Willamette University
Atkinson Graduate School of Management
O'Neill Student Investment Fund
5 May 2020

Dear OSIF Board of Directors,

It has been an honor to manage the O'Neill Student Investment Fund. These last two semesters presented us with invaluable experience managing real money for a real portfolio. We truly enjoyed the responsibility of making impactful decisions for the betterment of the fund. With the rapid market expansion of the previous semester and market volatility and macroeconomic events of the current semester, we have grown as investors in a variety of environments, giving us the real excitement and pain that comes with money management. We sincerely thank you for this unique learning opportunity.

The following pages detail our investment decisions from the last quarter, dated January 16 through April 16 of 2020. We will also provide insight as to our decision-making process. We will begin with an analysis of trends and the overall macroeconomic environment. Following this will be our investment decisions and their details. Finally, we will provide our thoughts on the outlook for the economy and potential opportunities that the O'Neill Student Investment Fund can capitalize on during the current market cycle.

Macroeconomic Environment, Trends, and Future Outlook

Throughout the semester, our team discussed the most pertinent economic factors of each week. We began each session with the moves of the Federal Reserve. As a class, we felt the Federal Reserve was the biggest leader of U.S. macroeconomic activity, and focused closely on both fiscal and monetary policy, the repo market, and Fed minutes. From there, we looked closely at the treasury yields. We used this as a risk-on/risk-off assessment, comparing the chart over time and the spreads between the two and ten-year yields. We followed by spending time talking about the major news, the global environment, and any macroeconomic events that shaped the near or long-term market. This discussion allowed for the fund members to formulate investment hypotheses and pitch ideas, and further implement these ideas into investments within the fund. The major macroeconomic events of the current quarter will be listed below, and each event will be further detailed and dissected:

COVID-19
2020 United States Presidential Election
Oil Price War and Collapse of Oil
Federal Reserve Interest Rate Cuts

COVID-19

As a board closely connected to the greater market, you all know that the largest and most impactful macroeconomic event to shake markets during this quarter is the viral infection, COVID-19. Most reports have stated that the virus originated in Wuhan, China and spread to 210 countries, infecting roughly 3 million people and killing more than 200,000 as of April 26, 2020[1] . This pandemic has led to a variety of impacts affecting the greater market and in turn, our portfolio.

Government-Issued Shutdown and GDP

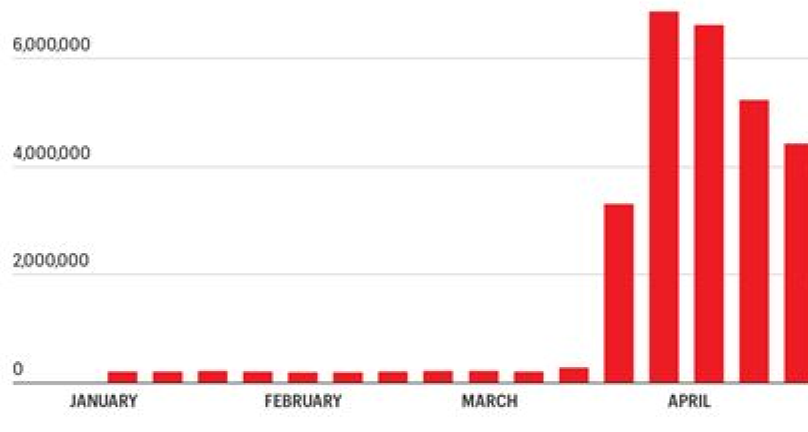
As a portfolio weighted heavily to U.S. equities, our portfolio was affected by the global economic shutdown caused by COVID-19, instated to flatten the curve. With the government-issued slowdown came the closure of most restaurants, virtually all non-essential stores, and a work-from-home order. In the United States, this meant a variety of pay cuts, furloughed employment, and job loss.

