

PORTFOLIO REPORT
FALL 2022



University of
Connecticut

SCHOOL OF BUSINESS

UNIVERSITY OF CONNECTICUT SCHOOL OF BUSINESS
GRADUATE STUDENT MANAGED FUND
HARTFORD TEAM

Letter to the Investment Advisory Board Members

To the respected members of the Investment Advisor Board (IAB),

On behalf of the Hartford Student Managed Fund (SMF) team members, we would like to extend our gratitude for the exceptional opportunity to participate in this unique program. We simply cannot thank you enough. Our fall semester has been filled with the typical rigors of class work, projects, and exams, but what our participation in the SMF offers is beyond that: we were given the opportunity to conduct ourselves in a professional environment amidst real-world pressures, deadlines, and responsibilities that a career in finance and portfolio management entails. To manage an investment fund of over \$1 million dollars is no small task for a group of graduate students, but under the guidance and expertise given by professors and mentors alike, we have been able to gain invaluable portfolio management experience and we cannot wait to continue to grow as a team through the remainder of the SMF program this spring.

If we cast our eyes back to our initial face-to-face group meeting in late June of last summer, it is clear that our team has grown leaps and bounds in our ability to evaluate investments and refine our investment process. A handful of us knew each other from our full-time MBA cohort, others were members of the part-time program, with the Financial Risk Management program also represented. What became clear right away was our ability to meet cohesively, productively, and frequently. Our team chemistry and work-ethic has come a long way in making online meetings feel more organic and to produce deliverables in an increasingly virtual world.

Our differing viewpoints, backgrounds, areas of expertise, and personal skills allowed us to source unique investment opportunities and conduct excellent research, debates, and discussions that we could not imagine back in our initial meeting in late June. However, it must be re-emphasized that our guidance and advice from professors and IAB members alike has been invaluable for cultivating our understanding of asset management and investment research. As one of the most prestigious and storied professional programs at UConn, we would like to wholeheartedly thank these same mentors and board members for their expertise, time, effort and energy given to the Hartford SMF team. That being said, our team is excited and ready to continue our hard work as the holidays wind down and our attention shifts to the second half of the SMF program this spring. We look forward to continually improving upon what we can deliver as a team in the coming months through the skills we develop through this program. Thank you again to the IAB members for everything that we have been given during this fall semester, and we hope that you enjoy this overview of our investment process and portfolio performance from Fall 2022.

