2023

Spring Semester Report

May 16, 2023

Mizzou Investment Fund

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The Mizzou Investment Fund

- For the Spring 2023 semester, the Fund returned 5.43% compared to the S&P 500 Index return of 3.74%.
- The portfolio's top three holdings are Apple Inc. (NASDAQ: AAPL), Amazon (NASDAQ: AMZN) , and Microsoft Corp (NASDAQ: MSFT), with weights of 9.39%, 7.16%, and 7.24%, respectively.
- The IFM team added a total of 10 names to the portfolio and sold or trimmed positions in 9.

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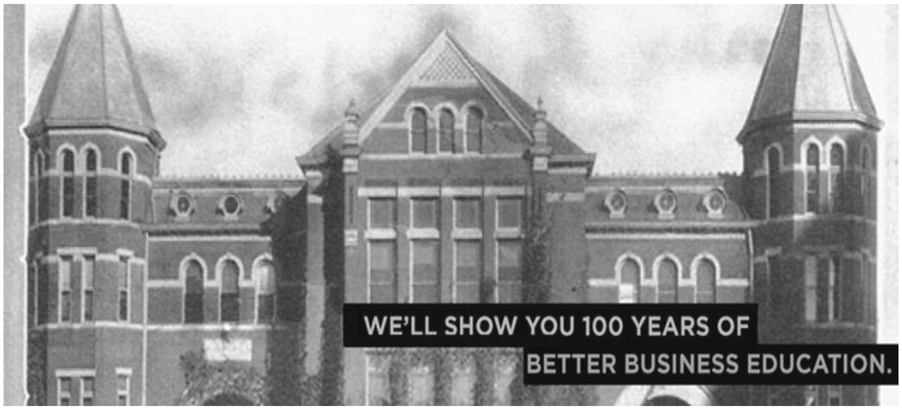
Robert J. Trulaske, Sr. College of Business
University of Missouri



Fund History

The Board of Curators of the University of Missouri established the Truman Tracy Memorial Investment Fund in 1967 as a tribute to Professor Truman Tracy, who passed away earlier that year. Dr. Tracy was the senior investments professor at the University of Missouri. The Truman Tracy Fund was originally established with memorial contributions from his students, colleagues, and friends.

In the same year as Tracy's death, Arie and Ida Crown established the Crown Memorial Student Investment Fund. Students initially managed the Tracy and Crown Funds as separate accounts, but the portfolios have since been merged and are now managed as a portion of the broader pool of assets within the Mizzou Investment Fund.

Before the Investment Fund Management (IFM) class began, students in the undergraduate investments and security analysis courses managed the funds. The portfolio has been actively managed since its inception, with the exception of the period from 1980 to 1984 when the funds were passively managed before Dr. Gary Trennepohl took over as advisor.

The Student Portfolio Analysis and Management Club was formed in 1991. This club sparked enough interest that eventually a portfolio management course was created in 1999 to meet student demand. The students competed in security analysis and portfolio management competitions, and their strategy presentations earned national awards.

In the Fall semester of 2005, the Department of Finance dedicated a separate course to manage the Fund, and the Mizzou IFM Program was born. Admission to the class continues to be competitive. Enrollment is typically limited and includes both undergraduate and MBA students. In 2006, the Fund saw a large increase in assets under management, as the IFM class began managing a portion of the endowment funds given to the college as a gift from the family of Robert J. Trulaske, Sr. The total value of assets under management by the Mizzou IFM Program now exceeds $1.7 million and includes funds from the Truman Tracy Fund, Crown Fund, and Trulaske endowment.

Management Team

Richard Strifler
CEO

Ethan Peter
Chief Economist

Chris Repka
Chief Market Strategist

Analyst Team

Tyler Peck
Communication Services

Eric Meyer
Consumer Discretionary

John Hurley
Consumer Discretionary

Andrew Schumann
Consumer Staples

Grant Wall
Energy & Materials

Ryan Edwards
Industrials

Eric Peasel
Industrials

Nick Romay
Health Care

Austin Cleveland
Real Estate & Utilities

Charlie Hirner
Information Technology

Tyler Kalata
Information Technology

Welcome Letter from the CEO

The IFM program provided our class a unique opportunity to manage the large capitalization, long-only equity portion of the University of Missouri's Endowment, allowing us to build invaluable active portfolio management and valuation skills. As the CEO, I directed and facilitated discussions among the class, informed the team about any material effects on our holdings, and guided the class through the voting processes. It was crucial to ensure that every decision was made by a majority vote of the IFM team.

In addition, I regularly provided overviews of our portfolio and spearheaded the strategy of the portfolio with the Chief Economist and Chief Market Strategist . Our team worked tirelessly to research potential investments and conduct thorough analysis to ensure that every decision we made was well-informed and well-reasoned.

I am incredibly grateful for this opportunity and proud of what the fund has been able to achieve. As of May 5th, 2023, I am pleased to provide an update on the IFM portfolio, which has performed exceptionally well under our management.

The IFM Program offered the team a unique opportunity to gain hands-on experience in equity research and portfolio management that surpassed what we could have learned in a typical classroom. I'm proud to have been part of such a talented and dedicated team and excited to see what the future holds as everyone in the fund enters their professional journeys.

IFM Program Description

For the first six weeks of the semester, Professor Adam trained the fund, ultimately equipping students with many of the necessary skills required to manage a successful equity portfolio. Students learned how to analyze the financial performance of companies using various intrinsic and relative valuation models, such as flow to equity, discounted cash flow, and comparable company models. These valuation methods along with sector research and qualitative business analysis became the primary tools used to craft our investment decisions.

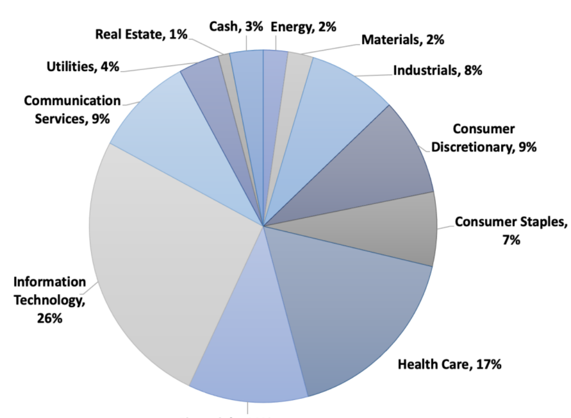
After this, the class was divided into managerial and industry coverage teams through a voting process. Each student was then assigned to analyze specific industries and companies, ultimately presenting a buy, sell, or hold recommendation to the class based on their research. The management team subsequently led thoughtful discussions on the investment recommendation's potential upside and downside and evaluated how it aligned with the overall portfolio strategy.

Richard Strifler

Performance	IFM	S&P 500
Three Year	-0.4%	44.5%
Semester	5.43%	3.74%

**Performance as of 05/05/2023*

Portfolio Characteristics	
Assets Under Management	$1.747M
Number of Equity Holdings	29
Beta	0.95
Weighted Average P/E	29.3



Strategy

Through thoughtful analysis and collaboration, our three fund managers created and proposed a fund strategy, which was unanimously agreed upon .

The first order of business was assigning target weights to the various S&P 500 sectors which we felt would overperform, market perform, or underperform for the semester. This analysis was spearheaded by Chris Repka, CMS, and ultimately debated and voted for by the fund mangers and analysts.

- The following industries saw a shift downwards in weight: Energy (equal weight to underweight), and utilities (equal wright to underweight)
- The following industries saw a shift upwards in weight: Materials (underweight to equal weight), Consumer Staples (underweight to equal weight), healthcare (overweight to significantly overweight), financials (equal weight to overweight), and Information Technology (underweight to equal weight).

In coordination with sector tilts, the fund built its strategy around momentum, value, size, and beta factors with an understanding of the vast academic research surrounding the topics. The fund decided that to remain wary of high P/E equities, with intent to not overextend our holdings of high growth names. Given our manager's market forecasts, the fund also decided to tilt to a low beta. Additionally, created a goal of adding equities in the bottom quartile of size within the large cap universe to increase diversification of size within the fund. With regard to the momentum factor, the fund decided to not consider momentum because of the fund's passive nature during the summer, making it susceptible to considerable downside in a correction if using this strategy.

Performance

Following considerable portfolio turnover this semester, the fund has generated of a return of –5.43% since the January 17th, relative to the S&P 500 return of 3.74%

The fund is incredibly proud of this performance as we faced incredibly choppy markets with no lack of macroeconomic data points leading to significant volatility. Furthermore, the fund outperformed relative to many preceding cohorts, which speaks to the continual progression of the fund and its dedication to intellectual curiosity, teamwork, and the candid feedback that is required to select strong investment candidates.

