

# UConn

SCHOOL OF BUSINESS



## PORTFOLIO REPORT UNDERGRADUATE STUDENT MANAGED FUND FALL 2016

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# PORTFOLIO OVERVIEW

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## **Investment Managers**

Joseph Cotton	Thomas Delaney	Sean Elliott
Steven Gasparini	Taishi Kato	Jason Mraz
Sean Phelan	Roma Romaniv	Tami Stawicki
Tommy Stodolski	Rob Tavernier	Taylor VanFleet

## **Fall Officer Positions**

**Lead Manager** – Sean Phelan

**Portfolio Manager** – Taishi Kato

**Treasurer/Secretary** – Joseph Cotton

**Web Manager** – Taylor VanFleet

**Undergraduate Supervisor** - Christopher Wilkos

**Fund Director** - Chinmoy Ghosh

## **Investment Philosophy**

The UConn Student Managed Fund has applied the principles of value investing made famous by Benjamin Graham and Warren Buffett and has used these principles to evaluate potential investments for the Fund. The Fund conducts both qualitative and quantitative research in order to find undervalued stocks, and then seeks to add them to the Fund. Qualitative research focuses on understanding the business, looking at actions of competitors, evaluating the company's management team, and assessing any risks that affect the company's business model. Quantitative research consists of analyzing a company's financial ratios and performance in order to value the company using a discounted cash flow method. The Fund also evaluates both domestic and foreign news when considering an investment in a company.

## **Investment Strategy**

In order to evaluate the performance of the Student Managed Fund, the undergraduate team's portfolio will compare its returns to that of the S&P 500 Index. Each investment is analyzed for several key qualitative and quantitative metrics before a decision is made to pursue or decline a particular investment. These metrics include:

- Return on Invested Capital
- Competitive Advantages (such as patents and superior products)
- Strong Leadership
- Effective Business Models
- Shareholder Programs (dividends and share repurchases)
- Long-term Growth Prospects
- Growth in Earnings and Revenues
- Free Cash Flow Yield
- Balance Sheet
- Potential Risks
- Margin of Safety (as determined by the difference between the intrinsic value and current market price)

## **Risk Management**

The undergraduate portfolio is composed of U.S. equities and cash. In addition to the above criteria, each manager must properly understand the risks of each security. The Fund considers the following risks are of the highest importance:

**Business Model Risk** – company’s business model is unsustainable or easily duplicated

**Balance Sheet Risk** – company has leverage well above industry average

**Management Risk** – company may have unreliable management

**Aggregation Risk** – a portfolio sharing common risks among its holdings

At this time, the portfolio contains only large cap equities. This was not by design, but rather a secondary result of other investment criteria. We acknowledge the risks associated with only investing in large cap securities.

We are maintaining a high level of risk management by putting each selected stock through a rigorous screening and analysis process before committing to a purchase. This process includes analysis of the company’s business model, competitive landscape, industry, and corporate social responsibility. Specifically, we take a long-term forward-looking approach to assess whether competitive advantages are sustainable, including the company's financial situation such as debt levels, intelligent allocation of capital, and ability to consistently generate cash for shareholders.

With multiple managers specializing in different sectors, we have been able to successfully diversify our portfolio holdings across multiple sectors to avoid significant aggregation risk. Thus, in the event of a single industry experiencing a downturn, the majority of the portfolio remains unaffected. We continue to monitor the portfolio and reevaluate our existing positions as needed. In the event of any single security or the market as whole taking a highly significant downturn, we hold a 25-30% stop-loss from the purchase price to cap potential losses. Our risk management focus is centered on long-term performance and capital preservation, so we are not overly concerned with short-term volatility in the market.

## **Current Market Conditions**

Investor enthusiasm has been a key story over the third and fourth quarters of 2016. All major US indices have hit record highs and keep climbing, all in the face of political uncertainty, stagnant to falling corporate earnings, sluggish economic growth, and speculations over when the Fed will finally raise interest rates. Since Election Day, the DJIA has risen over 4% to surpass the 19,000 level, driven by beliefs that Trump's pro-growth policies will encourage infrastructure spending, repatriate billions of dollars back to the US, and drive interest rates, GDP, and inflation higher. The flow of money in the stock market has been away from emerging markets, technology, telecom, and utilities into the financial sector, health care, and US-focused equities.

## **Process**

Each manager specializes in at least two sectors and works with at least one other manager within that sector. These teams then research their sector to determine which companies are trading significantly from their true intrinsic value.

The Fund then conducts weekly meetings for managers to pitch their stocks before the team and Professor Wilkos. During the meetings, the Fund discusses the business model, growth opportunities and risks of investing in the business, and then decides whether or not the Fund needs more information or is willing to invest at that time.

In order to invest in a stock, it must get approval from at least 7 out of 10 managers. After the Fund decides to invest in a business, the group determines how much capital to allocate based on the risks and growth potential of the business and the certainty of the company's future. Each company will be allocated approximately 3%-10% of the total capital available to the fund.

The sectors and the corresponding analysts are listed below:

**Basic Materials** - Roma Romaniv, Tami Stawicki

**Consumer Discretionary** - Tom Delaney, Jason Mraz, Tami Stawicki

**Consumer Staples** - Tommy Stodolski, Taylor VanFleet, Steven Gasparini

**Energy** - Tommy Stodolski, Taishi Kato

**Financials** - Sean Phelan, Roma Romaniv, Taylor VanFleet

**Healthcare** - Rob Tavernier, Sean Elliott, Joe Cotton

**Industrials** - Tommy Stodolski, Steven Gasparini, Joe Cotton

**Information Technology** - Jason Mraz, Sean Elliott, Taishi Kato

**Telecom** - Rob Tavernier

**Utilities** - Sean Phelan, Tom Delaney

### Equity Portfolio and Allocation

The Fund has 53.81% of the portfolio invested with 0.78% remaining in cash and 45.41% remaining in the SPDR. Looking forward, the Fund is well positioned to invest the remaining portion of the portfolio into equities throughout the spring semester. The average position size excluding the SPDR ETF, is approximately 6%, with our largest positions being Wells Fargo (6.98%/~\$135k) and Capital One (6.79%/~\$131k). In total, there are 9 positions.

### Performance

The charts below depict the performance of the portfolio from September 27, 2016 to November 25, 2016.