Respectfully,
The SMF Hartford Team

Investment Team Roster

Rishikesh J. – *Co-Lead Manager*

Ben N. – *Portfolio Manager*

David L. – *Co-Lead Manager*

Kashish M. – *Portfolio Manager*

Joseph S. – *Digital Media Manager*

Mark P. – *Communications Manager*

Patrick M. – *Fund Analyst*

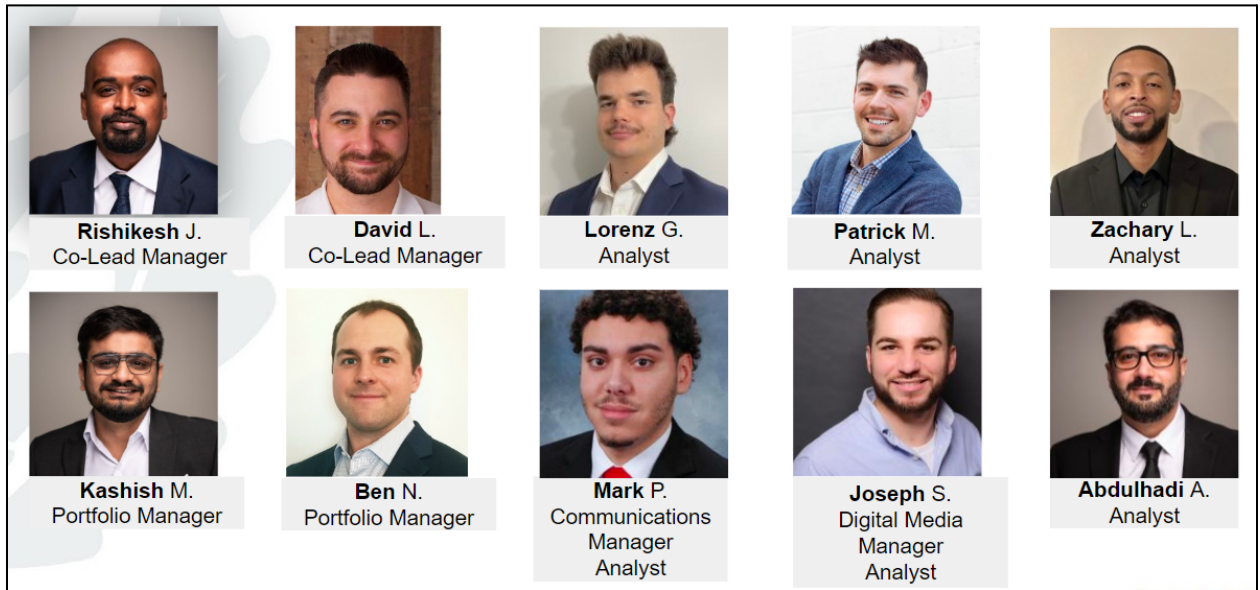
Lorenz G. – *Fund Analyst*

Zachary L. – *Fund Analyst*

Abdulahdi A. – *Fund Analyst*

Fund Director – Dr. Chinmoy Ghosh

Graduate Supervisor – Dr. Michel Rakotomavo



Investment Philosophy

Our team emphasizes the principles of value investing in making our investment decisions. We endeavor to choose companies that we believe hold strong intrinsic value despite fluctuations in the day-to-day market prices and the uncertainty presented by near-term volatility. In evaluating a company's intrinsic value relative to the market price through both quantitative and qualitative approaches, we then formulate a more complete understanding of the true value of the businesses with which we choose to invest. We also believe that during this period of high uncertainty and skepticism amongst investors, that this is also a period of great opportunity to take advantage of imbalances in the market by selecting companies to include in our portfolio at exceptional prices. While the prices of companies in our portfolio may continue to fluctuate due to near-term vicissitudes of the market, we remain confident through the application of value investing principles, that the companies which we select will continue to appreciate favorably over the course of our 10 year investment horizon in comparison to the broader market as a whole.

Investment Process

The Hartford SMF team took a multi-tiered approach to our overall Investment Process. Regarding team dynamics, virtual meetings were held, under the guidance of Professor Rakatomavo, who would offer advice, feedback and critiques when needed. Analysts would typically provide market/sector updates regarding their respective pitches as well, in order to give better pictures of the portfolio at large.

Analysts were given charge of at least 2 sectors of the S&P 500, in order to maximize market coverage, and provide overlap on sectors where needed. We decided as a team initially that we would divvy up the represented sectors like this, instead of being more generalist in our outlook. We emphasized collaboration amongst all individuals, but specifically those that had overlap regarding their sectors. Analysts from the same sectors would often trade ideas and bounce stocks off of each other in an effort to strengthen the overall portfolio at large. Another important facet of our analysis was not only identifying the opportunities of stocks, but also additionally, their risks. While strengths are obviously important and part of the process, we felt as a team that both sides should be represented and present when pitching stocks. The resources on offer were instrumental in our scouring of the market. Resources utilized by the team included: Bloomberg, Net Advantage, Yahoo Finance, and Morning Star. Using these tools, the team was able to leverage many different professional analyst reports, findings and outlooks to successfully screen and identify prospective positions.

Stock pitches were delivered weekly throughout the semester, with multiple pitches not uncommon for the team. Analysts pitching stocks were responsible for not only company

outlook, but industry outlook as well. We felt it was important to give a more holistic approach to sectors when pitching, as trends can sometimes ripple throughout the market at large. We attempted to streamline pitches as the semester went on, in an effort to maximize our meetings' efficiency and the time Prof. Rakotomavo spent with us. In the pitches, investment theses were offered, and as previously mentioned, potential risks and growth drivers alike. Different models from class were also factored into our pitches and calculations, specifically Intrinsic Value. Furthermore, owing to team members' own work in the sustainability space, ESG ratings became a feature of our pitches and were used to differentiate stocks when and where appropriate. Finally, one page reports for all approved stock positions were required before the purchasing was finalized.

Lastly, regarding the voting process, participation was compulsory for all members, with 7 out of 10 votes needed for a successful vote. Allocation for the stock positions was determined by the Portfolio Managers using guidance from the S&P 500 in regards to their weighting. While this specific weighting was predetermined in one of our initial meetings, we did continue to have conversations and an open dialogue on how our philosophy may continue to develop and evolve throughout the semester. Two stocks per sector were also agreed upon, with the exception of Technology, which would garner three positions due to its large composition of the S&P 500. Finally, a 20% stop loss was the metric used by the Hartford team.