From an economics point of view, the U.S. government shutdown meant a slowing of economic expansion. Although the U.S. government has tried to implement monetary policy by both lowering interest rates and giving out “free money,” which will be expanded on further shortly, they are going to be unsuccessful in continuing GDP growth projected pre-COVID-19. The reason for this is twofold. First, 70% of the U.S. GDP is comprised of consumer spending. The retail and service industries are crucial to the continued expansion of the U.S. GDP, and without these stores in service, the GDP will slow significantly. Second, these retail and service industry stores typically face tight margins, and with the stores being closed, they are forced to either furlough or lay-off these non-essential workers. Without these workers being paid, they are unable to pay bills or spend money, hurting business throughout the county and U.S. GDP in the process.

Unemployment

Similar to what was mentioned above, due to the government-issued shutdown, businesses have been forced to lay-off workers constantly in order for these businesses to stay afloat. Often, firms are allowing workers to stay on a future contract, but letting them go in the short-term to allow them to file for unemployment. The business workers being affected most are those in non-essential service and retail businesses, as most office workers can seamlessly work from home with a laptop and a monitor. Below are the unemployment numbers[2] seen in the United States over the last few months:

[1] https://worldometers.info/coronavirus/countries-where-coronavirus-has-spread/
[2] L ance Lambert, U.S. Department of Labor



CARES Act

On March 27th, 2020, Congress passed the Coronavirus Aid, Relief and Economic Security (CARES) Act with bipartisan support. On the same day, President Trump signed the Act into law. CARES provides $2 trillion in fast economic assistance to American families and small businesses. Through economic impact payments, the Treasury Department is providing assistance to American families. The Act includes the Payment Protection Program which provides assistance to small businesses so they are better able to cover payroll, hire back laid off employees, and better cover of overhead. The Act also provides payments to State, Local, and Tribal governments. The ultimate goal of this program is to preserve jobs in industries adversely impacted by COVID-19.

Supply Chain Disruption and Global Trade

During COVID-19 pandemic and the resulting global economic shutdown, we have witnessed the impact of supply chain disruption on corporations. The most notable examples are the empty shelves in grocery stores. Some fail to realize all global businesses are struggling due to their inability to produce resulting from the global pandemic. Considering the disruption the pandemic has caused, many corporations are rethinking their supply chain strategies going forward. Two big questions arising are: “Should we broaden our supplier choices?” and “Should we increase our inventory and raw materials?” COVID-19 has disrupted many supply chains and affected the bottom line of many businesses. The impact of the pandemic will change how supply chains are viewed going forward.

Supply chain disruptions have led to a slow in global trade. Many countries have placed restrictions on exports of medical supplies and food. End consumers are feeling the effects of this slowing as there are shortages in laptops, toilet paper, and medicines. The decline in global trade is the largest the world has seen in this generation. Last year, there was already a decline in global trade growth as a result of the U.S.-China trade war. Exports from China to the U.S. have slowed dramatically due to the closing of factories in China. China is currently looking to

re-open their economies and President Trump is adamant about the U.S. economy beginning the process.

2020 Presidential Election

As the fund's decision makers, we felt the democratic nominee could potentially shift markets substantially, and felt that Bernie Sanders and Joe Biden would be the two democratic finalists early in the quarter. Given that Sanders and Biden have different viewpoints and agendas, our portfolio adjustments were made to account for our probability assumptions of which candidate would eventually become the nominee.

Our portfolio held a variety of healthcare positions, in XLV and Eli Lilly. One of the major risks we saw was with Bernie Sanders and the healthcare industry. One of Sanders' campaign promises was Medicare for All. One of the major components of this promise was to "Stop the pharmaceutical industry from ripping off the American people by making sure that no one in America pays over $200 a year for the medicine they need by capping what Americans pay for prescription drugs under Medicare for All."[3] With small allocations to pharmaceutical companies within the XLV exchange-traded fund and over 2% allocated to Eli Lilly, we felt that Bernie Sanders' nomination would negatively impact the financial performance of these healthcare companies, and the share price value would decrease significantly. Often, these pharmaceutical companies have high margins on their successful drugs and utilize these margins to help pay for continued research and development. If there was a cap on price for these drugs, we thought that these firms might have to restructure financially to continue to pay for the high research and development costs. This was one of the major goals of Sanders' campaign, and we thought our healthcare positions would be most affected by his nomination.

Among the other candidates, we felt that Sanders' policies would affect markets the most, and focused most of our energy on what would happen if Sanders was president. Because his decisions would be so drastically different than Trump's current policies, our country would shift, and the U.S. market would shift with it.