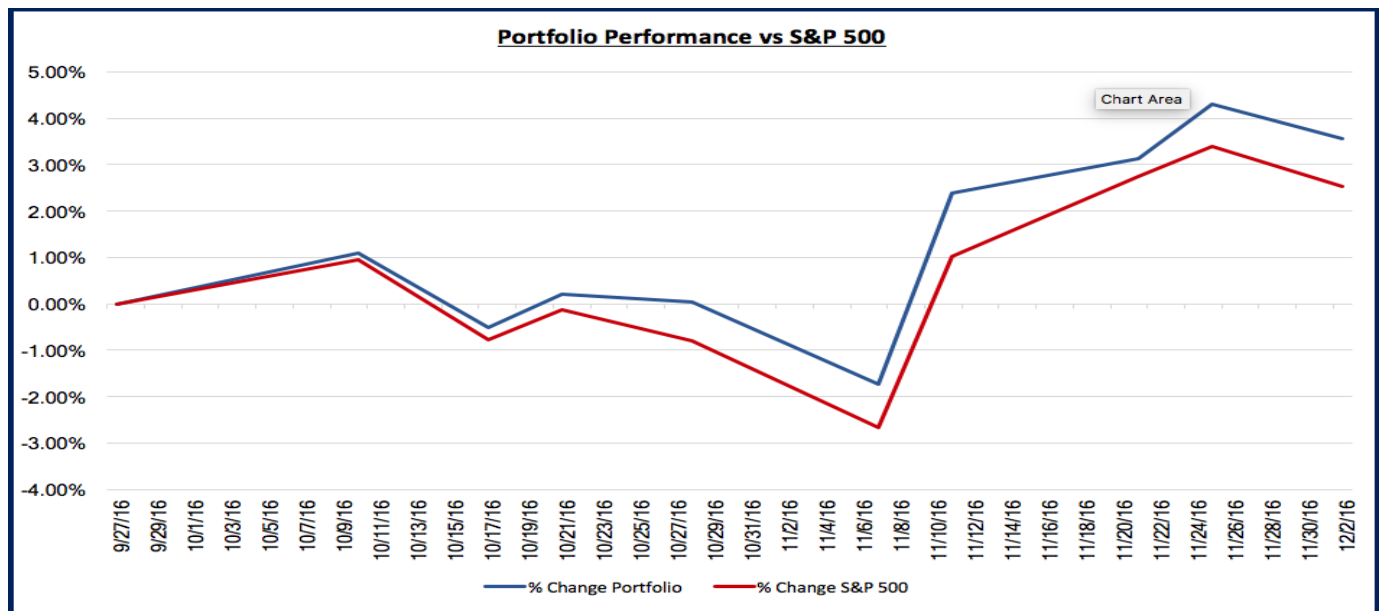
#### *Total Portfolio Unrealized Gains*

Portfolio											
Ticker	Name	Date Purchased	Shares	Purchase Price	Price	Cost Basis	Market Value	% of Portfolio	Change	% Change	
SPY	SPDR S&P 500 ETF	9/27/16	3,972	\$ 214.24	\$ 221.70	\$ 850,961	\$ 880,592	45.41%	\$ 29,631	3.48%	
WFC	Wells Fargo	10/3/16	2,437	\$ 44.10	\$ 55.55	\$ 107,472	\$ 135,375	6.98%	\$ 27,904	25.96%	
IBM	International Business Machines	10/10/16	700	\$ 157.22	\$ 160.35	\$ 110,051	\$ 112,245	5.79%	\$ 2,194	1.99%	
COF	Capital One	10/12/16	1,500	\$ 72.27	\$ 87.84	\$ 108,402	\$ 131,760	6.79%	\$ 23,358	21.55%	
DIS	Walt Disney	10/17/16	1,212	\$ 90.96	\$ 100.66	\$ 110,239	\$ 122,000	6.29%	\$ 11,761	10.67%	
VZ	Verizon Communications	11/1/16	2,282	\$ 48.04	\$ 50.36	\$ 109,627	\$ 114,922	5.93%	\$ 5,294	4.83%	
TSN	Tyson Foods	11/8/16	1,591	\$ 70.36	\$ 57.39	\$ 111,938	\$ 91,307	4.71%	\$ (20,630)	-18.43%	
EPD	Enterprise Products Partners	11/8/16	4,445	\$ 24.77	\$ 25.38	\$ 110,085	\$ 112,814	5.82%	\$ 2,729	2.56%	
UPS	United Parcel Service	11/21/16	966	\$ 113.87	\$ 116.54	\$ 109,995	\$ 112,578	5.81%	\$ 2,583	2.35%	
RPM	RPM International	11/29/16	1,036	\$ 53.17	\$ 53.37	\$ 55,082	\$ 55,291	2.85%	\$ 209	0.38%	
ROLL	RBC Bearings	12/6/16	655	\$ 84.46	\$ 84.35	\$ 55,319	\$ 55,249	2.85%	\$ (69)	-0.13%	
CASH			15,075		\$ 1.00		\$ 15,075	0.78%			
					<b>Total</b>	<b>\$ 1,783,851</b>	<b>\$ 1,939,208.90</b>		<b>\$ 84,824.52</b>	<b>4.73%</b>	

## Equity Portfolio Unrealized Gains

Equity Portfolio											
Ticker	Name	Date Purchased	Shares	Purchase Price	Price	Cost Basis	Market Value	% of Portfolio	Change	% Change	
WFC	Wells Fargo	10/3/16	2,437	\$ 44.10	\$ 55.55	\$ 107,472	\$ 135,375	12.97%	\$ 27,904	25.96%	
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ROLL	RBC Bearings	12/6/16	655	\$ 84.46	\$ 84.35	\$ 55,319	\$ 55,249	5.29%	\$ (69)	-0.13%	
Total						\$ 988,208	\$ 1,043,542		\$ 55,333	5.60%	

## Total Portfolio Performance vs. S&P 500



The most significant adverse impacts on our portfolio have been the delayed purchase of RPM International and the performance of Tyson Foods following disappointing earnings. For RPM, the Fund requested additional information upon the initial pitch regarding certain segments as well as the model. This resulted in a delay between the initial pitch and the purchase date. During this period, the stock had risen roughly 8.5%. This price appreciation would have resulted in additional capital gain for the Fund, however, in taking a long-term perspective, these short-term price increases do not affect overall performance greatly. Our thesis with Tyson has not changed in spite of the short term drop because we still feel their portfolio transformation will deliver value in the long-run.

## Individual Stock Performance

Overall, we have seen strong returns in our portfolio. More specifically, we have seen extremely strong returns in our investments in Financials and Consumer Discretionary stocks. Our largest gains 25.96% and 21.55% since purchase, comes from Wells Fargo and Capital One respectively due to the increased possibility of an increase in the Federal Funds Rate. In addition, the result of the recent presidential election has led to the anticipation of lower regulation in the industry resulting in a tremendous rally in recent weeks. Our largest and only loss at the moment is Tyson Foods due to reporting revenue and

earnings numbers slightly below analyst's expectation for the most recent quarter. The projected 2017 earnings forecast were also short of expectations. Additionally, the CEO also announced his retirement at the end of the year. The combination lead to a drop in stock price however, we believe that our investment thesis has not been compromised and that Tyson remains a strong long-term investment.

# ECONOMIC OUTLOOK

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Upon selecting potential investment opportunities for the Undergraduate Student Managed Fund, our team analyzes the current state of the global economy by focusing on macro-economic factors that will impact our investments in both the short and long term. Some of these economic factors and trends include:

## **The US Economy**

Although the U.S. economy has shown recent positive signs of stable growth, we consider our outlook to be mixed on the current and future prospects of the overall economy. In Q3 of 2016, the United States experienced real GDP growth of 2.9% QoQ, the highest single growth rate in quarterly GDP since Q4 of 2014. This growth was driven by an increase in consumer spending of .5% QoQ, a result of the positive outlook of consumer sentiment reflected in the latest consumer confidence figure of 91.6 in November 2016 (an encouraging sign given election uncertainty). In addition, core PCE (which excludes food and energy prices) stands at a 1.7% YoY rate, approaching the Federal Reserve's official target of a 2% inflation rate. Other growth prospects are exemplified in the latest 4.9% unemployment rate figure (in line with the consensus 5% natural rate of unemployment), as well as the decline in the latest initial jobless claims report (Nov 17) that reached its lowest level since November 1973 of 235,000 claims.

Despite these figures implying a strengthening domestic economy, our team also factors in historic benchmarks for comparison. On a YoY annual basis, real GDP has grown 1.5% in 2016, which is below the historic annual average of 3.2% from the post WWII period of 1948-2016. We believe a possible reason for this sluggish GDP growth is due to companies engaging in "quarterly capitalism". Many firms are under pressure by analysts and shareholders to maintain and sustain rising profits and earnings each quarter. Thus, although many of these companies are holding large cash reserves that could be reinvested in research and development (especially during this low interest rate environment), many would prefer to take that money and return it to shareholders. Thus, business investment has been a laggard on recent GDP numbers. In addition, although a 4.9% unemployment rate should signal a tightening labor market, wage growth has remained stagnant between 3.5-4.0% over the past year; below the historic average of 6.29% since 1960. We believe this disparity is due to a low labor force participation rate of 63% and explains the 9.5% U6 unemployment rate, which accounts for discouraged workers and those forced to settle for part-time over full-time positions.

In conclusion, while the Undergraduate SMF team recognizes the improvements made in the U.S. economy this year, we are still cognizant of the future progress that can occur before we deem the domestic economic outlook as unconditionally strong.

## **Economic Implications of the Trump Administration**

The SMF team recognizes that a shift from a liberal to a conservative administration beginning in 2017 will have significant economic implications on domestic and international economies.

In terms of domestic impact, the core of President-Elect Donald Trump's economic policies revolves around tax cuts. All individual taxpayers (regardless of income) will see a reduction in their tax rate based on his proposed three-tier tax bracket system. This should boost consumer spending within the United States, as individuals will have more disposable income. In addition, Trump's proposal to reduce the corporate tax rate from 35% to 15% (if enacted) should encourage business investment and could lead to repatriation of company cash held overseas. These tax reductions would help spur GDP growth and lead to a creation of jobs in the private sector. Furthermore, the Trump administration has called for a \$1



trillion infrastructure investment that would also lead to an increase in GDP growth, as well as job creation.

In terms of international ramifications, Trump has embodied an “America First” attitude when discussing trade policies. A protectionist trade policy is designed to promote and encourage domestic industries and protect them from pricing and cost pressures of international companies. However, like the uncertainty surrounding Brexit, many economists are skeptical of this pivot away from globalization. Globalization and free trade account for much of the United States’ economic growth and many fear trade wars could be enacted by disregarding trade agreements (like NAFTA and NATO) or by imposing tariffs on U.S. imports. Furthermore, Trump has discussed labeling China a “currency manipulator”, which could affect our relations with our largest debtholder going forward.

Therefore, although the SMF team is uncertain of the exact impact that a Trump administration will have on domestic and international economies, we will be closely monitoring policies that we feel will affect our investment holdings over the course of the Spring 2017 semester.

### **Federal Reserve and International Central Bank Monetary Policies**

As of November 20, 2016, the federal funds rate stood at 50 bps. With labor markets beginning to tighten (as reflected in the 4.9% unemployment rate) and inflation steadily rising to the Federal Reserve’s 2% target (1.7% PCE), it seems likely that a rate increase will occur by the end of 2016 (within the 25-50 bps range). We believe that, barring any unusual setbacks in the economy, the Federal Reserve will continue a gradual approach with respect to rate hikes throughout 2017. The SMF team recognizes that higher interest rates are used as a contractionary monetary policy tool to prevent the economy from experiencing high levels of inflation. Therefore, as interest rates and risk-free rates (i.e. 10 year Treasury yields) rise, the team will adjust our valuation assumptions accordingly with regards to WACC calculations and other rate-sensitive metrics.

Regarding monetary policy abroad, the European Central Bank (ECB) and Bank of England (BoE) have also held central bank interest rates at historic lows (currently 0 and 25 bps, respectively) following the Financial Crisis of 2008. The BoE actually lowered rates in August from 50 bps to 25 bps following the fallout of the Brexit vote and sharp decline of the British Pound. Meanwhile, central banks in Japan and Sweden have enacted negative interest rates to stimulate economic activity and inflation. The SMF team has acknowledged this unconventional methodology to stimulate economic activity abroad and will continue to follow developments regarding central bank monetary policy.