Portfolio Sector Coverage by Analyst

Sector	Analysts
Communication Services	David Leonardo, Zachary Lewis
Consumer Staples	Patrick Murphy, Joseph Sklenar
Health Care	Kashish Manchanda, Rishikesh Jagadeeswaran
Information Technology	Rishikesh Jagadeeswaran, Patrick Murphy, Lorenz Gunzl
Financial	Abdulhadi Almatiet, Lorenz Gunzl
Real Estate	Mark Pereira, Ben North
Utilities	Rishikesh Jagadeeswaran, Joseph Sklenar
Materials	Ben North, Kashish Manchanda
Industrials	Abdulhadi Almatiet, David Leonardo
Consumer Discretionary	Zachary Lewis, Ben North
Energy	Kashish Manchanda, Mark Pereira

Portfolio Allocation & Performance

As of December 2nd 2022, we have allocated 32% of our portfolio into 7 positions across 6 sectors. Since the beginning of the SMF program trading period, our total portfolio value has

increased by 5.64%. In comparison, the S&P 500 benchmark increased by 5.51%, so our portfolio has slightly outperformed the benchmark during this timeframe. As we continue to allocate our portfolio into individual equity positions through our investment process, we believe the value of our portfolio will continue to outperform the S&P 500 benchmark over the course of our 10-year investment time horizon.

All of our positions exhibited a net gain in value from their initial purchase price with the highest returns from NextEra Energy and Apple Inc. which yielded a 9.31% return and a 8.64% return respectively since our initial purchase of these positions. Our lowest performing positions, Ally Financial and Tesla, yielded 0.86% and 2.11% returns respectively. The information technology sector has the greatest share of our current equity positions at 9.5% of our total portfolio value followed by health care at 7.6% of our total portfolio value. In contrast, the utilities and materials sectors constitute 3.1% and 2.6% of our portfolio respectively which coincides with their smaller representation in the overall S&P 500 index.

While our performance has remained strong across our portfolio holdings, which provides support for our sound investment process, we continue to remain diligent in monitoring the current volatile market conditions and have stop loss orders in place as a means to safeguard our portfolio against future volatility that may occur in the coming months. Additionally, we have four additional positions we are in the process of adding to our portfolio to increase our allocation in positions we believe will further complement our existing portfolio of well performing positions against the S&P 500 benchmark. These equity positions include Merck, Visa, JPMorgan Chase & Co., and PepsiCo, Inc.