Top 10 Equity Holdings	% of Portfolio
Apple Inc	9.39%
Amazon.com Inc.	7.24%
Microsoft Corp	7.16%
Abbvie Inc.	5.34%
Alphabet Inc.	4.26%
United Parcel Service Inc.	3.87%
UnitedHealth Group Inc.	3.82%
NRG Energy Inc.	3.76%
Cigna Group	3.54%
Salesforce Inc.	3.34%

Top/Bottom 3 Performing Holdings	YTD Return
NVIDIA Corporation	100.35%
Meta Platforms Inc.	86.61%
Vertex Pharmaceuticals Inc.	21.7%
Raytheon Technologies Corp	-4.20%
AbbVie Inc.	-8.84%
Cigna Group	-18.89%

Portfolio P/E		S&P 500 P/E	
Mean		Mean	
32		33	
Weighted Average			
29			
Percentile			
10%	6.89	10%	6.73
20%	12.68	20%	9.49
30%	21.80	30%	11.35
40%	24.02	40%	12.83
50%	28.11	50%	14.44
60%	33.88	60%	16.43
70%	35.28	70%	18.68
80%	50.09	80%	22.16
90%	78.88	90%	28.26
95%	114.96	95%	40.35

Closing Remarks

The IFM Program has been an invaluable experience for the students who had the opportunity to participate in the program. We will be forever grateful for the knowledge and skills we have been taught throughout the semester and believe that they will be incredibly beneficial for our professional careers in finance. The fund would like to extend our sincerest gratitude to Professor Adam Yore for his dedication to the program and wealth of subject matter knowledge, which has shined through each and every day during class. We would also like to thank the IFM coordinators, the IFM board, and all others who made this program possible through their contributions, feedback, and dedication to the fund.

As a repeat participant in the fund, I am incredibly thankful for the opportunity it provided me to create valuable connections and engage in collaborative work with other highly motivated finance students. Each semester of the IFM program creates a unique bond between classmates which is not replicated in many other courses in the Trulaske College of Business.

As I prepare to bid farewell to Mizzou, I feel a deep sense of fulfillment understanding the learning journey the IFM program has provided. Since my first semester in the course during the spring of 2022, my deep passion for valuation has grown immensely and has convinced me to pursue the CFA designation, as I will sit for the level two exam shortly after graduation.

For the fund itself, with its strong history of unwavering dedication to learning and teamwork, I couldn't be more confident in the intelligence of the future cohorts and trajectory of its future performance. This class is truly unparalleled, and I would strongly encourage any student considering it to take the plunge. You won't find another course at Mizzou that offers such an immersive and hands-on experience in real-world investing.

Sincerely,

Richard Strifler

Portfolio MKT Cap Exhibit **% of Portfolio**

*Billions		
Mean		
$	440	
Weighted Average		
$	429	
Percentile		
10%	$	14
20%	$	26
30%	$	62
40%	$	124
50%	$	170
60%	$	216
70%	$	427
80%	$	641
90%	$	1,526
95%	$	2,572

Buy & Sell Orders Exhibit

Buy

Amazon (NYSE:AMZN)

EOG Resources (NYSE: EOG)

Molina Health (NYSE: MOH)

Albemarle Corporation (NYSE: ALB)

United Parcel Service, Inc. (NYSE: UPS)

Ingles Markets (NASDAQ: IMKTA)

Jacobs Solutions (NYSE: J)

Public Storage (NYSE: PSA)

Delta Airlines (NYSE: DAL)

AutoZone (NYSE: AZO)

Sell

McDonalds (NYSE: MCD)

Nvidia Corporation (NASDAQ: NVDA)

American Tower Corp (NYSE: AMT)

UnitedHealth Group (NYSE: UNH)

Cigna (NYSE: CI)

Stanley Black & Decker Inc. (NYSE: SWH)

Raytheon Technologies (NYSE: RTX)

Target Corp (NYSE:TGT)

ECONOMIC COMMENTARY

The economy will slow without entering a recession as the Federal Reserve raises interest rates.

Inflation

Inflation declined this semester due to higher interest rates and lower energy costs. CPI growth decreased to 5% for the previous 12 months but remained well above the Fed's target 2% level. The decline in prices accelerated recently due to falling energy prices, so the CPI Less Food and Energy still increased 5.02% over the previous three months. This indicator suggests the battle against inflation is far from over.

The Federal Reserve raised interest rates twice this semester. Futures markets anticipate the Federal Funds rate will stay between 500-525 basis points for most of 2023. This prolonged period of high interest rates should drive inflation down to the Fed's 2% target rate over time. I anticipate inflation will remain elevated throughout 2023 but should normalize in early 2024.

GDP

GDP growth slowed in early 2023 as leading economic indicators gave mixed signals about the economy's direction. Unemployment remains extremely low following COVID-19-induced labor market imbalances, but falling job openings suggest these imbalances are correcting themselves. The strong labor market supports growing consumer sentiment and retail sales, which are encouraging signs for the economy.

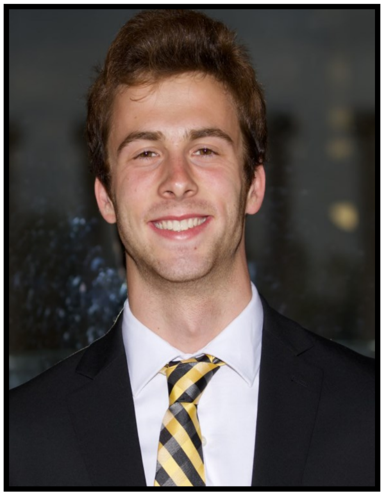
Output for sectors such as manufacturing and housing decreased under higher interest rates. Manufacturing activity declined in late 2022 but remained relatively stagnant in early 2023. Housing indicators remain lower than 2022 levels but have not declined substantially. Manufacturing and housing are considered leading economic indicators and suggest the economy will continue to slow.

I expect U.S. GDP growth will remain stagnant during the upcoming 12 months. Persistent high interest rates should cause manufacturing, housing and other cyclical sectors to experience slowdowns or even declines in growth. Still, the strong labor market should support consumer spending and prevent the U.S. from entering a recession.

Labor Market

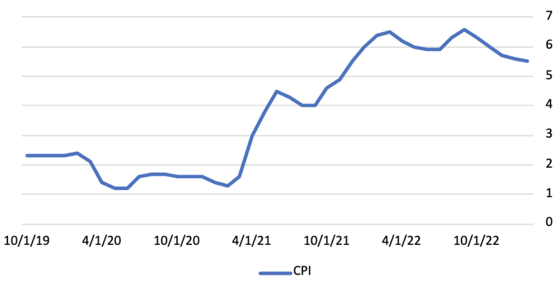
The unemployment rate remains around 3.5% following the COVID-19-induced decline in labor force participation rates. The decrease in labor force participation caused record high job openings and supply-demand imbalances in the labor market. This imbalance began to correct itself in recent months as job openings fell, however, the remaining large balance of unfilled jobs should keep the unemployment rate low for the foreseeable future.

The strong labor market supports growing consumer sentiment and retail sales, which are encouraging signs for the economy. It should prevent the economic slowdown from developing into a serious recession as most people maintain their jobs.



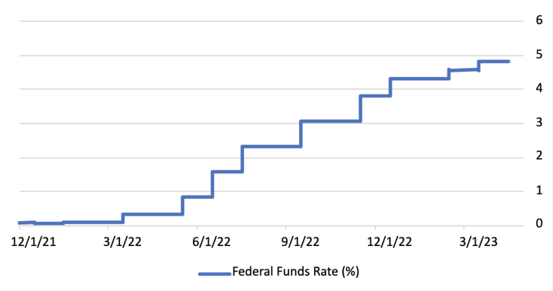
Ethan Peter

CPI Less Food and Energy



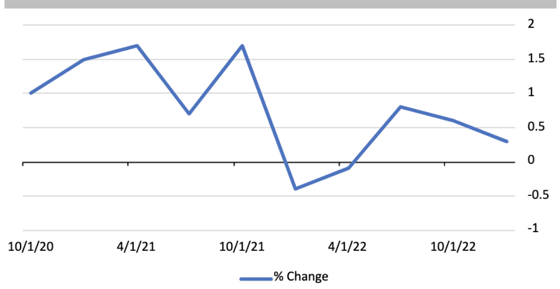
Source: FRED

Federal Funds Rate



Source: FRED

% Change in Real GDP

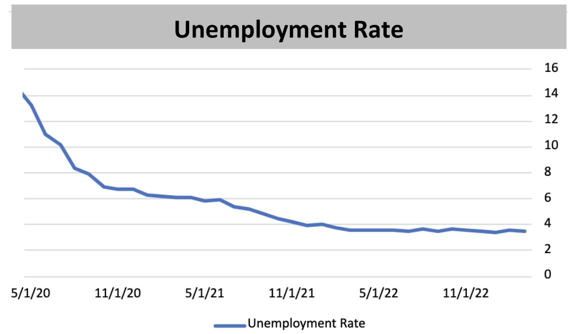


Source: FRED

Data as of April 27, 2023

Manufacturing

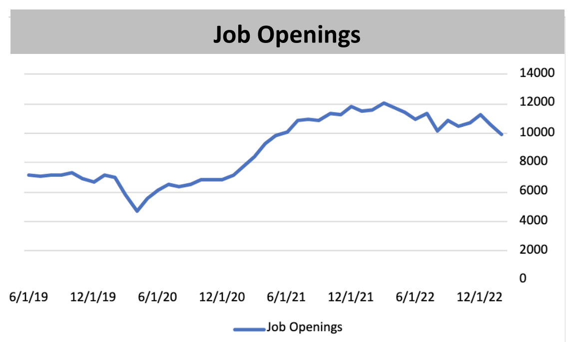
Manufacturing activity slowed but remained higher than expected given the interest rate increases. Manufacturing activity declined in late 2022 and remained relatively stagnant in early 2023. Purchasing managers for manufacturing companies continue to maintain negative outlooks on the sector's performance; however, these outlooks have been much more pessimistic than actual sector performance so far. Industrial production and durable goods orders declined slightly which suggests manufacturing may slow in upcoming months. Overall, manufacturing and industrial activity is likely performing better than usual under high interest rates due to the strong labor market and consumer spending.



