributors, Commercial Services & Supplies, Professional Services, Air Freight & Logistics, Airlines, Marine, Road & Rail, Transportation Infrastructure. Aerospace and Defense is the largest, representing approximately 27.4% of the sector's market value, while Construction and Engineering is the smallest, accounting for about 0.92% of the sector. The sector is projected to record a 20.9% year over year increase in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. The sector's price-to-earnings ratio of 16.7x, is below the S&P 500's forward P/E of 16.3x. The consensus long-term EPS growth estimate for this sector is 12.6% versus the S&P 500's 13.0%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.3x, which is slightly above the broader market's PEG of 1.2x. Finally, this sector pays a dividend yield of 2.0%, which is same for the S&P 500.

*Outlook*

The Industrial sector is very diverse, comprising of a huge array of companies. Aerospace and Defense, and Machinery form the biggest industries within the sector, with a combined weight of more than 40%. The Aerospace industry is poised for growth in the next decade fueled by growing demand in commercial airplanes. The demand in emerging markets and the U.S. is poised to grow significantly. Defense budgets of major countries are rising. With Aerospace and Defense being a niche and highly regulated industry, most of the business is likely to be taken up by already established companies. Barriers to entry are high for this sector. In Machinery, the demand for construction equipment is picking up, especially in India and China, along with the U.S. Infrastructure spending has been slow but steady. Housing also has been slow to recover from the 2008 crisis but is on a steady path. Risks for the sector include rising inflation and interest rates, the ongoing trade tensions with China, and increasing labor costs. These factors affect the industrial sector in different capacities. However, these factors have also resulted in increasing indigenous manufacturing activity for US.

Current Holdings: The Boeing Company (NYSE: BA)

**Information Technology**

As of November 30, 2018, Information Technology accounted for 19.9% of the S&P 500 index. The Technology sector comprises of six industries: IT Services, Software, Communications Equipment, Technology Hardware, Storage and Peripherals, Electronic Equipment, Instruments and Components, and Semiconductors and Semiconductor Equipment. In September 2018, due to reclassification of GICS standard, IT sector underwent major changes. Many large companies were put into different sectors, reducing the weight of Technology in S&P 500 from over 25% to just about 20%. Software is the largest, representing approximately 29.53% of the sector's market value, while Electronic Equipment, Instruments and Components is the smallest, accounting for about 2.2% of the sector.

The Information Technology sector was projected to record a 20% year over year increase in operating earnings-per-share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. The sector's price-to-earnings ratio of 19.6X, based on consensus forward 12-month operating EPS estimate, is well above the S&P 500's forward P/E of 16.3X. The consensus long-term EPS growth estimate for this sector was 15% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.3X, which is slightly higher than the broader market's PEG of 1.2X. This sector paid a dividend yield of 1.1%, as compared with the yield of 2.0% for the S&P 500.

*Outlook*

Cloud Computing, Big Data, Artificial Intelligence, and Internet of Things have been the main drivers of the Information Technology sector. The industry is becoming more organized and mature after a slew of mergers and acquisitions in the past few years. The balance sheets of the companies in the Information Technology sector appear strong, with relatively low debt and large cash assets. Increased regulation and trade tensions with China are the potential risks that can hurt the companies in the near term.

Current holdings: Microsoft (MSFT)

**Materials**

As of November 30, 2018, Materials accounted for 2.6% of the S&P 500 index. There are 11 sub-industry segments in this sector. Diversified Chemicals is the largest, representing approximately 28.8% of the sector's market value, while Metal & Glass Containers is the smallest, accounting for about 2.4% of the sector. The sector is projected to record a 31.1% year over year increase in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. The sector's price-to-earnings ratio of 15.4x, based on the S&P Capital IQ consensus of the next 12-month operating EPS estimates, is slightly lower the S&P 500's forward P/E of 16.3x. The consensus long-term EPS growth estimate for this sector is 12% versus the S&P 500's 13.0%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 1.3x, which is slightly higher than the broader market's PEG of 1.2x. This sector pays a dividend yield of 2.0% which is same for the S&P 500.

*Outlook*

Our outlook is negative as we see a structural change in the demand growth from China as the Chinese economy moves from commodity intensive towards consumer spending. In addition, the Industries within the sector continue be negatively impacted the strength of the US Dollar, rising input costs, and weak demand for consumer durable goods. Potential tailwinds to this sector include higher levels of energy and commodity related investments and higher than expected capital expenditures driven by US tax reform.