Portfolio Allocation & Performance Figures

Figure 1. Portfolio Sector Allocation as of December 2, 2022

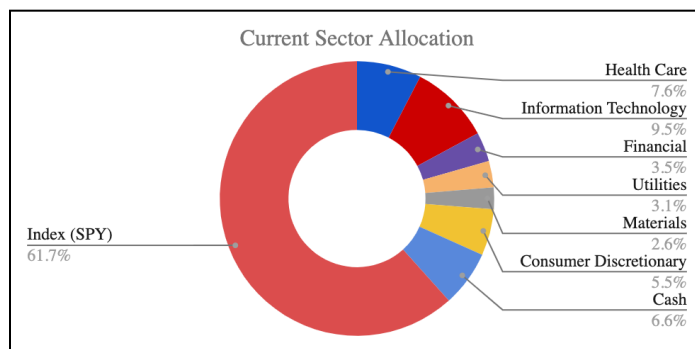


Figure 2. Portfolio Equity Allocation as of December 2, 2022

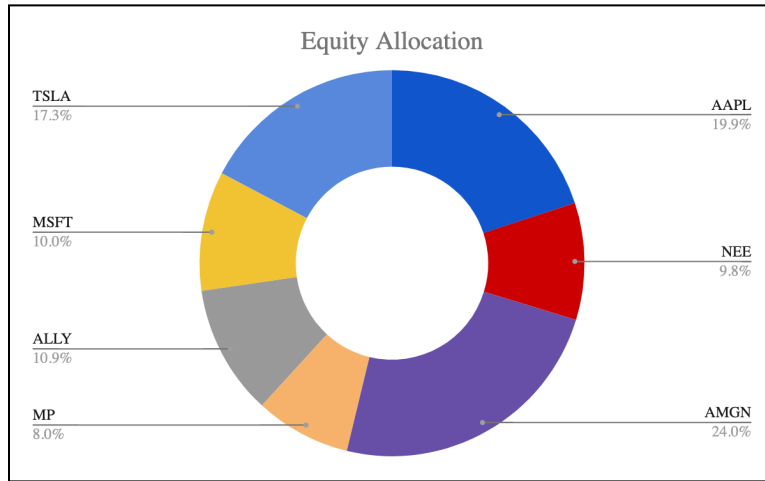


Figure 3. Portfolio performance as of December 2, 2022

Company	Ticker	Purchase Price	Recent Price	%Change	Weights
Apple Inc.	AAPL	\$ 136.06	\$ 147.81	8.64%	6.33%
Nextera Energy	NEE	\$ 77.95	\$ 85.20	9.31%	3.11%
Amgen Inc.	AMGN	\$ 267.87	\$ 285.51	6.58%	7.62%
MP Materials	MP	\$ 32.54	\$ 33.75	3.72%	2.55%
Ally Financials	ALLY	\$ 25.58	\$ 26.12	2.11%	3.46%
Microsoft Inc.	MSFT	\$ 239.36	\$ 255.02	6.54%	3.18%
Tesla	TSLA	\$ 193.21	\$ 194.86	0.86%	5.49%

Figure 4. Portfolio Investment Performance as of December 2, 2022

	S&P Index	HSMF Portfolio
Beginning value	3,859.11	\$ 1,109,692.70
Current value	4,071.70	\$ 1,172,304.33
Absolute value	212.59	\$ 62,611.63
% Change	5.51%	5.64%

Figure 5. Portfolio Performance Comparison to S&P 500 Index as of December 2, 2022

Total Performance vs. S&P 500 Performance	
Total Portfolio Performance	5.64%
S&P500 Performance	5.51%
Difference in Performance	0.13%

Figure 6. Portfolio Holdings by Asset Class as of December 2, 2022

Portfolio Holdings by Asset Class	
Total Capital	\$1,172,304.33
S&P 500 ETF (SPY)	\$697,925.63
Equity Holdings	\$352,749.42
Cash	\$77,209.32
Percent Invested (Without SPY)	31.73%

Economic Outlook

To make the best investment decisions as a team we are actively monitoring any news regarding the United States and world economies. We continually discuss the current events and their effect on our current portfolio and our future selections. Obviously this is only one part of our decision given our 10 year outlook, but monitoring ongoing economic conditions is an important part of our investment process.

In the last 52 weeks the US and World stock markets have seen overall decreases and while our portfolio has returned a slight increase since we began investing in mid-October we are still seeing a large amount of market volatility coupled with aggressive rate hikes by the Fed to combat the rising inflation throughout the U.S. economy. We have also witnessed residual effects of the Covid-19 pandemic. We have seen major cities in China continue to be locked down and economic output decrease significantly. Only recently has China shown signs of moving away from their Zero-Covid policy.

Given all of the economic indicators and economic forecasts we expect to see a mild recession in the United States based on various economic indicators and forecasts. This will affect overall economic growth and therefore affect the economic outlook of many stocks in the market. We are beginning to see companies provide reduced forecasts to analysts; which has affected their stock prices significantly. However, on a positive note given the depressed stock prices this could be an opportune time to buy companies well below their intrinsic value.

Environmental & Social Return Analysis

In addition to the economic return, we also attempted to assess the environmental and social returns of our investments in the portfolio.

