PORTFOLIO REPORT FALL 2021

Investment team information:

Ruosu Chen – *Portfolio Manager*

Martin Zhang – *Portfolio Manager*

Ronald Feng – *Co-Lead Manager*

Quiroz Rivera Cristina – *Communications Manager*

Serge Virvo – *Co-Lead Manager*

Tianyu Zhu – *Digital Media Manager*

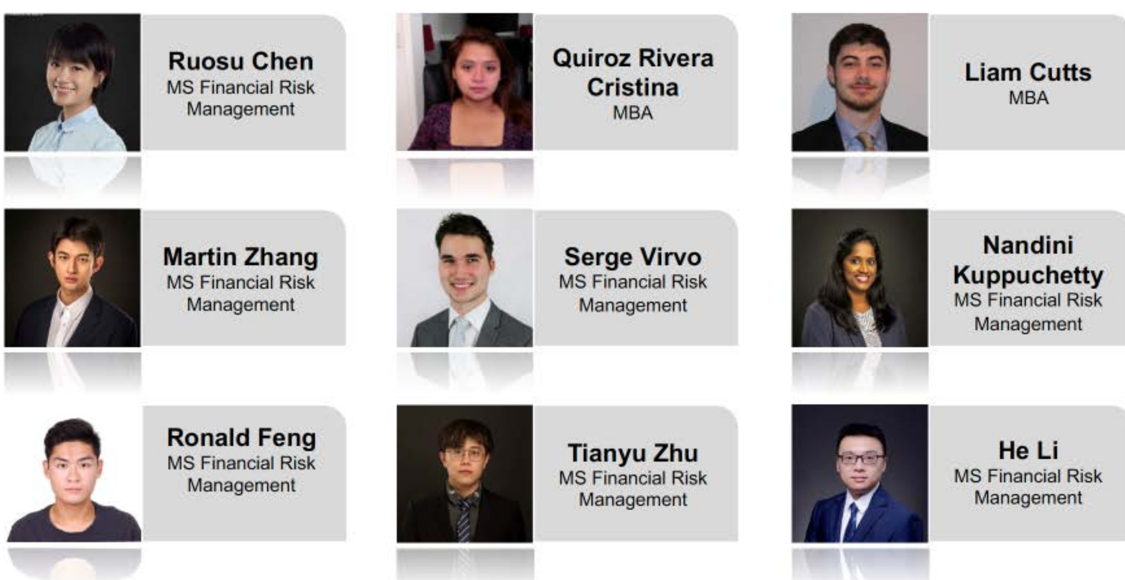
Liam Cutts – *Fund Analyst*

Nandini Kuppuchetty – *Fund Analyst*

He Li – *Fund Analyst*

Fund Director – Dr. Chinmoy Ghosh

Graduate Supervisor – Dr. Michel Rakotomavo



Investment Philosophy:

Our team's investment philosophy is based primarily on value investing. In the foreword to Benjamin Graham's “Security Analysis”, Seth Klarman talks about what he sees as value investing. According to him, value investing is investing below the value of an asset, leaving an adequate margin of safety. The mission of the margin of safety is to create a buffer zone between your investment and the potential for mistakes and fluctuations in the economic system. Combined with what we have learned in class and our investment expectations, value investing is an appropriate investment philosophy for our student managed fund.

Margin of safety is also one of the concepts that we focus on most in our investment philosophy. As we are in a difficult time with volatile economic conditions due to the pandemic, the margin of safety that value investing can create can mitigate downside risk in a market downturn. Through a strategy of value investing, we believe we can achieve the Foundation's long-term investment objectives. Our portfolio is constructed on the basis of a ten-year holding period, even though our Student Managed fund’s program is only one year in duration. We use the S&P 500 as our benchmark and our goal is for our portfolio to outperform the return of the benchmark.

Investment Strategy:

Our investment strategy is based on our investment philosophy of value investing, we make up our portfolio by looking for companies in different sectors that have intrinsic value above the current share price. As COVID-19 is ongoing, our first analysis is the macroeconomic situation. We look at the volatility of the economic markets and any information that will have an impact on the markets such as statements by Fed Chairman Powell and discuss with the team members as to how these macro factors will affect our investment behaviour. Inflation, unemployment, supply chain bottlenecks and even vaccination rates are all factors that we look at, and we focus on sectors and companies that can thrive despite these negative factors, but of course we also look at sectors and companies that are more correlated with the economic situation in order to diversify our portfolio and reduce risk. The risks posed by these negative macroeconomic conditions will also be an important factor in our stock selection, and we will be able to select companies that are able to cope with these risks.

