

Memo: Investment letter From: James Fryer, Jordan Megiveron, Noah Dantes, Bradley Van Ausdle, Jonathan Watts & Ryu Hsu To: OSIF Board December 6th, 2022

Dear OSIF Board and Directors,

We are pleased to have the opportunity to manage and make valuable contributions to the O'Neill Student Investment Fund. During the semester we were able to gain valuable insight and experience with real money in a turbulent economic environment. As investors, we thank you for the opportunity to contribute to this fund and gain experience that will continue into our future endeavors.

We managed the current portfolio through three macroeconomic events: high inflation, increases in the Federal Funds Rate, and recession fears. The following summary details how each of these events contributed to our decisions and market sentiment for the future outlook of the current fund.

Macroeconomic Factors

Interest Rates

Interest rates during Covid-19 (2020 - 2021) were at extreme lows due to the government's pandemic response. This contributed to more dollars chasing fewer goods in the economy, setting a precursor to higher inflationary periods that would likely be corrected in the following years.

Over the course of the semester, interest rates have risen steadily, with four consecutive 75 bps hikes since July, with a current Federal Funds Rate range of 3.75% to 4.00%. The quick increase in interest rates has been in response to the economy overheating with 40-year high inflation. As inflation appears to be on a downward trend from its peak, interest rate hikes are also expected to be smaller. Traders are now pricing in a 75% chance (as of 11/23) that the Fed will raise rates by only a half-point at its December 14 meeting. As investors start to anticipate a less aggressive

Federal Reserve in hopes of a soft landing, the market has shown signs of rallying since October (S&P 500 up 8%). An upward trend in the equity market should continue, conditional on the fact that inflation continues to subside and Fed rates begin to ease.

Inflation

Throughout the Fall, the US has experienced high yet declining inflation (CPI), from a peak rate of 9.1% in June to 7.7% in October. Additionally, from the producers perspective, the October PPI on a year-over-year basis rose 8% compared to an 8.4% increase in September. For the month of October PPI rose 0.2%, compared to the consensus of 0.4%. On top of CPI and PPI, University of Michigan's Consumer Sentiment Index decreased 18% YoY as household budgets tightened moderately. These are examples where we are starting to see outcomes of price pressure alleviation, inducing a slow down in the economy and thus reduction of inflation. This in turn sends a signal to equity investors that we are near the end of the tightening cycle. We are optimistic that this is evidence of a sustained bull market reversal that could be forming. Our portfolio allocation has centered mainly around the U.S. equity market, because we expected the U.S. to combat inflation more successfully compared to other countries. We continued to underweight our bond allocation due to ongoing concerns of restrictive monetary policy.

Fear of Recession

Over the course of the time we managed the O'Neill student investment fund (mid August-early December), there was plenty of discussion in the news about recession fears. The last time this happened in the United States was during 2008 (which lasted for a year and a half), and 2020 (which lasted a few months). These were periods in which there was a widespread decline in spending. Recent news about increasing interest rates have deterred spending from consumers and has led to multiple quarters of economic decline.

In their battle against inflation, there is growing analyst concern that the Fed may overtighten, inducing a recession and an unemployment rate much larger than they intended. However, there are also many investors that believe a soft landing is increasingly possible as inflation appears to be decreasing leading to a short and potentially weaker recession. In the third quarter, 69% of S&P 500 companies beat earnings per share estimates and 71% of S&P 500 companies beat revenue estimates, which is below the 5-year and 10-year averages for S&P 500 companies, signaling that while rates are helping cool down the economy it is not a drastic pull down. The ideal scenario for the economy and market would be a situation where interest rates and inflation ease while consumer spending remains relatively robust in comparison. This so far appears to be the case providing confidence in the soft landing expectation, as evidenced by October's weaker than expected CPI and PPI. Additionally, the Atlanta Fed boosted its fourth-quarter GDP growth estimate to a 4.4% annualized rate from a 4.0% pace. Airline travel also appears to be remaining