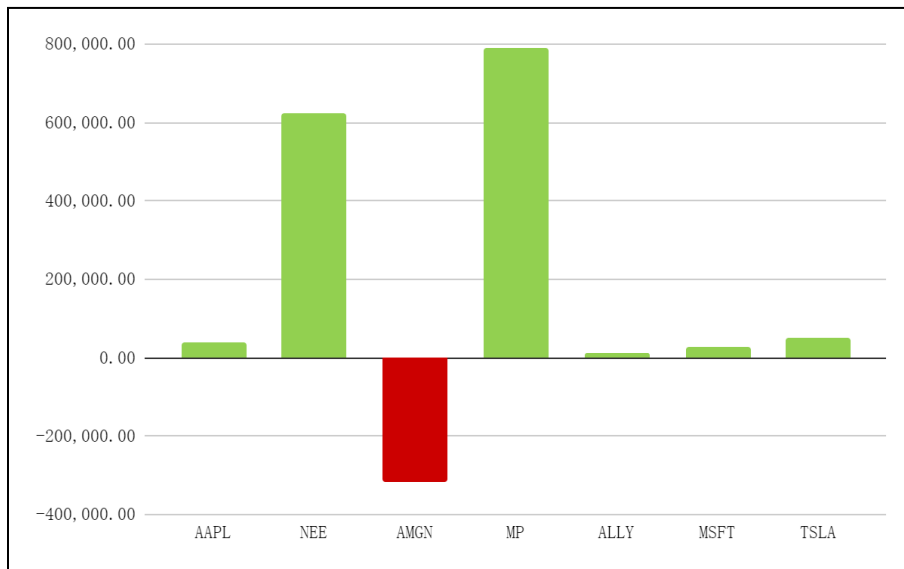
Environmental Return

To assess the environmental return of the portfolio, based on research papers and studies, we identified three benchmarks to quantify the environmental impact - carbon emissions, water

stewardship and waste generation. However, due to lack of reporting numbers and limited time, we could only assess carbon emissions in our analysis. Fortunately, as we move forward, we would have a better understanding and data to assess the return.

Based on our current Portfolio, we expect an environmental return of 1.3 billion metric tons of CO₂ emissions by the end of 2022, which gives 3.5 metric tons of CO₂ emissions saved per dollar invested. MP Materials and Nextera Energy are the biggest sequesters of carbon emissions whereas Amgen is expected to increase their emissions (Scope 3 emissions).

Figure 7. CO₂ sequestered by portfolio company in 2022 (metric tons)



* Please note: CO₂ emissions are based on the disclosed scope 1, scope 2, and estimated scope 3 emissions by Bloomberg. Also, the emissions are assumed to decrease/increase further based on the historic CAGR rate and analyst understanding of the stock.

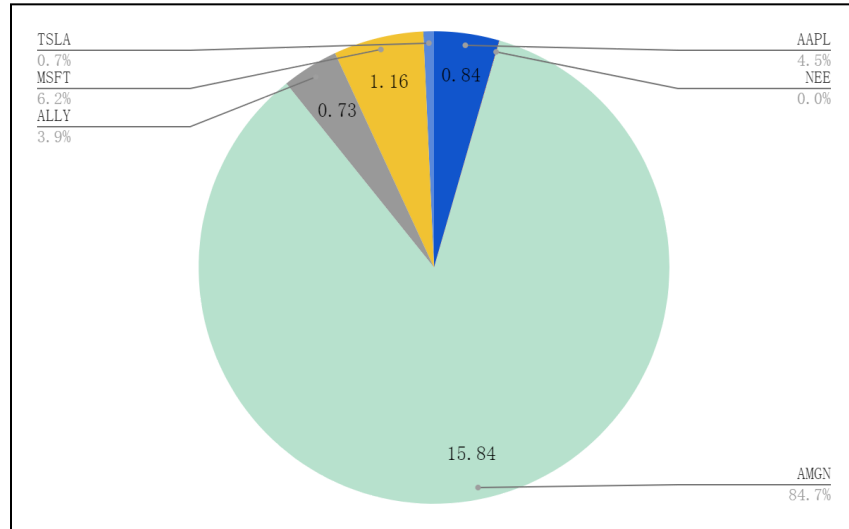
Social Return

To assess the social return on the investment of the portfolio, based on research papers and studies, we should have a materiality assessment for each company and allocate weights for impact on each stakeholder for the business. However, due to a lack of reporting figures and data, we ran through the impact reports for each company and assessed the social return in units of 'lives' as impacted apart from the direct customers, which are the stakeholders for the business.

We realized that apart from direct customers, our portfolio holdings would improve ~19 lives in the society. We assessed the return in the unit of lives as their health or economic status is improved with the intervention. Amgen constitutes the major societal impact with 84% of the

social impact of the portfolio. Microsoft and Apple follow the lead with 6% and 4% of the total contributions respectively.

Figure 8. Social impacts by portfolio company in 2022 (lives positively impacted)



Future Plans

There are few backlogs in terms of stock purchases namely Visa, JP Morgan, Pepsico, Merck. With these holdings, we will be invested in 50% of the given funds. The economic outlook is also so volatile and with the recession fears looming in late Q1-early Q2 of 2023, the investments should happen more rapidly as the S&P ETF is also tending towards a downward trend at present. The stock pitches will be increased and the stock presentations will also likely be as concise as possible to accommodate the pitches. Also the portfolio mainly consists of large-cap, large growth type stocks. For the upcoming half of the program, we would like to dwell on Value positions such as MP Materials to enhance the portfolio. We would also conduct a team analysis and reallocate roles and responsibilities to other team members so that everyone in the team gets a chance to learn other aspects of the program. Also, to facilitate more healthy discussions and voting processes, the stocks to be pitched are disclosed a week prior to the presentation so that the team members can do their own research before listening to the pitch by the fund analyst.