Source: FRED

Bank Failures

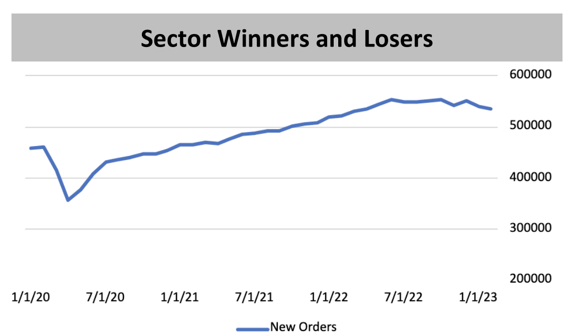
Two of the largest bank failures in American history occurred this semester. Silicon Valley Bank and Signature Bank went bankrupt after their depositors withdrew their money and the banks were forced to sell long-term bonds at steep discounts. Higher interest rates forced both banks to sell bonds they bought during low-rate periods for a significant loss. Regulators decided to insure all deposits beyond the FDIC limit to maintain faith in the banking system and prevent runs on similar banks, but it is still possible similar banks will fail as interest rates remain high.



Source: FRED

Outlook

We predict the U.S. economy can respond to the higher interest rates in three ways. First, the Federal Reserve may pull off a "soft landing" where interest-rate-sensitive sectors slow to decrease inflation while strong labor markets support economic productivity in other sectors. Second, the Federal Reserve may raise interest rates more than expected because the strong labor market supports consumer spending. In this scenario the strong consumer spending and labor markets cause inflation to persist as interest rates devastate the manufacturing and housing sectors. Third, the economy may enter a recession at current rate levels due to banking pressures being more serious than initially assumed. We believe a soft landing is the most likely outcome because of Federal Funds futures expectations, slowing inflation and encouraging economic indicators.



Source: FRED
Data as of April 27, 2023

MARKET COMMENTARY

Christopher Repka

Overall Market Commentary

The S&P 500 reached a high of $4800 on January 3rd, 2022. A sustained bear market until October 11th, 2022, has seen the S&P 500 fall by 26% to $3588. A year-to-date increase of 14.8% to $4090.75 on May 3rd indicates we are currently in a sideways market.

The outlook is positive. The first four months of 2023 started off strong despite an environment of uncertainty and bearish consumer and investor sentiment. Bank collapses, inflation, and the Federal Reserve's interest rate hikes added to the risk, but equities rallied nevertheless.

The VIX index measuring volatility remained low, reaching its lowest level since 2021. The S&P 500 and the Nasdaq achieved a YTD return of 8.27% and 16.31%, respectively.

In March, bank collapses caused the Federal Reserve to slow down interest rate increases to avoid further damage to the banking system. Interest rate-sensitive sectors were positively impacted, while financial sectors suffered due to fears over bank turmoil.

The Nasdaq outperformed the S&P 500, driven by its high concentration in technology and lower exposure to the financial sector. The current hype around generative AI further fueled the technology rally. Foreign markets also had a positive YTD performance.

S&P 500 Valuation

For the dividend discount model, I used the following assumptions: long-run GDP forecast as provided by our Chief Economist (2.40%), implied equity risk premium calculated by Dr. Damodoran (4.77%), and a predicted risk-free rate in a year of 3%. In both model, I assume the analyst median for forecasted S&P 500 earnings, according to Refinitiv. I arrived at a one-year price target of $4044.51, an approximately 1% downside to the current levels.

For the market multiples model, I used the following assumptions: The current multiple as a 50-year average (19.72). I consider this multiple a modest one, as the potential of generative AI could increase the multiple in the next couple of years. I arrived at a one-year price target of $4480.19, an approximately 5% upside to the current levels.

Averaging the two methods yielded a one-year price target of $4262.35, a 4.19% upside to the current levels.

Looking ahead, the current S&P 500 Forward P/E ratio is high at 22.29, but the growing prevalence of technology and growth firms in the index is shifting fundamental determinants of the P/E ratio.

Excluding FAANG stocks, the Forward P/E is lower at 15.1. Defensive sectors such as Consumer Staples and Utilities are among the most expensive sectors, driven by recession fears and a vast majority of investors who are pessimistic. Given the tremendous opportunity in AI, I believe FAANG stocks are rightfully expensive

While there are still some risks in the banking sector, the credit tightening that resulted from the crisis has given the economy a way to fight inflation without raising interest rates. It also caused the Federal Reserve to be more cautious in their future rate hikes. And while there may be a few more banks that mismanaged their fixed-income portfolios amidst the current interest

Stock Indices	4/28/2023	1Mo % Chg	YTD % Chg	1Yr % Chg	5Yr % Chg
S&P 500	4169.48	4.08%	8.27%	0.56%	11.08%
NASDAQ	12226.58	3.21%	16.31%	-1.89%	12.27%
MSCI World ex USA	302.93	4.47%	8.30%	5.01%	2.92%
RUSSEL 2000	1768.99	-0.01%	-0.12%	-5.62%	3.75%

Current S&P 500 Earnings	187.23		1y Target using median	
Long-run GDP Forecast CME	2.40%			
Risk-free rate	3.34%		DDM	$4,100.93
Equity risk premium	4.77%			
Multiplier	19.72		Multiples	$4,480.19
Predicted risk-free rate in 1y	3.00%			
Current cost of equity	8.11%		Current level	$4,090.75
Cost of equity in 1y	7.77%		Most likely 1y target	**$4,262.35**
			Implied upside	4.88%

Note: Forecasts range for 2023 S&P 500 earnings from 195 to 248, with a median of around $220.22

Sector	Ticker	YTD Return	Relative Change
S&P 500	SPX	8.27%	0.00%
Communication Services	XLC	24.09%	15.82%
Consumer Discretionary	XLY	14.53%	6.26%
Consumer Staples	XLP	3.82%	-4.45%
Energy	XLE	-3.18%	-11.45%
Financials	XLF	-3.68%	-11.95%
Health Care	XLV	-2.16%	-10.43%
Industrials	XLI	1.25%	-7.02%
Materials	XLB	2.93%	-5.34%
Real Estate	XLRE	1.77%	-6.50%
Information Technology	XLK	20.17%	11.90%
Utilities	XLU	-1.30%	-9.57%

Data as 4/29/2023

Therefore, I expect the current rally to continue, with cyclical sectors outperforming defensive sectors. This is further supported by the fact that stocks and especially cyclicals perform well during periods of lowering interest rates, which is an environment we are close to reaching. I do not anticipate a retest of the previous lows of October 2022, as stocks tend to perform well during periods of lower interest rates, which we are close to reaching.

Our fund has historically benchmarked our performance as well as our weightings against the S&P 500. For this reason, it is of great importance to track sector performance as a whole throughout the semester. At the start of the semester, we expected healthcare, consumer discretionary, financials, communication services, and technology to outperform the benchmark by the greatest difference.

Actual results show that communication services, technology, and consumer discretionary are clear leaders, with communication services outperforming the benchmark by over 16%. However, our expectations missed on financials and healthcare. Due to reasons outlined earlier, I expect cyclical sectors to continue to outperform throughout the year, with consumer staples and utilities being the biggest laggards.

ENERGY SECTOR

After my analysis this semester, I have a **Market Underperform** rating on the energy sector due to a steady decrease in commodities prices, and the slowing of our economy.

Grant Wall

Economic Drivers and Recent Developments

In 2022, many constituents of the energy sector brought in record revenues and profits. The Russian invasion of Ukraine caused crude oil and natural gas prices to spike. As part of sanctions placed on Russia by the EU, European countries stopped buying Russian oil which decreased the amount of available supply. In turn, the United States and our energy companies sent millions and millions of barrels overseas which allowed for record performances. However, by the fall of 2022 the prices of crude oil and natural gas fell to below pre-invasion levels. With China coming back from their zero-COVID policies and still purchasing Russian oil, the 'usable' supply has increased. Combine this with the fact that the Fed is trying to slow down the economy leads to too much supply for the demand. Myself and analysts expect energy companies' sales to contract in 2023.

Major developments to track into the future will revolve around clean energy and Net Zero by 2050. Firms in this sector will see decreased demand for fossil fuels in the next couple decades, and the successful firms will figure out how to position themselves to be apart of the next forms of energy.