Based on the current macroeconomic situation, our team's stock picks are focused on choosing the best companies in their respective sectors that have the experience and capital to deal with the volatility of the market. So, having identified the macroeconomic situation, we then start screening companies whose shares are undervalued due to the recession caused by COVID-19 or other factors that lower the stock's price relative to their financial performance. Our target company needs to meet several criteria: firstly, it needs to have strong fundamentals, such as a large market share and stable and strong revenues. Our team will use the analysis methods that we learned in class to find a strong and stable company in all aspects by first analysing its financial performance, investment returns, and risk through various economic indicators and comparing it with other companies in the same industry. We use various models to value the target company's intrinsic value, such as the DCF and DDM models. We utilize a margin of safety on the company's stock price of 20% or more above the current stock price. We also make use of the various resources provided to us by the UConn Business School, such as the Wall Street Journal, Valueline, Net advantage, and Morningstar to supplement our research. The expert's opinions are by no means 100% correct, but we can find a lot of insight into companies in their reports, not only as a source of reference, but also to learn how to be as sensitive as the experts to economic indicators and macroeconomic situations. Overall, our investment strategy is to build a portfolio that ultimately outperforms our benchmark, the S&P 500, over the investment period.

The Hartford Graduate Student Managed Fund team is diverse, disciplined, and experienced. The team includes students from UConn's full-time FRM, part-time FRM, full-time MBA, and part-time MBA programs. We made a detailed and robust plan when we took over the fund in August: We positioned our fund with a 10-year horizon having the goal of beating the S&P 500 index and achieving alpha returns. Our team delineated the sectors for which fund managers are responsible, as shown in the exhibit below, and attended weekly regular meetings with stock pitch presentation which included quantitative and qualitative analysis. Complete half of the investment before the IAB meeting in December and the rest during the spring semester. Collect daily market information from fund managers and stay on call, and monitor market fluctuations and analyze market risks.

	Tianyu	He	Cristina	Liam	Ruosu	Serge	Nandini	Ronald	Yukun
Communication Serv.									
Consumer Discretionary									
Consumer Staples									
Energy									
Finnacials									
HealthCare									
Industrials									
Information Tech.									
Materials									
Real Estate									
Utilities									

As you can see from the chart above, we designated each fund manager to choose two to three industries to cover all sectors in the S&P 500. We structured the sector coverage in this way to promote collaboration between fund managers who were working on the same sectors.

In our weekly meetings, we start with stock pitching from fund managers. We are most concerned about the DCF model presented to us by the fund manager and whether each value in it is reasonable, along with looking at the fundamentals of the company, risks associated with the stock, analyst recommendations, dividend history, and the company's market share and business model as a whole. If there are any glaring issues related to the DCF model or the presentation, we will defer voting on the stock to the next meeting, to allow the manager some time to make revisions to the stock pitch. All of the aforementioned factors are important to the team when choosing a stock. After the pitch is presented by the fund analyst, we then bring the stock to a vote. All managers are required to attend the meeting, and the stock pitch needs a 2/3rds vote in order to put in a full buy order. We then take the S&P 500 sector weight in which the stock is categorized, multiply the total fund size by the sector weight, and divide by two to achieve the allocation amount. We perform this for all sectors with the exception of the information technology sector, which will be divided into thirds in order to diversify the sector, as it has the largest weighting in the S&P 500. The goal is to have two stocks per sector (with the exception of information technology), following the weighting of the S&P 500.

. As you can see from the chart below, we have voted a total of 16 times since the inception of the fund, and have picked a total of 10 stocks for our fund.