Oil Price War and Collapse of Oil

In early March, Saudi Arabia initiated an oil price war against Russia in response to their refusal to cut production. Saudi Arabia and OPEC anticipated the sharp decline in demand for oil due to the pandemic and agreed to collectively cut production levels to keep prices sustainable based on production costs. Russia, however, walked away from the deal and kept production high. This resulted in global oil prices plummeting, even briefly going negative in mid-April. With supply far outpacing demand, producers began running out of storage space for their oil, leading to a capacity issue that caused prices to fall further. Other than taking a small position in USO (explained below), our team generally stayed away from the oil sector due to the volatile prices and high uncertainty. Until demand returns to more normalized levels, likely sometime later this year, oil prices will remain unusually low.

[3] https://berniesanders.com/issues/medicare-for-all/

Federal Reserve Interest Rate Cuts

After cutting interest rates three times in 2019, the Federal Reserve opened the year with no plans for rate cuts in 2020. In early January, much of the market agreed with this strategy, as Federal-funds futures showed an 87% chance that interest rates would remain between 1.5%-1.75% throughout the first half of the year. However, as fears of COVID-19 began to affect the U.S. economy, the Federal Reserve cut interest rates by half a percent on March 3rd in an emergency attempt to keep the financial markets strong. Despite the fact that there were less than 1,000 cases of COVID-19 in the United States at the time, investors were fearful of how hard the virus would hit the U.S. This emergency rate cut set the new benchmark interest rate to 1%-1.25%.

As the total number of cases in the U.S. increased exponentially over the two weeks since the initial rate cut, Fed Chairman Jerome Powell announced on March 15 that they would cut rates again, this time by a full percentage point. This brought the interest rate to near zero territory. Despite these rate cuts, the S&P 500 dropped by roughly 25% throughout the month of March. The Fed-funds rate is currently sitting at .04%, with talks of short term interest rates potentially going negative in the near future if conditions continue to worsen.

Another tool the Federal Reserve used to combat the economic fallout of the virus was repurchase programs. In order to keep money flowing through the financial system, the Fed offered nearly $2 billion in repurchase funds. While markets initially reacted positively, it was for only a very short period of time before they crashed back down. Other quantitative easing measures included at the time were asset purchases of $700 billion.

Allocation Rationale

Overall, the fund itself was more neutral to the short-term outlook of the markets. The reason for being somewhat risk-on was due to the past performance of the market as a whole. We know that strong past performance does not indicate strong future performance, but it was evident that there was momentum pushing the markets upwards with strong business growth and the market being in arguably the longest expansion ever. All of these attributes made it clear to us that because of increased spending and firm growth, there was value in the market and strong investment prospects.

That being said, the markets were hit with a variety of curveballs throughout the course of the quarter. Besides those mentioned above, we had the U.S.-China trade war deals, which caused vast uncertainty into how and where future trade and globalization would leave large multinational firms. We dealt with the potential for a global war in the Middle East with Iran. We dealt with the price war of oil between the Middle East, Russia, and the smaller players. We witnessed the implications of a new North American trade deal. We saw how Europe would change with the final touches of Brexit being finished. All of these events caused market uncertainty, and did not allow for the fund to realize a true risk-on or risk-off stance.

The fund utilized a large cash balance to make tactical trades throughout the semester. Much of our trading was done around U.S. equities. We started with a portfolio of $453,815.62, with allocation to cash of 30.16%, to fixed-income of 20.51%, and to equities of 49.33%. We started with such a large cash balance due to the portfolio being untouched throughout most of December and January and the uncertainty of the market. We sat in more equity than bonds

because U.S. equities had outperformed virtually all other investments in the last few years at least, and felt that we wanted to capitalize on the upside and momentum we were seeing throughout the expansion. Within equities, we were allocated to the U.S. at roughly 90%, compared to the rest of the world at a little over 10%. The same rationale can be explained here in that U.S. equities have outperformed virtually all other world indices in the previous years.