strong, another signal of solid consumer discretionary spending, with Thanksgiving travel expected to be one of the busiest on record. One other key factor that tends to make recessions less painful is consumers and firms having cash on hand to continue spending. Many households built up substantial excess savings during the pandemic. Lower-income households have tapped their savings to offset the inflation hit to their purchasing power, but many middle and high-income households have excess cash reserves. Households still have roughly \$1.7 trillion in excess cash in the bank to keep spending and cash equivalents per share among S&P-500 companies is about three-times what it was before the global financial crisis, according to Morgan Stanley. If consumers continue to spend as they are, a severe recession is unlikely.

Holdings, Performance, and Rationale

Our semester began with a fund market value of \$466,260 invested across approximately 85% equities, 10% fixed income securities, and 5% money market/cash holdings. Due to the volatile economic environment, we shifted our portfolio allocation strategy from an aggressive growth strategy to a blended, value and growth strategy. We retained a relatively high equity allocation, 76%, as we viewed the current environment unappealing for fixed income securities. We also chose to increase cash allocation from 5% to 12% to meet policy requirements and to protect from short-term market risks.

We made our decisions based on evaluating qualitative and quantitative factors surrounding each company, including their fundamentals and valuation, forecasts, micro and macroeconomic trends, changes in market sentiment, and competitive landscapes.

Over the course of the semester, we acquired positions in Tesla, Taiwan Semiconductor Manufacturing Co., United Health Care, Apple, Costco, and General Dynamics. All companies are established brands with economic moats that we believe will outperform the overall market. Our team increased healthcare exposure and did so through initiating a relatively large position in United Health Care. The portfolio was previously underweight in healthcare and we found long-term growth prospects for the sector promising.

In hindsight, our best purchase decision was purchasing Costco, up approximately 15%. We chose to initiate a position in Costco because we found its customer value proposition very appealing in the current high inflationary environment and because Costco has a history of holding up well during times of recession.

Our worst performing purchase has been Tesla, down by approximately 27% as of this writing. We purchased Tesla because we expect significant growth in the electric vehicle space and believe that Tesla is well-positioned to remain the market leader. We think that higher valuations are justified due to Tesla's industry leading technology, established charging infrastructure, and consumer brand loyalty. Our team attributes Tesla's recent share price declines largely to temporary production shut-downs in China due to covid lockdowns, Elon Musk's purchase of Twitter, and overall market conditions. We view these events as short-term and not posing a risk to our investment thesis. We remain bullish on the long-term future of Tesla.

We also made a handful of deliberate sell decisions to free up capital for our higher conviction ideas. We sold our stake in QQQ as we felt the portfolio was too heavily weighted towards growth and because we preferred our individual holdings of companies included in the index. We sold Bank of America and KBWB to reduce exposures to financials, as we were previously very overweight financials and desired to allocate capital elsewhere.

In hindsight, our best sell decision was to sell Meta, down approximately 20% since our sale. Our decision centered around uncertainties in near-term ad spending and concerns surrounding Meta's large investment in the metaverse. We are not optimistic that we will see large-scale adoption of virtual reality anytime soon and believe that Meta's investment in the space could detract from the success of its core business.

Our worst sell decisions were Netflix and Shopify, both up approximately 20% since our time of sale. Our decision to sell Netflix was based on lack of future pathways for substantive growth moving forward, increased competition in the space, and potential vulnerability during a recession. Our decision to sell Shopify was based on a belief that Amazon will limit Shopify's long-term upside potential and that Shopify's core customer base could struggle in a higher interest rate environment.