	Date	Stock Pitch	Sector	Result	Tianyu	He	Cristina	Liam	Ruosu	Serge	Nandini	Ronald	Yukun
1	9/29/2021	CBRE	Real Estate	No	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE
2	9/29/2021	BLK	Financials	No	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
3	9/29/2021	SBUX	Consumer Discretionary	Yes	TRUE	FALSE	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE
4	9/30/2021	APPL	Information Tech	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
5	10/7/2021	V	Financials	No	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
7	10/18/2021	CVS	Healthcare plans	No	FALSE	FALSE	TRUE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE
8	10/18/2021	TGT	Consumer Discretionary	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
9	10/21/2021	NRG	Energy	Yes	FALSE	TRUE	FALSE	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE
10	10/21/2021	UNH	HealthCare	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
11	10/29/2021	T	Communication Serv	No	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE
12	10/29/2021	V	Financials	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
13	11/5/2021	WY	Real Estate	Yes	TRUE	FALSE	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE
14	11/5/2021	AEP	Utilities	Yes	TRUE	FALSE	FALSE	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE
15	11/29/2021	GOOGL	Communication Serv	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
16	11/29/2021	MSFT	Information Tech	Yes	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE

Stock Pitch	Pitch Date	Investment Decision (Yes/No or Deferred)
CBRE Group, Inc. (CBRE)	September 29th , 2021	**No** (4,5,1) – Real Estate industry outlook is unfavorable.
BlackRock, Inc. (BLK)	September 29th, 2021	**Deferred** - There are better options in Financial sector.
Starbucks Corporation (SBUX)	September 29th, 2021	**Yes** (8,1,0)
Apple Inc. (AAPL)	September 30th, 2021	**Yes** (9,0,0)
Visa Inc. (V)	October 7th, 2021	**Deferred** – DCF model needs to be adjusted.
CVS Health Corporation (CVS)	October 18th, 2021	**No** (3,7,0) – There are better options in Consumer Staples industry.
Target Corporation (TGT)	October 18th, 2021	**Yes** (8,1,0)
NRG Energy, Inc. (NRG)	October 21st, 2021	**Yes** (6,3,0)
UnitedHealth Group Incorporated (UNH)	October 21st, 2021	**Yes** (9,0,0)
AT&T Inc. (T)	October 29th, 2021	**No** (2,7,0) – There's a better option in communication services industry.
Visa Inc. (V)	October 29th, 2021	**Yes** (9,0,0)
Weyerhaeuser Company (WY)	November 5th, 2021	**Yes** (7,2,0)
American Electric Power Company, Inc. (AEP)	November 5th, 2021	**Yes** (6,3,0)
Alphabet Inc. (GOOGL)	November 28th, 2021	**Yes** (9,0,0)
Microsoft Corporation (MSFT)	November 28th, 2021	**Yes** (9,0,0)

Economic Outlook

Economy: The US economy is projected to remain strong in the first half of 2022, mainly due to large consumer demand. With the improvement of the pandemic, increasing vaccination rates, and the re-opening of the country, the high growth rate of the US economy is expected. In the second half of 2022, the economic growth rate will gradually slow down.

Supply and Demand: 2021 was an unprecedented year for the shipping and logistics industry due to disruptions and supply chain bottlenecks, there are already signs of potential trouble ahead. Further disruptions will stem from the rapid spread of the Omicron variant of Covid-19 and how countries choose to handle outbreaks, while other potential disruptions are a little less predictable. Historically, half of air cargo is transported in the underbelly of passenger aircraft. With the decline in passenger air travel due to the pandemic and the use of cargo planes in the place of passenger aircraft, shipping costs have skyrocketed to $16 per kilogram, as opposed to $3.80 per kilogram before COVID-19.

Employment: By almost every measure, the labor market had an extraordinary year in 2021. An average of 537,000 jobs were created each month throughout 2021, although there was considerable volatility in the month-to-month job reports, with 1.09 million jobs added in July and 199,000 in December. The unemployment rate fell from 6.3% in January 2021 to 3.9% at year's end. The number of people filing first-time claims for weekly unemployment benefits fell below 200,000 and ended the year close to that threshold. However, there's also the chance that high inflation, combined with the tight labor market, may lead the Federal Reserve to raise interest rates earlier than expected, which may impact hiring confidence.

Inflation: Currently, market expectations for 2022 inflation are widely divergent, and we expect CPI pressures to remain high in the first half of 2022 and to then ease in the second half. Supply bottlenecks and slack in the labor market remain the main reasons for high inflation in the first half of 2022. In the second half of the year, as the labor market improves and demand growth slows down, inflation pressure is expected to ease. The FED is expected to raise interest rates four times in 2022 and another four times in 2023 to help combat inflation.