Because of COVID-19, we became more risk-off due to market uncertainty and the pricing-in of future underperformance by the major multinational firms. As of April 16, 2020, the portfolio had fallen to $426,442.29. Of that, 10.78% was allocated to cash, 24.06% was allocated to fixed-income, and 65.16% was allocated to equities. Lots of research had looked at whether the best performance would be from individual companies immune or capitalizing on the consumer and business shift to stay-at-home orders, or whether allocating money to the major indices would allow the portfolio to realize gains back to the highs over time. We utilized a combination of both, with some tactical single-firm trades while maintaining a large allocation to index-tracking funds.

Individual Investments

1/24: Bought QQQ, $20,000. The reason we bought into this Nasdaq-tracking ETF is that we were impressed with the tech sector's recent performance and believed QQQ's holdings would continue to do well even through the COVID-19 pandemic. Nasdaq performance has outperformed the S&P in recent memory, and wanted to capitalize on technology.

1/24: Bought PM, $10,000. Not shying away from vice goods, we purchased shares of Philip Morris with the rationale being that whether the economy is up or down, the tobacco industry tends to thrive. Addictive goods and stress relievers pay in recessions.

1/24: Sold LLY, $10,000. We were unhappy with Eli Lilly's recent performance and decided to minimize our exposure to the healthcare sector at this time. Already owning a position in XLV, we felt that that was enough exposure to healthcare at a time when the sector was relatively volatile. There was also political risk.

1/30: Sold UNH, $8,500. Similar to the Eli Lilly transaction, we continued to minimize our exposure to healthcare. At this time, we felt that the possibility of a far-left democratic presidential nominee would weigh heavily on the healthcare sector of the market. We put the proceeds from this sale into the long-term bond ETF, TLT.

1/30: Sold XLV, $9,000. Continuing the trend of reducing healthcare exposure, we sold a portion of our stake in XLV and put the proceeds into the tech sector ETF, QQQ.

1/30: Bought SPY, $13,000. As more of a long-term play, we felt that the S&P 500's ETF is almost always a good risk-on investment. We also felt that it would bounce back from a recent decrease in asset price.

1/30: Bought QQQ, $10,000. Impressed with the ETF's performance and future outlook, we bought more at a price we found to be reasonable.

2/14: Bought ADP, $6,900. Bought during a strong economic environment. Unemployment was at an all time low which made this an attractive play.

2/14: Bought QQQ, $9,800. Continued strong performance. Blue Chips continued to shine. We felt adding to this position made sense given our risk-on approach.

2/14: Bought TLT, $10,000. With a large position at the time, we wanted to add more to the 20-year treasury position because of its stellar performance.

2/14: Bought EUO, $3,000. Coronavirus concerns were beginning to spread globally. We took a small position in the euro short to gain experience with ETF shorts as an investment vehicle, and to capitalize on some European volatility.

2/14: Bought V, $5,000. At the time, Visa was one of the top performers in our portfolio. With a strong economy, we believed adding to this position would continue to realize gains. As consumer spending continued, we felt Visa would realize some of that performance.

2/28: Bought SH, $10,000. COVID-19 was beginning to make its way to the U.S. As a class, we were shifting towards a risk-off approach. We bought this S&P short as a hedge for our SPY position.

2/28: Bought PSQ, $10,000. Similar to our SH purchase. This is an ETF short which would serve as a hedge to our QQQ position.

2/28: Sold EUO, $3,000. When purchasing EUO we viewed it as a short-term hold. Since there was zero movement in the 2-week time frame, we sold out of the position.

3/06: Sold QQQ, $10,000. Concerns over COVID-19 became more prominent. We did not want to finance purchases with cash. Sold QQQ to finance other purchases.

3/06: Bought TLT, $10,000. Class sentiment shifted to risk-off. We felt we needed to add to our long-term bond position as a defensive play.

3/06: Bought ORCL, $10,000. Oracle's focus on software was extremely attractive to us. We felt computer software was a good space to be in. We felt the need for software was not going to decline during the pandemic.

3/06: Sold SH, $9,650. The ETF short was to hedge our position over a short time horizon. We did not feel comfortable holding this position for more than a week.

3/06: Sold PSQ, $9,660. Similar to SH, we did not want to hold this position for more than a week. Market uncertainty was increasing and we did not feel comfortable holding this position.

