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Crummer Trust Portfolios

Crummer Graduate School of Business

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2023

### 2023 Crummer Trust Portfolio Recommendations: Crummer Investment Management 24th Anniversary

Davis Moshier

Matej Susec

Sarah Butterfield

Judith Laskowski

Nicholas Disa

*See next page for additional authors*

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24<sup>TH</sup>  
ANNIVERSARY

CRUMMER  
TRUIST  
PORTFOLIO  
2023

Prepared by :

CRUMMER INVESTMENT MANAGEMENT TEAM

**Crummer**  
Graduate School of Business  
Rollins College

## Introduction

We would like to thank you for your service to the Crummer Truist Portfolio. Without your participation, Crummer students would not benefit from the unique insight you bring to managing an active portfolio.

We have been fortunate to listen and learn from some outstanding guest speakers who have been generous with their time and expertise: Phillip Rich, Chief Investment Officer, Seaside Bank; Sarah Passero, Senior Consultant, EY; Shawn Fletcher, Financial Analyst, The Walt Disney Company; Ryan Abronski, Venture Capital Associate, Morgan Creek Digital; Robert Zhang, Senior Research Analyst, DePrince, Race and Zollo; Dr. William Seyfried, Professor, Crummer Graduate School of Business; Marc Miller, Partner, DePrince, Race and Zollo; Rick Ahl, President, Ahl Investment Management; Dr. Rob Roy, Senior VP and Chief Investment Officer, AdventHealth; Jay Menozzi, Principal and Chief Investment Officer, Orange Investment Advisors, LLC; Sean Warrington, Partner & Portfolio Manager, Gresham Partners.

SunTrust (now Truist) endowed this portfolio to provide scholarships for future Crummer students and to give current students a practical, hands-on learning opportunity. This year, we are pleased to be able to disburse \$55,000 to be used for scholarships. We are extremely grateful for SunTrust's generosity and investment in higher education. We have all learned a great deal from this experience and the responsibility of managing real money.

Our first challenge is to establish a portfolio position that takes advantage of economic opportunities while avoiding unnecessary risk and conforming to the Crummer Truist Investment Policy Statement (IPS). We are also tasked by the IPS to operate at two levels simultaneously – tactical for the near term, and strategic for the long run. Additionally, this portfolio presents some unusual portfolio management challenges by trading only once a year, in early April.

Our tactical approach began with a top-down sector analysis. We established an economic forecast based on research and consultation with economists, including Professor William Seyfried of the Crummer School and Philip Rich of Seaside Bank. We based our equity and fixed income split on that forecast with a 20% allocation to bonds, at the highest level allowed by the IPS. That forecast also drove our allocation among the eleven S&P sectors: Communication Services, Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, and Utilities. Within the next twelve-month period, we forecast stagnant economic growth that will not quite be a recession. Accordingly, we tilted the allocation towards sectors that should do well in such a macro environment while paying attention to ongoing recovery from inflationary pressures as well as other issues such as the ongoing war in Ukraine.

Our asset class allocation embodies the long-run strategy of our portfolio. The IPS sets asset class ranges from low to moderate risk to keep the portfolio from being whipsawed by transitory market cycles. Our equity allocations signify a heightened level of risk, consistent with our view that the stock market will relatively underperform the fixed income market through the end of March 2024. We maintain an allocation to a sector ETF in each sector to ensure diversification. Due to enrollment constraints, we actively manage eight sectors this year with a limit of two individual stocks in each sector. The remaining sectors are invested 100% in their sector ETF. Fixed income is our anchor sector, providing a hedge against the risk of an economic slowdown adversely impacting our equity holdings. Consistent with our non-parallel shifting yield curve projection, we are at the high end of our IPS range for fixed income at 20%, but towards the lower end of the permissible duration level.

Furthermore, we have continued to incorporate the theme of Environmental, Social, and Governance (ESG) investing into our portfolio selection process. While ESG investing has become a lightning rod and ESG ratings have been under

heavy criticism for lack of consistency, the fund flows into this domain have continued to grow globally. Regardless of a security's consistency with this theme, all recommendations must be undervalued after rigorous quantitative and qualitative analysis. In other words, our intent is not to maximize the ESG impact of our portfolio but to tilt towards this factor. Specifically, the proposed equity holdings in this year's portfolio have a weighted average FTSE ESG score of 3.56 out of 5, while S&P 500 holdings have a cap-weighted average score of 3.34.

Since the onset of the COVID-19 pandemic, we have witnessed three extraordinary and unpredictable years in many respects. Inflation levels that have not been seen in the past 40 years, supply chain problems, the Russian-Ukrainian war, and interest rate hikes at an unprecedented pace have all contributed to an increased uncertainty. We do not intend to simply follow the crowd. Yet, echoing the philosophy of Warren Buffett, "our opinions and beliefs, grounded in economics and guided by all of those who have counseled us," lead us to a strategy that is not significantly different from many investors. Even so, we accept responsibility for our investment decisions. We are investing for the long-term and we have been conservative in our forecasts and recommendations. Simultaneously, in the short term, we are mindful of the need to protect the portfolio's commitment to scholarships.

We thank you for your time and participation in this important endeavor.





Sincerely,

Crummer Investment Management Team



*From left to right: Davis Moshier, Nicholas Disa, Matej Susec, Sarah Butterfield, Jaxon Mills, Miguel Castro Morales, Dr. Koray Simsek  
Not pictured: Judith Laskowski, Zak Abed*

## Crummer Investment Management Team





	<p><b>Davis Moshier   Communication Services</b></p>
	<p><b>Matej Susec   Consumer Discretionary</b></p>
	<p><b>Sarah Butterfield   Consumer Staples</b></p>
	<p><b>Judith Laskowski   Energy</b></p>

Davis Moshier graduated Magna Cum Laude from Rollins College with a BA in International Business and is an active member of the Rollins Men's Lacrosse team. He is the current President of the Crummer Finance Organization with internship experience in wealth management and investment banking. Upon graduation from Crummer, Davis will be working as an Investment Banking Analyst at ThinkEquity.

Matej Susec graduated Summa Cum Laude from Rollins College in 2022 with a B.A. in International Business. He is expecting to complete his MBA with a concentration in Finance in May 2023. He has co-authored journal-published research on ESG effects on the financial performance of publicly traded firms across countries and has previous professional experience in banking and supply chain finance. After graduation, he plans to pursue a career in finance, specifically in investment management.

Sarah Butterfield graduated from the University of Florida in 2001 with a major in Psychology and a minor in Business Administration. She expects to earn her MBA in May with a concentration in finance. Sarah has worked in Marketing and Project Management and has a green belt in Lean Six Sigma. She is seeking a position that can combine her experience in leadership and marketing with opportunities for investment analysis.

Judith Laskowski graduated from Rollins College in 2022 with a B.A. in International Business and will finish her MBA with a concentration in Corporate Finance in May. Judith has previous experience in personal wealth management and sales analytics and is looking to pursue a career in personal wealth management upon graduation.

	<p><b>Nicholas Disa   Financials</b></p> <p>Nicholas Disa is an MBA candidate at the Crummer Graduate School of Business in Winter Park, Florida. He received his B.S. degree in Finance with a minor in Accounting from Elon University in August of 2019. Additionally, he passed the SIE, Series 7 &amp; 66 in 2021. After graduation, Nicholas is entering into a two-year rotational program with Bank of America in an internal consulting capacity supporting the Bank’s Consumer, Preferred, &amp; Small Business segment.</p>
	<p><b>Miguel Castro Morales   Healthcare</b></p> <p>Miguel Castro graduated Cum Laude from Rollins College in 2022 with a B.A in Economics. He is expected to earn his MBA with a concentration in finance in May 2023. While at Crummer, Miguel has held various positions working in the commercial real estate industry with PGIM Real Estate, JLL, and Colliers. He plans to continue to pursue a career in commercial real estate after graduation.</p>
	<p><b>Jaxon Mills   Industrials</b></p> <p>Jaxon Mills is a 2022 graduate of Rollins College with a B.A. in Political Science and will earn his MBA in May 2023 with a concentration in finance. While at Crummer, Jaxon completed internships in the nonprofit, sports, and energy sectors. He is also a pitcher on the Rollins College baseball team and remains open to exploring career opportunities upon graduation.</p>
	<p><b>Zak Abed   Information Technology</b></p> <p>Zak graduated from Rollins College with a degree in Business Management in 2021. Following this, he attended Crummer Graduate School to obtain his MBA with a concentration in finance. During this period, he passed CFA Level 1 in the 90<sup>th</sup> percentile and completed an internship at Swan Global Investments within the national accounts and research division. After graduation, he will be starting a career in investment wholesaling at Global X ETFs.</p>

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## Economic Outlook

### Introduction

The Crummer Investment Management team has the responsibility of managing the Crummer Truist Portfolio. Our mandate is to make appropriate investment recommendations guided by the Portfolio's investment policy statement. Our goal is to generate income to support annual contributions to Crummer's scholarship program and growth to build the value of the portfolio. With risk management as a core tenet of our investment strategy, we have positioned the portfolio to benefit from increased exposure to fixed income and a defensive equity allocation while maintaining exposure to growth opportunities.

### Economic Thesis

The early months of 2023 have been characterized by persistently high inflation and spiking interest rates, which have caused concern among analysts and investors. Despite these challenges, our economic outlook suggests that a rolling recession is the most likely outcome. This hybrid scenario, which falls somewhere between a hard and soft landing, is expected to result in contractions in specific industries while others will continue to experience growth. The tight labor market and sustained inflation are likely to require the Federal Reserve to maintain a higher-for-longer Fed funds rate in order to reach its 2% target CPI. While the recent banking crisis has led to lower peak estimates due to concerns about additional bank runs, reducing inflation remains the Fed's long-term goal. Fed Chair Powell recently said rate cuts are not in their base case.

Despite ongoing challenges, we do not anticipate a recession in 2023 due to the tight labor market and minimal layoffs thus far. However, businesses with high interest rate risk, historically cyclical growth patterns, or frothy valuations are likely to underperform in 2023. On the other hand, stable businesses that offer essential goods and services to society are expected to maintain slow-but-steady growth rates with reduced risk. While the supply chain disruptions caused by COVID and the pressures of rising energy prices have abated, consumers are now feeling the hangover effects of excessive stimulus and easy money policies. However, the pent-up personal savings accumulated during the pandemic will enable consumers to continue selective spending.

Higher interest rates are expected to provide attractive risk-adjusted returns on our fixed income exposure. While overall economic expansion is unlikely, we anticipate pockets of growth to come from industries that do not require a bull market to maintain profitable growth.

### GDP

Fiscal and monetary tightening that has been taking place in the US will result in stagnant economic growth in 2023. While GDP contraction is possible, we project the Real GDP growth over the next 12 months to be 0.5%, which is positive but well below 2021 and 2022 levels. Conservative corporate strategy and strong balance sheets will likely provide protection from risks of lingering inflation and lowered economic growth estimates. Corporate EPS grew by 66% in 2021, but growth is expected to slow to 6.6% in 2023, driven by near-flat top line upside potential. EPS consensus has been revised down by 12.2% for 2023 thus far, which has set expectations at a healthy conservative level. High-growth and overvalued industries are expected to underperform as consumer and corporate spending will continue to slow as excessively generous COVID stimulus and negative real rates will be history. We expect stable and defensive industries to outperform in the next year due to the essential nature of their revenue generation and cost basis, regardless of economic conditions. There is potential upside in large tech-enabled businesses with strong and recurring revenue streams, many of which have reconfigured their cost structure to focus on sustainably high profit margins.

## Unemployment

The expansionary monetary policy of the past 2 years has fueled one of the tightest labor markets in history, which has put the unemployment rate in the center of the spotlight for Fed decisions. Currently at 3.6%, we expect lingering wage inflation to be marginally overpowered by the loosening effects of supply chain stability and an increasing participation rate. Lower post-COVID labor participation rates and spiking job openings were the perfect recipe for labor market overcapacity of 2022. Jobless claims remain at relatively low levels after growth-pressured business. The tight labor market caused significant wage inflation since 2020. We predict higher rates will mildly loosen the unemployment rate at 3.9%. The trend of increasing labor participation rates over the past 6 months may continue, which would provide an additional cushion to the tight market. While contractional monetary policy will reduce the demand for added labor, a decade-low level in currently unemployed people poses a risk to hiring in specialty industries. Recent layoffs have been skewed toward higher-wage sectors, but still managed to slightly ease the unemployment rate. Employers which provide severance to salaried workers may be delaying current labor market indicators, which will offset any growth in labor participation rate. Businesses that over-hired during the bull market, either to keep up with competition or to fill transitory demand increases, are likely to be forced to lay off additional workers to uphold the bottom line.

## Inflation

Red-hot inflation of the last two years is expected to slow down in 2023 due to higher interest rates and lower personal savings rates, but it continues to remain the main target of the Fed's policies. The Fed is expected to continue rate hikes and quantitative tightening to reach their 2% long-term CPI target. Wage inflation caused by a tight labor market is expected to slow moderately, but low unemployment levels remain a headwind. PPI, which spiked due to supply constraints and energy prices, has slowed, which will ease pricing on consumers. Energy prices and supply chain disruptions were also significant contributors to the record inflation, but both have begun to subside back to pre-pandemic levels. Our projection for the end of 2024 Q1 is 4% CPI.

## Interest Rates

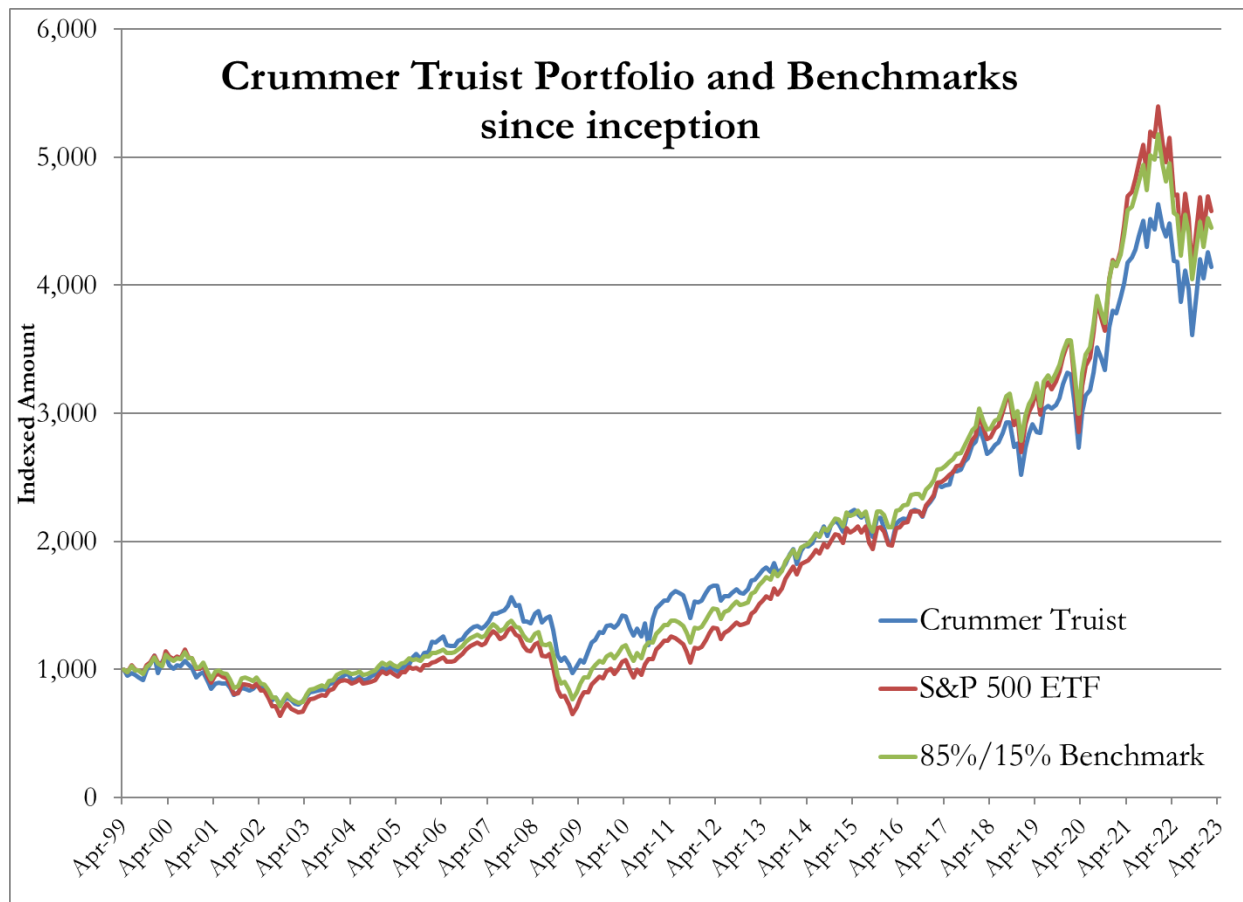
Rising interest rates in response to an overheated economy bear primary responsibility in the recent downturn. While peak 2023 Fed Fund rate estimates have cooled from 6% to 5.25%, stubborn inflation will likely force a higher-for-longer scenario. Severely tight labor market, which poses the risk of additional wage inflation, is viewed by the Fed as the most significant challenge. We expect 10-year Treasury yields to sit at 3.8% a year from now, as higher-for-longer sentiment has remained the primary message. Therefore, we do not expect rate cuts until 2024 and project Fed Funds rate to be at the 5.00-5.25% band.