Monetary policy: The Fed shifted from dovish to hawkish as inflation picked up mostly attributed to supply shortage and the buying of bonds by the FED. From the perspective of the Federal Reserve's consistent policy propositions. Generally, the Federal Reserve has been keeping interest rates low, which in turn has kept investors in the stock market, and away from bonds and other fixed investments. Meanwhile, a better Labor market has a more direct impact on inflation. The FED's most urgent task is to ease inflation, and is expected to increase interest rates several times over this year and next. The FED mentioned in December 2021 that they plan to taper purchases by $30 billion per month starting on December 15th. In conjunction with raising interest rates, the FED's tapering will allow the economy to stabilize.

Risk Management

Risk management:

Risk management is a central pillar to our investment philosophy and process. All team members were expected to identify both macroeconomic and microeconomic risk factors before pitching their stocks. By incorporating systematic risk or market risk into our pitches we sought to quantify the impact said risk will have on the portfolio. Beta, also known as market risk, is a measure of the volatility, or systematic risk, of an individual stock in comparison to the entire market. Given the shift in allocation and preference for IT and Technology stocks by the S&P 500, our group sought to balance out the risk of being overallocated in tech by incorporating low beta stocks that had a negative correlation to IT and Technology stocks. This strategy offered diversification and helped to offset any potential loss from our position in Apple during the first quarter. Standard deviation, a statistical measure of dispersion around a central tendency is another key metric we used to maintain good risk management. By reducing our initial position in Apple after making steady returns in the stock, the total variation of the portfolio reduced and hence the risk diversification was spread more evenly throughout the portfolio.

Our investment philosophy incorporated the Sharpe ratio in our portfolio analysis to help with risk management. The ratio describes how much excess return you receive for the extra volatility you endure for holding a riskier asset. Our Sharpe ratio is 2.78 compared to the S&P 500 Sharpe ratio at 2.35. Usually, any Sharpe ratio greater than 1.0 is considered acceptable to good by investors. A ratio higher than 2.0 is rated as very good. A ratio of 3.0 or higher is considered excellent. A ratio under 1.0 is considered sub-optimal. Given our Sharpe ratio and having only invested half of the funds available, our performance is good and on track.

As a team we also decided to measure the Alpha of the portfolio. Alpha is a measure of an investment's performance on a risk-adjusted basis. An alpha of 1.0 means the fund has outperformed its benchmark index by 1%. Correspondingly, an alpha of -1.0 would indicate an underperformance of 1%. For investors, the higher the alpha the better. Our Alpha so far is 1.21% so this means our portfolio performance of 2.74% was better than the SPY benchmark of 1.53%.

In addition to the market risk identified in the valuation process, team members were encouraged to identify if possible: credit risk, liquidity risk, legal risk and operational risk of companies pitched. By addressing all of these risks, a more comprehensive view on the business model and how sensitive a company is to these macro and micro economic risks can lead to more informed decisions.

It is expected that both the pitching and non-pitching managers research and have an understanding of the industry and sector of the proposed investment. The team facilitates this process by submitting the proposed pitches deck, valuation model, and one-page report by Sunday night of the week it is to be pitched. This allows managers up to four days to familiarize themselves with the company and the sector. As a result, the managers are able to evaluate potential financial (or balance sheet), business model, management, or valuation risk related to the proposed pitch. By following this model, the team has more thoughtful, constructive, and beneficial discussions when evaluating and voting on pitches. Through these approaches the team has established a strong outline for our risk management process.

Portfolio Allocation and Asset Selection

Our team's investment philosophy follows the footsteps of Warren Buffet as mentioned above, focusing on investing in stocks that are value based. We used the bottoms-up approach which emphasizes analysis of individual stocks through fundamental analysis, which also assumes that the stock will do better even if the industry doesn't perform well. However, we also included a view of the current macro-economic scenario and the market behavior while selecting stocks for our portfolio.