3/13: Bought QQQ, $5,000. Although concerns over COVID-19 were looming, markets were still riding highs. We felt the Blue Chips would go unscathed. We felt that exposure to the tech heavy index would perform.

4/03: Bought USO, $5,000. Given the unease between Russia and Saudia Arabia, USO was trading at a discount. We felt a cap on production would increase the price of future oil contracts.

4/13: Bought BA, $5,000. We have always been bullish on Boeing. At the time, Boeing was trading at a discount. Backed by the U.S. government and one of only two major airplane manufacturing players, we felt a small long position would behoove the portfolio.

4/13: Sold TLT, $5,000. We did not want to touch our cash position to execute purchases. We decided to take some of our gains on TLT to finance other purchases this week.

4/13: Bought KMB, $10,000. Kimberly Clark is a company which has prevailed through the pandemic. Given the supplies they produce, i.e. soap dispensers, hand dryers, etc., we feel they will be a good long term play. Demand for soap dispensers and the like will be exponentially greater post COVID-19.

4/20: Sold TLT, $3,500. We used some of the gains on TLT to finance our EFA purchase.

4/20: Bought EFA, $3,500. Since the European economy appears to be reopening, we felt this international ETF would be a good position to add to.

Benchmark

As fund managers, we decided to use the S&P 500 as our performance benchmark for a few reasons. The first reason for using the S&P as our benchmark was because of our weight to U.S. equities. As mentioned above, we sat at roughly 50 to 60 percent in U.S. equities. Second, the S&P 500 has been the highest performing liquid asset in recent memory. Compared to other indices across the globe, the S&P 500 has seen average annual returns of roughly 11.80% per year. We wanted to utilize a historically strong performing indicator as our benchmark to hold our portfolio to the highest standard.

Utilizing an equity-only benchmark has its downsides, however. We realize that using the S&P 500 as a benchmark means that our performance is only compared to a single country's firms and only one asset class in that country. Although historically fairly representative and higher performing than other global indices, it does not take into account other asset classes and holdings of the portfolio. If our portfolio was solely a U.S. equity traded fund that maintained full allocation, the S&P 500 would be the proper benchmark to use. This also does not take into account the risk reduction that our fund has compared to the benchmark. As bonds are a large holding in our portfolio, our benchmark does not necessarily account for risk.

One potential benchmark change moving forward could be to use a dynamic benchmark that changes monthly and averages the beginning and end balances as a proportion of our portfolio for equities, fixed-income, and cash. This would better allow for our benchmark to be representative of our portfolio while still using major indices to compare to.

Future Outlook and Investment Opportunities

We discussed items such as treasury yields, global news, and actions taken by the Federal Reserve. Often, our conversations were dominated by the economic effects of the COVID-19 pandemic. The current economic climate is loaded with uncertainties as a result of the pandemic. COVID-19 paired with the 2020 presidential election will make for an exciting second half of 2020 from an investors' perspective. President Trump is determined to reopen the U.S. economy. U.S. GDP is expected to rebound in Q3 and Q4 of 2020. China is slowly reopening factories. Media is not prioritizing the 2020 elections, as news on COVID-19 dominates screen time. Amidst all of the mentioned economic uncertainties, we are confident our investment decisions will be capable of withstanding all uncertainties.

Healthcare, tobacco, and software are industries which have shown resilience through the current economic situation. People will always get sick. People, for better or worse, will always use tobacco. People will also continue to use computer software. We believe the resilience these industries have shown despite the current economic conditions will make them an attractive space to play for investors going forward. As a result, they will provide lasting value to the fund.

Looking longer term towards the future of multinational firms, there is the obvious fear of where globalization will take us. With COVID affecting so many firms throughout the country, there is the realization that global operations present a risk that was not prevalent just three months ago. Only time will tell the comfort level of global conglomerates.

Thank you again for the opportunity to manage the O'Neill Student Investment Fund. It has been an invaluable experience that has taught us the value of diligent research, spirited debate, and how putting the pieces of the economy together is a difficult but rewarding endeavor. We thank you for your confidence and appreciate your continued trust.