Current holdings: International Flavors and Fragrances (IFF)

**Utilities**

As of November 30, 2018, Utilities accounted for 3.1% of the S&P 500 index. There are four sub-industry segments in this sector. Electric utilities is the largest, representing around 62% of the sector's market value, while water utilities is the smallest, accounting for 2.3% of the sector. The sector is projected to record a 5.4% year over year increase in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS gain of 22.2%. The sector's price-to-earnings ratio of 16.3x, based on consensus of the next twelve-month operating EPS estimates, is equal to the S&P 500's forward P/E of 16.3x. The consensus long-term EPS growth estimate for this sector is 7.0% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 2.3x, which is significantly above the broader market's PEG of 1.2x. This sector pays a dividend yield of 3.7%, as compared with the yield of 2.0% for the S&P 500.

*Outlook*

We did not invest in this sector. The major reason being that we are still in a rising interest rate environment. Sensitive economic indicators such as Housing Starts, Electric Consumption, and the Industrial Production Index are not showing signs of steady growth. Also, given the rising interest rate environment, the Utilities sector tends to trade at a discount to other industries. This is due to a higher cost of debt as these companies tend to have a higher debt to market cap level. This is also due to the diminishing competitiveness of bonds.

**Real Estate**

As of November 30, 2018, Real Estate accounted for 2.9% of the S&P 500 index. There are nine sub-industries in this sector. Specialized REITs is the largest, representing 40.1% of the sector's market value, while real estate services is the smallest, accounting for 2.0% of the sector. According to S&P Capital IQ consensus estimates, the sector is projected to record a 7.6% year over year gain in operating earnings per share in 2018, as compared with the S&P 500's estimated EPS increase of 22.2%. In addition, revenues for the sector are forecast to increase by 9.4% in 2018 versus the S&P 500's projected rise of 8.7%. The sector's price-to-earnings ratio of 37.0x, based on S&P Capital IQ consensus of the next 12-month operating EPS estimates, is well above the S&P 500's forward P/E of 16.3x. S&P Capital IQ also reports that the S&P Capital IQ consensus long-term EPS growth estimate for this sector is 8.7% versus the S&P 500's 13%, giving the sector a P/E-to-projected EPS growth rate (PEG) ratio of 4.2X, which is well above the broader market's PEG of 1.2X. Finally, this sector pays a dividend yield of 3.7%, as compared with the yield of 2.0% for the S&P 500.

*Outlook*

The macro environment looks positive for REITs. Steady economic and job growth translates into incremental demand for commercial real estate, yet the macro economy is not improving enough for developers to aggressively add incremental supply to commercial real estate stock. However, risks to REIT valuations include rising interest rates as well as a relatively negative outlook for brick-and-mortar retailers.

**CURRENT HOLDINGS**

**International Flavors and Fragrances (NYSE: IFF)**

IFF is a leading innovator of sensory experiences, co-creating unique products that consumers taste, smell, or feel in fine fragrances and cosmetics, detergents and household goods, and food and beverages. The company has historically operated via two reporting segments--flavors and fragrances--that contributed about equally to companywide sales. Flavors enjoys slightly higher margins and therefore generates a slightly larger share of profits versus fragrances. The company now operates a third "Frutarom" segment, having completed the acquisition of Frutarom in October 2018. In 2017, IFF achieved sales of approximately $3.4 billion. Management estimates the sales and adjusted EPS of about 4 B and $6.35 respectively for 2018 (full-year).

The flavors and fragrances market is approximately $24.8 billion (per management estimates) and is forecasted to grow approximately 4.2% by 2022. IFF holds the second highest market share in the industry behind Givaudan. Other competitors are Firmenich, and Symrise. These "Big Four" companies command roughly three fourths of total market share.

Our investment in IFF is based on 3 main factors.

1. ***Wide Economic Moat*** - The company’s highly valuable intangible assets in the form of proprietary formulations provide significant pricing power while switching costs help ensure the durability of economic profit generation. IFF's R&D spending of over 8% sales helps to stay ahead of the curve in identifying and servicing new customer trends. Widespread acceptance on customer core lists serves as an additional intangible asset.
2. ***Vision 2020 Strategy*** - The four pillars of IFF's Vision 2020 strategy originally announced in 2015 and refreshed in 2017 focuses on building differentiation and accelerating growth to create shareholder value.
3. ***Frutarom Acquisition -*** IFF and Frutarom combination creates a global leader in natural taste, scent and nutrition and enriches portfolio for a stronger product offering. Also, the acquisition provides access to attractive adjacencies and strengthens exposure to fast-growing midsized customers.

Our investment in IFF comes with different risks. A disruption in manufacturing operations or in the supply chain, currency fluctuation or devaluation in the international markets and failure to comply with environmental protection laws could adversely affect the company's business and financial results. The integration of Frutarom represents a source of uncertainty as Frutarom, in its own right, has been highly acquisitive in recent years. This will require that IFF integrate a wide variety of product lines and a geographically widespread asset base.