Our portfolio allocation was strategized in such a way to reflect predominantly the weights of S&P 500 index but can include potential differences based on our investment decision. The allocation to sectors may also vary in terms of exclusion of a few sectors from S&P 500 based on the performance of the industry/sector and the prevailing macro-economic conditions. This way the team may find itself fully invested with holdings in most sectors.

Though our investment philosophy follows the bottoms up approach, it is pertinent to include an overall view of the industry and the market because of the COVID-19 pandemic which was the biggest shock to the market. When we started our investment analysis for portfolio selection, the economy was in the revival stage with vaccination and normalization of businesses. So, we used the specific sector SPDR ETFS traded in the market and took a long-term view of the industry performance and the impact it went through during the pandemic. Based on this analysis, each of the members picked two sectors which seemed a fit each to research the sector and the individual stocks that had the potential to perform. FIGURE 1 shows high level 5-year performance of the Select Sector SPDR Equity Funds as of 12/03/2021.

FIGURE 1: 5-year Performance of the Select Sector SPDR Equity Funds

Although few sectors were not up to the mark during the pandemic and post that, members were diligent in researching the sectors not to miss out an opportunity of investment in every sector. Finally, we were able to have pitches in the Fall from the following sectors based on our analysis in the following sectors – Consumer Discretionary, Communications, Healthcare, Utilities, Information technology & Real Estate which accounts for 6 sectors out of the 11 in the S&P realm. The team was of the motive to have a well-diversified portfolio at the start of the investment and spread the risk across sectors to mitigate any sudden shock in the system.

Our team is over 50% invested currently and has been continuing the research in stock selection and portfolio allocation to be completely invested by the end of Spring 2022, with investments in at least 9 sectors. As of 3rd December 2021, we are 51% invested in U.S Equities, 5% in Cash & remaining 44% in SPDR S&P 500 ETF Trust. The portfolio currently has around 10 stocks on the portfolio as shown in **FIGURE 2,** with an aim to have at least 15-16 stocks in total on fulfilment of the investment. However, headwinds and stress in the market can potentially yield the team to unsuccessful value investments across sectors and hence the team wants a well-diversified portfolio and avoids concentration in specific sectors.

Figure 2: Portfolio Investment Allocation as of 12/03/2021

Security	Purchase Date	Shares	Purchase price	Amount	Portfolio Allocation	Sector
Cash				$ 59,404.95	5.03%	
AAPL US EQUITY	10/13/2021	798	139.86	$ 111,608.28	9.45%	Information Technology
AEP US EQUITY	11/10/2021	179	83.7	$ 14,982.30	1.27%	Utilities
GOOG US EQUITY	12/2/2021	24	2825	$ 67,800.00	5.74%	Communication Services
MSFT US EQUITY	12/2/2021	338	330.12	$ 111,580.56	9.45%	Information Technology
NRG US EQUITY	10/29/2021	352	40.51	$ 14,259.52	1.21%	Utilities
SBUX US EQUITY	10/11/2021	526	112.6	$ 59,227.60	5.02%	Consumer Discretionary
SPY US EQUITY	9/13/2021	1191	433.82	$ 516,679.62	43.77%	SPY
TGT US EQUITY	10/26/2021	281	259.1	$ 72,807.10	6.17%	Consumer Discretionary
UNH US EQUITY	10/26/2021	152	454.5	$ 69,084.00	5.85%	Healthcare
V US EQUITY	11/5/2021	317	213.29	$ 67,612.93	5.73%	Financials
WY US EQUITY	11/10/2021	417	37.09	$ 15,466.53	1.31%	Real Estate
Total				$ 1,180,513.39		

The team actively assesses the holdings in place and continuously rebalances the position as we continue to be completely invested by early Spring. The sector allocation weights in Figure 5 show the potential rebalancing that will be required for the team to do and will be reflected as we continue investing.