### **Global Economy**

One factor that we often consider when evaluating potential investments is international exposure. Two major economies that we focus on are China, Japan, and the Eurozone.

China has continued to see a decline in real GDP growth, estimated at 6.7% this year, compared to 6.9% last year, and as high as 15% before the Financial Crisis. Industrial production is expected to stay near 6%; it was as high as 18% before the financial crisis. The Chinese economy observed healthy growth in Q3 as private consumption remains strong and investment recovers. Property and real estate markets soared in Q3, yet are expected to slow in Q4 resulting from government stabilization efforts. The economy expects to attain its annual growth target between 6.5% and 7.0% for the year. Downside risks include a correction in the housing market, and increased tensions between the United States and China, follow Donald Trump’s presidential election. The economy is still expected to grow 6.6% in 2016 and 6.4% in 2017, up from previous projections. Both consumer confidence and business confidence indices are expected to fall over the next few years, providing additional indication that growth in China is

slowing. We will continue to monitor China as the year progresses, especially when considering investments that have exposure to this market.

The Japanese economy has fought the strength of the yen and global headwinds in Q3, expanding 2.2% from the previous quarter in Real GDP QoQ% SAAR, representing the fastest acceleration since Q1 2015. However, Japan's economic recovery suffers from weak wage growth, which in turn is dampening private consumption. Also, the uncertain global outlook and a strong yen remain a concern for Japanese businesses. In Japan, Donald Trump's presidential victory may negatively impact the country's important external sector and further strengthen the yen if global uncertainty rises. Unemployment in Japan is at recent lows, reaching 3.0% in Q3 as it continues to decline from the 5.1% high during the 2008 recession. Prime Minister Shinzo Abe plans to persuade private companies to boost wages as well as utilizing an expansionary budget next year to jumpstart growth. However, growth is expected to remain sluggish with GDP YoY for 2016 expected to be 0.6%, and 0.8% next year.

We have also given thought to the European market. Although this market is struggling, it is projected to improve over the next few years. Unemployment, currently at 10%, is projected to improve to 8.2% by 2020, and youth unemployment is also expected to fall. The unemployment rate fell in Q3 and consumption has been growing due to low interest rates and low inflation. A major European event that affected the US equity markets was the Brexit announcement on June 23, 2016. While this event led to an immediate decrease in US equities of about 5%, the market rallied back over the next week, and ultimately hit an all-time high two weeks after the announcement. We believe that this behavior was caused by uncertainty immediately after the announcement, followed by the realization that this event has no substantial change on US economic outlook. This event led to the Fed putting a rate increase on hold, which also helped the market rally. The Eurozone's slow growth continued in Q3, seemingly unaffected by the Brexit vote in June. GDP growth was stable at 0.3% over the previous quarter in Q3. Strong domestic demand and weak external sector demand were the main drivers of the modest quarterly growth. GDP growth is expected to rise from 0.3% to 1% in 2020. These metrics show that the European economy is expected to slowly recover. The euro has also fallen to the lowest level seen in nearly one year this November with increased market volatility following the United States presidential election of Donald Trump.

The most prominent and presently relevant geopolitical risk affecting the financial markets is the rise of populism. The economic squeeze of the middle class and domestic Islamic extremism have driven the populist politics of xenophobia, fear, and anger across Europe and the United States. This has the potential to weaken the existing political establishments and give power to those on the far left and far right. This will result in unpredictable foreign policies which avoid engagement abroad and focus efforts on domestic prosperity and problems.

### **Oil and Commodities**

Since the start of 2016, oil prices have swung between \$35 and \$53 per barrel, with prices more or less stabilizing around the \$45 per barrel mark for the last 8 months. Considering there is still oversupply in the market, many agencies and oil and gas companies are expecting this gap between supply and demand to close by mid-2017 due to an OPEC agreement on cutting production and healthy crude oil demand in the global market. In the long-term, it is important to note that we believe oil prices will be higher, but there is a new fundamental shift that has happened that will impede the global crude oil market from seeing record prices in the coming years. This shift is credited to American shale oil and gas producers who have pioneered a new business model that has affected OPEC producers' approach. Due to improved drilling and fracturing technology, these companies can quickly bring oil into the market in as few as six months, for smaller amounts of capital investment. These unconventional producers will act as a counterweight to OPEC production in the future, significantly reducing their leverage in the global oil

market. With other countries such as China and Argentina now developing their own oil and gas resources and the United States lifting the crude export ban, the global crude oil market will be much more competitive in the coming years, allowing for more stable oil prices.

While the price of gold has gained for the year, ever since Donald Trump was elected to office, gold prices have fallen about 7%. This is most likely due to the President-elect's pro-business policies that drove investors away from gold and into the equity market. Another part of the commodity market that is interesting to look at is the industrial metals side, which entails products such as steel and copper. Futures prices for these metals have actually risen after the election of Donald Trump due to his plan on investing more than \$500 billion in U.S. infrastructure. All in all, these higher prices in oil and industrial metals will be a factor that we will have to consider in the future for our positions since it has both a direct and indirect impact on financial performance.

# SECTOR ANALYSIS

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## **Sector Allocation**

The manner in which we allocated our portfolio by sector stems from our team's investment philosophy. As previously mentioned, we based our investment decisions primarily on selecting companies that exhibited strong business models and that are trading at a discount relative to their intrinsic value. We did not limit our investment decisions by requiring a certain allocation of the portfolio into specific sectors. We believed that certain sectors (i.e. utilities) holistically contained companies that would not create as much value as other sectors, so we did not make it a requirement to allocate into that area.

While the Fund did not set any floor for sector allocation, the team is aware of sector allocation in order to minimize aggregate risk and diversify our portfolio.

The following table highlights the sector breakdown, sector performance, and S&P sector weightings of our portfolio as of November 29, 2016:

Relative to the S&P 500, our investments are not evenly spread across all sectors. This is because we are only about 53% invested. We have not yet invested in the Healthcare, Utilities, and Real Estate sectors. As we continue to invest, we will be able to enter into the remaining sectors. Real Estate was recently separated from financials as of this year will be treated separately going forward.

## **Consumer Staples**

The consumer staples sector includes items that consumers buy that tend to be viewed as necessities. These businesses are less sensitive to economic cycles. It includes manufacturers and distributors of food, beverages, and tobacco as well as producers of non-durable household goods and personal products. Despite the volatility in the overall market, the consumer staples sector has been steady. However, due to some political uncertainty and continued Federal Reserve uncertainty, staples have the ability to be stable in investment portfolios.

Due to a large degree of tight profit margins, companies in this sector have been cutting costs while also adding more perceived value for consumers. Additionally, a reduction in energy prices over the last two years have also helped lower costs.

We recognize that the consumer staples industry has been considered over-valued over the past year, as investors have been attracted to these high-dividend paying stocks for yield in a low interest rate environment. However, companies in this sector that do not pay a dividend or that have a low dividend yield may still have room for growth, in terms of valuation.

As the U.S. economy grows, this dampens enthusiasm for staples due to decreasing demand. Also, there has been increased competition due to growth of emerging-market production that comes at a lower cost. Lastly, as banks seek to ease their effort to stimulate the economy, there could be a push to less defensive sectors.

Current Holdings: TSN

## **Industrials**

The Industrials sector contains a broad spectrum of companies that produce goods or provide services to both consumers and business for industrial use. The types of companies included in this sector include industrial conglomerates (United Technologies Corporation, General Electric), aerospace companies (Boeing), heavy machinery companies (Caterpillar), airliners (Southwest Airlines, American Airlines Group), shipping companies (FedEx, United Parcel Service), tool manufacturers (Stanley Black & Decker), fire and security companies (Tyco International PLC), defense companies (Lockheed Martin), etc. The industrial sector currently holds a weight of 9.73% (or about \$3.58 trillion in market cap) of the S&P 500. This is a decrease of about 0.30% of the weight of the index from last year.

The industrials sector has performed well this year. A dollar invested in a broad basket of U.S. industrial companies would have returned approximately \$1.16, year to date. Comparatively, a dollar investment in the U.S. equity market as a whole would have only grown to approximately \$1.07.

An important factor that will likely come into play in determining the performance of the industrial sector in the upcoming years will be global growth. Recent data has suggested to investors and to the market that China, the largest developing economy, may be slowing down. This slowing economy will likely reduce the demand for industrial products, with companies producing fewer products. However, Trump's \$500B to \$1T infrastructure spending plan and protectionist policies on domestic manufacturing industries will likely stimulate domestic industrial companies, such as Caterpillar, and Stanley Black & Decker. In addition, a proposed increase in the defense budget bodes well for companies like Boeing, UTC, Lockheed Martin, and GE. Thus, although global demand may be softening, favorable domestic policies may be enough to offset the disparity between industrial supply and demand abroad.

Current Holdings: UPS, ROLL

## **Consumer Discretionary**

Since the start of the year, 2015 has been tough on oil. In January oil prices hovered around \$55 per barrel. The Consumer Discretionary sector consists of companies that provide goods and services that are above and beyond needs to survive. A few types of companies that fall into this sector are consumer electronics companies (Best Buy), resort and gambling companies (Wynn Resorts), and clothing companies (Nike, Michael Kors). Year to date, the Consumer Discretionary Sector has increased by 6.17%, trailing the S&P 500 by 2.12%. This sector is a relatively large with a market cap of \$4.5 trillion and a market weight of 12.19% (Fidelity). Going forward, we believe there are some broad economic factors that bode well for this sector, as well as some that could pose a threat.