## Performance of the Crummer Truist Portfolio

In 2022, we witnessed one of the worst years for asset allocation: Equity and bond markets both performed poorly. The unprecedented rate hikes were not able to fully bring the inflation under control. Yet, the labor market remained unusually strong leaving it open for further Fed tightening. Crummer Truist Portfolio followed the general market trend throughout the year, closely tracking the benchmark, but began to get ahead in November 2022 thanks to the performance of some stock selections. After last year's trades and the disbursement of our scholarship donation of \$55,000, the Portfolio stood at \$1,135,889 on April 29, 2022. After dropping to a two-year low of \$979,693 at the end of September 2022, the Portfolio rebounded strongly, and as of February 28, 2023, it was valued at \$1,123,298, which is just 1% shy of the value on April 29, 2022. Based on this performance, we plan to fund a \$55,000 scholarship again this year, corresponding to 4.9% of the three-year average of portfolio month-end balances.

This year marks the twenty-fourth anniversary of the first \$100,000 SunTrust contribution in April 1999. Subsequent annual contributions brought the total investment to \$500,000. Since inception, the Portfolio has generated over \$645,000 in scholarships, including the 2023 contribution of \$55,000.

The chart below shows the Portfolio's performance relative to the S&P 500 Total Return Index and a monthly-rebalanced 85% equity–15% bond benchmark portfolio. Although both indexes have outperformed the Portfolio since early 2012, its difference with the 85-15 portfolio has been shrinking since May 2019.



## 2022 – 2023 Plan Year Performance Highlights

From May 2022 through the end of February 2023, the Portfolio outperformed both the S&P 500 index and the 85/15 benchmark by about 1.4%. Absolute performance without considering asset allocation is incomplete and the Portfolio achieved this performance at a lower risk compared to S&P 500. From May 2022 through February 2023, the Portfolio lost 1.1% with a monthly standard deviation of 6.4%, while the S&P 500 was down by 2.5% with a monthly standard deviation of 6.4% and the 85/15 portfolio lost 2.5% with a monthly standard deviation of 5.7%. The portfolio's since-inception annual return is 6.1% (with an annual standard deviation of 14.4%) versus the S&P 500 index's return of 6.7% (with an annual standard deviation of 15.4%) and the 85/15 benchmark's return of 6.5% (with an annual standard deviation of 13.1%) over the same period. Using the reward-to-risk ratios since-inception, the portfolio (0.43) slightly underperformed both S&P 500 (0.44) and the benchmark (0.49).

### Equity Sector Performance Attribution

For the 2022-23 portfolio year, the portfolio's tactical equity investments were allocated among the S&P's eleven sectors: Communication Services, Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, and Utilities. In 2022, the portfolio was tilted toward sectors that were expected to outperform, e.g., Consumer Staples, Energy, Financials, Healthcare, and Materials. The Sector Index column of the table below shows that four sectors were down while Energy was a runaway winner. Each Crummer Trust Portfolio sector holds the sector SPDR ETF – even so, superior stock selection allowed the portfolio to outperform in three of the five actively-managed sectors: Communication Services, Consumer Discretionary, and Healthcare. The best stock selections came from Communication Services – Interpublic Group of Companies, Consumer Discretionary – Nike, and Healthcare – Gilead Sciences and Novo Nordisk.

April 7, 2022 through February 28, 2022 Performance Attribution Analysis					
Sector	Crummer Trust	Benchmark	Allocation Effect	Selection Effect	Total Effect
Communication Services	-13.9%	-25.2%	0.0%	1.0%	1.0%
Consumer Discretionary	-16.6%	-20.6%	0.1%	0.4%	0.5%
Consumer Staples	-6.2%	-6.4%	0.0%	0.0%	0.0%
Energy	11.6%	12.5%	0.0%	0.0%	0.0%
Financials	-8.9%	-3.2%	-0.1%	-0.7%	-0.8%
Healthcare	7.2%	-9.3%	-0.1%	2.4%	2.4%
Industrials	2.2%	1.4%	0.0%	0.1%	0.1%
Information Technology	-16.6%	-12.1%	0.0%	-1.3%	-1.4%
Materials	-5.2%	-5.1%	0.0%	0.0%	0.0%
Real Estate	-20.6%	-20.7%	0.0%	0.0%	0.0%
Utilities	-13.3%	-13.3%	0.0%	0.0%	0.0%
<b>Equity Portfolio</b>	<b>-8.5%</b>	<b>-10.4%</b>	<b>0.1%</b>	<b>1.8%</b>	<b>1.9%</b>

## Bonds and Cash

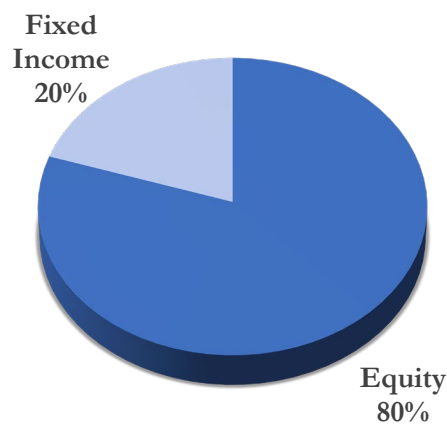
By the end of April 2022, the Portfolio had distributed \$55,000 in scholarships, leaving 0.3% allocated to cash, 89.1% allocated to equities, and 10.6% allocated to fixed income (DoubleLine Low Duration and the Vanguard Intermediate-Term Investment-Grade mutual funds). The fixed income investments were flat (up by only 0.05%) from May 2022 through February 2023, thanks to the minimum duration exception granted by last year's panel. Even though the bond markets were down, the fixed income portfolio was able to weather the storm with higher allocation to the DoubleLine Low Duration fund. After this year's proposed trades, the Portfolio will hold less than 1% in cash and will generate \$55,000 in scholarships – supporting future Crummer students and fulfilling the spirit of the original gift.

## Portfolio Design

### 1. Asset Allocation

The 2023 Crummer Investment Management Team has strategically structured the Truist portfolio based on the team's developed economic outlook, with the goal of optimizing the mix of equity and fixed-income assets within the portfolio. The portfolio's chosen asset allocation stems from the team's data-driven approach to research used to assess market benchmarks and develop market forecasts.

The proposed asset allocation mix, as represented in the graph below, consists of 80% equities and 20% fixed income. We believe that maximizing the portfolios' fixed income allocation to 20%, the portfolio limit according to IPS, positively positions the portfolio to benefit from the risk-adjusted performance of debt instruments during periods of elevated interest rates. The team forecasts a non-parallel mild upward shift in the interest rates over the next 12-month period. We believe that an 80% allocation for equities is appropriate given the increased volatility in the equity markets caused by increased macroeconomic uncertainty.

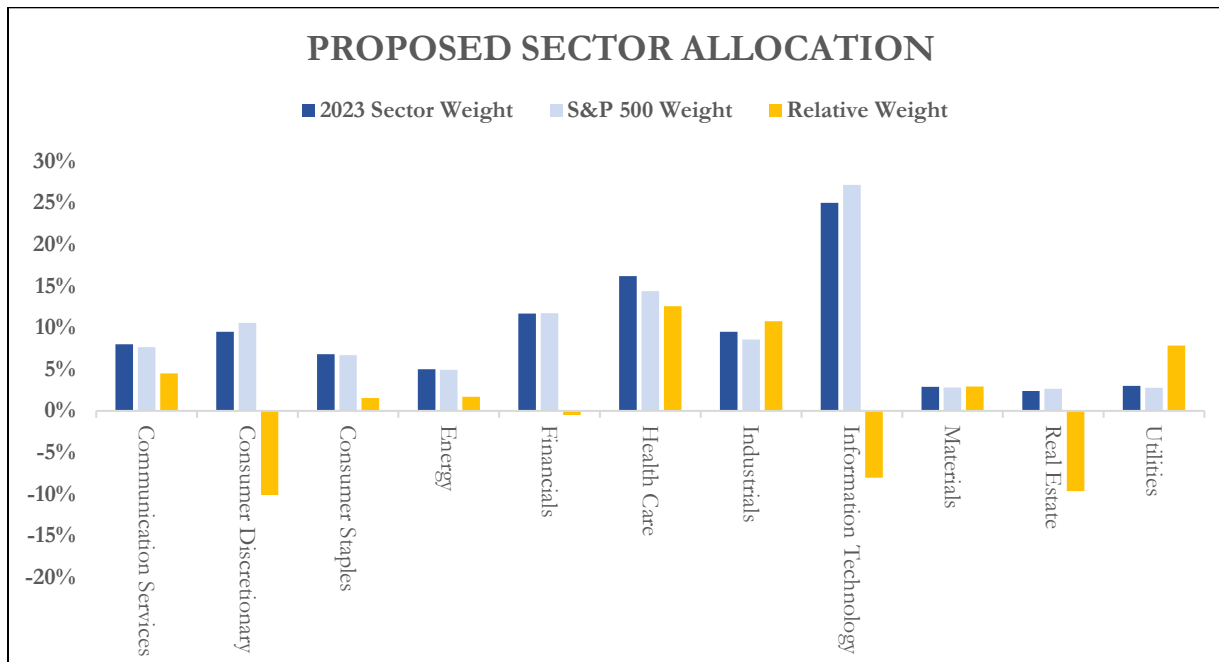


### 2. Sector Allocation

The Crummer Investment Management team acknowledges the potential risks and catalysts affecting the equity markets with respect to their performance over the next 12 months. The team forecasts that interest rate hikes by the Federal Reserve will cause CPI inflation to cool down but cause a slight increase in unemployment, resulting in a 12-month period of "Stagnant Growth" in the economy. With these qualities in mind, equity sector weights were proposed to underweight, overweight, or neutral in relation to each sector's benchmark. These decisions were based on the team's economic outlook and perceived sector performance during times of stagnant economic growth. We have decided to overweight the Communication Services, Consumer Staples, Energy, Healthcare, Industrials, Materials, and Utilities at varying degrees, and underweight Consumer Discretionary, Information Technology, and Real Estate. The Financials sector was weighted neutral to its benchmark. The degree that they were overweighted, or underweighted was derived from the sector analyst's confidence in the sector and with majority consensus from the team.

The chart and table below show a visual representation of the weights that are proposed by our team versus what percentage the sector holds in the S&P 500. For example, the current weight of the Healthcare sector in the portfolio is 16.34% and while the S&P 500 benchmark weight is 14.39%, we are proposing a sector weight of 16.10%. The decision

to overweight the sector stems from the team’s perception of healthcare as an inelastic and well-diversified sector. Such qualities provide the sector with “defensive” capabilities during the uncertain, volatile, and stagnant growth period that the markets will experience according to our economic outlook.



Sector	Portfolio Weight [c]	S&P 500 Weight [d]	Relative Weighting	Degree of Tilt vs S&P 500 [a]
<b>Communication Services</b>	8.00%	7.65%	Overweight	5%
<b>Consumer Discretionary</b>	9.50%	10.57%	Underweight	-10%
<b>Consumer Staples</b>	6.80%	6.70%	Overweight	2%
<b>Energy</b>	5.00%	4.92%	Overweight	2%
<b>Financials</b>	11.70%	11.76%	Neutral	0% [b]
<b>Health Care</b>	16.20%	14.39%	Overweight	13%
<b>Industrials</b>	9.50%	8.58%	Overweight	11%
<b>Information Technology</b>	25.00%	27.19%	Underweight	-8%
<b>Materials</b>	2.90%	2.82%	Overweight	3%
<b>Real Estate</b>	2.40%	2.66%	Underweight	-10%
<b>Utilities</b>	3.00%	2.78%	Overweight	8%

[a]: Degree of tilt is the proportional difference  $((c-d)/d)$ , not the absolute difference  $(c-d)$

[b]: A range of +/-1% proportional tilt is considered neutral.

### 3. Sector Securities vs. Exchange Traded Fund (ETF) Allocation

The Crummer Investment Management team utilized a risk-budgeting approach to determine the allocation between each sector’s stock portfolio and respective sector ETF. This methodology calibrates the amount of risk within the stock

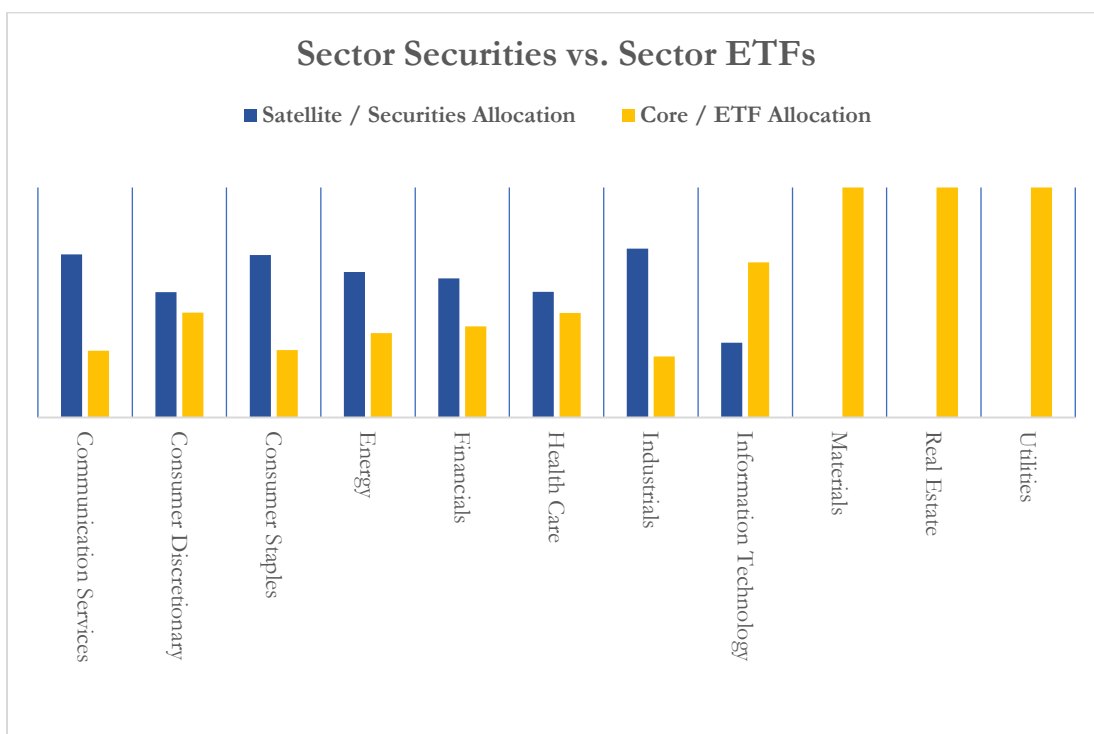


portfolio relative to that of the sector ETF, the passively managed portion of the portfolio, to prevent excessive risk-taking within the actively managed part of the portfolio. The team relies on this approach to compute the annualized tracking error between each of the 8 actively managed sectors and their corresponding sector ETFs using historical data that stems back to the portfolio inception date. The objective is to determine the percentage allocated for each of the sector ETFs based on the calculated annual tracking error tolerance that has been predetermined by the team. A tolerance level of zero implies full allocation into the sector ETF while a higher tolerance level suggests that a greater share of the sector holdings should be allocated to the two-stock portfolio.