FIGURE 5: Portfolio sector allocation Vs S&P 500 index

Sector	Portfolio Weight	S&P 500 Sector weights as of 09/30/2021	Percentage of invested portfolio	Amount Invested
Communication Services	5.74%	11.29%	11.22%	$ 67,800.00
Consumer Discretionary	11.18%	12.36%	21.84%	$ 132,034.70
Consumer Staples		5.77%	-	-
Energy		2.75%	-	-
Financials	5.73%	11.39%	11.19%	$ 67,612.93
Health Care	5.85%	13.25%	11.43%	$ 69,084.00
Industrials		8.04%	-	-
Information Technology	18.91%	27.63%	36.93%	$ 223,188.84
Materials		2.48%	-	-
Utilities	2.48%	2.46%	4.84%	$ 29,241.82
Real Estate	1.31%	2.58%	2.56%	$ 15,466.53
Total	**51.20%**	**100.00%**	**100.00%**	**$ 604,428.82**

The team will draw down from positions that are over-allocated relative to the S&P 500 index weights adjusting the portfolio to raise capital for new investments to be made in other sectors. This evaluation will be done at both the sector and the stock level to have the right balance and diversification in the portfolio.

Portfolio Performance

The performance data presented is calculated from September 13 to December 3, which represents the date the portfolio became active for the fund to trade. This summary shows the portfolio's overall performance, price change, market value, unrealized gains and uses the weighted average to calculate the contribution of each stock. The overweight in APPL with approximately 10 % of the portfolio, which also has the highest return with 15.72%, has significantly impacted our portfolio.The fund also has rebalanced positions to decrease exposure in the information technology sector and the selling of SPY position to raise capital creating the difference in cash between the initial value to the current market value.

Portfolio performance as of December 3, 2021

Security	Cost Price	Position	Initial Value	Current Price	Current Position	Market Value	Value Change	Price Change	Portfolio Weight	Weighted Return
Cash	$1.00	71329	$71,329.43	1	$74,869	$74,868.70	$3,539.27	0.00%	5.77%	0.00%
AAPL US Equity	$139.86	798	$111,608.28	161.84	798	$129,148.32	$17,540.04	15.72%	9.94%	1.56%
AEP US Equity	$83.70	179	$14,982.30	82.34	179	$14,738.86	-$243.44	-1.62%	1.13%	-0.02%
GOOG US Equity	$2,825.00	24	$67,800.00	2850.41	24	$68,409.84	$609.84	0.90%	5.27%	0.05%
MSFT US Equity	$330.12	338	$111,580.56	323.01	338	$109,177.38	-$2,403.18	-2.15%	8.41%	-0.18%
NRG US Equity	$40.51	352	$14,259.52	36.56	352	$12,869.12	-$1,390.40	-9.75%	0.99%	-0.10%
SBUX US Equity	$112.60	526	$59,227.60	111.24	526	$58,512.24	-$715.36	-1.21%	4.51%	-0.05%
SPY US Equity	$433.82	1356	$588,259.92	453.42	1356	$614,837.52	$26,577.60	4.52%	47.34%	2.14%
TGT US Equity	$259.10	281	$72,807.10	247.57	281	$69,567.17	-$3,239.93	-4.45%	5.36%	-0.24%
UNH US Equity	$454.50	152	$69,084.00	449.32	152	$68,296.64	-$787.36	-1.14%	5.26%	-0.06%
V US Equity	$213.29	317	$67,612.93	196.32	317	$62,233.44	-$5,379.49	-7.96%	4.79%	-0.38%
WY US Equity	$37.09	417	$15,466.53	38.33	417	$15,983.61	$517.08	3.34%	1.23%	0.04%
Total			$1,264,018.17			$1,298,642.84	$34,624.67		100.00%	2.76%

Graduate Team Portfolio Performance vs S&P index

	S&p500 Etf	Smf Portfolio
Beginning value	447	$1,264,018
Current Value	453	$1,298,643
Absolute Value	6.84	$34,625
% Change	1.53%	2.74%

Total Performance Vs. S&P 500 Performance	
S&p500 Etf	1.53%
Smf Portfolio	2.74%
Difference	1.21%

The table above shows the total portfolio return against the S&P 500 Etf benchmark through the same time period. To calculate the return of the SMF portfolio against the S&P Etf, we used absolute values. Using the return of the S&P of the date the fund was active and December 3 and compute the price change. We evaluate the SMF portfolio in the same way; we used the starting funds and the latest market value of the portfolio. Our team decided to use this method to keep consistency between the methods used to evaluate both returns.

Overall, our team believes that the portfolio is well-positioned to continue outperforming the benchmark; we have rebalanced positions and revised the portfolio allocation to reduce the portfolio's exposure. Which we believe would have a substantial impact on the portfolio performance next semester.