Portfolio Equity Holding Descriptions

Microsoft (NASDAQ: MSFT)

146 Shares of Microsoft were purchased as part of the Information technology sector in our portfolio. Microsoft constitutes about 3.18% of the overall portfolio. The stock was purchased at \$239.36 which was a good price to buy as the stock is undervalued at that price. Although the Federal Trade Commission didn't allow the Activision acquisition, the strategy was not detrimental to Microsoft to a large extent. The XBOX gaming division is likely to suffer but the company still has a wide economic moat in terms of its products and services. After Satya Nadella became CEO, the company started focusing on its cloud journey with the Azure product. The idea of providing on-demand IT resources on the internet with pay-as-per-usage makes Azure a great product. The Gartner magic quadrant releases industry-specific metrics each year and for the cloud industry, the advantage quadrant has AWS in the lead which is closely followed by Microsoft, and Microsoft is closely followed by Google cloud. The advantage for Microsoft over AWS is that large corporations use Microsoft Windows as the primary OS and with Azure gaining traction, companies who would want to switch to the cloud will more likely choose Microsoft over AWS because all resources are housed under one company. This can also make Microsoft bundle its Azure services to existing OS product-Windows and software suites such as Microsoft 365. This is likely to be achieved in the near future and then the competition will be primarily based on pricing between AWS and Microsoft. Microsoft has again a competitive edge because of its strong cash flows and healthy balance sheet. The trillion-dollar company's weighted average cost of capital shows that only 2% of the whole is financed by long-term debt and the rest 98% is through equity. The current low price is the unnecessary market penalty for the rise in inflation. The current inversion of bond yield curves signaling a recession would not affect Microsoft because of its wide economic moat across multiple products and services. The estimated 12-month target price is approximately \$330. Some of the other products that Microsoft has a competitive advantage in are Microsoft Office 365, LinkedIn, GitHub, Microsoft Windows Servers for on-prem activities, SQL database Management system, Visual Studio, Xbox Live, and Microsoft Surface hardware. The high switching costs and network effects are the primary reasons for its competitive advantage. The fundamentals of the company are strong enough to generate sustained cash flows for years to come. With the emphasis on the Azure cloud services, Microsoft is set to achieve its compounded annual growth rate of 10% over the next 3 -5 years. Although the growth rate may not be 10% in the next year due to the economic uncertainty and rise in interest rates by the Fed, the company is bound to grow and increase its free cash flows.

Next Era Energy (NYSE:NEE)

428 shares of Nextera Energy were purchased at \$77.95 as part of the energy/utilities sector. NEE constitutes 3.11% of the overall portfolio. NEE is one of the largest electric power and energy infrastructure companies in North America and a leader in the renewable energy industry. NEE has two principal businesses, FPL and NEER. FPL is the largest electric utility in the state

of Florida and one of the largest electric utilities in the U.S. NEER is the world's largest generator of renewable energy from the wind and sun, as well as a world leader in battery storage. NEER has a net capacity of over 24,600 MW across 38 states and 520 M in Canada. NEER generates 67% of its power through wind, 13% through solar, 9% through nuclear, and 10% through natural gas. NEE is the only company that primarily focuses on renewable sources and has significant investments in R&D for maximizing the efficiency of the power generation. NEE "Real zero" plan to achieve zero emissions will benefit from the tax credits for its focus on renewable energy. The dividends issued by the company have followed a strong growth trend and are expected to grow at a rate of 9.5% CAGR throughout 2025. The current economic scenario hits NEE to some extent because 50% of capitalization is in the form of long term debt and the rise in the interest rates is not playing in the favor of the company. Also the unexpected hurricane Ian which hit Florida this year gave rise to an increase in the costs of over 1.1 Billion. In the long run, the growing emphasis on climate change and net zero across countries and NEE having a headstart already in the game makes the stock a worthy investment. NEE's business model is also resistant to change in the oil prices which a lot of other energy and utilities companies are susceptible to. The stock is currently trading at 84\$ and it has been one of the best performers in the portfolio for the reasons discussed above.