Comparisons to indexes

Fund Type	1-Month	3-Month	YTD	
O'Neill Fund	3.24%	0.06%	-16.00%	
S&P 500 Index	5.59%	2.77%	-15.01%	
Index Blend (Fidelity) 70% Stock	6.00%	2.02%	-13.14%	

* Data taken from 11/30 returns

Overall performance

Over the last 3 months, the approximate timeframe this class has managed the account, the fund has generated a return of .06%. The most comparable benchmark, an index of 70% stocks and 30% bonds, generated a return of 2.02% over the last three months. From this perspective, we have slightly underperformed a similarly weighted market index. However, this could be interpreted as somewhat favorable in that a positive return was made during such a volatile market period, where many other investors accrued massive losses. Reflecting back on the

managing period, we were overweight into large-cap growth stocks, which hurt us this term, as value stocks generally outperformed. However, we were underweight on bonds, which actually benefited us, as bonds overall are down 1.56% in the last three months. Investing primarily into U.S. equities also strengthened the portfolio, as the U.S. continues to outperform international equities along the long-term trend, with negligible parity in the last three months.

Outlook

We believe that as the economy recovers from this period of potential recession there are several factors that the next set of investors should consider. First and foremost, we believe that the FOMC meeting over the winter break will be a precursor for market trends as the Feds decide whether or not to increase interest rates by 50bp or 75bp. Such action will impose either a soft-landing or increased tightening of the overall economy causing many businesses to retain employment or restrict unnecessary cash flows. This could cause a recessionary period that would leave room for speculation as to which industries would be most likely affected by FOMC deliberations.

Furthermore, we believe that the holiday season's impact on revenue in Q4 could prove vital to GDP numbers and inflationary trends in the coming year. We advise that the next set of investors monitor not only future financial statements, but also statements ending in Q4 2022. This will prove useful for a general understanding of future CPI and PPI indicators, but also provide necessary information for valuations of companies.

Thank you

Managing the O'Neill Student Investment Fund for the family, faculty, and board was an opportunity for us to learn about the investing process and increase the scholarship fund. We celebrated successes in our trades and experienced humility in others. This class has unveiled some of the challenges in maximizing returns and managing risk. Thank you for allowing us this opportunity to increase our investor acumen.

<u>Appendix</u>

Exhibit 1: Balance and Performance

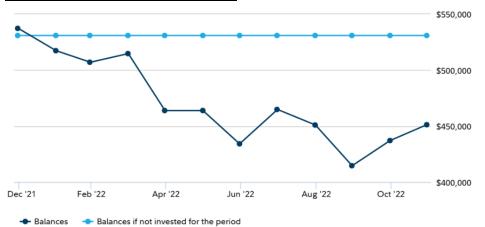


Exhibit 2: BUY and SELL decisions, shares, price, amount

Holding	Decision	Trade Date	Shares	Price(\$)	Amount (\$)
TESLA	BUY	9/1/2022	56	268	(15,010.47)
SHOPIFY	SELL	9/8/2022	134	30	4,072.16
TAIWAN SEMICONDUCTOR	BUY	9/8/2022	124	80	(9,912.93)
Invesco KBW Bank ETF	SELL	9/8/2022	135	55	7,385.68
ISHARES MSCI EAFE ETF	SELL	9/15/2022	304	61	18,501.01
UNITEDHEALTH GROUP	BUY	9/22/2022	40	511	(20,441.20)
META PLATFORMS	SELL	10/6/2022	58	138	7,977.13
NETFLIX	SELL	10/6/2022	26	237	6,153.53
APPLE	BUY	10/13/2022	53	142	(7,517.49)
COSTCO WHOLESALE	BUY	10/13/2022	16	466	(7,454.24)
Bank of America	SELL	10/27/2022	216	36	7,808.22
GLOBAL X LITHIUM AND BATTERY TECH ETF	SELL	10/27/2022	91	69	6,301.60
Invesco QQQ ETF	SELL	10/27/2022	116	277	32,150.98
General Dynamics	BUY	11/3/2022	30	243	7,300.50
Dollar General	SELL	11/17/2022	20	254	5,082.08
Home Depot	SELL	11/17/2022	17	312	5,303.87
TOTAL					47,700