Sector Vital Statistics

Energy Sector (GICS #7; XLE)

Market Weight					3.7%	
Average Market Capitalization					$76.644 B	
Number of Companies					23	
Sector Performance	**1 Mo**	**3 Mo**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**
XLE	-4.64%	-8.31%	-9.69%	3.46%	103.69%	6.96%
Sector Metrics	**Multiple**	**Beta**	**P/B**	**Gr. Rate**	**Altman**	**PEG**
XLE	10.4x	1.63	4.19	7.61%	4.88	2.42

Performance Outlook

I believe sales will contract Y/Y in 2023 due to the declining commodities prices mentioned prior. The sector as a whole will have negative stock returns, after beating the market significantly in 2022. The sector also had unsustainable growth in 2021, due to a significant increase in demand while the entire world was coming out of a pandemic. Into the future, I have sales growth for the sector roughly 7.5% using data from Compustat/Capital IQ.

Sector Winners and Losers

The number one metric that I have determined is most important for valuation in this sector is PEG. With the last two years of growth being unsustainable for the sector, PEG takes into account how cheap or expensive a stock is and compares that with their long-term growth prospects. A PEG ratio of around 1 or lower is considered fair value for future growth which current holding, **Exxon Mobil (XOM)**, and my other two winners— **Devon Energy Corp. and Diamondback Energy** all embody. The three losers I have identified for this sector, **Targa Resources (TRGP), The Williams Companies (WMB),** and **Baker-Hughes Company (BKR)** all have performances in this metric that are way worse than their contemporaries. These firms are considered to be overbought in my opinion and are not positioned to take advantage of the long-term growth prospects in this sector.

Sector Winners and Losers

Company	Ticker	Multiple	Price	Target	% Diff
Outperform					
Exxon Mobil	XOM	1.01x	$116.42	$128.96	10.8%
Devon Energy Corp.	DVN	1.08x	$53.43	$66.37	24.2%
Diamondback Energy	FANG	0.35x	$142.20	$175.44	23.38%
Underperform					
Targa Resources	TRGP	2.55x	$75.53	$60.00	-20.6%
The Williams Comp.	WMB	10.48x	$30.26	$29.05	-4%
Baker Hughes Comp.	BKR	N/A	$29.24	$17.26	-40.97%

Ticker	Beta	ROE	Gr. R	Payout	P/E
XOM	1.07	28.58%	8.55%	26.8%	8.60
DVN	2.35	53.86%	6.43%	56.69%	14.86
FANG	2.03	29.22%	17.29%	35.84%	12.09
TRGP	2.28	42.85%	6.01%	24.12%	245.52
WMB	1.20	17.16%	1.81%	100%	18.97
BKR	1.45	-4.18%	2.96%	100%	N/A

Data as of Apr. 28, 2023

MATERIALS SECTOR

After my analysis this semester, I have a **Market Perform** rating on the materials sector due to improving supply chain conditions and the cyclical nature of this sector.

Grant Wall

Economic Drivers and Recent Developments

The main economic drivers for this sector revolve around overall supply and demand for consumer goods and potentially services. The companies that comprise this sector produce, procure, and then sell raw or compound materials to manufactures' who need the materials for their products. The more consumer demand grows, the more activity and revenue the materials sector sees. The winners and losers in this sector can be predicted by trends in specific industries that they supply.

A recent development in this sector has been and will continue to be the Fed's policy regarding interest rates. As the Fed has been nearing the end of its rate hike cycle, the effects are going to start to be seen. Inflation has been on a steady decline for months now, and that will effect how much materials companies can sell their products to their customers for. The slowing of the economy also will start to decrease overall demand, and the demand for the materials companies products.

Sector Vital Statistics

Materials Sector (GICS #2; XLB)

Market Weight					2.38%	
Average Market Capitalization					$32.795 B	
Number of Companies					29	
Sector Performance	**1 Mo**	**3 Mo**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**
XLB	4.10%	-3.42%	3.69%	-5.70%	58.59%	39.46%
Sector Metrics	**Multiple**	**Beta**	**P/B**	**Gr. Rate**	**Altman**	**PEG**
XLB	18x	1.13	4.43	9%	4.71	3.37

Performance Outlook

I believe the sector's average sales growth will increase Y/Y in 2023, and stock performance will follow. Supply chain issues prevented the sector from running higher last year, and with those mostly in the rearview, the sector has potential to bounce back. Into the future, I have sales growth for the sector at 9% using data from Compustat/Capital IQ.

Sector Winners and Losers

As I mentioned earlier, the winners and losers in this sector can be predicted by industry trends or new industries arising. This was apart of my investment thesis to the fund when I pitched **Albemarle Corporation (ALB).** The fund approved the purchase due to their strong financials as it stands and their ability to serve the EV market. **ALB** is the leading supplier of lithium that goes into Tesla, and other EV maker's, lithium batteries. The firm has several mines around the world, and is opening a new one in Kings Mountain, NC by 2025.

As for the other winners, **LyondellBassell Industries (LYB)** and **DuPont de Nemours (DD)**, I like the PEG ratio and growth prospects these firms have. Similar to the energy sector I believe PEG is an important ratio for comparing firms in this sector, because the particular sub-sector the firms serve will determine their top-line revenue growth in the future. **International Paper Corp. (IP), Amcor plc (AMCR), and Vulcan Materials Companies (VMC)** all have poor growth prospects compared to the value they are currently trading at. A company I would stay away from especially is **International Paper Corp. (IP)** due to the fact they had a loss in net income for 2022.

Sector Winners and Losers

Company	Ticker	Multiple	Price	Target	% Diff
Outperform					
DuPont de Nemours	DD	1.19x	$69.72	$91.78	31.6%
LyondellBasell Ind.	LYB	0.73x	$94.61	$99.50	5.17%
Albemarle Corp.	ALB	0.43x	$185.46	$299.00	61.2%
Underperform					
International Paper C	IP	N/A	$33.11	$31.00	-6.81%
Amcor plc	AMCR	24.17x	$10.97	$10.75	-2.05%
Vulcan Materials Co.	VMC	5.54x	$175.12	$166.00	-5.49%

Ticker	Beta	ROE	Gr. R	Payout	P/E
DD	1.44	22.09%	5.03%	11.11%	5.97
LYB	1.21	30.77%	11.51%	83.62%	8.40
ALB	1.57	33.7%	27.33%	6.88%	11.79
IP	1.04	-10.58%	3.04%	100%	N/A
AMCR	0.84	19.7%	0.87%	89.81%	21.03
VMC	0.76	8.31%	7.74%	36.94%	42.85

Data as of Apr. 28, 2023

INDUSTRIALS SECTOR

Ryan Edwards

The Industrials sector of the S&P 500 consists of 73 companies that comprise 8.34% of the broader market index. The sector is diverse in nature and companies span across three main industry groups: Capital Goods, Transportation, and Commercial and Professional Services. The top 10 constituents comprise a 41.8% weight in the sector. Over the next twelve months, we are initiating a **Market Perform** rating for the sector.

Economic Drivers and Recent Developments

This sector is very cyclical in nature and closely tracks along side the S&P 500.In the past twelve months, the XLI has returned 3.5% versus the SPY of -0.3%.

Interest rates have sent many ripple down affects across this sector. A combination of tightening credit and lending markets within a capital intensive industry does not bode well for near-term growth. Companies will have to allocate a more significant portion of their cash flows to interest payments instead to reinvesting in the company or returning dividends to shareholders. In addition, customers and businesses are hesitant to make large investments with the looming risk of a recession still sitting on the horizon. Confidence in the economy is a must when companies decide to make large capital investments and current outlooks do not learn towards the favorable side. This decreased demand has been seen across manufacturing, machinery, and consumer exposed sectors as interest rates have risen over the past year.

Eric Peasel

Although corporate spending has began to stagnate, the United States government continues to pass more bills granting funding to a wide variety of industries. Government spending is one of the biggest growth drivers of the Industrials sector. In 2023, the US government is expecting to spend $87.3 billion on infrastructure, over $800 billion of defense spending, billions more of climate and clean energy investments which many companies in this sector are well positioned to capitalize on.

Performance Outlook

Over the next twelve month, we expect the Industrials sector to perform relativity inline with the boarder market index. Uncertainty continues to remain around the Fed's decisions with the current direction of interest rate. This sector will not experience strong growth again until consumers, businesses, and investor develop a restored confidence in the economy. Sub-industries such as Aerospace & Defense and Infrastructure will out perform the rest of the sector with the boosts from government spending. Then once the confidence returns to the economy, there will begin to see strong growth across the sector as a whole. Economists and research analyst expect this come again towards the tail end of 2023 and into 2024.

United Parcel Service (UPS), a current portfolio holding, discussed in their first quarter earning call how they have began to see slow in demand from their consumer exposure. This lead to their full year financial guidance begin lowered, sinking the stock down ~9% intraday.

Sector Vital Statistics

Industrials Sector (GICS 20; XLI)

Market Weight						8.43%
Average Market Capitalization						$39.9 B
Number of Companies						73
Sector Performance	**1 Mo**	**3 Mo**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**
XLI	0.14%	-0.15%	1.82%	2.32%	55.57%	38.47%
Sector Metrics	**P/E**	**Growth**	**ROE**	**Beta**	**Payout**	
SPDR Ticker	34.93x	18.90%	22.70%	1.14	24.71%	

Data as of May 3rd, 2023

Sector Winners and Losers

We used linear regression modeling techniques to predict outperformers and underperformers within the Industrials sector. When evaluating the accuracy of these regressions, we found that three ratios had the most statistical significance for predicting future stock returns. These key ratios are P/S (2.95x sector average), EV/S (3.15x sector average), and P/E (24.63x sector average). The Industrials sector is a capital-intensive industry, and these ratios allow investors to see the revenue and earnings a company is generating to cover their debts and generate free cash flow. Additionally, we can use these ratios to evaluate a company's growth and see how much an investor is willing to pay for future revenue.