The team has established a portfolio-wide tolerance level to distribute risk equitably across sectors. This approach prevents the natural inconsistency in tracking error figures across sectors. The Crummer Investment Management team has decided to use a 10% tolerance level for all sectors. The only exception is the IT sector, which is restricted to a 5% tracking error tolerance level. The reasoning behind this adjustment is to comply with the IPS constraint, which prevents any individual security from exceeding a 5% weight of the overall portfolio.

We acknowledge the possibility of overlap between the recommended US stocks and the holdings of the sector ETFs. As the team’s investment strategy is centered on selecting undervalued stocks, if there is any overlap between the recommended stocks and sector ETFs, the suggestion implies allocating a greater portion of the portfolio to the stock relative to its weight in the ETF.

The figures below provide more insights into the equity allocation of the portfolio. The first illustration showcases the composition of sector securities versus sector ETFs, while the second figure illustrates the tracking error of each sector’s two-stock portfolio. For instance, the tracking error for the two-stock portfolio in the Industrials sector is 13.6%. Given the portfolio’s tracking error tolerance is set to 10%, the total allocation for the two-stock portfolio is 73.4%, while the remaining sector allocation of 26.6% is invested in the sector ETF.



Sector	Satellite / Securities Allocation [a]	Core / ETF Allocation [b]	Tracking Error
<b>Communication Services</b>	71.0%	29.0%	14.1%
<b>Consumer Discretionary</b>	54.5%	45.5%	18.4%
<b>Consumer Staples</b>	70.7%	29.3%	14.1%
<b>Energy</b>	63.3%	36.7%	15.8%
<b>Financials</b>	60.5%	39.5%	16.5% [b]
<b>Health Care</b>	54.6%	45.4%	18.3%
<b>Industrials</b>	73.4%	26.6%	13.6%
<b>Information Technology</b>	32.6%	67.4%	15.4%
<b>Materials</b>	0.0%	100.0%	N/M
<b>Real Estate</b>	0.0%	100.0%	N/M
<b>Utilities</b>	0.0%	100.0%	N/M

[a] [b]: Securities vs. ETF split is based on the tracking error tolerance of 10%.

[c]: For Information Technology sector, 5% tracking error tolerance was utilized to ensure that individual stock allocations are less than 5% of the portfolio based on IPS constraints.

Based on the team's combined calculations from each sector, the Crummer Investment Management team recommends that 50.14% of the equity portfolio be allocated to sector ETFs, and the remaining share of 49.86% shall be allocated to the selected stock portfolios. Overall, the recommended allocation splits would provide the portfolio with the necessary active exposure while maintaining an anchor to the sector benchmark, resulting in a portfolio composition capable of achieving risk-adjusted returns through the uncertain economic outlook.

## 4. Sector Equity Allocation – A Risk Parity Approach

The Crummer Investment Management team utilized the risk parity approach to calculate the allocation between the two stock selections for each of the sectors. The risk parity methodology is an investment strategy that balances risk across constituents of a portfolio. The team calculated the historical volatility of each of the selected stocks to determine a balanced composition of risk between each sector's two-stock portfolio. We believe this approach is effective at mitigating undesired risks that may stem from a single security.

## 5. Security Selection

In the first half of 2022, the equity markets experienced a rally due to the economic re-opening following the closures imposed by the COVID-19 pandemic. However, in the second half of the year, concerns over inflation increased, leading the Federal Reserve to impose interest rate hikes to control inflation, which strongly impacted the market landscape. The Crummer Investment Management team faced the challenging task of identifying 16 undervalued companies across the eight largest S&P 500 sectors. Such companies must be well-positioned to navigate the changing economic environment. Despite such challenges, our team has identified the portfolio's 16 equity holdings for the next 12-month period. As a result of this process, four of the current stock holdings continued to be undervalued and were assigned a HOLD recommendation, while the remaining six were no longer deemed to be undervalued and given a SELL recommendation.

With the aim of selecting two suitable stocks for the Portfolio, each of the eight members spearheaded individual sector coverage and performed both quantitative and qualitative analyses. Our quantitative analysis involved using dividend

discount model for dividend paying stocks and a free cash flow model for non-dividend paying stocks. Our objective was to identify undervalued stocks in terms of their current market valuation, and our perceived security growth potential. On the qualitative front, we focused on identifying trends and potential catalysts that are either unaccounted for or only partially priced in the security's current market valuation. For instance, we consider ESG momentum and initiatives that may be partially captured by ratings as a prominent growth driver, as we believe that firms that prioritize ESG factors achieve greater top-line growth, productivity, and overall valuation. To derive our sub-sector and individual security growth assumptions, we used a macro-based research methodology, which formed the basis of our holistic analysis.

While we anticipate continued downward pressure on the overall market, we are confident in our recommended stocks to outperform their respective sectors in the next twelve months. A list of all recommendations and their proposed weights in the Portfolio are presented in the table below.

Name	Ticker	Security Type	Portfolio Weight
Communication Services Select Sector SPDR Fund	XLC	ETF	1.86%
Consumer Discretionary Select Sector SPDR Fund	XLY	ETF	3.46%
Consumer Staples Select Sector SPDR Fund	XLP	ETF	1.59%
Energy Select Sector SPDR Fund	XLE	ETF	1.47%
Financial Select Sector SPDR Fund	XLF	ETF	3.70%
Health Care Select Sector SPDR Fund	XLV	ETF	5.88%
Industrial Select Sector SPDR Fund	XLI	ETF	2.02%
Technology Select Sector SPDR Fund	XLK	ETF	13.49%
Materials Select Sector SPDR Fund	XLB	ETF	2.32%
Real Estate Select Sector SPDR Fund	XLRE	ETF	1.92%
Utilities Select Sector SPDR Fund	XLU	ETF	2.40%
Meta Platforms Inc. Class A	META	Stock	1.45%
Verizon Communications Inc.	VZ	Stock	3.09%
Home Depot, Inc.	HD	Stock	2.29%
Tractor Supply Company	TSCO	Stock	1.85%
Procter & Gamble Company	PG	Stock	2.40%
Tyson Foods, Inc. Class A	TSN	Stock	1.45%
ConocoPhillips	COP	Stock	1.42%
Diamondback Energy, Inc.	FANG	Stock	1.11%

Name	Ticker	Security Type	Portfolio Weight
BlackRock, Inc.	BLK	Stock	2.48%
Chubb Limited	CB	Stock	3.18%
Abbott Laboratories	ABT	Stock	4.03%
Gilead Sciences, Inc.	GILD	Stock	3.05%
Lockheed Martin Corporation	LMT	Stock	2.76%
3M Company	MMM	Stock	2.82%
Cisco Systems, Inc.	CSCO	Stock	3.18%
International Business Machines Corporation	IBM	Stock	3.33%
PGIM Ultra Short Bond ETF	PULS	ETF	14.01%
Vanguard Long-Term Investment Grade Fund Admiral	VWETX	Mutual Fund	5.99%

### List of Securities Recommended for Sale

Name	Ticker	Sector / Asset Class
Interpublic Group of Companies, Inc.	IPG	Communication Services
NIKE, Inc. Class B	NKE	Consumer Discretionary
Target Corporation	TGT	Consumer Discretionary
T. Rowe Price Group	TROW	Financials
Novo Nordisk A/S Sponsored ADR Class B	NVO	Healthcare
Intel Corporation	INTC	Information Technology
DoubleLine Low Duration Bond Fund Class I	DBLSX	Fixed Income
Vanguard Int.-Term Investment Grade Fund Adm. Shrs	VFIDX	Fixed Income

## ESG Overview

Conventional investment portfolios prioritize risk and reward while disregarding other stakeholder and investor aims. To make investment decisions that truly align with diverse stakeholders affected by investments, a uniform strategy is insufficient. CIM has been focusing on the environmental, social, and governance (ESG) factors for our portfolio since 2019, enabling us to better integrate sustainable objectives into our investment decisions. A full 85% of asset managers reported that ESG has become a larger priority within their company's overall investment strategy in the past year.

Firms that adjust to evolving socio-economic and environmental circumstances can more easily pinpoint chances to bolster their competitive edge and expand their competitive stronghold. Gallup's research reveals that 48% of US investors are very or somewhat interested in sustainable investing. Moreover, the interest in sustainable investments increases significantly when looking at millennials who tend to harbor a deep brand loyalty towards ethical corporate entities that strive to improve labor standards, foster diversity, support their communities, and champion environmental causes. One-third of millennials often or exclusively use investment products that take ESG factors into account and 90% of millennials are interested in pursuing sustainable investments in the future.

One prevailing investment fallacy is the belief that investing responsibly requires sacrificing returns, but we at CIM challenge this idea. There are at least five links to think about how ESG systematically benefits the company such as top-line growth by attracting more customers with more sustainable products, cost reductions through lower energy consumption, regulatory benefits through earning government subsidies, productivity uplift through increased employee motivation, and asset optimization for example. Moreover, increasing evidence indicates that ESG-centered companies are more effective at minimizing overall operational risk. A study conducted by Oxford University and Arabesque in 2014, which examined 49 research papers on ESG performance, found that 88% of firms that prioritized sustainability experienced an increase in operational performance, resulting in higher cash flows. At CIM, we employ ESG factors as a primary screening guide, while maintaining risk and return as the fundamental pillars of our stock selection.

CIM analysts relied on FTSE Russell and Sustainalytics ESG ratings as screening mechanisms in each actively managed sector. Our recommendations consist of industry ESG leaders or firms actively striving to better their ESG standing. With the market's continued movement towards ESG-focused investments, CIM will persist in optimizing growth through investment in businesses committed to ESG principles.

We can also demonstrate our ESG inclination through quantitative means. The suggested equity holdings for this year's portfolio have a weighted average FTSE ESG score of 3.56 out of 5, compared to the S&P 500 holdings' cap-weighted average score of 3.34. Each of the actively managed sectors but one in the portfolio exhibits a favorable ESG inclination (as demonstrated in the table on the next page). Ultimately, the total of this year's proposed portfolio ranks on average 6% higher than its corresponding S&P 500 FTSE weighted average FTSE ranking. At the beginning of each tear sheet, we indicated the percentile ranking (out of 100) for each stock's FTSE ESG Score.

Sector	S&P 500 Average FTSE ESG Rating	CIM Average FTSE ESG Rating	Relative Tilt
Communication Services	3.24	3.69	14%
Consumer Discretionary	3.13	3.42	9%
Consumer Staples	3.39	3.36	-1%
Energy	3.08	3.36	9%
Financials	3.02	3.54	17%
Health Care	3.27	3.29	1%
Industrials	3.01	3.48	16%
Information Technology	3.86	4.04	5%
<b>Overall Equity Portfolio</b>	<b>3.34</b>	<b>3.56</b>	<b>6%</b>

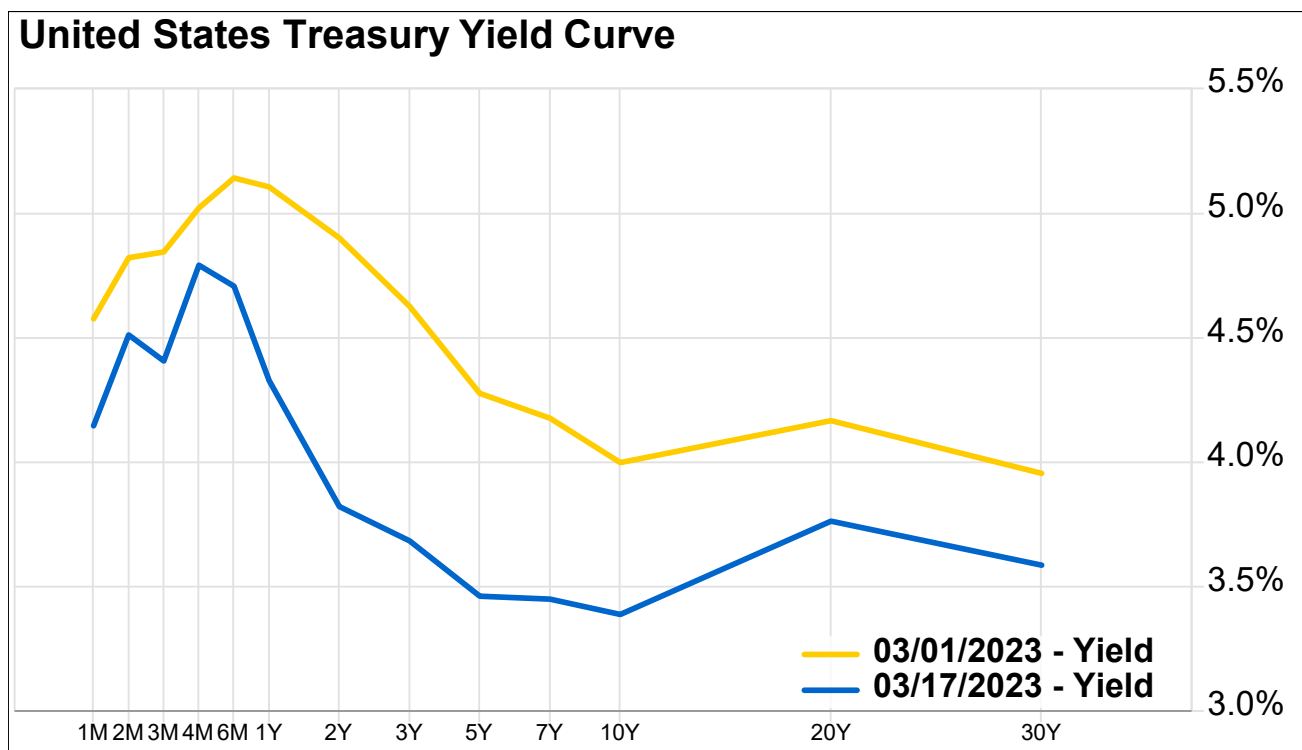
## Fixed Income Assets

### 2022-23 Outlook and Overview

As highlighted in our economic outlook, we believe that the Fed funds rate will rise to 5.00%-5.25% over the next 12 months. This will materialize in higher rates on lower maturity bonds, specifically for maturities of two years or less. Concurrently, we see a significant rate reduction in long-tenure bonds. We do not expect to see yield-curve steepening during this period. Instead, we see the yield curve staying squarely inverted over the next twelve months as we do not believe a catalyst—such as a recession and subsequent aggressive rate cuts—is probable within this plan year.

Our team has chosen to increase our fixed income exposure to the maximum amount (20%) allowed by the investment policy statement due to these beliefs. In prior years, fixed income has been a drag on portfolio returns. Now, we are seeing a significant opportunity within this asset class due to rate and term structure and anticipate growth from fixed income securities.

One consideration to note is the volatility of rates over the next 12 months. Recently, rate volatility has been elevated due to the failure of some regional banks in March of this year. These failures have caused rates to shift marginally downward across the yield curve, undoing roughly two rate hikes. We included the chart below to illustrate that we understand the risks of our increased allocation and the volatility of yields in this environment. However, we stand firmly in our beliefs that the yield curve will invert further, with long term bonds falling relatively lower in yields while the short end is subjected to more rate hikes.



## Fund Changes

Due to the changes in the macro landscape for rates, we have decided to change the bond funds in our portfolios. In lieu of DoubleLine's Low Duration Bond Fund (DBLSX), we recommended PGIM's Ultra Short Duration fund (PULS). We made this change because PULS offers an effective duration of 0.07 versus 1.17 and a weighted coupon of 3.99 versus 4.08 all with better credit ratings. We prefer the lower duration because we believe that the short end of the yield curve will rise over the holding period, and this fund offers similar coupon payments to the incumbent short duration fund. In exchange for Vanguard Intermediate-Term Investment Grade Credit Fund (VFIDX), we recommended Vanguard Long-Term Investment Grade Fund (VWETX) in our portfolio. This fund carries 13.2 years of duration instead of VFIDX's 6.2 years. This extended duration is necessary as we believe that the long-term rates will be less likely to increase over the holding period resulting in strong total returns in exchange for taking on more duration. VWETX also offers a 4.24% weighted coupon versus VFIDX 3.5% all while having better credit quality.