Return on Invested Capital (ROIC) for IFF is close to 15% and is well above the company’s 7.2% cost of capital. We have a high degree of confidence that positive economic profits will prove durable for at least the next 20 years.

**Unrealized Gain on the Investment: 3.71%** (As of November 30, 2018)

**McDonald’s (NYSE: MCD)**

On November 8th, 2018 we bought 61 shares of McDonald’s at $184.43. McDonald’s Corporation operates and franchises over 37,600 McDonald’s restaurants in 120 countries. McDonald’s goal is to become their customer’s favorite place to eat and drink. It is the largest company within the fast food restaurant industry bringing in over $22.8 billion of revenue in 2017. McDonald’s has two main streams of revenue: Company-owned stores where McDonald’s gets to recognize 100% of revenue from sales of food and beverages, and franchised stores where they receive rent payment from their franchisees (typically 9% -11% of monthly sales), initial fee (40% of the total cost when purchase a new restaurant), and service fee (4% of monthly sales).

McDonald’s operates in the quick service restaurant industry amongst top competitors such as Subway, Yum! Brands, and Chipotle Mexican Grill. The fast food industry generates over half a trillion dollars worldwide and McDonald’s as the largest company in this segment is well positioned to take advantage of the factors contributing to growth such as technology and a growing middle class in key growth markets.

We believe that McDonald is the best company operating within this industry due to

1. **The Dividend Yield of McDonald's is attractive and increases consistently.** McDonald’s has been increasing dividend for 41 years, and its 5-year growth rate is 5.7%. McDonald’s potential for future dividend yield with its low-risk profile makes it a solid long-term dividend stock to invest in.
2. **Size and Brand Value.** McDonald’s dwarfs their competition when it comes to brand value with an estimated value of over $126 billion being almost three times larger than the second most valued brand of Starbucks at just over $44.5 billion.
3. **EOTF and Delivery**. McDonald’s has launched major initiatives, one of which is Experience of the Future (EOTF) implementing technology into their chains to increase number of customer visits as well as average transaction amount. As new technologies are implemented, the speed of service and order accuracy will be improved, and customer satisfaction scores increase continually. More options for ordering allow McDonald’s to reduce their cost due to decreased number of employees needed to run the stores. McDonald’s is the global partner of the Uber Eats, whose delivery service adding more accessibility to customers. Uber Eats Delivery increased US same-store sales by 3%.
4. **Franchisee System.** Franchisee System enable McDonald’s to experience significantly faster expansion as well as growth, and to obtain higher profit margins by reducing costs associated with operating stores. McDonald’s owns 45% of the land, and 75% of the buildings for its restaurants. Around $5.5 billion in land assets meaning this business model is hard to apply in a large scale.
5. **Becoming a nimbler organization.** As a global company McDonald’s always make decisions at the local and regional level.

There are numerous risks impacting McDonald’s. One of the major risks is lower return than expected on EOTF implementation. McDonald’s has invested a huge number on EOTF in order to increase same store sales and customer service via technology. An additional risk that McDonald’s must face is the possibility of them not being able to adapt to changes in consumer behaviors. This kind of risk will be moderated due to a strong history of McDonald’s understanding what consumers want and adapting their menu to meet the demands of specific markets. McDonald’s prides themselves on being a big company made up of many local entrepreneurs that understand the needs of their community and keep the company in sync with society.

**Unrealized Gain on the Investment: 2.21%** (As of November 30, 2018)

**Microsoft (NASDAQ: MSFT)**

On November 13, 2018 we purchased 228 shares of Microsoft at $108.12 per share.

Founded in 1975 and operating in more than 190 countries, Microsoft is the world's largest software maker. Microsoft’s revenue can be divided into three parts: intelligent cloud (include infrastructure as a service and platform as a service), productivity and business processes (applications in cloud), and more personal computing. About 38% of the revenue is personal computing, 29% is intelligent cloud, 33% is productivity and business processes. In 2018, Microsoft achieved sales almost 110 billion, realizing 14% growth. Microsoft also has dominant market share in PC operating systems and office tools.

The global market for PC operating systems is expected to remain stable, and Microsoft is expected to continue being the market leader. For the cloud computing market, we see growth coming from enterprises, as companies upgrade/spend on data center infrastructure. Microsoft is the leader in software as a service segment, providing platforms and applications, and holds the second largest market share in the infrastructure as a service space.

Cloud computing will be the future of enterprise IT. Microsoft is a key player in the market and has a rapid growth. Microsoft is expanding partnerships with many large companies on cloud computing, AI and IoT to capture global market. Microsoft has made many large acquisitions like Linkedin and GitHub.