Using the regression models, we found our top five outperformers to be **Alaskan Air Group (ALK)**, **Delta Air Lines (DAL)**, **Jacobs Solutions (J)**, **United Parcel Service (UPS)**, and **United Rentals (URI)**. The five underperformers we found are **Automatic Data Processing (ADP)**, **Old Dominion Freight Line (ODFL)**, **Paychex Inc. (PAYX)**, **Rockwell Automation (ROK)**, and **Xylem Inc. (XYL)**.

Two of our outperformers are airline companies who struggled in recent years due to travel restrictions during the COVID-19 pandemic. Both Alaskan Air Group (ALK) and Delta Air Lines (DAL) have significantly lower P/E ratios than the industry average. This is due to investors doubting their financial strength and profitability amid recession concerns. As long-run GDP starts increasing, we expect travel to ramp up as supported by these large EPS growth rates of 25.6% and 34.3%. Recent first quarter data released for 2023 show year-over-year business air travel up 85%. This figure was still significantly lower than pre-pandemic travel numbers, indicating that there is still plenty of room for further growth in the airline industry.

Sector Winners and Losers

Ticker	Current Price	Target Price	P/E	Growth	Beta	ROE	Payout Ratio
Outperformers							
ALK	$ 43.93	$ 63.54	8.56	25.6%	1.51	14.6%	0.0%
DAL	$ 34.27	$ 51.56	7.12	34.3%	1.25	40.7%	0.0%
J	$ 115.08	$ 153.32	16.38	10.7%	0.84	14.9%	18.4%
UPS	$ 179.50	$ 192.78	14.69	3.6%	1.10	66.5%	36.7%
URI	$ 359.39	$ 441.61	10.27	15.1%	1.83	35.4%	4.8%
Underperformers							
ADP	$ 219.31	$ 210.51	27.57	13.7%	0.82	82.7%	58.5%
ODFL	$ 321.86	$ 306.00	25.76	11.3%	1.08	37.6%	7.4%
PAYX	$ 109.72	$ 104.78	26.17	8.3%	0.97	45.0%	66.5%
ROK	$ 284.19	$ 235.19	25.39	15.0%	1.43	45.5%	40.5%
XYL	$ 104.00	$ 97.00	35.56	15.7%	1.08	10.6%	61.1%

Data as of May 3rd, 2023

CONSUMER DISCRETIONARY SECTOR

John Hurley

Eric Meyer

We have a **Market Perform** rating relative to the S&P 500 index for the Consumer Discretionary sector's forward 12-month performance. The Consumer Discretionary sector of the S&P 500 makes up 11% of the broader index. The sector can be broken down into industry groups of retail, consumer services, automotive manufacturing, and consumer durables.

The Consumer Discretionary sector is highly concentrated. The top ten companies within the sector make up more than 50% of total market share. This is reflective of the larger trend in corporate consolidation, which has been driven by several factors such as M&A, technological advancements, and economic globalization. Globalization has recently had a significant impact on this sector. Companies within this sector have experienced increased competition from foreign markets. Cheaper labor and production costs in these foreign markets can lead to lower prices for products. This specifically affects the retail industry with large players such as **Amazon (AMZN)** and **Nike (NKE)**.

Economic Drivers and Recent Developments

As inflation continues to remain a concern for investors this year and last year's interest rate hikes worked their way through the economy, consumers have begun to peak towards the horizon and have begun chattering about high-performing consumer discretionary names in preparation of a slowing Federal Reserve rate. Investors are most optimistic about the Consumer Services industry which is trading above its 3-year average PE ratio.

The sector is highly competitive both internally and externally. Internally, there are many players vying for market share by supplying a wide range of new products and services that entice customers. In addition, companies must stay ahead of the curve when it comes to innovation to remain competitive within this sector. Externally, competition is fierce as well due to the high degree of customer loyalty towards certain brands which lead to intense price wars.

As the global supply chain continues to return to healthier levels, this is critical for cost efficiency for the Consumer Discretionary sector. Although the levels aren't expected to return to normality this year, inventory arrivals for the retail industry have been arriving earlier than expected. Additionally, the slowing of Personal Consumption Expenditures (PCE) from macroeconomic data could hamper the overall growth of the sector.

Performance Outlook

In 2022, the consumer discretionary sector produced around $3 trillion in sales. Because of the slowing PCE growth according to federal data, we do not anticipate robust growth throughout the entire sector. However, due to large firms, namely **Amazon (AMZN)** and **Nike (NKE)**, and inflation, the sector should still see some growth. We anticipate sales growth to be around 3%, resulting in $3.09 trillion in sales for 2023.

Based on the underlying economic drivers, we anticipate the consumer discretionary sector to perform similarly to the market S&P 500. Over the past year, the Consumer Discretionary index (XLY) has returned -14.55%, but is returning 11.92% YTD. In a similar time frame, SPY has a -1.16% 1-year return and a 8.30% YTD. Despite the greater returns currently, we expect the consumer discretionary to perform returns closer to the S&P 500 for the remainder of 2023.

Winners and Losers

The main ratios in Consumer Discretionary we found useful to apply were P/S ratio. The P/S ratio was used because when valuing stocks in a variety of industries, we thought it was a valuable metric to determine how a company is managing its stock price in reference to their sales. As a result, we believe that evaluating P/S and its determinants would be the best for gauging individual valuations. Generally, companies with low betas and high Net Profit Margins (NPM) performed well in this metric. Using this information, we determined our winners to be **Amazon (AMZN)**, **AutoZone (AZO)**, **Nike (NKE)**, and **Pool Corporation (POOL)**. Based on our valuation method, we determined **Caesars Entertainment (CZR)**, **Etsy (ETSY)**, **Royal Caribbean Cruises (RCL)**, and **Wynn Resorts (WYNN)** to be overvalued.

We believe **Amazon (AMZN)** will be a winner despite its negative NPM because the loss came from a single bad investment. The negative ROE from stock buybacks, good growth prospects in its business operations, and below sector average beta suggest a recovery for the stock price. At **Nike (NKE)**, we believe that the company's P/S is undervalued and will continue to perform well in ROE and NPM that are above sector averages with strong sales growth targets to correct itself over time. On the flip side, **Caesars Entertainment (CZR)** has a negative NPM and an above average beta of 2.88, which contributes to a current overvaluation and we believe it causes a stock price decline. Despite an above average P/S, **Wynn Resorts (WYNN)** has a combination of negative NPM, high beta, and negative long-term growth that suggest it is overvalued against the rest of the sector. As a result, we think that the downward trend will continue with its stock price.

Sector Vital Statistics

Consumer Discretionary Sector (GICS 25; SPDR XLY)

Market Weight	10.60%
Average Market Capitalization	$70.44B
Number of Companies	53

Sector Performance	1 Mo	3 Mo	YTD	1 Yr	3 Yr	5 Yr
SPDR Ticker	3.4%	1.2%	13.4%	-12.9%	30.5%	40.7%

Sector Metrics	P/S	NPM	Payout	Growth	Beta	ROE
SPDR Ticker	12.5x	5.6%	24.7%	2.0%	1.37	-27.9%

Sector Winners and Losers

Company	Ticker	P/S	Price	Target	% Diff
Outperform					
Amazon.com, Inc.	AMZN	2.2x	$109.82	$132.49	20.6%
AutoZone, Inc.	AZO	3.0x	$2,660.73	$2,961.45,	11.3%
Nike	NKE	4.1x	$125.70	$135.00	7.4%
Pool Corporation	POOL	2.2x	$342.09	$382.50	11.8%
Underperform					
Caesars Entertainment, Inc.	CZR	2.9x	$43.41	$39.86	-8.2%
Etsy, Inc.	ETSY	2.0x	$100.49.	$97.30	-3.2%
Royal Caribbean Cruises Ltd.	RCL	1.8x	$61.66	$46.20	-25.1%
Wynn Resorts Limited	WYNN	3.3x	$110.22	$96.02	-12.9%

Ticker	NPM	Payout	Growth	Beta	ROE
AMZN	-0.5%	0.0%	26.0%	1.26	-1.9%
AZO	15.0%	0.0%	11.3%	0.68	-68.7%
NKE	12.9%	31.2%	6.8%	1.11	39.6%
POOL	12.1%	20.1%	12.3%	0.93	60.6%
CZR	-8.3%	0.0%	27.5%	2.88	24.2%
ETSY	-27.1%	0.0%	-1.7%	1.99	126.9%
RCL	-24.4%	0.0%	-160.4%	2.45	-75.2%
WYNN	-11.3%	0.0%	-135.2%	2.04	56.5%

Data as of April 27, 2023

CONSUMER STAPLES SECTOR

I believe the consumer staples sector will **Market Perform** relative to S&P 500 over the next twelve months because of the sector's ability to weather downside caused by economic turbulence.