Currently, there are four factors that signal potential growth in this sector. First, is low gasoline prices. Low gas prices mean that consumers will be driving more and will be more willing to purchase larger, less efficient vehicles like SUVs that can command a higher price. Second, improving residential housing conditions is good because it means people are spending more to improve homes, which creates jobs and adds to economic growth. Third, the economy is in a low interest rate environment, meaning consumers have easy, cheap access to capital. This makes it easier to spend money on a house, a car, a condo, etc. Lastly, the economy is in a period of falling unemployment. With more people at work, more people have discretionary income to spend on goods.

There are also some factors that could be of concern for this sector. The Consumer Discretionary sector performs well when the economy is growing and performs poorly when the economy is not doing well. Given that the current economic cycle is more than six years into its recovery after the Great Recession of 2008, there is a potential risk that the broader economy could falter and hurt the consumer discretionary

sector. There is also the prospect of rising interest rates over the foreseeable future. Higher rates could lead to less discretionary income and less growth for the sector.

Due to these reasons, the undergraduate SMF team believes the consumer discretionary sector has several attractive companies in which to invest. Currently, the SMF portfolio has a consumer discretionary weighting of 6.20%. Our only current holding in this sector is Disney, which appreciated in value 8.65% since our purchase in October. Going forward, we will continue to monitor this space for undervalued corporations, particularly in the automotive industry.

Current Holdings: DIS

### **Energy**

Following a tough year in 2015, oil prices continued to fall in the beginning of 2016, before hitting a near-term low of \$26.05 per barrel in February. This was due to continued high production levels from the Organization of the Petroleum Exporting Countries (OPEC), specifically Saudi Arabia. Since then, oil has rallied over 70% and has settled in the mid 40s. The resilience of U.S. oil producers and depressed prices have led to talks about OPEC members reaching an agreement on production quotas at their semi-annual meeting at the end of November. In anticipation of an OPEC agreement, oil prices reached its highest levels in more than a year before falling to roughly \$45 per barrel.

In the short term, there is uncertainty about the direction of oil prices as OPEC may not come to a consensus or adhere to the agreed upon quotas. However, the SMF does believe that the price of oil will increase in the long term as the outlook for global consumption of petroleum products remains relatively strong.

Natural gas and liquid natural gas are also opportunities for growth. Natural gas emits significantly less carbon dioxide compared to coal and oil. Many midstream energy companies have focused on transporting and the expansion of terminals to export these natural gas products and offers substantial potential for growth.

These two views supported our position in Enterprise Products Partners. Enterprise is more of a volume and fee based business that has little exposure to oil commodity prices. Enterprise will also benefit from the growth in natural gas and liquid natural gas.

Current Holdings: EPD

### **Financials**

The Financials sector contains the category of stocks that provide financial services to customers, both commercial and retail. This includes banking, mortgage finance, consumer finance, specialized finance, investment funds, insurance companies and until September 1st, 2016, real estate. The team decided to encompass the 11th sector of Real Estate under Financials, therefore those who followed Financials would also be following real estate.

Financial service companies have seen both good and poor performance so far this year. In the beginning of 2016, there was poor performance due to selling with regard to potential loan defaults in the energy. From mid-February to May, however, the sector had steady performance until June when the British vote to leave the European Union. This decision had no precedent, so there seemed to be an overreaction in the market, as yields pushed lower and the United State's Federal Reserve did not raise rates. The financial

sector was the worst year-to-date performer following the Brexit vote. However, the likelihood of a rate hike in December has caused the sector to outperform in recent months. After the November Meeting, a hike in December is very likely, as economic data portrays higher wages and decreasing unemployment. Another positive factor for financial sector is the growing financial strength of financial institutions as some have increased dividend payments, enhanced share buyback programs, and paid back government loans, illustrating their growing health and stability. Many financial firms have much more robust capital levels today than they did pre-recession, yet trade at a relative discount, potentially creating attractive entry points for investments. In addition, consumer health has been on the rise, which bodes well for the economy as a whole, and financial services firm especially. They've reduced overall debt reducing the risk of default and giving them the opportunity to add to their debt to invest in the future.

The ultimate impact of Trump's presidency on financials is still uncertain, but the market reaction in the sector has been undoubtedly positive. Investors forecast rising interest rates and GDP, which has driven many firms who create revenue from interest spreads higher. Additionally, Trump is likely to be anti-regulation, which could be another boon for some of the bigger banks with less restrictions on their activities. The yield curve has steepened since the election, which could be a positive for the sector as well with loans becoming more profitable.

Current Holdings: WFC, COF

### **Healthcare**

For this analysis, healthcare will be broken down between companies that provide healthcare services or healthcare equipment, and companies that are involved in biotechnology and pharmaceuticals.

Healthcare services have been the topic of intense political and legal discussion leading to high uncertainty, and thusly, high volatility in the industry. As of the past few years, there has been an industry trend to consolidate. There are two pending mergers, Aetna - Humana and Anthem - Cigna that could have large implications on the industry's policies. These mergers have been very controversial as the healthcare industry would decrease from 5 large companies to only 3. There is skepticism that these deals will not be approved due to antitrust concerns leading to high price volatility in healthcare service companies. Furthermore, there is great controversy regarding the future of the Affordable Care Act (ACA). President elect Donald Trump plans to replace the ACA, which also creates a large unknown for the future of healthcare. Despite the unpredictable future, healthcare companies look to benefit from an increased demand in healthcare products and services, as well as improved cost structures.

As for biotechnology and pharmaceutical companies, the cost of research and the pricing of drugs remain topics of discussion. The biotechnology industry has struggled to limit losses since the beginning of 2016. This is evident when observing the S&P 500 Biotechnology ETF, XBI. This sector ETF has yet to reach its high of \$72.29 from 1 year ago demonstrating the poor performance of biotechnology companies. Threats to drug pricing and profitability have diminished returns within this industry. However, this may make financially strong and cash-heavy companies such as Gilead and Biogen undervalued investments. Additionally, due to modest price increases, the pharmaceutical industry looks to have modest growth. Moody's has changed its industry outlook from positive (4%-5% growth) to stable (3%-4% growth). Lower pricing flexibility and a strong US dollar have contributed to decreased growth expectations. Increased regulation diminish profit margins as companies are unable to charge as high of prices for drugs. Also, because most pharmaceutical companies sell products globally, foreign currency translation exposure can be detrimental.

No Current Holdings

## **Materials**

The materials sector makes up about 2.9% of the S&P 500 with 27 constituents and has seen a 8.10% return for the past year. Materials is sensitive to changes in the business cycle and depends on a strong economy. It is also sensitive to the price of raw materials and so is largely driven by supply and demand fluctuations.

The materials sector is comprised of five major industries: chemicals, construction materials, containers and packaging, metals and mining, and paper and forest products. Chemicals include agricultural, basic and diversified, and specialty which are all widely used for manufacturing. Construction materials is highly cyclical and fragmented with companies dominate in certain niche areas. Containers and packaging serve food and beverage, household products, and pharmaceutical with dispensing and protection of products. Metals and mining companies supply commodities used in many of the other sectors. Companies that perform well tend to have substantial mine reserves, an extent of projects, and steady production. Paper and forest products operate in lumber and building supply, paper, and timberland markets where electricity and transportation tend to be the biggest expenses.

There has been a strong trend of mergers and acquisitions in the chemicals materials sector. As the regulatory environment becomes tougher, smaller deals take precedent. However this trend in deals leads some to think that a drop in ROIC is to follow based on previous historical patterns. Other trends in the industry include growth in the specialty chemicals space even in weak economy. Another recent economic impact will be the results of the elections. Trump's \$500 billion infrastructure plan will require use of chemicals including coatings and sealants. This can provide another boost for the future of the industry.

Current Holdings: RPM

## **Information Technology**

The Information Technology (Tech) sector includes companies that make hardware and software, as well as companies that provide services in data analytics, technology implementation, and technology process improvement. Companies in this sector include Microsoft, Apple, and Google. So far this year, the tech sector has had an above average performance in comparison to the S&P 500, outperforming by 3.78%. Year to date, Tech has a 12.07% return which is fifth best of the 10 sectors. Presently, tech has a market cap of \$6.39 trillion and a market weight of 21.44%. Over the past 20 years, tech has experienced more growth than any other sector. Moving forward, there are factors that support additional growth, as well as factors that could derail growth.

Specifically, there are two areas of tech that are expected to perform well in the foreseeable future. The first area is consumer facing technology companies that focus on social, mobile, and e-commerce applications. Companies like Facebook have been very successful in this space and are poised to continue growing. The second area is companies that can provide cost savings or revenue enhancement to other companies. These are companies that offer cloud solutions such as Amazon and Microsoft, as well as companies like IBM that are investing heavily in analytics.

There are two factors that could negatively impact tech. The first is a downturn in the global economy. The tech sector is increasingly global, and if a large economy such as China's falters, it could hurt the whole industry. The second factor is the potential of increasing interest rates over the next year. Increased rates mean increased costs of raising capital, which could make it more difficult for companies to invest in growth opportunities.



Currently, the tech sector makes up 5.91% of the Undergraduate SMF portfolio and consists of one holding, IBM. We believe IBM is poised to gain a foothold in both cloud computing and analytics and is well positioned for growth over the foreseeable future. Moving forward, we will continue to look at the tech sector for undervalued companies.