## Fund Weights

In order to capitalize on this opportunity, we allocated a significant portion of our fixed-income portfolio to long-duration income products. We chose an approximate 70%-30% split between short and long duration funds to capitalize on high yields while also opening ourselves up to the forecasted price increase in long-duration bonds. The short duration yield is certainly welcomed, especially with PULS' duration of 0.07, as there is little price risk from this portion of our portfolio. Conversely, the long-duration fund offers a similar coupon to our short duration fund—notably in an inverted yield curve environment—which will keep our yield high while positioning ourselves for a reasonable amount of price appreciation over the holding period.

Fund	Weight	Duration	Maturity (Years)	Weighted Coupon (%)	Avg. Credit Quality
<b>PULS</b>	<b>70.1%</b>	0.07	1.4	3.99	AA
<b>VWETX</b>	<b>29.9%</b>	13.20	22.7	4.24	A+
<b>Overall</b>	<b>100.0%</b>	<b>4.00</b>	<b>7.8</b>	<b>4.06</b>	



# Sector Analysis

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## Communication Services

### Introduction

The Communication Services sector has been rapidly evolving in recent years, driven by advancements in technology and changes in consumer behavior. The sector is highly competitive, with large and well-established companies competing for market share across media, entertainment, telecom, and internet services. This includes telecom giants such as AT&T, Comcast, and Verizon, as well as newer digital players like Alphabet, Meta, and Netflix. As consumers increasingly demand fast and reliable connectivity, companies in the sector are under pressure to continually innovate and adapt to meet changing customer needs. The Communication Services sector represents 7.65% of S&P 500 as of March 1<sup>st</sup>.

### Growth Opportunities

The Communication Services sector is an integral part of consumer and business connectivity. With the rise of the internet and mobile devices, the sector has shifted away from traditional forms of communication and towards digital services. The ongoing development of new technologies such as 5G, artificial intelligence (AI), and cloud computing are expected to continue driving growth in the sector. 5G technology promises to provide faster data transfer speeds, improved connectivity, and lower latency, enabling new services such as autonomous vehicles, smart homes, and Internet of Things. The rise of remote work means the need for secure and reliable communication channels is critical. Video streaming platforms and social media apps will continue to gain share of screen time due to consumer preferences. Businesses will increasingly rely on social media apps to engage with customers and build their brand. User-specific targeted advertising will allow more effective marketing tactics and promote more relevant ads to users. The Communication Services sector will greatly benefit from the “creator economy” in digital media and entertainment, which is expected to grow at a 10% compound annual growth rate (CAGR). Despite higher historical growth rates, industry valuations have dropped below the S&P average, which signals a great buying opportunity.

### Challenges

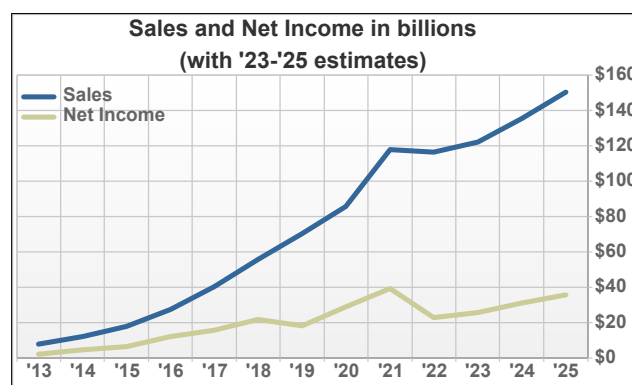
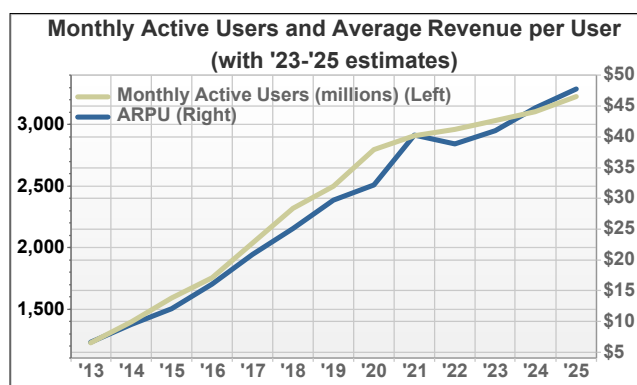
Macro-economic factors are the most significant headwinds for the next year as consumers and businesses have limited budgets amid economic uncertainty. That said, the slowdown in spending is temporary and the Communication Services sector will be one of the top benefactors of a resurgence in typical spending. Slower-than-expected adoption of 5G tech and decelerating postpaid customer ads in the consumer industry are a challenge, but the users are spending 32% more time on social media apps and the overall share of TV viewing for streaming services in the US jumped to 35% in 2022.

### Conclusion and Recommendation

An overweight recommendation at 8% of the equity portfolio has been placed on the Communications Services sector due to undervaluation and tech-enabled growth opportunities. The sector is well-positioned for growth with accelerated adoption of 5G and a resurgence targeted digital advertising due to the continued rise of virtual communication.

## Meta Platforms (NASDAQ: META)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$229</b>	<b>\$173.42</b>	<b>1.1x</b>	<b>Large Core</b>	<b>N/A</b>	<b>77</b>	<b>AA-</b>



### Introduction

Meta Platforms is a social media conglomerate consisting of Facebook, Instagram, Messenger, and WhatsApp. Its platforms offer compelling user experiences, finely targeted advertising, and innovative technology applications such as artificial intelligence and data analytics. Meta generates most of its revenues from advertising on its Family of Apps (FoA) and is expanding into other disruptive horizontals.

### ESG Status

Meta has extraordinarily strong ESG momentum due to initiatives to be completely net zero by 2030 and employment opportunities for underrepresented populations. Meta also has set a goal to be water positive by 2030. In 2021, Meta exceeded their diverse supplier commitment, spending \$1.26 billion with US certified diverse suppliers and more than \$306 million with Black-owned businesses in the US. Since 2019, Meta has doubled the number of women in their global workforce and doubled the number of Black and Hispanic employees in the US. Meta has made great strides in re-engineering their data collection, storage processes, and sales to protect user data and personal information.

### The Story Behind the Stock

Meta Platforms owns four of the top six social media platforms with 3.7 billion total monthly active users, which are evenly distributed around the world. The Meta business model ensures reliable recurring revenues as their media sites continue to grow in popularity and businesses continue to invest in digital advertising. The cyclical return of digital ad spending will be a tailwind moving forward, as revenues and earnings are expected to continue growth at a 8% and 20% CAGR over the next two years. A restructured cost basis and strong top-line growth estimates will bolster high profit margins above 20%.

Management restated its focus on the core revenue strategy in advertising, and they expect momentum in their Digital Labs division to accelerate in 2023. Emerging social media markets such as the metaverse, virtual reality, and augmented reality will be strong growth drivers in the evolution of social technology. The compelling network effects of the 3.6 billion users will continue to draw in new users and monetize app usage upon the resurgence of corporate digital media spending.

## Fundamental Analysis

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### Balance Sheet:

Meta's balance sheet is buttressed by \$41 billion in cash despite the use of \$60 billion in share repurchases over the last two years. Meta has pledged an additional \$40 billion in share repurchases in 2023, which will reduce total outstanding shares by 20% compared to five years ago. Meta has averaged 4.4 current ratio to easily service short-term obligations, though cash levels have decreased due to stock repurchases. Meta has a 0.2 debt-to-equity ratio, above their historical average as it completed a large debt issue in 2022. The conservative capital structure provides flexibility and freedom to invest in emerging technologies.

### Income Statement:

Meta averaged strong revenue and EBITDA growth of 23.5% and 12.7% over the past five years as well as a robust 30% profit margin and 24.6% ROE. Revenue growth will continue at an 8% CAGR, and EPS is projected to grow at 20% CAGR for the next two years. Though revenue was down in 2022, ad impressions in the Family of Apps increased 18% YoY. Expense estimates have been revised down 10% due to a recent restructuring, which will ensure profit margins to remain above 20%. Therefore, EPS is expected to grow from \$8.59 in 2022 to \$13.91 in 2025 despite economic uncertainty. Average Revenue Per User will continue to grow above 10% per year supported by the monetization of WhatsApp and Messenger and a resurgence in digital ad budgets. While not included in estimates, Meta has also received interest in digital billboard advertising space within the metaverse realm.

### Free Cash Flows:

Free cash flow yields have grown by 9% over the past five years to \$18 billion in 2022. FCF is expected to grow 13% per year to \$26 billion in 2025. FCF yields have increased from 4.1% in 2018 to 5.8% in 2023, with expectations to remain at elevated levels. Meta earned \$50 billion in cash flow from operations, which has increased at a 15.8% five-year CAGR, allowed massive share repurchases and capex investments. CFO trend remains strong with estimates of 7% CAGR until 2025.

## Valuation

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Our free-cash-flow-based valuation implied an intrinsic value of \$229, a 32% upside from the current price. Conservative growth rates used in our model, 18.7% short-term and 3% long-term growth, reflect the possibility that the future growth could be lower than historical, though most estimates are significantly higher. Discounted at a 9.5% cost of equity, the intrinsic value ranges between \$210 - \$250.

Meta is also attractive on a relative basis, trading at a 0.7x relative P/E to other big tech and media companies. EV/EBITDA multiple is down from 25x in 2021 to current 10x, compared to the industry average 17x. The stock is down over 60% from its peak, though fundamental growth has remained intact.

## Challenges

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Recent price drops have dampened previous questions about valuation, as oversold conditions have now presented a strong buying window. Some investors are worried the company is distracted by unprofitable business segments, but management has doubled down on the core advertising revenue model with innovative strategies to remain ahead of the competition. Meta's growth strategy, including expensive acquisitions and investments, has proven incredibly effective historically due to management's strong execution. While margins and growth rates have recently declined, the slowdown was factored into our valuations even though a resurgence of ad spending and disruptive innovations anchor a stronger growth profile.

## Conclusion & Recommendation

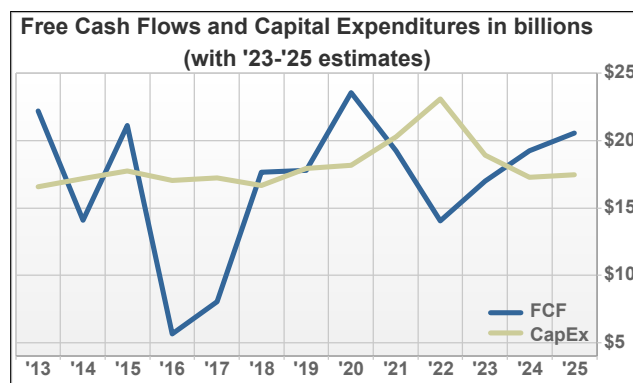
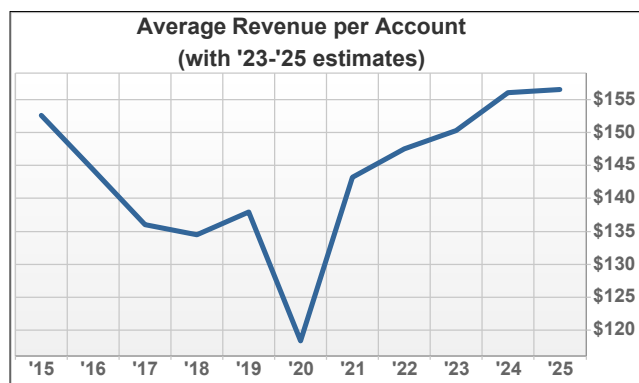
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Meta has been overlooked since its 2021 peak as investors underestimate the resilience of their revenue streams and the magnitude of the user base. It is the largest social media conglomerate around the world, with over three billion monthly users. The return of advertising demand on their platforms is inevitable, and multiple levers are available to boost revenue streams.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Verizon Communications (NYSE: VZ)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>HOLD</b>	<b>\$51.51</b>	<b>\$38.30</b>	<b>0.5x</b>	<b>Large Value</b>	<b>6.8%</b>	<b>72</b>	<b>BBB+</b>



### Introduction

Verizon Communications is one of the leading providers of communications, technology, and entertainment products. It offers data, video, voice, and text to meet customer's demands for mobility and reliable connectivity. Verizon's 145 million subscribers make it the largest telecommunications business in the US.

### ESG Status

One of the primary factors for economic development is access to internet and communication services. Verizon's corporate initiatives, such as Citizen Verizon, focus on areas that impact key stakeholders. Verizon has pledged billions of dollars to uplift vulnerable communities by closing the digital divide. The company will provide ten million youths with digital skills training and is supporting one million SMBs with tech resources and tools by upskilling 500,000 individuals with tech training by 2030. In alliance with the World Economic Forum, Verizon will provide accessible and affordable digital solutions in health, education, and finance to one billion people globally by 2025. Verizon plans to be Net Zero by 2035 by sourcing and generating renewable energy for 50% of energy consumption by 2025. Verizon recently issued its fourth green bond to support renewable energy strategy and was rated a five-star

company by the HACR Corporate Inclusion Index in 2022, an upgrade from 2021.

### The Story Behind the Stock

Verizon Communications is a leading player in the telecommunications industry, boasting the largest recurring customer base with over 115 million postpaid consumers and 29 million recurring business contracts. The company's 5G architecture promises to transform its networks into an Intelligent Edge Network, offering advanced capabilities that include improved efficiency, automation, and edge computing services. With significant investment in network densification to accommodate growing demand for IoT products and services, Verizon is well-positioned to continue its success as an integral part of global digitalization.

The company's solid brand reputation and continued investment in network improvements instill confidence in the retention of current users and subscribers with lower Capex requirements beginning in 2023. In addition, Verizon has secured rights to numerous contracted sites and fiber facilities, creating substantial barriers to entry for competitors.

Verizon is also a powerful cash generator for investors with a 6.8% dividend yield. With its strong market position, cutting-edge technology, and commitment to

# Communication Services Crummer Investment Management

delivering value to shareholders, Verizon continues to be an excellent long-term investment opportunity.

## Fundamental Analysis

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### Balance Sheet:

Verizon currently has a D/E ratio of 193%, which is below the 5-year average of 212%. Businesses with higher leverage can generate higher profits relative to the equity invested. Verizon has a ROE of 24.6%. Verizon has a low cash balance, but mostly due to the significant cash dividends paid to investors. While a current ratio of 0.87 appears to show some vulnerability to pay off short term interest payments, 50% of current liabilities include accounts payable which frees up working capital to pay off short-term debt obligations. Verizon has also significantly lowered their cash conversion cycle below the 5-year average by reducing DSO from 72 to 66 and increasing DPO from 36 to 40 in from 2020 to 2022. Net working capital is expected to be positive by 2024 due to increasing CA and decreasing CL.

### Income Statement:

Bolstered by a strong recurring customer base, Verizon's profit margins have increased from 11.9% in 2018 to 15.5% in 2022, with a 6.0% five-year CAGR. In that period, net income has grown by 7.4% annually, to be used for reinvestment and dividend distribution. With 142 million wireless subscribers, total revenue grew at the historical 2.5% rate due to a constant ARPU and 2% annual user subscriber growth rate. Revenue is expected to continue to grow at a rate of 2.5%, though net income growth is expected to be flat for the next few years. That said, significant recent investment has lowered Capex requirements moving forward, which will result in stronger cash flows.

### Free Cash Flows:

Capex is expected to reduce from \$23 billion to \$18 billion in 2023 and remain at lower levels due to recent investments. Though CFO is expected to remain flat around \$35 billion, lower Capex will result in FCF increases from \$14 billion in 2022 to \$19 billion in 2023.

At \$2.61 per share, Verizon's dividend yield of 6.8% is one of the most attractive aspects of their valuation.

## Valuation

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According to our three-stage DDM, Verizon has an intrinsic value of \$51.51 implying a 34% upside with conservative assumptions. Verizon had a \$2.61 dividend in 2022, which is expected to grow at a modest 2.9% short-term growth rate using a bottom-up analysis. Given the business maturity and market saturation, as 97% of Americans already have a cell phone plan amid declining landline usage, we revised long-term growth rate to a humble 1.5%. A 0.6 average beta resulted in a low 6.97% cost-of-capital. Verizon has a very favorable P/E of 7.8x and EV/EBITDA of 7.2x, both below S&P and industry averages. Slowing top and bottom-line growth rates required more conservative growth rates, but we concluded the stock has 34% upside bolstered by a consistent 6.8% dividend yield.