Andrew Schumann

Economic Drivers

Population growth drives revenue growth in this sector more than anything. As the population grows, more people need more essential items. However, the staples sector is also tied to the health of the broader economy and consumer spending patterns.

Economic growth (GDP) is the key performance driver of staples stocks. GDP growth heavily affects consumption levels. For this reason, consumer staples performance is ultimately driven by four main components of GDP: personal consumption, business spending, government consumption expenditures, and net exports.

Recent Developments

This mature sector faces a complex and evolving landscape of consumer behavior. E-commerce innovation and government regulation are at the forefront of developments that could greatly affect a staples' profitability.

Portfolio sector weighting was affected when the S&P Dow Jones announced a sector reclassification of fourteen equities March 17th. **Target (TGT), Dollar Tree (DLTR), and Dollar General (DG)** made the switch from consumer discretionary to consumer staples.

Performance Outlook

I predict the consumer staples sector will *market perform* over the next twelve months, with a growth prediction range of 2.5% to 4%. Consumer staples is set up to prevent a lot risk against economic turbulence, negating underperformance. However, I believe inflation and high interest rates will slow revenues of staples equities enough to impede an outperformance.

Winners and Losers

I predict **Archer-Daniels-Midland Co. (ADM), Sysco Corp (SYY),** and **Walmart Inc. (WMT)** will outperform both the consumer staples sector and the S&P 500. ADM is global leader in agricultural processing and commodity trading that is undervalued in my discounted cash flows (dcf) and market multiples regression valuations. ADM holds powerful market position and has beaten EPS estimates for eighteen straight quarters. SYY is a leading food distribution company. Paired with strong financials and dominant market position, my market multiple regressions indicate SYY is undervalued. My dcf models and market multiple regressions indicate WMT to be undervalued. I also hold high sentiment in WMT's e-commerce innovation plans.

I predict **Brown-Forman Co. (BF.B)**, **Church & Dwight Co. (CHD)**, and **Lamb Weston Holding Inc (LW)** will underperform the consumer staples sector and S&P 500 due to weak fundamentals and market multiple regressions indicating overvaluation.

Sector Vital Statistics

Consumer Staples Sector (GICS 30, XLP)						
Market Weight						6.66%
Average Market of Capitalization						$79,677.82
Number of Companies						36
Sector Performance	**1 Mo**	**3 Mo**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**
XLP	5.37%	6.15%	4.27%	-0.26%	32.92%	53.50%
Sector Metrics	**P/B**	**Long-Run Growth Rate**	**ROE**	**Payout**	**Equity Beta**	**Sales Growth (y/y)**
XLP	15.63	3.64%	38.92%	60.71%	0.63	9.05%

Sector Winners and Losers

Company	Ticker	Multiple	Price	Target	% Diff
Outperform		*P/B*			
Archer-Daniels-Midland Co	ADM	1.81	$ 78.08	$92.50	18.47%
Sysco Corp	SYY	28.70	$ 76.74	$88.00	14.67%
Walmart Inc.	WMT	5.23	$ 150.97	$165.00	9.29%
Underperform					
Brown-Forman Co.	BF.B	11.22	$ 65.09	$67.00	2.93%
Church & Dwight Co.	CHD	6.21	$ 97.12	$93.00	-4.24%
Lamb Weston Holding Inc.	LW	41.59	$ 111.81	$115.00	2.85%

Ticker	Long-Run Growth Rate	ROE	Payout	Equity Beta	Sales Growth (y/y)
ADM	24.17%	17.87%	20.71%	0.80	19.13%
BF.B	1.53%	30.62%	99.16%	0.70	13.64%
CHD	8.21%	11.86%	61.61%	0.46	3.57%
LW	-4.30%	55.73%	69.34%	0.53	11.61%
SYY	-3.07%	98.30%	71.44%	1.10	33.80%
WMT	7.79%	15.23%	52.35%	0.49	6.76%

Data as of 4/26/23

HEALTH CARE SECTOR

Positive trends and external drivers, coupled with diminished discretionary spending on nonessential health services, have contributed to a one year **Market Perform** outlook on the Health Care Sector.

Nick Romay

Economic Drivers and Recent Developments

The primary economic drivers that affect the Health Care Sector are public and private spending on health promoting expenditures and the expanding number of senior citizens. Since 2021, nationwide expenditures on health related products and services has fallen by 2%, per IBISWorld analysts. Analysts predict health expenditure trends to continue through 2023. Technological innovation in the medical field has led to longer average life expectancies and a growing number of adults over the age of 65. Longer life expectancies directly increases the amount and duration of medical expenses for the average American. Since 2021, the number of adults over the age of 65 has increased by 2.6%. The aforementioned external drivers have led to increased funding for Medicare, a rapidly expanding digitalized health care experience, and relatively low market share concentration.

Performance Outlook

Based on trends in reduced consumer spending on health related services, the increasing reliance on medical assistance by aging Americans, and low entry barriers to the industry, I expect growth in the health care sector to be somewhat stagnant. I project an industry-wide, one year return around 5% with sales growth between 6-7%.

Sector Winners and Losers

The price-to-sales ratio is the most important determinant of outperformance in the market because it represents shareholder value per dollar of sales.

Cigna Group (CI) was deemed an outperformer based on its P/S ratio and equity beta below one. **Cigna (CI)** had one of the highest growth in EPS in the sector at 35.4%, in 2022. **Cigna (CI)** has a long-run growth rate of 11.3%, nearly 5% higher than sector average.

UnitedHealth Group (UNH), while exhibiting P/S over one, is still well below the industry average of 4.6. **UnitedHealth Group (UNH)** also reported sales growth and EPS growth well over sector averages in 2022.

Regeneron Pharmaceuticals (REGN) is considered a loser based on very poor sales growth in 2022 and a P/S ratio nearly double the industry average. **Regeneron (REGN)** had returns on invested capital and returns on equity nearly 10% and 40% under sector averages, respectively.

I expect **Intuitive Surgical (ISRG)** to underperform based on its P/S ratio nearly four time the industry average of 4.6. **Intuitive (ISRG)** has a beta well over one, not aligning with the fund's goal of being defensive against the market. **Intuitive (ISRG)** had returns on invested capital and returns on equity approximately 15% and 48% below sector averages, respectively.

Sector Vital Statistics

Health Care Sector (GICS 35; SPDR XLV)

Market Weight	13.5%
Average Market Capitalization	$79.5 B
Number of Companies	64

Sector Performance	1 Mo	3 Mo	YTD	1 Yr	3 Yr	5 Yr
SPDR XLV	3.1%	0.3%	-1.8%	3.1%	32.9%	64.8%

Sector Metrics	P/S	Growth	Margin	Payout	Beta	Sales Growth
SPDR XLV	4.6x	6.4%	9.7%	20.3%	.86	5.2%

Sector Winners and Losers

Company	Ticker	P/S	Price	Target	% Diff
Outperform					
Cigna Group	CI	0.4x	$246.00	$431.70	75.5%
UnitedHealth Group	UNH	1.4x	$489.57	$581.09	18.7%
Underperform					
Regeneron	REGN	7.2x	$803.17	$654.58	-22.7%
Intuitive Surgical	ISRG	17.2x	$305.06	$249.99	-22.0%

Ticker	Growth	Margin	Payout	Beta	Sales Growth
CI	11.3%	3.7%	20.8%	0.63	3.37%
UNH	13.9%	6.2%	29.8%	0.68	12.7%
REGN	-16.6%	35.6%	0%	0.23	-24.3%
ISRG	14.5%	21.3%	0%	1.31	8.9%

Data as of May 3rd, 2023

INFORMATION TECHNOLOGY SECTOR

Charlie Hirner

We believe the Information Technology sector will **Market Perform** relative to the S&P 500 index over the next twelve months. The Information Technology sector of the S&P 500 is comprised of 66 companies, weighing 25.75% of the total index. The biggest two companies (**Microsoft Corporation (MSFT)** and **Apple Inc.** (**AAPL**)) account for 48.36% of the Information Technology's weight and the top five account for 59.01%. These largely weighted companies are the core drivers in the Information Technology price movement. The sector is broken down into three industry groups, Software & Services, Technology Hardware & Equipment, and Semiconductors & Semiconductor Equipment. The Technology Select Sector SPDR Fund (XLK) has returned 6.65% over the past year, beating the S&P 500's return of 0.95%. In 2023, the sector has returned 22.37% vs S&P 500 return of 9.22%, driven mainly by Artificial Intelligence advancements and a focus on cost savings.

Economic Drivers and Recent Developments

The Federal Reserve has been hiking up interest rates to combat inflation. Economic data is producing no clear path for the economy, with some imminent contraction while others are pointing towards continued growth. The market is expecting a pause in rate hikes for the near term, with rates staying high through the remainder of the year. With the high costs of borrowing, the Information Technology is heavily affected due to the increased demand for funding R&D and other expenditures in order to grow.

Tyler Kalata

The loss of liquidity will likely contract the Information Technology sector's premium offset by recent developments in Artificial Intelligence. AI will help companies to breed innovation, reduce costs, and automate many IT processes. The trend towards Artificial Intelligence has opened up opportunities for gaining market share in companies in the following markets: Customer Relationship Management (CRM), cloud services, and data centers. With the cost of borrowing at highs and companies looking to increase margins and reduce costs, lay-offs have struck the Information Technology sector in 2023.