Apple (NASDAQ:AAPL)

502 shares of Apple were purchased as part of the Information Technology sector in our portfolio. Apple constitutes about 6.33% of the overall portfolio. The stock was purchased at \$136.06. From a quantitative perspective, the stock was purchased at an attractive price based on a discounted cash flow valuation using an estimated long-term growth rate of 6%. This growth rate was determined based on a 10-year average of the company's free cash flow growth rate. The resulting intrinsic value calculation provided a significant margin of safety which indicated this was an attractively priced stock. From a qualitative perspective, the company possesses many strengths relative to its competitors in the marketplace. Apple is a very financially strong company, they have a \$2.3 trillion market capitalization with \$4.8 billion of cash available. Their average dividend growth rate over a 10-year period is 17%. They have a history of strong margins, earnings growth, and robust cash flows. They have also innovated recently and developed a services strategy which should provide a recurring revenue stream in the future. They are a market leader in their industry, vastly larger in balance sheet size than their competitors. There are some headwinds in the industry, with global trade concerns, inflation, and pandemic supply chain recovery all potentially weakening the outlook. For individual company risks, there is a chance that the smartphone industry has fully matured and that innovation could slow, reducing the long-term growth rate for this segment. However, we believe that the strengths of this stock far outweigh any potential drawbacks cited above. This stock has

performed excellently since its purchase and contributed to our results in this first reporting period.

Ally Financial Inc. (NYSE: ALLY)

1551.53 shares of Ally Financial Inc. were purchased at \$25.58 as part of the financial sector. ALLY constitutes 3.69% of the overall portfolio. ALLY is a holding company that provides digital financial services to consumers, businesses, automotive dealers, and corporate clients. Ally segments revenue into four categories: Automotive finance, insurance mortgage finance, and corporate finance. 69% of its revenue generated from the automotive finance segment.

ALLY has invested heavily in its digital platform and has been recognized as a leader in the field, which has helped it attract and retain customers. In the US, ALLY has a notable market share in at least two industries: Auto Leasing, Loans & Sales Financing, Property, Casualty and Direct Insurance and Property, Casualty and Direct Insurance. Their largest market share is in the Auto Leasing, Loans & Sales Financing industry, where they account for an estimated 4.1% of total industry revenue and are considered a Rising Star because they display lower market share, but displaying stronger profit and revenue growth than some of their peers.

ALLY has a good and healthy financial position. Its net income growth is almost tripling during the 2021. This big increase in net income was thanks to higher net financing revenue driven by lower interest rate expenses and lower net depreciation expenses on operating lease assets as well as lower provision for credit losses associated with improved macroeconomic conditions. Also, it has a strong balance sheet which has \$185 B in total assets compared to \$171B in total liabilities. They also have \$3.45B set aside as allowance for loan losses. This is the money they set aside each quarter to help protect themselves from their borrowers in case they start to default on their debt.

ALLY returns a lot of capital to shareholders both in terms of share buybacks and through a dividend. In the last 12 months, they spent about \$2.4 B in buybacks and they've reduced the amount of shares outstanding by about 25% over the last 5 years. ALLY has also been paying a really good dividend over the last several years.

Amgen Inc. (NASDAQ: AMGN)

A position with 313 shares of Amgen priced at \$265.07 was bought by the Team in the healthcare sector. It was designed in such a way that we have allocated 50% of the healthcare sector, which accounted for 7.34% of overall portfolio, for this position. Amgen Inc. is an independent biotechnology medicines company that discovers, develops, manufactures, and

markets medicines for grievous illnesses. The Company focuses on human therapeutics and concentrates on innovating novel medicines based on cellular and molecular biology. Amgen's products are marketed worldwide with the US market accounting for over 65% of sales.

We have a positive outlook on the biotechnology sub-industry (biotech), a historically defensive sub-industry, that has held up better on overall stock performance (year to date through September 30) than the broader market index. We expect to see solid drug sales growth driven by the continued adoption of many new and innovative therapies, a favorable M&A environment, and a low prevalence of patent expirations in 2022, although that rises in 2023. We also expect drugmakers to benefit from a return to normalcy since lower in-person physician visits during the pandemic had a negative impact on prescription growth. We believe that Covid-related activity will evolve to an endemic stage, versus a pandemic stage, which may lengthen the revenue stream, but likely at a more subdued level.