## Challenges

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Verizon's primary challenge will be how it will continue to grow in a nearly tapped-out industry, but an entrenched customer base will provide reliable revenues. The delayed rollout of 5G network infrastructure was a primary challenge in 2022, but significant investments into 5G midband spectrum will allow Verizon to pierce the residential broadband industry, expecting to add 30 million homes by 2023 on top of wireless and business services. 5G business service infrastructure has also been laid out and is expected to gain momentum over the next few years. The consolidation of large competitors will pose a risk in future years, but the superior quality of Verizon's services and premium offerings will reinforce growth.

## Conclusion & Recommendation

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Verizon's significant market share and gradual penetration of new markets represent a clear area for capital appreciation and consistent dividend growth. Recent 5G network infrastructure investments will reduce future Capex requirements which will accelerate growth of free cash flows.

With our intrinsic value of \$51.51, the company is currently undervalued. We recommend a HOLD.

## Consumer Discretionary

### Introduction

The Consumer Discretionary sector comprises companies that offer nonessential products and services. Consumers have the option to avoid purchasing from these companies without affecting their wellbeing significantly. When disposable income is abundant, these companies tend to flourish due to increased demand. Conversely, demand for their products and services dwindles during periods of limited disposable income. This sector encompasses various industries, such as automobiles and auto components, leisure products, textiles and apparel, hotels and travel, restaurants, household durables and appliances, diversified consumer services, media distributors, broadline retail, multiline retail, and specialty retail. Some of the most well-known companies in the sector are Starbucks, Nike, McDonald's, Tesla, and Amazon.

### Major Trends and Challenges

The Consumer Discretionary sector is poised to face significant challenges in the next twelve months. One of the main factors contributing to this outlook is the low levels of consumer disposable income. Recent data reveals that personal savings in the US have hit lowest levels since the 2008 crisis, while personal credit card debt has soared to all-time highs in the last thirty years, leaving consumers with limited resources for non-essential purchases. As a result, many companies within this sector will likely struggle to maintain growth momentum, with stagnating demand for their offerings. To overcome these challenges, there is an opportunity for companies within the sector that will adapt their strategies to meet the evolving needs and preferences of consumers in a post-pandemic world or implement cost-cutting measures to improve profitability in the face of reduced demand in the face of ongoing economic uncertainty.

### Sector Impact of Economic Factors

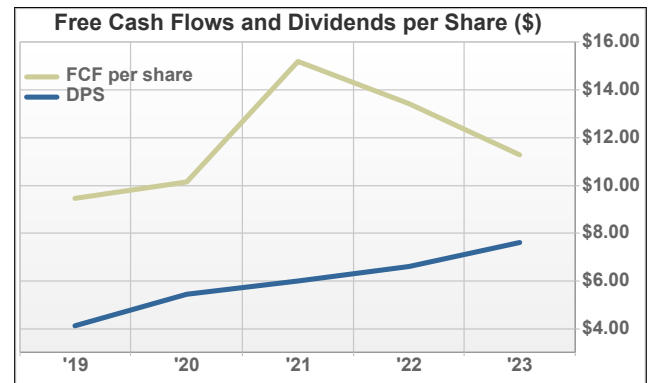
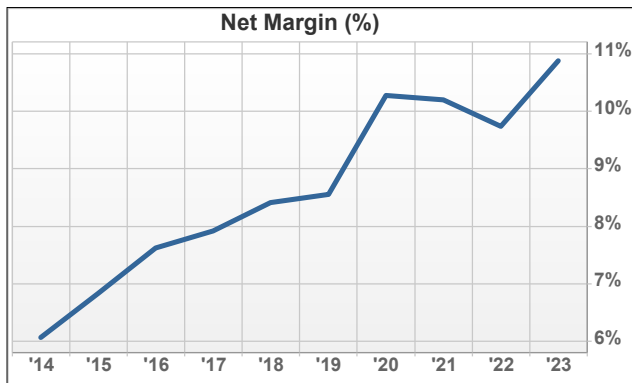
To assess the sector's prospects, we also account for the present and future state of the US macroeconomic environment. Although inflation appears to have plateaued, it is still high, thus, the Federal Reserve is unlikely to reduce interest rates soon, as it aims to restore price stability. Based on recent FOMC meetings, we anticipate interest rates to continue their upwards trend with limited impact on the labor market. Consequently, disposable income levels are expected to be further affected, compelling individuals to focus their expenditures on more essential products in the following twelve months. Nevertheless, discretionary spending could remain solid among higher-income consumers who feel less squeezed by the rising costs.

### Conclusion and Recommendation

The Crummer Truist Portfolio utilizes a short-term tactical sector tilt strategy based on the sector market weights of the S&P 500 index to anticipate market movements within a one-year timeframe. Considering the current macroeconomic framework and weakened disposable consumer income, the team proposes to underweight the Consumer Discretionary sector at 9.5% of the equity portfolio, compared to the benchmark weight of 10.57%. To determine recommended stocks in the sector, a two-stage dividend discount model is used, and a bottom-up approach is taken to calculate short-term growth rates, with qualitative analysis of companies' short- and long-term growth prospects also factored in. Additionally, share repurchases were considered in all models to provide a more accurate analysis of undervalued stocks.

## The Home Depot, Inc. (NYSE: HD)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$369.01</b>	<b>\$290.79</b>	<b>0.7x</b>	<b>Large Core</b>	<b>2.9%</b>	<b>85</b>	<b>A</b>



### Introduction

Home Depot, Inc. was founded in 1978 and is one of the world's largest home improvement retailers. It offers various products, including building and improvement materials, hardware, electrical products, kitchen and bath products, appliances, paint products, and garden products. It has 2,300 stores across North America.

### ESG Status

Home Depot has developed an in-depth ESG priority assessment framework and has been an industry leader in sustainability development by issuing sustainability reports since 2015. Recently, Home Depot has received the following awards: Energy Star's Retail Partner of the Year, Canada's Best Diversity Employers, Military Friendly Employer, WaterSense Partner of the Year Award, and Safer Choice Partner of the Year. Home Depot is also focusing on eight different UN SDGs and in 2021 allocated over \$45 million to organizations working to further diversity and social equity.

Home Depot has decreased its electricity consumption by 50% in US stores since 2010 and is aiming to source 100% of its energy through renewable projects by 2035. It has also reduced supply chain miles driven despite moving record volume through its supply chain. Home Depot has also conducted over 1,400 factory audits in

39 countries in 2021 under its responsible sourcing policy. Part of the firm's ESG initiative is also shown in the green products they offer such as smart thermostats, WaterSense toilets, and more.

### The Story Behind the Stock

The home improvement products industry saw a surge in demand during the COVID era when people were situated in their homes which led to a focus on improving living spaces. In a post-COVID world, the biggest demand drivers of the industry and for Home Depot are still the increasing homeownership rate in the US, growth in e-commerce, and growth of the DIY (do-it-yourself) home improvement retailing market which is expected to have a CAGR of 4.4% through 2030.

Home Depot is well-positioned to capitalize on these industry opportunities through its brand reputation, diversified revenue streams, and sustainability focus. Being a home improvement store industry leader with 52.2% of total industry revenue positions the firm with a favorable negotiation power in uncertain economic situations across all value chains.

### Fundamental Analysis

#### Balance Sheet:

Home Depot's assets have been growing since 2015 through the most recent fiscal year, with a large increase



from 2020-2021. Its inventory levels also rose significantly in the most recent years as the firm wanted to be prepared for any additional supply chain disruptions. Overall, there is also a favorable growth trend in cash and short-term investments over the past five years indicating better liquidity. This is also indicated in an increasing current ratio, particularly in the most recent fiscal year. Home Depot's liabilities rose significantly during the COVID pandemic, which can mainly be attributed to financing additional inventories the firm undertook during uncertain times but have encouragingly decreased substantially in the most recent fiscal year.

## Income Statement:

Home Depot has been consistently growing revenue YoY over the last five years with a CAGR of 9.3%. A strong case for the further upside of the growth is that the revenues were translated into net income, which has also been growing over this period with an even higher CAGR of 14.7%. A further indicator of the projected growth in the DIY home improvement retailing market size suggests that the trend of growing revenue should continue. We conservatively project that Home Depot's sales will grow at a minimum 9% annual growth rate based on the sales growth over the past five years.

In the past decade, Home Depot has maintained its gross margin between 31% and 33% and encouragingly grew its net margin from 6.8% to 10.9% in 2014-2023 (chart). In 2022, Home Depot achieved an EPS (diluted) of \$16.69, which is a 344% increase from 2014 and a 72% increase from 2019. It is clear to us that Home Depot's management has made appropriate moves to increase EPS and revenues.

## Free Cash Flows:

Home Depot's dividends have grown at an average of 16.4% annually over the past five years with an average dividend payout ratio of 46.8%. Over the same period, shares repurchased had an annual average of \$37.26 billion. Furthermore, the projected sustainable repurchase yield is 2.8%. Moreover, Home Depot's free cash flow per share CAGR is 11.6% over the past ten years (chart). The firm's steadily increasing dividends and consistent stock repurchases throughout uncertain times are signs of excellent management.

## **Valuation**

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To arrive at Home Depot's intrinsic value, we used a two-stage dividend discount model.

Using an ROE-based bottom-up approach, we found an adjusted short-term growth rate of 20.8%. We estimated a conservative sustainable long-term growth rate of 3.5%. By discounting at 8.8% cost of equity, the most likely intrinsic value was \$369.01, adjusted conservatively for expected share repurchases. Our sensitivity analysis estimates Home Depot's stock intrinsic value between \$338.74 and \$370.15. Even though our sensitivity analysis reveals Home Depot to be a highly undervalued stock, we believe our most likely estimates are conservative, supporting \$369.01 as a reasonable intrinsic value for Home Depot.

## **Challenges**

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One of the potential challenges that Home Depot could be facing are lack of geographical diversification as the firm has locations in the US, Canada, and Mexico, whereas the last one is currently an uncertain market due to foreign exchange risks and limited domestic growth. Another factor that could be seen as a challenge is aging infrastructure. Home Depot has already spent billions on digitalization, but further investments will have to be made in order to remain a market leader. This would likely prevent the firm from significantly raising its levels of cash in the short term. The positive here is that the company understands the benefits of digitalization such as leveraging customer data and increased sales from an online store, which will allow the company to capitalize on those long-term strategies and infrastructure investments.

## **Conclusion & Recommendation**

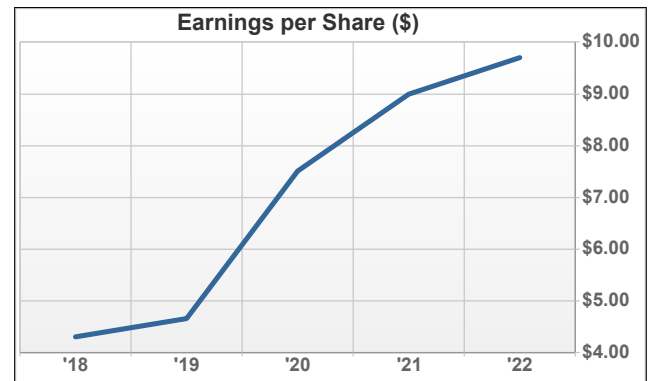
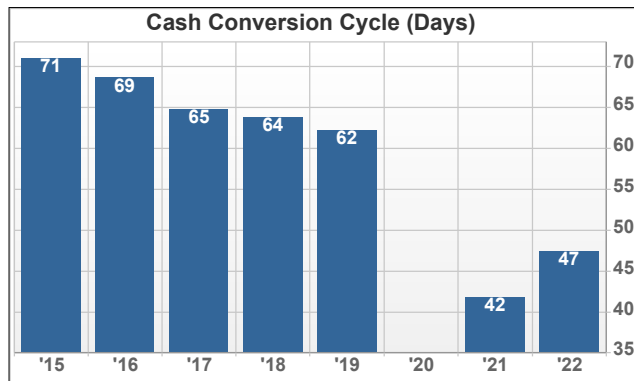
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Based on the increasing homeownership rate in the US, growth in e-commerce, and growth of the DIY home improvement retail market, growth of the market leader Home Depot is anticipated.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Tractor Supply Company (NASDAQ: TSCO)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$270.62</b>	<b>\$225.76</b>	<b>0.9x</b>	<b>Mid Core</b>	<b>1.8%</b>	<b>80</b>	<b>BBB</b>



### Introduction

Tractor Supply Company was founded in 1938 and is the largest rural lifestyle retailer in the US. It offers products for agriculture, lawn and garden maintenance, livestock, home improvement, and pet care. It owns and operates over 2,000 stores in 49 states.

### ESG Status

Tractor Supply is a member of the Sustainability Consortium, an alliance of over 100 organizations that help transform the consumer goods industry by delivering more sustainable products. Through this commitment, Tractor Supply is making progress on managing the impact of Scope 3 greenhouse gas emissions. The firm also announced a 2040 net zero target with interim targets of reducing emissions from operations by 20% by 2025 and by 50% by 2030 showing their commitment. Tractor Supply is also a member of the Clean Energy Buyers Alliance (CEBA) and an EPA Green Power Partner indicating their continued focus on using green power. Tractor Supply also aligns its business according to seven different UN SDGs, with established commitments and monitored actions. The company also focuses on the governance and diversity aspect of ESG by having a CEO-led DEI Council, 49%

of the female workforce, and 90% of the Board is independent.

### The Story Behind the Stock

Tractor Supply has been growing over the most recent years and has more room for growth based on the growing demand for rural lifestyle products. In 2021, the largest number of people left large urban counties for the first time in the past 50 years, leading to only 32% of the US population currently living in large urban counties. This demand is largely driven by the increase in metro area home prices and increasing food costs which increased 10.1% from January 2022 to 2023. Furthermore, Tractor Supply is well-positioned to capture the upside of the industry trend by being the largest farm supply store in the US, having low customer class concentration, and historically having higher profits than the sector average. The company has also undertaken an omnichannel distribution strategy including same/next-day delivery and increased focus and action on digitalization. Tractor Supply is also an Amazon-proof business by selling exclusive products of which may require a lot of handholding and by having a loyal customer base. Customers that are members of the firm's loyalty program account for 70% of annual sales and spend three times as much as non-members.

## Fundamental Analysis

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### Balance Sheet:

Tractor Supply's total assets have been increasing each year all the way from 2003 to today. This can mainly be attributed to a growth in stores owned by the company and an increase in inventories. The financing of the new stores is also reflected in the firm's liabilities, which are rising year-over-year. However, there is a favorable general trend of a decrease in the cash conversion cycle since 2015 (chart).

### Income Statement:

Tractor Supply's growth is reflected in its income statement as well, with an increase in sales every year over the last two decades at CAGR of 12.7% and with favorable net income growth over the past five years of 20.8% CAGR. The long-term success of this company is illustrated by the fact that it has withstood many business and economic cycles including recessions, which is an important consideration looking ahead.

Over the past decade, Tractor Supply has maintained gross margins between 31% and 34% and has most importantly achieved growth in EPS (diluted). The current value is \$9.71 while EPS had a 24% CAGR over the past five years. The company's management has made productive decisions, which are reflected in the increase in EPS and sales (chart).

### Free Cash Flows:

Tractor Supply's dividends have grown at an average of 28.5% annually over the past five years with an average dividend payout ratio of 27.2% between 2013 and 2022. At the same time, Tractor Supply repurchased an average of \$821 million in common stock over each of the last five years. Moreover, free cash flow per share had an 11.9% CAGR over the past five years. Tractor Supply's steadily increasing dividends and consistent stock repurchases throughout uncertain times are great signs of excellent management and appropriate strategic direction.

## Valuation

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To arrive at Tractor Supply's intrinsic value, we used a two-stage dividend discount model.

Using a ROE-based bottom-up approach, we found an adjusted short-term growth rate of 14.4%. We estimated a conservative sustainable long-term growth rate of 4%. By discounting at 8.27% cost of equity, the most likely intrinsic value was \$270.62, adjusted conservatively for expected share repurchases. Our sensitivity analysis estimates Tractor Supply's intrinsic value between \$254.48 and \$291.37. Even though our sensitivity analysis reveals Tractor Supply to be a highly undervalued stock, we believe our most likely estimates are conservative, supporting \$270.62 as a reasonable intrinsic value for Tractor Supply.