Although the sector is poised to market perform, there is the potential for growth. The major companies in the sector have implemented major layoffs which will reduce the costs of operations. Consequently, making the firms more profitable. Additionally, supply chain issues continue to resolve, specifically in China, which will allow firms to operate more efficiently compared to previous years. As technology and companies move towards Internet of Things (IoT) and supply chain issues resolve, semiconductor companies are likely to increase revenues as they fill demand**.** With the

Performance Outlook

The sector did not perform well in the latter part of 2022 and into early 2023. In 2022 Q4 information technology's earnings were -10% and in Q1 of 2023 they were -12.1%. Similarly, revenue posted -2.4% and -3.9% in the respected quarters. This is largely due to macroeconomic conditions mentioned above, specifically extreme inflation and rising interest rates.

However, the last two quarters of 2023 the sector is set to have a quality rebound. Information technology earnings are predicted to grow 0.8%, 12.2%, and 18.2% in the next three quarters. Revenue will make corresponding moves forecasted to grow 1.6%, 7.1%, and 8.6% respectively. The sector is poised to see the growth in the next year because of inflation mitigation, smoothening supply chains, and cost cutting.

The Information Technology sector currently sits at a P/E ratio of 28.58x compared to the S&P 500 P/E of 20.95x. The sector is driven by innovation as it expands into emerging markets using scalable business models. This premium is largely due to the expected growth potential of these firms and the high margins they carry.

Sector Winners and Losers

A key ratio that is useful to value the sector is EV/EBITDA. The sector typically has an inflated P/E ratio which results from a decreasing denominator. Compared to P/E, we believed EV/EBITDA was a better metric for valuation as technology companies tend to have higher depreciation and debt which this ratio considers. The winners for the sector are **Hewlett Packard Enterprise Company (HPE), DXC Technology (DXC), and Skyworks Solutions Inc (SWKS)** because they were undervalued in these metrics. On the other hand, the losers are **Fortinet Inc. (FTNT), ServiceNow Inc. (NOW), and VeriSign Inc. (VRSN)** as they were all significantly overvalued. **Hewlett Packard Enterprise Company (HPE)** was the top winner as the company has a lower WACC than its peers. A lower cost of capital will make it easier for the firm to raise capital and increase investment which is crucial in a contractionary period. Conversely, **Fortinet, Inc (FTNT)** was our biggest loser as the firm has the highest WACC. A high cost of capital during a period of economic contraction will cause the firm's difficulties in raising funds for investment. This in turn hinders the company's ability to grow.

Sector Vital Statistics

Information Technology Sector (GICS 45; XLK)

Market Weight					26.1%	
Average Market Capitalization					$140,270 B	
Number of Companies					66	
Sector Performance	**1 Mo**	**3 Mo**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**
XLK	0.1%	9.0%	17.4%	0.6%	34.8%	121.8%
Sector Metrics	**EV/EBITDA**	**Growth**	**Tax Rate**	**Depreciation**	**Reinvestment**	**WACC**
XLK	24.5x	9.9%	14.2%	16.1%	21.1%	8.6%

Sector Winners and Losers

Company	Ticker	EV/EBITDA	Price	Target	% Diff
Outperform					
Hewlett Packard Enterprise Company	HPE	6.55x	$14.09	$24.06	70.8%
DXC Technology	DXC	5.82x	$22.86	$38.22	67.2%
Skyworks Solutions, Inc.	SWKS	8.46x	$102.80	$166.35	61.8%
Underperform					
ServiceNow, Inc.	NOW	126.57x	$454.03	$370.28	-18.5%
VeriSign, Inc.	VRSN	25.21x	$212.20	$150.01	-29.3%
Fortinet, Inc.	FTNT	15.37x	$63.40	$42.08	-33.6%

Ticker	Growth Rate	Tax Rate	Depreciation	Reinvestment	WACC
HPE	5.6%	0.91%	51.5%	-13.5%	6.4%
DXC	8.7%	21.00%	75.1%	-20.4%	7.5%
SWKS	15.0%	13.6%	30.2%	100.0%	8.8%
FTNT	18.9%	3.5%	9.8%	-3.08%	9.2%
NOW	23.7%	18.6%	47.4%	-54.2%	8.6%
VRSN	8.0%	21.0%	4.7%	-6.8	8.2%

Data as of April 28, 2023

COMMUNICATION SERVICES SECTOR

I have an **Outperform** rating for the sector. Continuing on a hot start to 2023, technological advancement and an increase in advertisement spending throughout the year should allow the sector to outperform its S&P 500 index benchmark.

Economic Drivers and Recent Developments

Disposable income is a large economic driver for the Communications sector. The number of households earning more than $100,000 has been shown to affect revenue in the sector as they tend to subscribe to more telecommunications services and premium media content. The number of mobile internet connections is another key driver as they increase revenue for telecommunications services while allowing new ways for media companies to reach consumers. Private investment in computers and software determines the demand for the sectors software publishing companies. Lastly the amount of advertising and promotional campaigns contributes to the revenue of many companies in the sector. Roughly one-fifth of revenue in the sector is generated from paid advertising.

The sector is going through a changing of tides as growth triggers the fall of past operations and systems. Traditional media such as cable and print advertising are projected to decline but this should be offset by the growth in digital media and streaming services providers. The introduction of 5G mobile internet service nationwide will likely increase while wired broadband services decline.

Some key ratios that are unique to the sector are subscriber growth, revenue per user, churn rate, monthly active users and advertisement revenue. These are important metrics to track when valuing firms in this sector as they can indicate the health and performance of the company.

Performance Outlook

Even with the threat of a potential economic recession, I have a bullish stance towards the Communication Services sector over the next year. Personal investment in computers and software is projected to increase by 4.1%, and advertising expenditure is expected in increase 0.3%. I project sector revenue to grow to $2.3 trillion over the next year, up from $2.14 trillion in 2022. I expect the **XLC** to increase 10% over the next 12 months, slightly outperforming the **SPY.**

Sector Winners and Losers

The valuation multiple that works best when analyzing stocks in the Communication Services sector is the P/E ratio. P/E ratios within the sector can vary due to the diverse mix of high tech growth stocks and more defensive telecom stocks. Two stocks that should be invested in are **Alphabet (GOOG) and Meta Platforms (META)**. These are the two strongest performing stocks in the sector with high growth potential, profitability, ROE and show steady subscriber growth. Two stocks that should be avoided are **Dish Network (DISH) and Verizon (VZ)**. These stocks have performed poorly and have below average growth potential, ROE, sales growth and show stagnant or declining subscriber growth. These recommendations and subsequent price targets were determined using statistical regressions, key sector ratios, qualitative factors of business and growth rates.

Tyler Peck

Sector Vital Statistics

Communication Services Sector (GICS 50; XLC)

Market Weight	8.2%
Average Market Capitalization	$134.8 B
Number of Companies	21

Sector Performance	1 Mo	3 Mo	YTD	1 Yr	3 Yr	5 Yr
XLC	1.40%	-0.7%	22.8%	-2.2%	6.7%	N/A

Sector Metrics	P/E	Growth Rate	ROE	Payout	Beta	Sales Growth (y/y)
XLC	30.8x	16.9%	13%	12.7%	1.04	5%

Sector Winners and Losers

Company	Ticker	Multiple	Price	Target	% Diff
Outperform					
Alphabet INC.	GOOG	23.6x	$106.12	$145.83	37.4%
Meta Platforms, INC.	META	28.8x	$237.03	$279.48	17.9%
Underperform					
DISH Network Corp	DISH	2.0x	$6.99	$6.95	-0.57%
Verizon INC.	VZ	7.4x	$37.98	$30.00	-21.0%

Ticker	Growth Rate	ROE	Payout	Beta	Sales Growth (y/y)
GOOG	19.91%	23.41%	0.00%	1.10	9.78%
META	18.02%	18.45%	0.00%	1.19	-1.12%
DISH	-10.90%	12.84%	0.00%	1.80	-6.72%
VZ	2.66%	22.99%	51.09%	0.34	2.41%

Data as of 5/03/23

UTILITIES SECTOR

I have a **Market Perform** with a chance to **Outperform** rating for utilities in the current environment, given the potential for a recession and the inelasticity of revenues.

Austin Cleveland

Economic Drivers and Recent Developments

Natural gas prices are coming off two years of red-hot growth in 2020 and 2021, growing by 91% and 73% respectively primarily due to supply constrains of the Russia-Ukraine war. Utility revenues are positively correlated with rising energy prices, and according to 2023 pricing projections, shifts in energy prices are counterbalancing. The price of electric power is projected to grow by 1.75% in 2023, while the price of natural gas is expected to decline by -19.23%. Year-over-year shrinkage of -7.5% in housing starts also has a negative effect on Utilities.

Despite the projected decline in revenue, my rating hinges on the likelihood of a recession and the relative attractiveness of Utilities. Two key places to monitor are looking at Allowed Return on Equity and the regulation of mergers & acquisitions. Over the past 20 years, allowed return on equity has been experiencing a secular decline, more which means cheaper utilities for end consumers (not adjusted for inflation).