Current Holdings: IBM

### **Telecommunications**

The telecommunications sector is the smallest sector of the S&P 500, with only 5 companies included in the index. This sector has performed well over the past year, with a return of approximately 11.5% (versus 5.5% for the S&P as a whole). This sector is made up of companies that provide communications services primarily through a fixed-line, cellular, wireless, high bandwidth and/or fiber optic cable network. The major divide in this sector is between wireless and wireline services, however, the major wireless providers (AT&T and Verizon) both offer wireline services in addition to their primary wireless businesses. We project higher growth in the wireless segment as consumer preferences change and people continue “cutting cable.”

Current Holdings: VZ

# INDIVIDUAL POSITIONS

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## **Wells Fargo (NYSE: WFC) - Sean & Taishi**

On October 3, 2016, we purchased 2,437 shares of Wells Fargo & Co at \$44.10/share.

Wells Fargo & Co is a diversified, community-based financial services company with \$1.9 trillion in assets. WFC operates in three main business segments: Community Banking, Wholesale Banking, and Wealth and Investment Management. Community Banking, responsible for half of the company's revenue, offers retail and small business banking services as well as consumer lending. Wholesale Banking provides financial solutions to businesses across the United States. The majority of revenue in this business segment comes from commercial banking services. Wealth and Investment Management offers financial advisory, wealth management, brokerage, retirement, trust, and reinsurance services.

We feel as though Wells Fargo has sustainable competitive advantages across each business line that position the bank as one of the most attractive investments within the financial services sector over the long term. From a purely price attractiveness standpoint, Wells Fargo has been down with all of the financial sector since the Great Recession despite being much more well capitalized now than they were pre-2007. We believed that Wells Fargo was a strong investment because they are incredibly well positioned to capitalize on a normalization in interest rates, their financial health is much stronger than their peers, and because they have begun to focus on growing smaller parts of their business by leveraging the relationships and cash flows from more entrenched lines to build their brand in these key areas.

Wells Fargo's key distinction among all US based banks is simply their scale, which provides serious cost advantages that have and will prove to be critically important given the cost of regulation. WFC has a presence in one out of every 3 houses in the US and has more retail deposits than any other bank in the country. This is a significant advantage that has contributed to the financial success of the bank because deposits are one of the safer and more reliable revenue sources in the financial services industry; the deposit rate in the US has grown for 66 consecutive years at a rate double US GDP. As a result, WFC has an expansive and low cost funding source, and the interest rate spread on the deposits they take in versus what they lend out is poised to increase top-line revenue by 2-5% based on the severity of imminent interest rate hikes. Additionally, WFC has a dividend yield of 3.3%, much greater than a comparable average of 2.54%.

Expanding upon WFC's financial strength, the bank's 12.2% ROE easily outpaces the industry average of 8.7%, and their 57.3% efficiency ratio documents a very strong earnings potential. WFC's 39% profit margin (check trends) is set to rise as the firm expands their investment banking and treasury businesses. The expansion of these lines, among several other initiatives, will be another key catalyst for the bank; overall growth will remain stable if these lines underperform due to the high-switching costs for customers in their industry leading community banking division, but increasing their market share in smaller, but high profit-margin lines will diversify the company and boost earnings.

WFC is not without risks, and they faced a major scandal prior to our purchase of the stock. About a week to two weeks prior to our purchase, news surfaced that WFC had illegally opened millions of fake customer accounts in attempts for sales staff to reach very aggressive quotas. In evaluating this scandal, we thought about several different scenarios. To start off, the \$185M fine was simply a drop in the bucket for WFC, and ultimately the fake accounts contributed an incredibly small fraction of total revenue. Financially, the scandal was not a concern; where the issues would arise is from consumer confidence in the bank, and any negative impact the scandal would have on customer retention and creation. As part of our pitch, we asserted that if strong action were taken to reconcile with those customers defrauded and

management was held responsible, the market would react positively and the scandal would slowly fade away. After we purchased WFC, CEO John Stumpf resigned amid investor backlash that he was either ignorant or inactive about the scandal, and the company removed unrealistic sales goals while retaining their cross-selling culture.

Other major risks for WFC lie in the viability of the American economy. The stock jumped significantly following the election of Donald Trump because of his pro-growth policy initiatives that should induce higher interest rates, and because of his anti-regulation stances. However, the realization of growth is still uncertain, as are many other consequences of his presidency since there is little clarity on his exact approach. An economic downturn will significantly hamper WFC ability to grow, and could hit their earnings hard if loan losses mount.

To date, we have an unrealized gain of 19.32% on WFC.

### **International Business Machines Corp. (NYSE: IBM)**

On October 13, 2016, we purchased 700 shares of International Business Machines Corp. (IBM) at a price of \$157.22/share. The size of the initial investment was \$110,051.13.

IBM provides information technology (IT) products, solutions, and services globally. IBM has 4 business segments: Global Services (GS), Software Capabilities Systems Hardware, and Global Financing. Furthermore, Global Services can be broken down between Global Technology Services (GTS) and Global Business Services (GBS). GTS provides IT infrastructure services such as cloud computing, analytics, mobile, security, and social. GBS delivers predictable business outcomes through consulting in strategy, application, and software. The breakdown based on percent of revenue in 2015 is (\$81.7 billion total): GS: 44%, Software: 43%, Hardware: 12%, Global Financing: 2%

IBM provides products and services directly and through third party distributors.

As of recently, IBM has suffered due to the corporation's transition from a hardware services company into a software services and solutions provider. This transition has led to recent trends in declining revenue. However, throughout the transition process, IBM has maintained profitability with an EPS of 13.50 or more since 2012. IBM's transformation will be powered by development and growth in Cognitive Solutions and IBM's Cloud Platform. IBM is an industry leader in Data and Analytics with products such as Watson, a supercomputer that combines artificial intelligence and analytical software to provide solutions as a question answering machine. Additionally, IBM is a global leader in Hybrid Cloud, which will drive their efforts to compete with Amazon Web Services in the cloud industry.

Within the Global Services industry, cloud computing remains to be the driving force behind IT services. Despite only capturing 7% of the cloud market share (while the industry leader, Amazon, has 31%), IBM is the industry leader in hybrid cloud. Hybrid cloud is a combination of using the public and private cloud. Due to better security and more architectural flexibility, IT services are trending towards hybrid cloud. Furthermore, software is expected to grow due to cloud, mobile, and analytics. The \$65 billion cloud software market is projected to continuously grow at 16% per year through 2020. As a leader in hybrid cloud, IBM is heavily exposed to this growth area. Also, the transition to the cloud and the digitization of data is expected to drive demand for analytics and artificial intelligence like IBM's Watson.

Within IT services, IBM's main competitors are Accenture, Hewlett Packard (HP), and Wipro Technologies. In the infrastructure software industry, IBM's biggest competitors are Microsoft, Oracle, and Amazon. Although IBM is transitioning away from hardware, IBM mainly competes against Oracle, Dell, and HP. And lastly, IBM competes with numerous small players in the global financing industry.

In order to compete with other industry leaders like Microsoft, HP, and Amazon, IBM has transitioned into more profitable, faster growth areas. It calls these growth areas its 'Strategic Imperatives'. These Strategic Imperatives consist of the Cloud, Analytics, Mobile, Social, and Security. As companies advance technologically, they will invest more into technologies such as hybrid cloud and cognitive solutions. It's estimated that hybrid cloud market alone will grow to be a \$400B industry and that analytics will grow to become a \$2T industry. As the industry leader in both of these segments, IBM is primed for success. Furthermore, IBM is in a strong, stable position due to its stable leadership team, its stable owners (largest investor is Berkshire Hathaway), and its commitment to investing in growth.

IBM faces inherent risks in transitioning its business model. As the company transitions from a hardware services company to a software and solutions provider, IBM must remain innovative to overcome increased competition in cloud, analytics, and IT services. Additionally, there is cybersecurity risk when using cloud computing. IBM will mitigate this risk with the use of hybrid cloud and security intelligence and analytics to detect vulnerabilities. IBM can utilize Watson to find where IBM and its customers are most susceptible to cyber attacks. Lastly, due to the rapid growth in cloud, artificial intelligence, and data and analytics, there is increased competition. IBM will be able to overcome increased competition through utilizing previous relationships with current clients and utilizing economies of scale.

Because IBM is a financially strong and well diversified business with growth potential, it is a good investment opportunity in the Information Technology sector.

To date, we have an unrealized gain of 3.77% on IBM.

### **Capital One (NYSE: COF)**

On October 12th, 2016 we bought 1,500 shares of Capital One at \$72.27 for a total value of \$108,401.55.

Capital One (COF) is a domestic and international diversified bank. They have bank locations in Connecticut, Louisiana, New Jersey, New York and Texas, and offer a broad array of financial products and services to customers, small businesses and commercial clients. COF operates through two main subsidiaries, Capital One Bank (USA), National Association ("COBNA") which offers credit and debit card products, other lending products and deposit products; and Capital One, National Association ("CONA"), which offers a spectrum of banking products and financial services to both consumers and businesses of various sizes. It is the eighth largest bank in the United States based on assets and the number four credit card issuer based on loan balances. The three main segments of Capital One are their credit card business, their consumer banking and their commercial banking businesses. The credit card business is their legacy business that began with the inception of the company in 1994. COF distributes credit cards to individuals, small businesses and corporates. This is the largest segment in terms of revenue and income. Their consumer banking segment offers a variety of mass-market and customized financial products for individuals, families and communities. Their commercial banking segment offers loans for corporations.