We identified risks associated with Amgen with low-medium impact potential including but not limited to the lack of diversified revenue streams and regulatory restrictions that can be proposed on the new drug developments of Amgen. However, the strategic positioning of Amgen outweighs the risks we identified. With a steady historic growth rate and largest market capitalization (~ 53%), Amgen has a high growth potential as \$1.7bn (out of \$4.8bn) of R&D assets are in the last stage of the deployment, which is the highest amount ever in the history of Amgen. Amgen current geographic presence and market cap provides an edge to Amgen against its competitors.

TESLA (NASDAQ: TSLA)

308 shares of Tesla were purchased at \$193.20 as part of the consumer discretionary sector. Tesla constitutes 5.5% of the overall portfolio. Through making this investment we allocated half of the total weight of the consumer discretionary sector in the S&P 500 Index (~11.8%). Tesla designs, develops, manufactures, leases and sells high-performance fully electric vehicles, solar energy generation systems and energy storage products. Tesla also offers maintenance, installation, operation, financial and other services related to these products. Tesla has also increasingly focused on products and services based on artificial intelligence, robotics and automation.

Tesla is the world's fifth most valuable publicly traded company and producer of the world's highest selling electric vehicles. Tesla is well positioned to be the biggest winner of the inflation reduction act and is poised for future growth as it gets closer to completing its giga factories in Texas and Germany. The inflation reduction act extends the electric vehicle (EV) tax credit of \$7,500 per electric vehicle through 2032 (10 years) which includes all EVs under \$55,000. Tesla is also uniquely positioned to provide value to consumers through its product ecosystem of solar,

energy storage, battery cells, electric vehicles, and self driving consumers which are all integral to a decarbonized future. Tesla also has vertically integrated sales and auto-servicing which further enhances customer experience relative to competitors in the EV market. Tesla's price also sits close to the 52-week low suggesting an optimal buying point for the company. We believe Tesla has established a significant competitive advantage in vertically integrated power generation, storage, and transportation solutions for an electrified future.

We identified risks associated with Tesla being the historic highly competitive nature of the automobile industry which may make it increasingly difficult over time to sustain a long run competitive advantage as major auto-manufacturers and new companies such as Rivian make large commitments to shift towards vehicle electrification. Additionally, as Elon Musk continues to allocate resources towards the management of Twitter, this may continue to make investors increasingly wary of him also being able to effectively manage Tesla in addition to his other companies. We believe that over our 10 year investment time horizon which coincides with the extension of the EV tax credit under the inflation reduction act, that this company will continue to exhibit sustained growth over this period.

MP Materials Corp. (NYSE: MP)

887 shares of MP Materials Corp. were purchased at \$32.54 as part of the materials sector. MP constitutes 2.6% of the overall portfolio. Through making this investment we the entire total weight of the materials sector in the S&P 500 Index (~2.6%). We chose a single position in this sector since the materials sector has the smallest representation of any sector in the S&P 500 Index.

MP Materials is the largest producer of scale in the western hemisphere. The Company owns and operates the Mountain Pass Rare Earth Mine and Processing Facility (Mountain Pass), the only rare earth mining and processing site of scale in North America. MP Materials produced approximately 15% of the rare earth content consumed in the global market in 2020. Separated rare earth elements are critical inputs for the magnets that enable the mobility of electric vehicles, drones, defense systems, wind turbines, robotics and many other high-growth, advanced technologies.

We firmly believe that MP Materials Corp. is well positioned to become a critical supplier of rare earth elements, particularly NdPr, an input needed for manufacturing advanced technology in key growth markets for the modern economy (discussed above). Additionally, the U.S. federal government has a national security interest in the success of this company (MP received \$45 million of U.S. DoD funding since 2020 for processing rare earth elements). We also believe that global supply chain issues exacerbated by COVID-19 and rising geopolitical tensions have made western countries eager to establish greater supply chain security for these critical inputs for

manufacturing advanced technologies. In this context, since MP materials is the only rare earth materials producer of scale in the western hemisphere, we believe it is especially well positioned to address these supply chain vulnerabilities and sustain an important competitive advantage.

We identified risks associated with MP materials being competition with low-cost chinese producers of rare earth materials which currently dominate the global market and competing advanced technologies which may reduce the need for rare earth element inputs. Additionally, this company exhibits a relatively high beta (2.83) which indicates this company may introduce more volatility to our portfolio especially in our current period of market uncertainty. Also, this company only recently held an IPO in 2020 providing a limited proven track record of success. Despite these risks we believe the growth prospects of this company continue to remain strong considering its unique position to alleviate a critical choke point in western supply chains for the manufacturing of advanced technologies including those needed for transitioning to a decarbonized economy.