Performance Outlook

Utility revenues are projected to decline by -0.71% in 2023 given the decline in natural gas prices and the decline in housing starts, but I project that the XLU will have a 1Y return of 10% in 2023.

Sector Winners and Losers

I have reaffirmed the fund's current holding of **NRG Energy (NYSE: NRG)** as an attractive hold into the future given the firm's recent acquisition of Vivint Energy. The acquisition grows and diversifies NRG's revenue base to have more dynamic growth potential away from the grips of regulatory control while still having a more defensive core in residential electric and gas distribution. The company has unparalleled Return on Invested Capital and asset efficiency given their above industry average Return on Assets.

WEC Energy Group (XNYS: WEC) is an attractive low-beta play with strong interest coverage. Using a E/P regression with fundamental determinants of ROE, dividend payout, Equity Beta and Y/Y sales growth, WEC is trading at a 11.5% discount. WEC has above an above average earnings yield and ROA and a below average equity beta yet is trading at a discount to what its fundamental determinants value the firm.

At the bottom, **PG&E Corporation (XNYS: PCG)** is struggling with negative ROA and ROIC, and a concerning Altman Z-Score, representing well below industry average levels. While it trades at a large projected E/P discount, there is risk of permanent loss of capital in a firm with such a low Altman Z-Score.

Sector Vital Statistics

Utilities Sector (GICS 5510; NYSE: XLU)

Market Weight	3.0%
Average Market Capitalization	$34.6 B
Number of Companies	30

Sector Performance*	1 Mo	3 Mo	YTD	1 Yr	3 Yr	5 Yr
XLU	4.6%	1.9%	-1.3%	-5.5%	2.9%	33.2%

Sector Metrics	P/E	ROE	Payout	Beta	Sales Growth
XLU	20.9x	7.3%	64.3%	0.58	16.1%

*Cumulative Return

Sector Winners and Losers

Company	Ticker	P/E	Price	Target	% Diff
Outperform					
NRG Energy	NRG	7.0x	$33.36	$56.00	68.0%
WEC Energy Group	WEC	21.31x	$94.28	$125	32.6%
Underperform					
The AES Corp.	AES	-27.7x	$22.45	$18.50	-18%
PG&E Corporation	PCG	-483.7x	$17.30	$16.26	-6%

Ticker	ROE	Payout	Beta	Y/Y Sales Growth
NRG	31.9%	27.2%	1.01	29.4%
WEC	12.4%	65.1%	0.40	15.4%
AES	-22.4%	0%	0.93	13.2%
PCG	-0.4%	0%	1.14	11.8%

Data as of February 20, 2023

REAL ESTATE SECTOR

I have a **Market Underperform** rating for Real Estate in the current environment.

Austin Cleveland

Economic Drivers and Recent Developments

- **Interest Rates:** Real Estate Investment Trusts (REITs) make up the majority of the Real Estate Sector. REITs do not pay corporate income tax, but are required to 90% of net income in dividends each year. Due to this dividend distribution requirement, this leaves REITs more exposed to interest rate risk; if more retained earnings could be kept on the balance sheet, less debt would be required. Moreover, real estate developments and acquisitions are very reliant on debt financing, making the current environment less appealing for Real Estate M&A.
- **Raw Materials Costs:** High building materials costs have hurt housing starts and other Real Estate Development. According to Federal Reserve Economic Data, lumber prices are up a cumulative 18% since March 2020, with a 200% spike between April 2020 and May 2021 before normalizing close to the long-term inflation mean. The story is similar in concrete, which has increased a cumulative 29% since March 2020.
- **GDP:** Potential for a recession leads us to advise against highly cyclical sectors like hotel, retail, and office space. GDP decline signals firms are hiring less and not expanding, thereby not requiring as much physical space for their operations.

Sector Performance Outlook

Revenue for Real Estate Investment Trusts is projected to decline -3.23% percent in 2023 given the headwinds to M&A activity of high interest rates and the slowing US economy. I project the XLRE to decline moderately, by – 5%.

Sub-Sector Performance Outlook & Winners/Losers

- **Office REITs:** The rise of remote work presents a significant risk to the long-term success of Office REITs. Rising vacancies in major urban areas like San Francisco, whose office vacancy rate is currently 30% is sign of warning to avoid this sub-sector. Due to this macro-factor, S&P 500 REIT **Boston Properties (NYSE: BXP)** is a sector loser.
- **Industrial REITs:** E-commerce growth represents a key opportunity in Industrial REITs. Industrial REIT **Prologis, Inc**. **(NYSE: PLD)** is a leader in this segment.
- **Self-Storage REITs:** Self-storage should benefit positively from urbanization and the frozen housing market. The Mizzou Investment Fund acquired a position in **Public Storage (NYSE: PSA)**, my chosen winner of the sector has industry leading margins and a higher GAAP earnings yield yet trades at a P/FFO discount relative to the industry average.

Sector Vital Statistics

Real Estate Sector (GICS 6010; NYSE: XLRE)

Market Weight	3.0%
Average Market Capitalization	$23.8 B
Number of Companies	30

Sector Performance*	1 Mo	3 Mo	YTD	1 Yr	3 Yr	5 Yr
XLRE	4.48%	-7.23%	0.46%	-23.3%	12.15%	20.10%

Sector Metrics	P/FFO	E/P	ROA	ROIC	Beta
XLRE	22.9x	3.30%	4.0%	5.38%	0.93

*Cumulative Return

Sector Winners and Losers

Company	Ticker	P/FFO	Price	Target	% Diff
Outperform					
Public Storage	PSA	22.5x	$282.31	$381.78	35.2%
Extra Space Storage	EXR	21.3x	$147.26	$165.00	12.1%
Weyerhaeuser Company	WY	-	$29.28	$35.00	19.5%
Underperform					
Alexandria Real Estate	ARE	32.5x	$121.49	$110.00	-9.5%
Ventas Inc	VTR	17.8x	$47.59	$33.31	-31.2%

Ticker	ROE	Payout	Beta	Y/Y Sales Growth
PSA	43.2%	89.9%	0.46	18.3%
EXR	21.9%	72.6%	0.55	-43.3%
WY	17.5%	0%	1.48	-0.2%
ARE	2.3%	0%	1.14	11.8%
VTR	-0.47%	-1521%	1.21	8.47%

Data as of February 20, 2023

Schedule of Investments

As of May 5, 2023

GICS Sector	Holding (Ticker)	Shares Held	Dollar Value
Energy	EXXON MOBIL CORPORATION (XNYS:XOM)	100	$ 10,868.00
	TC Energy Corporation (XNYS:TRP)	700	$ 29,260.00
Materials	ALBEMARLE CORPORATION (XNYS:ALB)	230	$ 41,331.00
Utilities	NRG ENERGY, INC. (XNYS:NRG)	2099	$ 65,656.72
Healthcare	THE CIGNA GROUP (XNYS:CI)	237	$ 61,795.38
	UNITEDHEALTH GROUP INCORPORATED (XNYS:UNH)	135	$ 66,727.80
	VERTEX PHARMACEUTICALS INCORPORATED (XNAS:VRTX)	95	$ 33,068.55
	MOLINA HEALTHCARE, INC. (XNYS:MOH)	150	$ 44,929.50
	ABBVIE INC. (XNYS:ABBV)	630	$ 93,258.90
Industrials	RAYTHEON TECHNOLOGIES CORPORATION (XNYS:RTX)	497	$ 48,000.26
	UNITED PARCEL SERVICE, INC. (XNYS:UPS)	385	$ 67,659.90
	DELTA AIR LINES, INC. (XNYS:DAL)	842	$ 28,577.48
Communication Services	Meta Platforms, Inc. (XNAS:META)	200	$ 46,556.00
	ALPHABET INC. (XNAS:GOOGL)	700	$ 74,350.50
	THE WALT DISNEY COMPANY (XNYS:DIS)	406	$ 40,811.12
Consumer Discretionary	AMAZON.COM, INC. (XNAS:AMZN)	1197	$ 126,469.04
	AUTOZONE, INC. (XNYS:AZO)	11	$ 29,607.38
Consumer Staples	COSTCO WHOLESALE CORPORATION (XNAS:COST)	37	$ 18,465.22
	WALMART INC. (XNYS:WMT)	280	$ 42,495.60
	PERFORMANCE FOOD GROUP COMPANY (XNYS:PFGC)	400	$ 24,804.00
	INGLES MARKETS, INCORPORATED (XNAS:IMKTA)	410	$ 33,538.00
Financials	Sel Sector:Finl S SPDR (ARCX:XLF)	6040	$ 195,273.20
Information Technology	INTUIT INC. (XNAS:INTU)	70	$ 29,816.50
	JACOBS SOLUTIONS INC. (XNYS:J)	365	$ 43,482.45
	MICROSOFT CORPORATION (XNAS:MSFT)	403	$ 125,191.95
	SALESFORCE, INC. (XNYS:CRM)	295	$ 58,289.05
	NVIDIA CORPORATION (XNAS:NVDA)	105	$ 30,114.00
	APPLE INC. (XNAS:AAPL)	945	$ 164,023.65
Real Estate	PUBLIC STORAGE (XNYS:PSA)	63	$ 18,642.33
	Cash		$ 54,240.81
Total			**$ 1,747,304**

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