Capital One will deliver long run value due to its growing diversification in business, experience in managing quality of deposits and loans, and their competitive advantage in key areas such as online banking and their credit card business. The company has been able to withstand financial volatility (as seen during the financial crisis) and has taken on successful organic and inorganic growth opportunities through its lifetime. It was undervalued at the time of purchase and had significant upside potential.

Capital One Corporation has several strong competitive advantages. First, Capital One has a prominent international credit card business in the UK and Canada. Direct competitors Wells Fargo, U.S. Bank and PNC Bank don't have a strong international card presence. Also, Capital One, since its acquisition of

ING Direct in 2012, has been the pioneer in online banking and mobile banking. Capital One 360 was the first U.S. issuer app from contactless payments on Android. 360 and the Capital One wallet are two of the highest rated apps in financial services. Additionally, their cards with rewards are well-known and continuing to expand. Quicksilver and Venture cards are growing at a faster pace than competitors American Express and Discover Financial Services while also managing their overall costs well. Their credit card balances are up 12% in Q2 Year over Year.

In the most recent news Capital One has released its third quarter earnings of \$2.03 per share, beating estimates consensus. Future growth and innovation is expected in the growing Capital One Wallet application that has recently been developed in partnership with Android. COF maintain a positive outlook on growth in the U.S. and internationally as future macroeconomic outlooks tend to favor the financial industry.

The largest risk COF faces is interest rate risk. Capital One is well-positioned for a rate increase, as they are not as rate-sensitive as a typical bank due to their higher net-margin and greater proportion of high-yield assets. Credit losses are also a risk but Capital One has proven itself to be a prudent underwriter of risk. Although the credit card business caters to low-prime and high-quality subprime borrowers, it did not have a loss during the financial crisis and all money borrowed from the government was returned the following year. Through time COF has successfully balanced the provisions for write offs and fluctuations of subprime loans in its operations. There are also several technology risks that COF faces. As a prominent player in the online and mobile banking space, there is a risk of credit information being stolen through a security breach. There has not been an incident in the past however and Capital One has invested in cyber threat analytics, data encryption and tokenization technologies, anti-malware defenses and a vulnerability management program.

As of November 28th, we have an unrealized gain of 17.02% on Capital One.

### **Disney (NYSE:DIS)**

On October 17, 2016, we purchased 1,212 shares of Disney at \$90.96 per share.

The Walt Disney Company is a diversified global entertainment business with operations in five major segments: Media Networks, Parks and Resorts, Studio Entertainment, Consumer Products, and Interactive. Media Networks is Disney's largest segment which is made up of the company's cable and broadcast television networks which include ESPN, the Disney Channels, and ABC Family. The segment generates revenues from affiliate and provider fees. The Parks and Resorts segment consists of the domestic and international theme parks and resorts the company owns or has effective ownership in. The resorts generate the majority of revenue from the sale of admission and the food and retail purchases made within the parks. The Studio Entertainment segment produces live-action and animated films, direct-to-video content, musical recordings, and live theater performances. Disney distributes this media under the Walt Disney Pictures, Pixar, Marvel, Lucasfilm, and Touchstone banners with revenues stemming from the distribution of the content. The Consumer Products segment designs and develops a wide array of products based on its extensive intellectual property which produce revenue through licensing, publishing, and the company's retail stores. The interactive segment develops console, mobile, and virtual games sold globally and licenses content to publishers for mobile devices.

The Walt Disney Company has been a leader in the media entertainment industry throughout its history with its strong brand recognition and consumer loyalty. The company will continue to provide long run value due to its unique media network content, domination in its world-renowned parks and resorts, and its consistent ability to monetize on its intellectual property. The company has seen consistent and strong growth since inception and is continuing to innovate across all segments. Disney's minority stake in

BAMTech and other OTT streaming services will help the company expand distribution and thus remain an industry leader. International investment in Europe and Asia for the parks and resorts business will benefit the company through exposure to additional high growth economies.

Disney competes with many different media conglomerates across its various business lines. The company's largest competitors are Comcast, Time Warner, 21st Century Fox, CBS Corp., and Discovery Communications. Disney has proven to be the market leader in the media industry, with the largest market-share by revenue of all competitors. This past year, Disney reported \$52.465B in revenue which is equivalent to 31.82% of the total revenue generated by its ten closest competitors combined.

Disney is an innovator and leader in its primary business segments. ESPN, ABC, and the Disney Channels offer unique content that cannot be licensed or distributed by other media networks. The strength and exclusive nature of this content allows Disney to generate profit above their competitors through advertising and affiliate fees. The company also ties many of its business units together where consumers are able to engage with the same characters through television, film, consumer products, parks, and video games. Disney's brand recognition is one of its strongest assets and continues to be a household name across the globe.

The primary concern for Disney has been its loss of subscribership for its ESPN networks with consumers no longer wanting to pay high cable fees and switching to streaming services. However, Disney has made strategic investments and partnerships with BAMTech, AT&T/DirecTV, Hulu, PlayStation Vue, and Sling TV which are actively addressing these concerns and moving the company toward streaming distribution. Other risks include decline in economic conditions, maintenance of intellectual property rights, and increased competition. As the top global content licensor with incredible control over its unique and innovative intellectual property, this risk is not a concern and barriers to entry remain high in all segments.

Fiscal 2016 also included two of the most important developments in recent years, the return of Star Wars and the very successful opening of the Shanghai Disney Resort. These strategic developments will drive long-term growth for Disney going forward. Star Wars: The Force Awakens is the third highest grossing movie of all time, and the Lucasfilm acquisition is relatively recent (2012). In addition, production for Rogue One, Episode VIII, a Han Solo film, and Episode IX are all already underway. Shanghai Disneyland has already seen four million visitors in the first four months of operations. The park is already a national tourist destination, with more than half of visitors coming from outside of Shanghai. Millions of people across China are developing an awareness and fondness for the Disney brand, which will help drive growth in this huge market over the long term. Revenues for the year increased 6% to a record \$55.6 billion, net income for the year increased 12% to a record \$9.4 billion, and EPS for the year increased 17% to a record \$5.73.

As of November 21, 2016 we have an unrealized gain of 8.65% on DIS.

### **Verizon (NYSE: VZ)**

On November 1, 2016 we purchased 2,282 shares of Verizon at \$48.04 a share for a total investment of \$109,627.28.

Verizon is a broadband telecommunications company and the largest wireless communications service provider in the United States. Verizon has two main business segments: Wireless (responsible for 70% of revenue) and Wireline (responsible for 30% of revenue). Wireless provides Wi-Fi, 3G, and 4G data networks to consumers. Wireline provides broadband internet, landline services, and Verizon Fios TV.

Verizon is also expanding into the online advertising sector with the purchase of AOL and pending acquisition of Yahoo. The CEO of Verizon is Lowell McAdam.

Verizon is a leader in the wireless service industry and is poised to be an emerging player in the digital media and advertising space. Verizon has a high free cash flow yield and a strong dividend which has grown consistently for the past decade, making it both a safe income oriented investment and an undervalued company with high upside potential.

The wireless service industry is projected to grow at a rate of 3% per year with global 5G network growth projected to reach \$247 billion by 2025. The onset of new technology requiring wireless data and mobile connectivity will cause telecommunications companies to increase their bandwidth speed and reliability of their data networks. Telecom companies are also heavily involved in the acquisition of digital media providers such as Verizon purchasing AOL and AT&T announcing the acquisition of Time Warner. These companies are looking to expand away from the wireline service and more towards the online advertising revenue.

Verizon has a number of competitive advantages compared to other telecom companies. They have the largest market share in the telecom industry with over 31%. Additionally, Verizon has the highest customer loyalty rating in the industry at 99.4% which ensures customers are not switching from the company when they get a new wireless contract. Verizon is also the first telecom company to drastically expand into the online advertisement market which has created a variety of new growth opportunities to increase revenue. They also have a strong dividend yield of 4.6% which is higher than many of their competitors

There are several risks that were analyzed before investing in Verizon. Some analysts believe that Verizon is overvalued in the market due to its high dividend yield and project that the company's share price will eventually fall. Additionally, increasing data coverage in the telecom industry is also especially challenging as it requires a large amount of infrastructure and capital to expand into new locations. The wireline industry consisting of landlines and broadband internet is currently profitable but will eventually decline and be replaced by a pure wireless network. Finally, Verizon is expanding to the online advertising world where it will face new competitors and business strategies that it has never previously competed with.

As of November 21, 2016 the SMF has a unrealized gain of 0.56% on the Verizon investment.

### **Tyson (NYSE: TSN)**

On November 8th, 2016, we purchased 1,591 shares of Tyson Foods, Inc. at a price of \$70.36 per share. The total size of the initial investment was \$111,937.99.

Tyson Foods, Inc., together with its subsidiaries, operates as a food company worldwide. It was founded in 1935 and is headquartered in Springdale, Arkansas. It operates through four segments: Chicken, Beef, Port, and Prepared Foods. They sell their products to domestic food retailers, foodservice distributors, restaurant operators, hotel chains and non-commercial establishments such as schools, healthcare facilities, and the military. Tyson also markets their products to international export markets. Tyson Foods, Inc. offers its products primarily under the Tyson, Jimmy Dean, Hillshire Farm, Sara Lee, Ball Park, Wright, Aidells, and State Fair brands.