## Challenges

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Perhaps, the largest risk with Tractor Supply can be attributed to its increasing level of debt. This can, however, largely be attributed to the overall growth and expansion in the number of stores which is shown in the increase of capital and operating lease obligations. We can also see that Tractor Supply has managed its debt well through the TIE ratio which has been higher in 2022 than the five-year average.

Furthermore, it is worth noting that new supply chain disruptions could affect the business, as already seen during the COVID years, when Tractor Supply had some issues getting raw materials or some assembled goods into the US. However, the situation has been dealt with as this would be a threat only in a situation similar to a global pandemic where many other businesses sourcing materials outside of the US would be affected as well.

## Conclusion & Recommendation

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Tractor Supply's recent focus on digitalization and omnichannel distribution alongside a fundamental driver of a growing demand for rural lifestyle products should lead to continued growth. Customer loyalty, industry-leading market share, and being an industry leader in ESG initiatives are all factors that will be essential in these uncertain economic times and, as Tractor Supply will grow in the years to follow, so will its price.

With our intrinsic value and key fundamental catalysts in consideration, the company is currently undervalued. Our final recommendation is a BUY.

## Consumer Staples

### Introduction

The Consumer Staples sector consists of manufacturers and distributors of food, beverages (alcoholic and non-) and tobacco as well as producers of household and personal products. It also includes food & drug retailing companies and consumer super centers. The products related to this sector are considered necessary for daily life; holdings in this sector are considered defensive because they are non-cyclical and less sensitive to economic downturns. In the first week of March 2023, the Consumer Staples sector comprised 6.7% of the S&P 500.

### Challenges

In 2022, Consumer Staples outperformed the S&P 500 as well as all but two other sectors. The sector's performance proved its reliability at the beginning of economic slowdowns and managed this despite several challenges. While performance remained steady for Consumer Staples, the sector's profits were dented by rising commodity prices, increasing labor wages, lower sales volumes, and a stronger US dollar overseas. The main driver for profits for many companies in the sector was price increases. Consumers were willing to pay higher prices for staples as inflation was hitting across all sectors, but there is concern about how sustainable this will be if the economy weakens further in 2023. Consumers may start buying even less and shifting to lower cost brands if prices continue to rise. From the start of the year through the first week in March, the sector's performance has fallen 3.6%, while the market has risen 3.8%. We would expect this trend to reverse if the market volatility continues as investors will seek less risky equities for investment.

### Opportunities

While there are concerns for the sector, there are bright spots for the year ahead. Revenue is expected to grow by 10% and growth is expected to be positive by the end of the third quarter and up by mid-single digits by the end of the year.

About 40% of US Consumer Staples companies' revenue comes from overseas markets. 2022 revenue for the sector was down in both Asia and Europe; revenue dropped 3.7% in China and 1.2% across the European market. These declines were due to the economic slowdown in China from COVID-19 lockdowns and a stronger US dollar across the global market. The lockdowns in China have been lifted, and the economy there is beginning to rebound. The dollar value peaked in September of last year, and is expected to steadily weaken throughout the next year. Both trends encourage our expectations that overseas revenue for the sector should pick back up throughout the year.

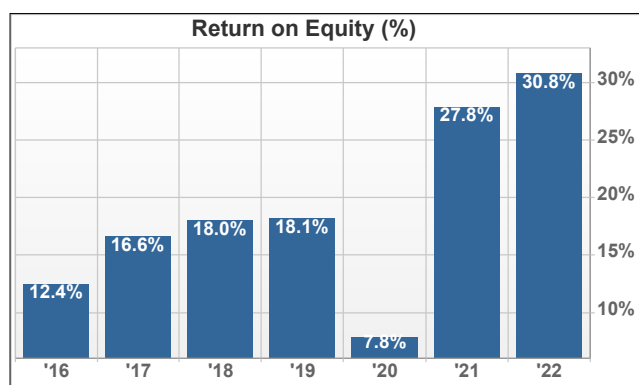
Despite the challenges of the last year, many fundamentals remain strong. Debt-to-equity ratio for the sector was lower than the five-year average in 2022. FactSet estimates that dividend yields will continue to grow for the sector this year and for 2024. Companies will have to be nimble to keep sales volume and margins up. Many companies have already begun implementing cost-saving strategies and EBITDA margins for the sector are expected to rise for the coming year.

### Conclusion and Recommendation

Based on the sector outlook, we expect that Consumer Staples will continue to be a defensive sector in a challenging economic environment, and that growth expectations for the year will play out as companies get a better handle on operating margins and overseas revenue ticks up. We recommend a slight overweight at 6.8%.

## Procter and Gamble (NYSE: PG)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$162.54</b>	<b>\$137.66</b>	<b>1.1x</b>	<b>Large Core</b>	<b>2.7%</b>	<b>55</b>	<b>AA-</b>



### Introduction

Founded in 1837 by William Procter and James Gamble and headquartered in Cincinnati, Ohio, Procter and Gamble (P&G) is a multinational consumer goods corporation, with six business segments, organized around their product lines, including beauty, grooming, health care and home care. P&G products are sold in over 170 countries and many of them enjoy some of the greatest brand recognition in the world.

### ESG Status

P&G’s efforts towards sustainability are evident through many of the products they offer and through their commitment to cut greenhouse gas emissions across their operations to zero by 2040. The company has strived to make an impact on the community, both locally and globally. This includes the \$10 million P&G has donated to United Way of Greater Cincinnati over an 80-year long involvement with that charity in their headquarter city. Amongst their international efforts, the company has sent over three million P&G products to Ukraine since the invasion last February. The company has made an active effort to promote diversity in the workforce; 50% of the board of directors is made up of women. P&G has pledged to spend \$5 billion annually with diverse-owned and women-led businesses by 2030.

### The Story Behind the Stock

As the largest consumer goods company in the world, P&G is one the steadiest companies to have in a portfolio as the market continues to face uncertainty. Over the last five years, P&G has provided an 87.7% return to shareholders, over 15% more than their next best competitor in the industry. Its management has proven their ability to provide value by streamlining the business where and when it makes sense. In 2014, P&G restructured the company, and dropped over 100 of their brands to focus on the remaining ones that were responsible for 95% of profits. It has seen a 50% ROE increase since that time. The company is protected in turbulent economic times by a well-diversified product portfolio of daily use items as well as sale presence in nearly every country. Nearly half of P&G sales come from outside North America. P&G’s approach to growing value has been focused on improving their operations and anticipating customer demand with innovative, industry-leading products. These strategies have proved sound through the past year as margins stayed relatively steady through rising costs and customers remained loyal despite rising prices. The company’s other priority has been returning cash to shareholders. This will be the 66<sup>th</sup> consecutive year that the company has increased their dividends. P&G’s P/E

is slightly trailing its long-term average. Its fundamentals remain strong, making this an ideal time to buy.

### **Fundamental Analysis**

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#### Balance Sheet:

Despite the economic challenges of the past year, P&G has maintained a healthy balance sheet. Profitability has increased even as costs of raw materials and supply chain transportation rose. P&G's assets, liabilities and debt have all remained relatively steady over the last three years, and their return on assets shows an improvement from 2021 up from 11.9% to 12.5%, beating the industry average of -2.6% and the median of 8.8%.

#### Income Statement:

In the past FY, P&G saw sales increase across all six business segments, and net sales grew 5% over the prior year. Over the past five years, P&G has made significant improvements to their return on equity, up to 30.8% from 18.1% in 2019, showing a growing efficiency in generating profits (chart). The company's net margins fell 6% over that same period as the company kept prices in line with rising costs. Earnings per share have also gone up almost 25% the past four years, up to \$5.81 from \$3.93 in 2019 (chart).

#### Free Cash Flows:

Over decades, P&G has a very impressive record of consistently returning free cash flow back to their shareholders. After marketing and research and development costs, the company's adjusted free cash flow productivity was 93%, allowing it to return \$19 billion to shareholders last year, \$8.8 billion in dividends and \$10 billion in repurchases. This was a 5% increase in the company's dividends, and their 66<sup>th</sup> consecutive annual dividend increase. Only three other companies have increased their dividend in more consecutive years. The company recently announced that it is targeting a 90% cash-conversion ratio in fiscal 2023, allowing it to pay about \$9 billion in dividends while repurchasing as much as \$8 billion of its stock.

### **Valuation**

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P&G's approach to streamlining their growth and investing their cash internally and for returning to

shareholders, led to our choice to use a three-stage dividend discount model to arrive at an intrinsic value for Procter and Gamble's stock. We used a bottom-up approach, and a short-term growth rate of 9.83%. To arrive at our long-term growth rate estimate, we looked at the growth rates for P&G's product segments and at the company's plans to expand sales internationally in China and the greater Asian region, and assigned 4% for the long term, giving us an intrinsic value of \$162.54. Our sensitivity analysis estimates the stock's intrinsic value to be between \$126.91 and \$191.75, mostly above the current stock price.

### **Challenges**

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Inflationary headwinds have been a challenge for much of this sector this past year. Although it is not a long-term fix, P&G was able to navigate with raised prices and profit margin efficiencies. The company's goods tend to be higher-end brands, and the rise in their prices could turn some customers away as inflation and a potential recession cause consumers to be more price-conscious. However, P&G has proven adept at anticipating their consumer's needs, and their customers have proven to be loyal to the brands they carry. We will have to keep an eye on volume growth in the coming quarters as inflation comes down. With operations and sales in so many countries, P&G also has exposure to fluctuations in commodities and currency prices. The CFO says their healthy growth and savings can weather this, but it will be interesting to see if the company makes any adjustments to their hedging strategies.

### **Conclusion & Recommendation**

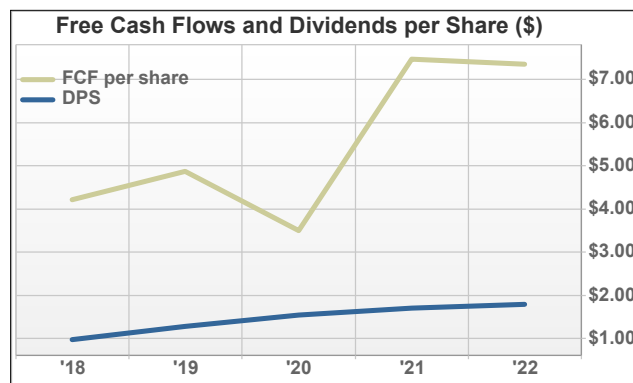
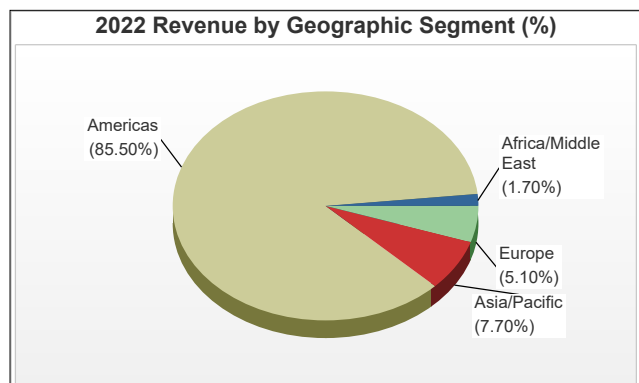
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P&G has attractive fundamentals, such as strong cash flow and earnings per share. The company continues to improve its margins while leading the industry with innovative and ESG-friendly products. They have a proven record of returning cash to shareholders; P&G has been paying dividends for 132 years. As an established and mature company with a diversified array of products, it is a safe and defensive stock to have in the portfolio during this upcoming year of economic fluctuations and uncertainty.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Tyson Foods, Inc. (NYSE: TSN)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$72.96</b>	<b>\$59.29</b>	<b>0.3x</b>	<b>Mid Value</b>	<b>3.2%</b>	<b>65</b>	<b>BBB+</b>



### Introduction

Tyson Foods Inc. is a multinational corporation based in Springdale, Arkansas. Founded in 1935 by John Tyson, the company has been run by four family generations. Tyson Foods is the largest U.S. producer of processed chicken and beef as well as a large producer of processed pork and protein-based products under familiar brands like Jimmy Dean, Hillshire Farm, Ball Park, Sara Lee, Aidells, State Fair, and Raised & Rooted.

### ESG Status

Tyson has become a good example of an ESG success story over recent decades. For a company that was at one point ranked the second highest emitter of greenhouse gas (GHG) in the global food industry, Tyson has made serious efforts to turn things around. The company has worked with the World Resources Institute to set a goal to reduce GHG emissions by 30% in 2030: by making a 5% reduction in the year 2020 alone, they are well on track towards meeting this goal. The company has recently received the Smartway Excellence Award from the Environmental Protection Agency. Additionally, they have recently announced a new goal of reducing GHG to net-zero by 2050. Beginning in 2016, Tyson began buying stakes in meat-alternative companies, and has

since funded its own clean-meat alternative company, Future Meat. These efforts are part of the company's plan to meet future consumer demand in a sustainable way. Charity and non-profit donations have long been an important part of how the company defines itself, and in February of 2022, Fortune magazine ranked Tyson number one as the World's Most Admired Company in the Food Production category for the sixth consecutive year.

### The Story Behind the Stock

Despite some exceedingly difficult headwinds and market conditions over the past year, we are impressed with the company's ability to retain customer loyalty, allowing it to continue to grow revenue and earnings per share and consistently deliver dividends to their shareholders. We believe management developed sound plans for Tyson's future growth when they implemented a reinvestment plan for operational upgrades and put together a strategy for further international expansion to meet the fast-growing protein demand around the globe (chart). We believe market conditions that have hurt the company recently are beginning to turn around, and the stock is currently trading below its intrinsic value that can be taken advantage of before the positive changes are reflected in the valuation this year.

## Fundamental Analysis

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### Balance Sheet:

Tyson's balance sheet remains strong, with investments made in the company and no increase in long-term debt. Tyson announced a new \$1.3 billion reinvestment project starting in 2021. The plan is focused primarily on investing working capital towards improving operational, supply chain and transportation efficiencies as well as increasing inventory visibility and automation abilities. The plan is set to deliver over \$1 billion in savings by the end of 2024 (relative to 2021). More than \$700 million in operational savings has already been realized in fiscal year 2022, and the plan may be on track to exceed its goal in both savings as well timing. Tyson has pledged to fund this investment while staying at or under their target net leverage ratio of 2x net debt to adjusted EBITDA (currently at 1.34).

### Income Statement:

Despite a 16% increase in the cost of goods sold from last year, Tyson was still able to grow net income by 6% over last year. Tyson saw sales growth of 13.1% for the entire company in the FY 2022, with some outstanding numbers in their targeted segments: Chicken (24%), and International/Other (18%). The international growth is a sign of the success the company expects as they begin their overseas expansion. Currently, over 80% of the company's revenue comes from the U.S., but the company recognizes that global protein consumption is set to grow by over 95 billion pounds by 2030. Tyson has selected high-demand markets for an aggressive \$1.8 billion expansion, including seven new plants overseas, with four in Asia to be complete by the end of the FY 2023. The project is expected to increase EPS by at least \$8 over the next three years. This past FY, Tyson achieved an EPS of \$9.10, a 6% increase over last year and 22% higher than their five-year average.

### Free Cash Flows:

The company consistently raised their dividends annually since 2013 (chart). In 2022, Tyson returned \$1.4 billion in cash to shareholders through dividends and share repurchases. The company's 3.2% dividend yield is above the industry average of 2.6%, and we expect their eleven-year streak of raising dividends to continue in the future.

## Valuation

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For the next two years, we believe that Tyson's reinvestment rate will be a good guide of what to expect for growth. Its reinvestment rate has been relatively high and steady over the past decade, so we used the ten-year average to get a short-term growth rate of 13.6%. We used a three-stage model because the company has significant plans to expand in China and Southeast Asia, and it may be some time before economic conditions stabilize there. We estimated a conservative long-term growth rate of 3%. At a 7.6% cost of equity, the most likely intrinsic value was \$72.96, adjusted conservatively for share repurchases. Our sensitivity analysis estimates Tyson's stock intrinsic value between \$67.48 and \$90.00.