Microsoft’ s main competitors include Amazon, Alphabet, Oracle and IBM. While these companies all operate on a global scale and compete in the cloud computing market, Microsoft’s competitive advantage is that they have a strong EBITDA margin, profit margin and holistic solutions which have helped create a Microsoft ecosystem.

However, Microsoft also faces some risks. Significant investments made in new products and services may not achieve expected returns. Government litigation and regulatory activity may limit how Microsoft designs and markets its products. Also cyberattacks and security vulnerabilities could lead to reduced revenue, increased costs, liability claims, or harm to reputation or competitive position. Additionally, the new acquisitions like LinkedIn and GitHub may face an overpayment risk.

**Unrealized Gain on the Investment: 2.59%** (As of November 30, 2018)

**The Boeing Company (NYSE: BA)**

The Boeing Company, together with its subsidiaries, is one of the world’s leading aerospace firms. The company reports in four segments:

1. Commercial Airplanes segment, which develops, designs, produces and markets commercial jet airplanes and provide fleet support services worldwide.
2. Defense, Space & Security Segment, which engaged in the research, development, production and modification of manned and unmanned military airplanes and weapons systems.
3. Global Service Segment, which provides service and training to commercial and defense customers.
4. Boeing Capital Segment, which supports financing services for customers and manages overall financing exposure. It is the largest in the industry sector in terms of Market Cap (Over $200billion).

The outlook for Aerospace & Defense sector is strong. As globalization and urbanization continue to expand, air-traffic continue to grow and largely driven by economic growth and improved airline services are driven by the liberalization of air traffic rights between countries. This will create further demand for commercial airplanes and aviation service support. Strong demand also coming from the replacement of the current fleet. As airplanes are reaching an average of 20 years of service, according to company forecast, there are roughly 18590 airplanes will be replaced. This will bring the total fleet from 24400 to 42730 in the next 20 years. There are also opportunities in the defense sector. A large amount of fighter jets are demanding replacements and new programs are also introduced and going to be awarded to those who qualify.

We believe this industry is highly regulated. And both the technological barriers and heavily scrutinized certification process create a significant wide moat for Boeing and protecting its attractive margins from new entrants. The strong growth in the commercial airplanes market will continue to create a strong revenue growth for Boeing both in the commercial airplanes segment and global service segment, given its duopoly place with Airbus in the narrow body aircraft market. In addition, we have analyzed that the healthy backlog orders signal for a steady growth and continuing innovation also increase margins over time. These elements are also consistent with our investment philosophy.

We believe the current U.S. dollar strengthening and the trade tensions might impact Boeing’s projected earnings and growth strategy in the medium term. We also consider the uncertainty in fiscal appropriations will affect the BDS segment. The supply chain failure could also dramatically hurt the production rate and the quality image of Boeing, like the recent tragedy in Malaysia and reported engine problems. We believe we must consider these risk factors along with attractive returns from this investment.

**Unrealized Gain on the Investment: 5.22%** (As of November 30, 2018)

**LESSONS LEARNED**

As students, we have made sacrifices in order to invest in ourselves and attend University, increasing our knowledge and making us more valuable to future employers. Being a part of the University of Connecticut’s prestigious Student Managed Fund adds an additional layer of experience that many individuals do not get to receive until they are well into their careers. The opportunity to invest $500,000 is as daunting as it is exciting. Under the guidance of Professor Blake Mather, we have started to practically apply the lessons that we’ve learned in his class as well as other UConn courses that came before his. The Student Managed Fund in particular has allowed us to sharpen some old skills as well as taught us many new ones. These skills can be summarized as either hard technical skills or soft interpersonal skills.

Valuation and modeling are hard skills that all students in Student Managed Fund have acquired and sharpened. We have spent hours adjusting the assumptions and projections for the Discounted Cash Flow analysis and other forms of valuing companies. We have also learned to use Bloomberg Terminals for stock screening and research. There are countless functions that have become second nature to us and this has helped to use Bloomberg more efficiently. Lastly, the Student Managed Fund has turned us into industry experts and has taught us how to efficiently sift through tons of information.

On our first day of class Professor Blake Mather introduced us to the concept of second level thinking. Since that day, UConn Stamford’s SMF team has learned to not take data at face value or as isolated strands of information. Instead, we ask ourselves how one piece of data can come together with the rest of our knowledge in order to paint a better picture. In addition to this second level thinking we have developed soft skills related to preparing for and pitching a company. After multiple stock pitches the team has become comfortable with the nuances that come along with stock presentations. We have learned not to get too bogged down in assumptions and modeling and instead focus more on the big picture and the qualitative aspects of the company that is being pitched.