Tyson Foods Inc. was a strong buy recommendation due to TSN's portfolio transformation focusing on increasing margins while minimizing volatility, positioning TSN at the top of key growing segments with room to continue to capture market share due to their strong financials. After acquiring Hillshire Brands in 2014, the company has now positioned themselves as the #1 of #2 brand in 13 different categories, with

still the opportunity to grow within the segment to increase their brand penetration within households. In addition, Tyson historically has been seen as a commoditized meat producer, which has led to low operating margins when the food industry generally attracts high margins. Tyson's portfolio transformation is centered on expanding their commitment to higher margin business lines, so they are in a strong position to see constant margin growth. The company also has a mixture of share repurchasing programs and synergies from their Hillshire acquisition that has been good for EPS growth. Lastly, despite acquiring The Hillshire Brands for \$7.7B in 2014, the company has already managed to position itself to make future acquisitions through rapid deleveraging.

We took account of risks specific to Tyson and the industry as a whole. The recent price-fixing class action lawsuit could lead Tyson to incur high litigation costs or fines if any wrongdoing is actually found. Our belief is that the allegations are unfounded and don't reflect collusion among market participants, but rather shows companies acting in their best interests given changes in the demand for chicken. Another key risk lies in the price fluctuations of different commodities, including corn, chicken, and cattle. While Tyson has adjusted their product mix to minimize volatility, they still are dependent on the supply/demand of many commodities and cannot fully hedge their risks. One of Tyson's main goals currently is to sustainably increase their operating margins across all 4 segments; prolonged depressions or rises in commodity prices could squeeze margins. Another risk lies in unexpected shifts in consumer tastes as many Americans are becoming more and more health conscious. Tyson will need to continuously innovate to match their products with consumer demands.

On November 21st, shares of Tyson Foods tumbled by almost 15% after the company reported fiscal fourth-quarter profit and sales that missed expectations and provided a downbeat outlook. The revenue miss was a result of less-than-expected beef, pork and prepared food sales which offset the good performance of better than expected chicken sales. In addition, the Chief Executive Officer Donnie Smith will step down at the end of 2016. Despite the revenue miss and adjusted outlook, we still believe that Tyson is positioned well in the consumer staples market and have said they plan to increase capital spending to increase production and improve worker safety, animal welfare, food safety and its supply chain. Despite the weak results outgoing Smith explained that the company still had success for the fiscal year and it was their fourth year of record results in a row. Also, Smith's replacement, Tom Hayes, has been chosen to succeed Smith and has been with the company since their acquisition of Hillshire Brands. He transitions to CEO from his current role as President, and has previously held positions as Chief Commercial Officer overseeing all North American Sales, as well as Chief Supply Chain officer for The Hillshire Brand Company. He is a 29-year veteran of the consumer products industry and is more than fit to continue Tyson's growth.

As of November 21st, 2016, we have an unrealized loss of -15.22% on Tyson.

### **Enterprise Products Partners (NYSE: EPD)**

On November 8th, 2016, we purchased 4,445 shares of Enterprise Products Partners, L.P. at a price of \$24.77 per share. The total size of the initial investment was \$110,084.87.

Enterprise Products Partners provides midstream energy and processing services to producers and consumers of natural gas, natural gas liquids (NGLs), crude oil and petrochemicals. Operating through four main business segments, Enterprise generates revenue through its Natural Gas, Natural Gas Liquids and Crude Oil Pipelines and Services, as well as its Petrochemical and Refined Products Services segment. These segments include hydrocarbon treating, processing, transportation, storage and terminal servicing. Spanning across the United States, but mostly located near the Gulf of Mexico, Enterprise's assets include 49,000 miles of pipelines, as well as 250 million barrels of storage capacity for NGLs, crude oil and petrochemicals. Additionally, the company has about 14 billion cubic feet of natural gas storage capacity.



In regards to Enterprise's financial information, the company has been largely affected by the crash in energy prices, causing its revenues to decrease significantly when compared to years with higher energy prices. This is largely because Enterprise is dependent on oil and gas exploration companies in generating products that can be used through Enterprise's assets. These assets, specifically, pipelines and storage are primarily long-term fee-based contracts, in which prices are regulated by the Federal Energy Regulatory Commission, or by other state agencies if the pipeline is intrastate. Although revenues have decreased recently, Enterprise's gross and operating margins have increased in the past 5 years due to these fee-based contracts and cost cutting measures. This is one of the reasons cash distribution to unitholders has increased for the past 49 quarters.

An important growth project that Enterprise is investing in currently and is scheduled for operation in mid-2018 is its Midland-to-Sealy Pipeline. This pipeline will extend 416 miles across Texas and will have a capacity of about 300 thousand barrels per day. With robust demand from oil and gas exploration companies, Enterprise already has about 60% of initial capacity contracted with companies in the Permian basin, connecting them to Enterprise's storage facilities, export terminal or every refinery in the Houston and Beaumont region. Considering the Permian region is one of the most productive and profitable oil fields that can withstand oil prices at a low of \$30 per barrel, we believe the Midland-to-Sealy Pipeline will bring distributable cash flow to investors in the long run.

Operating in an industry that requires large amounts of capital expenditure on projects and regulatory compliance, Enterprise has large barriers of entry against future competitors. When analyzing their pipeline map, the company faces little competition and essentially operates a monopoly in some areas of the United States due to the aforementioned two factors. In addition to these factors, Enterprise's key NGL assets and scale allow it an advantage that other companies find hard to compete with, since Enterprise has developed such long-term relationships with customers. While the company has key advantages operationally, it also has competitive advantages financially because of its high credit rating (Baa1) and because it does not have any incentive distribution rights (IDRs). Its credit rating allows easier access to the debt markets, which midstream companies are dependent on for future growth. In regards to incentive distribution rights, the general partners of the company are incentivized just like the limited partners, through cash distributions. With no IDRs, Enterprise can generate more distributable cash flow that can either be paid to unitholders or kept for future funding on projects.

A major risk that Enterprise faces going forward is the production and demand for crude oil, natural gas and NGLs. Decreases in the production of these hydrocarbons from U.S. exploration and production companies will cause Enterprise to lose future sales, affecting its distributable cash flow. Additionally, increased global demand for nonrenewable energy will affect hydrocarbon production, impacting Enterprise's business. The company can also be impacted in the future by regulation and different third-party organizations on future projects, as seen recently with Energy Transfer Partners and its planned Dakota Access Pipeline.

As of November 21, 2016 we have an unrealized gain of 3.53% on EPD.

### **UPS (NYSE: UPS)**

On November 21 we purchased 966 shares of UPS at \$113.87 a share for a total investment of \$109,994.46.

United Parcel Service (UPS) is the largest package delivery company in the world which delivers more than 15 million packages daily to 8 million customers in over 220 countries worldwide. The company is broken up into three segments U.S. Domestic Package Services (63% revenue), International Package

Services (21% revenue), and Supply Chain and Freight Solutions (16% revenue). UPS had a total revenue of \$58.4 billion in 2015. The CEO of UPS is David Abney.

UPS was pitched to the SMF on the basis of the courier industry growth trends as a whole as well as UPS's specific growth opportunities within the industry. The courier industry is highly correlated to the e-commerce industry due to the advancement of online shopping. From 2015-2016, domestic online shopping is projected to increase by 15.6% from \$341 billion to \$395 billion. The growth in the domestic e-commerce industry is projected to continue to grow at an average annual rate of 15% to a market of \$600 billion by 2020. Global e-commerce sales are poised to grow 112% over the next four years, a \$4 trillion market by 2020. UPS has recognized the growth in this industry and announced the purchase of 14 Boeing 747-8 jumbo freighters in Q3 of 2016 to supplement its existing capacity for overseas delivery.

In addition to UPS as the best positioned company in the industry to succeed from significant growth in the ecommerce industry, their full rollout of their ORION system in 2017 will increase UPS's profit margins by reducing operating costs and expenses. UPS has the largest market share in the courier industry at 57% and is also the leading deliverer in freight and ground shipping in the world. UPS's ORION (On-Road Integrated Optimization and Navigation) system is a supercomputer designed to calculate the most efficient routes for every UPS driver across North America. The software is expected to save the company \$300-400 million a year once fully implemented in 2017. This system will boost the company's profit margins and can be used as a logistics problem-solver across many of its other business segments.

UPS also acquired Marken Logistics, the leader in the direct to patient biological sample shipment space. Global growth in biopharma sales is projected to grow 41% by 2020 and UPS has expanded its health-care dedicated facilities to over 100 locations around the world, all certified by the FDA. UPS can leverage its logistics expertise to efficiently route sensitive materials and specimens in and out of complex geographies

There are several risks faced by UPS that were taken into account by the SMF when making this investment. Amazon is in the infant stages of developing its own delivery infrastructure. However, even though Amazon is considered UPS's largest account, it only accounted for 1.7% (\$1.0B) of UPS's 2015 revenues. Furthermore, an Amazon chief executive stated that Amazon's own delivery efforts are needed to supplement, rather than replace the capacity provided by UPS.

UPS is also exposed to the commodity price risk of oil due to their reliance on powering their ground and aircraft fleet. However, UPS uses a combination of options, forwards, and futures to hedge this risk and has consistently delivered during high oil price environments. In 2007, when WTI traded at \$120 a barrel, UPS's profit margin was at a historical high of 8.8% compared to 2015's profit margin of 8.4% (with oil trading at an average price of \$49) a barrel. Thus, their hedging strategy has proved effective to mitigate risk exposure concerning fluctuations in oil prices.