## Challenges

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The entire livestock industry has been hit with volatile prices of beef and chicken at the same time feeding costs are rising. The latest inflations report released by the Bureau of Labor Statistics showed that food prices climbed at an above-average rate. Staffing shortages have made it difficult for Tyson to fulfill their orders. All of these issues hit the company and its margins simultaneously. The positive news is that inflation has slowed. The United States Department of Agriculture is also projecting higher production in beef, which should help ease the costs. In even better news, the USDA anticipates a sharp drop in the price of pork and chicken starting over the next four weeks, moving to reduction of around 7% and 25% respectively down from the peak prices last May. Tyson believes they are positioned to meet the rise in consumer demand as prices drop.

## Conclusion & Recommendation

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We have several reasons to be optimistic about Tyson's prospects over the coming months and years. The conditions of the meat industry are improving, and we also expect the company's margins to improve as a result of their major investment in cost-saving efficiencies. The company's overseas expansion plans are well-timed with rising global demand for meat, a weakening US dollar and an expected economic rebound in China.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.



## Energy

### Introduction

The Energy sector is comprised of firms that engage primarily in the exploration, production, development, and transportation of petroleum, oils, and other fossil fuels and renewable energies. Companies that foster the development through refinery and drilling through equipment and services are also included in this sector. Key drivers for the energy sectors are crude oil prices, which often remain volatile due to refinery and extracting costs, as well as market supply and demand.

### Increased Momentum in ESG Initiatives

The energy sector has made a fundamental approach to ESG awareness, including the environmental impact of operations and climate change. Many energy companies have made ESG a key driver for firm and management success and long-term value strategy towards “net-zero” emissions. By utilizing sustainability-focused reporting frameworks, the sector can identify critical weaknesses in operational practices. The companies who have seen the most success in the Energy sector have also improved their overall governance practices, increasing diversity, shareholder relations, cash flow payout to shareholders, and better executive performance incentives.

### Economic Factors, Growth, and Volatility

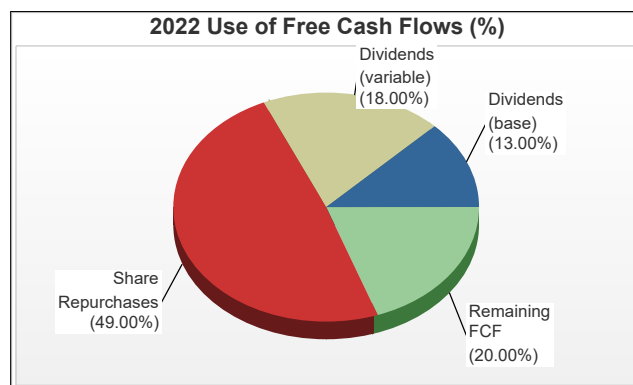
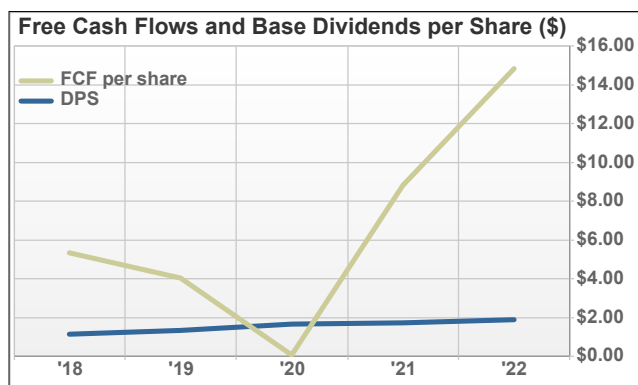
Essential factors to be considered in the Energy sector are crude oil prices, global output, continued political risks, and expected economic conditions. Energy consumption is expected to grow by 1.3% from 2022. With the expectations of a slowing economy, we can expect energy prices to increase due to supply and demand imbalances. Crude oil prices were already high and volatile, and costs per barrel are expected to remain around \$100 in 2023. The Russian invasion of Ukraine has been the driving force behind the recent surge in the level and volatility of prices. With sanctions being placed on Russia, a global leader in reserves and the exportation of natural gas, uncertainty continues to plague the market, and possible delays in the transition to renewable energy sources are expected. The US market is responding by expanding refinery plants and increasing resource capacity. We have seen substantial investment into pipeline infrastructure in the Midwest basins and reliance on LNG partnerships in the Middle East, however it continues to be highly unlikely that the current market will meet supply demand, resulting in exposure to higher energy costs and supply shortages.

### Conclusion and Recommendation

Based on our one-year outlook, we expect favorable market conditions for this sector. We propose slightly overweighting the Energy sector at 5% relative to its S&P 500 weight of 4.92% as of March 1<sup>st</sup>.

## ConocoPhillips (NYSE: COP)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$130.54</b>	<b>\$106.25</b>	<b>1.0x</b>	<b>Large Core</b>	<b>1.9%</b>	<b>75</b>	<b>A-</b>



### Introduction

ConocoPhillips is an integrated oil and natural gas company that operates in 13 different countries across the globe, operating in 5 separate geographic segments including the US, Middle East, Europe, and North Africa. Headquartered in Houston, TX, they engage in the development, exploration, and production of crude oil, petroleum products, and natural gas.

### ESG Status

In 2020, ConocoPhillips became the first US-based oil company to adopt the Paris agreement aligned to the climate risk framework. This includes reaching a net zero emission on Scope 1 and 2 greenhouse gases (GHG) by 2050. In 2022 they joined OGMP 2.0 and set a new methane emission intensity target to reduce by 25% within the next reporting year. They are focused on identifying new low-carbon technologies and continue to expand their research into opportunities to mitigate hydrocarbon outputs and invest in carbon capture and renewable energy technologies. ConocoPhillips donated over \$52.9 million to charitable organizations in 2021 and works with numerous organizations, startups, and universities to procure partnerships in developing technologies that enhance oil and natural gas exploration and production activities. ConocoPhillips understands

its operations' impact on local communities and environments and is taking the necessary initiatives to mitigate their effects.

### The Story Behind the Stock

ConocoPhillips is one of the world's largest E&P companies; the company began in 1875 as the Continental Oil and Transportation Company out of Ogden, Utah, as a part of Standard Oil. They have since grown their operations to 13 different countries and, in the past year, have extended Cascade LNG business operations to Australia, Germany, Qatar, and the US, to strengthen their competitive advantage in LNG. They have also created a 20-year agreement with Semptra to purchase five million tons per year of LNG for Semptra's Phase 1 of the Port Arthur LNG Project. To dissuade Europe's reliance on Russia for oil and other natural gas sources, ConocoPhillips has signed two contracts to buy LNG from Qatar energy to be delivered to Germany by 2026. ConocoPhillips has developed specific long-term strategies to position itself successfully in the transition to providing renewable energy resources to consumers. With high investment into low-carbon technologies in the net zero energy transition, they are still able to maintain a strong cash flow, and in 2022, returned 53% of operating cash flow to shareholders.

## Fundamental Analysis

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### Balance Sheet:

ConocoPhillips has a current ratio of 1.46, with a 5-year average of 1.81. More importantly, ConocoPhillips has consolidated its net debt to \$17.2 billion. This is also apparent in their 2022 debt-to-equity ratio of 16.6%, down from 33% in 2021. Their long-term debt-to-equity ratio decreased from 42.3% to 34.6% in 2022, well below their five-year average of 43.7%. Overall, the company has a strong balance sheet.

### Income Statement:

As ConocoPhillips sales have exponentially grown in the past couple of years following the pandemic, total sales have increased by 41.2% from 2021 to 2022. ConocoPhillips has maintained gross margins between 20% and 25% in the past several years, with a five-year average of 24.3% (compared to 15.4% benchmark average). Their most recent return on equity was 39.9%, with a return on invested capital of 28.8%. In 2022, ConocoPhillips achieved an EPS (diluted) of \$14.57, a 138% increase from 2021 at an EPS of \$6.08. Net margins also increased to 23.7% (five-year average 13.2%) in 2022, outperforming the benchmark of 14.9% (five-year average 5.6%).

### Free Cash Flows:

In 2022, ConocoPhillips reported a free cash flow per share of \$14.20, compared to a five-year average of \$6.46, and a free cash flow yield of 12.04%. This implies a 55% increase in FCF per share from 2021 (chart). They have continuously met targets of returning more than half of cash flow to shareholders and, in 2022, have done so with a mix of share buybacks and variable dividends (chart).

## Valuation

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ConocoPhillips' emphasis on ESG, commitment to shareholders, and strong dividend growth proves them to be a frontrunner as an industry leader. With this in mind, we used a three-stage dividend discount model to arrive at an intrinsic value for ConocoPhillips stock. Using their high reinvestment rate of 15.1%, reflecting their increased investment into various technologies and

global drilling infrastructure, we found an adjusted short-term growth rate of 20%. We estimated a conservative sustainable long-term growth rate of around 3.5%. By discounting at a 10.03% cost of equity, the most likely intrinsic value was \$130.54, adjusted conservatively for expected share repurchases. Our sensitivity analysis estimates ConocoPhillips stock intrinsic value between \$117.82 and \$136.59.

## Challenges

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As the energy industry transitions to finding renewable energy sources, ConocoPhillips continues to invest in LNG and hydrocarbon technologies. With their continuous global expansion into new international territories, they face multiple political, social, legal, and environmental risks. With the price of oil being highly dependent on the cost of gas and oil futures (down 18% from 2021), crude oil is expected to remain high and volatile. Global Energy consumption is expected to increase by 1.3% in 2023, but refinery capacity is dwindling with constant restraints on pipeline resources. Europe has imposed sanctions on the imports of oil and coal from Russia. This is expected to increase demand and stress on domestic refineries. Ultimately, the industry is susceptible to exposure to higher production costs and supply shortages soon. ConocoPhillips is taking the necessary steps to move into more sustainable energy practices, including research into renewable energy and other low-carbon technologies. They are centering their business practices around these upcoming changes.

## Conclusion & Recommendation

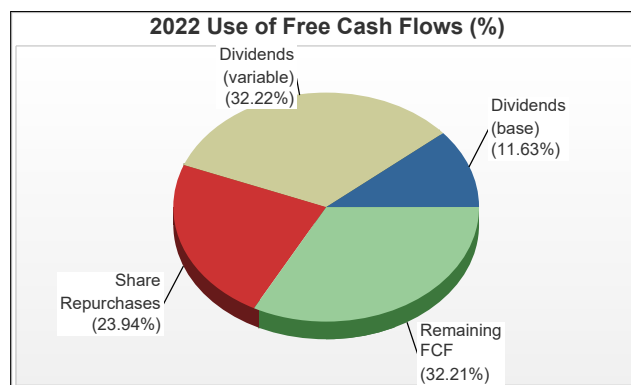
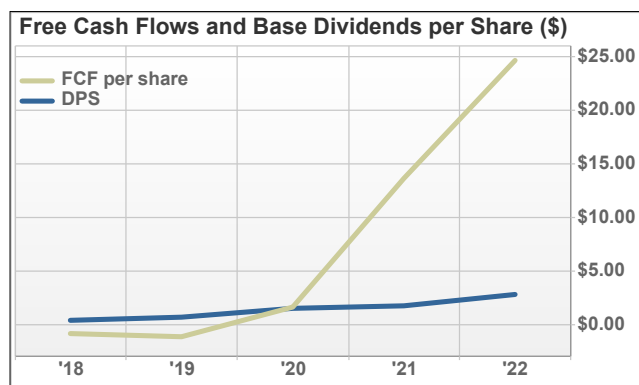
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With ConocoPhillips becoming more environmentally conscious, as shown by the implementation of several ecological initiatives and the sustainable growth structure management has created to ensure sustainable practices on a global scale, the future of the company continues to look promising.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Diamondback Energy (NASDAQ: FANG)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$177.71</b>	<b>\$144.62</b>	<b>0.8x</b>	<b>Mid Value</b>	<b>2.1%</b>	<b>49</b>	<b>BBB-</b>



### Introduction

Diamondback Energy is an independent oil and natural gas company that focuses on unconventional onshore oil and natural gas exploration in the Permian basin.

### ESG Status

While the Energy sector continues to be the most significant contributor to pollutants and methane emissions, Diamondback Energy has taken additional steps to ensure its management scorecard and goals align with their environmental initiatives, placing a 25% weight on ESG metrics for 2023. This includes the reduction of Scope 1 and 2 greenhouse gases (GHG) intensity per barrel of oil equivalent (BOE) produced by 50% by 2024. A reduction of methane intensity by 70% by 2024 and increasing their recycled water usage in operations by 60%+ by 2025. Like many other corporations in the energy industry, Diamondback has taken a "net zero now" initiative. Since January 1<sup>st</sup>, 2021, every hydrocarbon produced in their facilities has been created with a net Scope 1 emission of zero. Diamondback Energy has taken an extra initiative to reduce its environmental impacts. As reported in 2021, they have already reduced their methane intensity by 24%, increased their water recycling rate by 74%, and reduced Scope 1 GHG intensity by 15%.

### The Story Behind the Stock

Diamondback Energy is currently one of the largest operating drilling companies in the Permian basin, with over 77,866 acres (285 sq. miles) of property in West Texas. They continuously seek to obtain property in the basin and have strengthened their competitive advantage by acquiring several companies with exceptional resource potential. Since 2021, they acquired Firebird, QEP, and founded a strategic partnership with Viper Energy Partners. More recently, in 2022, they began their acquisition of Lario Permian, which they are funding primarily through an offering of \$650 million in 6.25% senior notes. In 2022, Diamondback Energy returned ~68% of all free cash flow to shareholders through dividends and share repurchases (chart). In 2023, they expect to return at least 75% of free cash flow to shareholders and continue to pursue share buybacks and high variable dividends. Diamondback Energy follows a divestiture and acquisition growth strategy that strategically places them at an advantage against competitors. As they continue to expand their portfolio of offerings, set the scope for ESG standards, and meet the 75% target of free cash flow return to shareholders, we can expect substantial growth from Diamondback Energy.

## Fundamental Analysis

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### Balance Sheet:

Diamondback Energy has a current ratio of 0.81, which was 15% above the five-year average of 0.75. More importantly, Diamondback Energy has a standalone liquidity of \$1.7 billion and has consolidated their net debt to \$6.3 billion. They are dedicated to decreasing their gross debt (5% in 2022) through divestiture agreements with previous acquisitions, moving divestiture targets to \$1 billion for 2023. This is also apparent in their 2022 debt-to-equity ratio of 42.5%, down from 56% in 2021. Their long-term debt-to-equity ratio decreased from 55.0% to 41.6% in 2022.

### Income Statement:

As Diamondback Energy sales have exponentially grown in the past couple of years following the pandemic, total sales have increased by 29.5% from 2021 to 2022. Diamondback Energy has maintained gross margins between 60% and 65% in the past years, with a benchmark average of only 24.3%. Their recent return on equity was 32.1%, with a return on invested capital of 31.0%. In 2022, Diamondback Energy achieved an EPS (diluted) of \$27.62, a 59.4% increase from 2021 at an EPS of \$12.30. Net income also increased 50.2% from 2021, resulting in a five-year CAGR of 23.1%.

### Free Cash Flows:

In 2022, Diamondback Energy had a reported free cash flow of \$4.4 billion and an FCF yield of 18.2%, resulting in an average FCF per share of \$24.85, a 78% increase in FCF per share from 2021 (chart).

## Valuation

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Diamondback Energy's strategic partnership with Viper Energy and acquisition of Laird, Firebird, and QEP shows they are committed to tactical growth and expansion. Besides the company's strong commitment to shareholders, Diamondback continues to execute ESG initiatives, paving the way for improvement in the company's environmental impact. With this in mind, we used a three-stage dividend discount model to arrive at

an intrinsic value for Diamondback Energy stock. Using Diamondback Energy's high cash flow growth rate of 29.2%, reflecting their significant cash flow generation ability, we found an adjusted short-term growth rate of 17.5%. We estimated a conservative sustainable long-term growth rate of 3%. By discounting at an 11.34% cost of equity, the most likely intrinsic value was \$177.71, adjusted conservatively for expected share repurchases. Our sensitivity analysis estimates Diamondback Energy's stock intrinsic value between \$157.45 and \$223.69.