As of November 21, 2016 we have an unrealized gain of 2.10% on UPS.

### **RPM (NYSE: RPM)**

On November 28 we purchased 1,036 shares of RPM at \$53.17 share for a total investment of \$55,082.

RPM International Inc. (RPM) is a holding company with a variety of subsidiaries that manufacture coatings, sealants, building materials, and other related chemicals. These chemicals are supplied to both industrial and consumer clients for maintenance, repair, and redecoration uses. RPM operates worldwide with over 120 manufacturing facilities in 24 countries and sells products in over 170 countries and

territories. The company operates under three sectors – industrial, specialty, and consumer. The industrial segment makes up 51% of net sales and includes products such as flooring, passive fire protection, and corrosion control. Products are sold directly to contractors, distributors, and end-users throughout North America and make up a majority of international sales. The industrial segment operates under a large number of brand names including Tremco, Stonhard, and Illbruck. The specialty segment makes up 15% of net sales with products such as industrial cleaners, restoration services equipment, colorants, exterior finishes, and edible coatings which are sold directly to contractors, distributors, and end-users. The leading brands such as Legend, Tru-Core, Dryvit, and DayGlo are primarily sold in North America. The consumer segment manufactures and sells professional and do-it-yourself products to mass merchandisers and home improvement stores. Products include rust-preventative, special purpose decorative paints, caulks, nail enamels, cement and woodcare coatings which are distributed primarily in North America. Brands include Rust-Oleum, DAP, Zinsser, and NeverWet. The company began in 1947 and has been run by the Sullivan family since inception.

RPM International is a diversified specialty materials holding company that has grown from a family owned business. It will deliver long term value with its strong acquisition and organic growth strategy, its superior dividend history, and its strategic diversified business model. It is a company that is positioned for growth and further international as well as products expansion. The company has delivered 40 years of consecutive dividend growth, and is operated by expert management.

RPM International competes with a variety of specialty chemical companies across the sectors. The company's main competitors in its peer group are PPG Industries, The Sherwin-Williams Company, Ferro Corporation, and GCP Applied Technologies. RPM is the most diversified company in terms of products, customer segments, and geographical reach.

RPM International has three main competitive advantages. First, RPM has a successful proven growth strategy. The company has completed over 150 acquisitions. Target growth is set at 3% organic and overall 8%-10% growth for the next five years. The company has extensive experience with synergist acquisitions that grow market share and revenue. Furthermore, RPM has a strong dividend history. The company has increased its cash dividend for 43 consecutive years, and has an expected cash and cash equivalents availability of \$195M. Lastly, RPM operates a diversified yet centralized model. While subsidiaries and targets in acquisitions maintain control, an integrated system with subsidiaries contributes to significant synergies. In addition, RPM continues to diversify its geographic and product base.

There are several major risks that RPM faces. Global market and economic conditions will continue to be a major risk. The company is also subject to external fluctuations in supply and prices of raw materials. Further risks include significant amounts of indebtedness and conflict mineral risk (mitigated through reporting). The two major risks that have recently been resolved but pose future issues are health and safety risks as exemplified by the SPHC Asbestos claims, and the recent SEC investigation in accounting reporting.

As of December 6, 2016 we have an unrealized gain of 0.38 % on RPM.

### **RBC Bearings (NASDAQ: ROLL)**

On December 6<sup>th</sup>, we purchased 665 shares of ROLL at \$84.46 a share for a total investment of \$56,165.90.

RBC Bearings is an international manufacturer and marketer of highly engineered precision bearings and products, which are essential to the manufacture and operation of most machines, aircraft, and mechanical systems. Their four operating segments are Plain Bearings, Roller Bearings, Ball Bearings, and Engineered products, largely serving the aerospace and industrial markets. These products serve to reduce

wear on moving parts, facilitate proper power transmission, and reduce damage and energy loss caused by friction or pressure. The aerospace market composes 2/3 of RBC's overall business in net sales. This market includes commercial, private, and military aircraft. It also includes aircraft engines, guided weaponry, vision, and optical systems. RBC is a primary supplier to military contractors for airplanes, helicopters, missile systems, engines and satellites. The industrial market composes the other 1/3 of RBC's overall business in net sales. This market includes construction and mining, oil and natural resource extraction, heavy truck, marine, rail and train, packaging, semiconductor machinery, and the general industrial markets.

RBC's strengths lie in their unique product mix, large number of special government approvals and patents, long standing customer contracts, dependency of consumers on RBC's products, high industry barriers to entry, and projected growth in defense and infrastructure spending. RBC primarily focusses on highly technical and regulated bearing products as well as engineered products. These products require complex design, testing, and manufacturing capabilities that RBC has efficiently developed. RBC's unique expertise and inimitable market positioning has gained them leading positions in many of the product markets in which they compete. The OEM industry has high barriers to entry due to the exclusive customer contracts that are required to serve their sophisticated and demanding consumer base. Aerospace bearing products are designed and certified during the original development of the aircraft being served, which often makes RBC the primary bearing supplier for the life of the aircraft.

RBC's competitors include SKF, New Hampshire Ball Bearings, Rexnord, PCC, Arkwin, and Timken. They also compete with other high end industrial suppliers and OEMs across each of their product lines. RBC's competitive advantages are product qualifications, product line breadth, service, quality, and pricing. Although some competitors have greater financial, marketing, and personnel resources than RBC, they are well positioned to compete in each of the markets in which they operate.

RBC's competitive advantages are product qualifications, product line breadth, service, quality, and pricing. In regard to product qualifications, they have received patents and approvals from the OEM, the U.S. Department of Defense, and the Federal Aviation Administration. Credentials have been achieved for over 71,000 items and in many cases, they are the exclusive producer of a product on the market. In regard to product line breadth, RBC helps customers achieve numerous design objectives and aftermarket requirements, striving to be the consumer's "one stop" supplier. In regard to service, RBC products are essential to the construction or operation of machinery. Inventory is maintained for immediate sale or service of popular items, and the company has made several strategic acquisitions to fulfill all of product and service requirements of their consumers. RBC is priced competitively and maximize operating efficiencies to reduce costs. They have also have exhibited financial flexibility through past elimination of unprofitable product lines in order to maximize profit margins.

RBC's main risk factors are competition, loss of customers, cyclical nature of the business, potential changes in government spending, fluctuating commodity prices, and any stunting of inorganic growth potential. To mitigate cyclical nature, RBC enters into sole-source relationships and long-term purchase agreements, as well as diversifying across multiple market segments in the aerospace and industrial segments. Commodity risk is often mitigated by passing cost increases to consumer, by expanding vendor networks, and adjusting purchasing patterns accordingly. The effects of these risks have been largely muted of the long term and overcome by the RBC's unique business model and strengths.

As of December 7<sup>th</sup>, 2016 we have an unrealized loss of 0.13% on ROLL.

# LESSONS LEARNED

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## **Lessons Learned**

The Student Managed Fund program is one of the premier experiences at UConn, regardless of major. While we have, of course, significantly improved our knowledge of investments and corporate strategy, the real benefit of the program is learning how to think and break down situations. The SMF has given each manager a framework to understand how companies fit into complex landscapes, and even if our future careers stray far from finance, being able to dissect a puzzle and comprehend how one piece fits in with another that fits in with the complete picture is invaluable.

From a technical standpoint, our investment work has taught us that value can take many different forms. Throughout the semester, we've seen value created through societal contributions, brand loyalty, competitive advantages, sustainability, financial engineering, and through a wide variety of other lenses. While we can now point to a situation and label it as a value-add or value-destroyer, the process of quantifying the impact of that value is not as straightforward.

In our attempts to quantify the intrinsic value of companies, we have performed several different valuation methods that will certainly be applicable for many of us moving forward. Notably, we have utilized discounted cash flow, dividend discount, and company comparable analyses to uncover the intrinsic value in each company. A share of a company is only worth what a buyer is willing to pay for it and what a seller is willing to sell it for; therefore, a company could be the best company in the world, but if the stock price is too expensive, it would not pass our final investment hurdle. Simply, the market has already priced in the company's value creation potential, leaving no margin of safety.

The concept of investing with a margin of safety is another critical lesson learned this semester. There are only a handful of ways portfolio managers can mitigate risk: diversification, hedging, due diligence, or investing at a discount. The first three strategies can never be accomplished with exact precision, but buying an equity at a discount provides a cushion in case things go wrong. That notion of having a capacity for error is fascinating because (as we will learn throughout our investing careers) we may be wrong as often as we are right. However, it is the magnitude of those extremes that will ultimately determine our success, so limiting downside through a margin of safety is one of the most prudent strategies we can follow as investors.

Outside of now having a stronger grasp of financial jargon and being able to somewhat comb through the 10k of a financial services company (what the heck are 'non-interest bearing funding sources used to fund earning assets'?), the SMF has taught us countless real-life skills. Disciplined research, tireless preparation, attention to detail, and an inherent skepticism are traits stressed in the fund, and set up each manager to step right in to their full time careers and contribute in both team and individual settings right away. The SMF has been brought up in nearly all interviews we have completed, and will be looked back upon as one of the pivotal moments of our undergraduate career. And we still have one semester left!