## Challenges

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Diamondback Energy has taken the necessary steps to deliver sustainable drilling and refinery procedures with less environmental impact. However, political and legal sanctions can continue to cause production costs to rise and drilling to be restricted. The energy demand will not be impacted as Global Energy consumption is expected to increase by 1.3% in 2023, and refinery capacity is dwindling with persistent limitations on pipeline resources. Diamondback Energy could be taking on too much risk with its acquisition growth strategy. They have shown radical growth in the past four quarters, but with more property, equipment, and crude products, we can expect to see an increase in operating costs, impacting cash flow.

## Conclusion & Recommendation

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Diamondback Energy's recent investment into multiple acquisitions in the Midwest region, strengthening of their dividend growth, free cash flow generation, and a strong emphasis on sustainability and ecological initiatives prove that they are ready and capable of becoming a market leader in the energy industry. As the future demand for oil and natural gases continues to increase, so will the value of Diamondback Energy.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Financials

### Introduction

The Financials sector is composed of banks, insurance companies, brokerage firms, lenders, accounting firms, credit card issuers, and fintech companies. Companies within the sector tend to have high market capitalizations and large customer bases. For this reason, as well as their important role in the global economy, these companies are tightly regulated by government agencies. The sector currently represents 11.76% of the S&P 500.

### Growth Opportunities

The sector will face headwinds in the short/medium term but is likely to grow in the longer term as companies lean into strong digital trends. In the short-term, we believe insurance companies will remain resilient as businesses tend to hold their policies through down cycles and will benefit from rising interest rates on available cash. Furthermore, we believe investment advisory firms will continue to realize organic growth in net fund flows as investors establish positions in the U.S. stock market at attractive valuations. In the long term, we believe the U.S. will follow the open banking trend seen in Europe and we will see more partnerships between fintech with cutting edge technology and legacy institutions with large access to data. Fintech will utilize these large pools of data to drive innovation in banking, security, AI, and deliver improved user experience across all financial service companies.

### Challenges

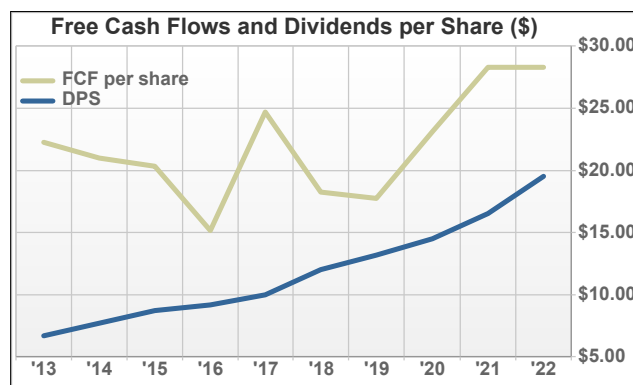
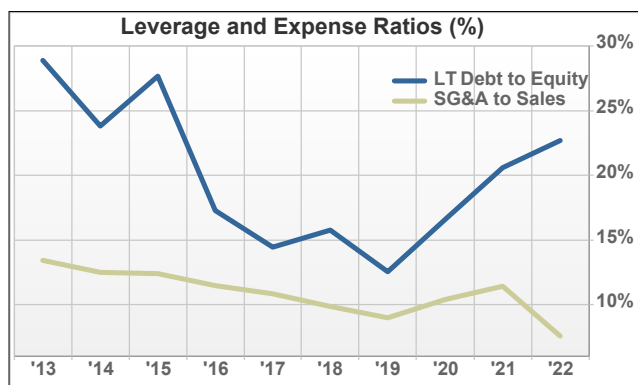
We anticipate that the sector will market-perform in 2023 based on the latest inflation reports indicating a partial reversal of softening trends and forecasts of further interest rate hikes. Furthermore, the risk of deglobalization trends related to geopolitical risks of the Russia-Ukraine conflict and U.S.-China strategic competition. As the Fed continues to pursue quantitative tightening, the economy will likely slow down to very stagnant growth. The revenue growth that banks will realize from higher interest rates will be offset by lower originations, consumer deposits, and the need to set aside capital to combat credit risk. The recent trend towards money market funds away from savings accounts confirm these dynamics. Finally, wage inflation and significant costs related to increased hiring trends over the past two years will reduce profitability.

### Conclusion and Recommendation

Our recommendation is to neutral-weight the Financials sector at 11.7% due to long-term growth forecasts related to innovation in digital and products being offset by lower revenue projections in the short-term from the anticipated rise in interest rates. Our team was able to identify two undervalued companies with strong balance sheets and cash flow potential, which can add stability to the portfolio against the macroeconomic uncertainties.

## BlackRock Inc. (NYSE: BLK)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>HOLD</b>	<b>\$821.46</b>	<b>\$680.56</b>	<b>1.3x</b>	<b>Large Core</b>	<b>2.9%</b>	<b>97</b>	<b>AA-</b>



### Introduction

BlackRock, Inc. was founded in 1988 and is one of the largest investment, advisory, and risk management firms in the world operating from 89 offices in 38 countries.

### ESG Status

BlackRock believes that climate risk is investment risk and ESG metrics should be considered when crafting a long-term strategy for client’s portfolios. They announced their commitment to Investment Stewardship in 2017 which aims to inform, advise, and vote on ESG related issues in companies it invests in. As fiduciaries of their client’s funds, BlackRock votes on company level issues that will serve in the financial interest of the client. BlackRock believes that sound governance and responsible leadership will deliver long-term growth. As of the 2022, BlackRock has a total of 3,886 engagements with companies on ESG related issues since the inception of the program. Furthermore in 2022, BlackRock has taken a step further and empowered individual shareholders by giving them more control over proxy voting and weighing in on specific issues.

### The Story Behind the Stock

BlackRock is the largest asset management firm in the world and manages \$8.6 trillion in client assets. In 2022, the firm realized positive net inflows of \$306 million and 4% organic growth. Historically, both state governments and companies sought out BlackRock’s advisory services in navigating the Financial Crisis of 2008. Furthermore, BlackRock made a series of decisive acquisitions to expand their product offerings and expand their global reach. Notable transactions include the acquisition of Barclay’s Global Investors in 2019, establishing their position as the largest asset manager in the world, and its latest acquisition of eFront to expand their illiquid alternative investment offerings, in line with the current seasonality of the investment vehicle. BlackRock’s flagship risk and investment advisory platform, Aladdin, has evolved as a B2B solution for the industry and has expanded to wealth managers to craft portfolios for its client. Most notably, BlackRock continues to launch new low-cost, tax efficient iShares ETFs which offer clients broad exposure to stock and bond markets. In 2022, BlackRock launched 85 new ETFs globally and realized \$220 billion in net ETF inflows.

## Fundamental Analysis

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### Balance Sheet:

BlackRock's long-term-debt-to-total-equity has been on a downward trend over the past ten years (chart). This suggests that BlackRock is maintaining appropriate levels of equity and is not inviting regulatory scrutiny. Furthermore, having lower leverage reduces interest rate risk in a rising interest rate environment and better positions the firm in the event of a mild recession. BlackRock continues to return capital to shareholders evident of the \$4.9 billion returned in 2022, including \$1.9 billion of share repurchases. Furthermore, BlackRock has steadily hiked its quarterly cash dividend from \$1.50 in 2012 to its latest increase in Q4'22 to \$5.00. This policy to appease its shareholders can be illustrated by the cash dividend coverage ratio which 1.98% in the 2022, greater than its 5-year average of 1.75% and is on track to its 10-year peak of 3.2% in 2019. This metric reassures investors that BlackRock continues to have a robust balance sheet amid uncertain market conditions.

### Income Statement:

BlackRock continues to improve its profitability evident of SG&A to Sales year-over-year decrease over the past decade, with 2012 being 13.4% to the 2022 of 7.1%, except for 2016 and 2020 (chart). This improved profitability can be attributed to stronger sales over the last decade and while SG&A expenses remained relatively constant. Furthermore, BlackRock's sales per share has improved over the last decade from \$53.15 in 2012 to \$115.56 currently. Despite a recent pullback attributed to uncertain market conditions, this positive trend suggests that BlackRock will continue to perform over the long term as market conditions improve.

### Free Cash Flows:

BlackRock's FCF per share has improved over the last decade from \$15.88 in 2012 to \$28.19 currently (chart). This is a positive signal that BlackRock continues to improve financial and operational flexibility in varying market conditions. Furthermore, BlackRock's DPS has improved year-over-year from \$6.00 in 2012 to \$19.52 currently. This indicates that BlackRock is using its excess cash flow to return capital to shareholders.

## Valuation

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BlackRock continues to be an industry leader with its passive ETFs in the US at a market share of 33.6% in 2022. Furthermore, BlackRock continues to stay ahead of technology trends by investing in AI to improve its flagship advisory platform, Aladdin. Finally, BlackRock latest strategic acquisition in an alternative investment's platform has benefited from the seasonality of the products. With these forward-looking decisions in mind, we used a three-stage dividend discount model to arrive at an intrinsic value for BlackRock's stock.

Using a reinvestment rate of 8%, which was justified by BlackRock's lower leverage, we found an adjusted short-term growth of 10%. We estimated a conservative sustainable long-term growth rate of 4%. Using 10.1% cost of equity, we arrived at an intrinsic value of \$821.46, adjusted for expected share repurchases. Our sensitivity analysis estimates BlackRock's stock intrinsic value between \$764.39 and \$868.87. We believe that our estimates are likely conservative, supporting \$821.46 as a fair value for BlackRock.

## Challenges

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In a rising interest rate environment and unfavorable FX movements driven by a stronger dollar, BlackRock has had to be decisive by reducing costs and focusing on high-growth areas. They have offset this risk by having competitive bond ETFs, illiquid alternative investment vehicles, and outsourcing solutions. BlackRock in the past year has faced political risk and has been criticized for its stance on ESG issues. These criticisms have led to state governments to pull billions of dollars from BlackRock.

## Conclusion & Recommendation

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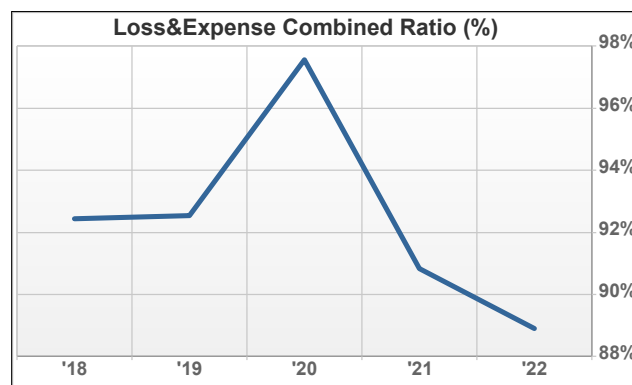
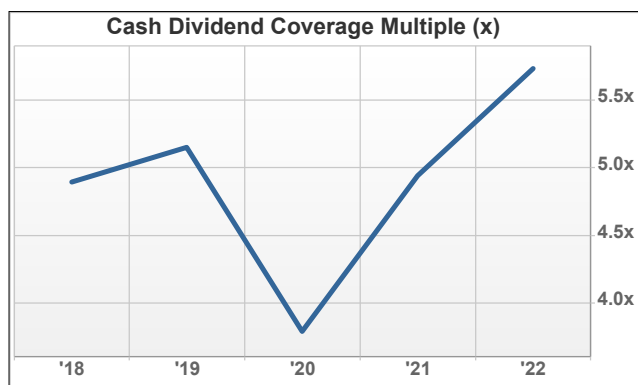
BlackRock is a global leader in risk & advisory services, low-cost and tax-efficient ETFs, and is positioned to benefit from growing technology trends. Despite uncertain market conditions, the firm has a strong balance sheet and continues to return capital to shareholders.

With our intrinsic value, the company is currently undervalued. We recommend a HOLD.



## Chubb Ltd. (NYSE: CB)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$272.41</b>	<b>\$209.50</b>	<b>1.0x</b>	<b>Large Core</b>	<b>1.6%</b>	<b>54</b>	<b>A</b>



### Introduction

Chubb Ltd, is the parent company of Chubb Corporation (Chubb), which was founded in 1882 and is the world’s largest publicly traded property and casualty insurer. Chubb serves a diverse group of clients in 54 countries and territories.

### ESG Status

Chubb has recognized the importance of ESG in the insurance business and has committed to reducing environmental risk for its clients as well as reducing its own environmental impact. This commitment is evident with their implementation of their global Corporate Environmental Program in 2006, which aims to measure, record, and reduce greenhouse gas (GHG) in its own operations. From 2016 to 2019, Chubb reduced absolute global GHG emissions by 22%, and aims to reduce emissions by 40% by 2035.

Chubb has also focused on establishing inclusive communities within the firm. With the introduction of Employee Groups, employees can leverage this network and gain access to mentorship, sponsorship, allyship and a sense of belonging. A few notable groups include IMPACT and Gender Equality Network, Mosaic Black Alliance, Pride, etc. Chubb further supports these initiatives by offering supplemental education, hiring

inclusive leadership, and establishing enterprise-wide initiatives.

### The Story Behind the Stock

In 2015, ACE Limited acquired The Chubb Corporation in a cash and stock deal and combined name assumed the Chubb name. This merger combined the two complementary businesses together and formed the global leader in property and casualty insurance. This positioned Chubb to offer its superior products to its wide range of customers via its comprehensive distribution channels. This merger enhanced Chubb’s earnings power and growth and reduced exposure to property and casualty industry pricing cycle. The firm’s objective is growth and remains committed to underwriting discipline and claims services. As of 2021, the evidence of Chubb commitment to diversifying its portfolio and pursuing data driven growth opportunities by its company growing 12% on a compound annual basis versus the S&P’s 9% over a seventeen-year period.

Currently, Chubb is pursuing opportunities in high growth markets such as Korea through its \$5.36 billion acquisition of Cigna’s accident and health and life business. As well receiving regulatory approval to increase its stake in China’s Huatai from 47.3% to 83.2%

## Fundamental Analysis

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### Balance Sheet:

Chubb's cash & short-term investments to short-term debt increased from 3.4 in 2017 to 5.4 in the current year, indicating a 9.7% CAGR. This proves Chubb's resilience in the context of unexpected losses related to its agricultural insurance segment and unfavorable economic conditions.

Chubb's cash dividend coverage ratio has improved over the last five years from 3.2 in 2017 to 5.7 in the current year, representing a CAGR of 12.3% (chart). This is a positive signal and indicates that Chubb has improved its ability to return cash to its shareholders, and likely responded to this metric by continuing to maintain its dividend growth.

### Income Statement:

Chubb's top line revenue has continued to improve over the past decade. Sales per Share has increased from \$52.41 in 2012 to \$101.82 in the current year, indicating a 6.9% CAGR. This is a positive signal that Chubb has been able to navigate a rising interest environment and losses related to agricultural insurances.

Chubb's loss & expense combined ratio has remained under 100% over the last decade with an average of 91.85%. Furthermore, over the last five years, this ratio has decreased from 96.5% in 2017 to 88.9% in 2022, except for a spike in 2020 (chart). This is a positive signal that Chubb is generating profit related to its underwriting business and is earning more in premiums than it is paying out in claims.

### Free Cash Flows:

Chubb's FCF per share increased over the last decade from \$11.75 in 2012 to \$27.18 in the current year, representing a CAGR of 8.8%. This is a positive signal that Chubb continues to improve financial and operational flexibility in the context of the firm's high growth strategy via acquisitions. Furthermore, Chubb's DPS has increased from \$1.94 in 2012 to \$3.29 in the current year, representing a CAGR of 5.4%. This indicates that Chubb is using its excess cash flow to return capital to shareholders.

## Valuation

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Chubb has continued to improve their risk-adjusted returns despite headwinds in 2022 despite a rising interest rate environment in response to inflation and abnormal losses in business. Furthermore, Chubb has remained committed to its ESG initiatives, hiking its quarterly dividend, and remained offensive by leaning into its international high-growth M&A strategies, such as Cigna and Huatai.

This rationale led us to justify a short-term growth rate of 12.3%. Furthermore, we used a long-term growth rate of 4%, slightly higher than the historic average of US GDP growth. Using the H-Model and assuming a cost of equity of 7.87%, the stock is intrinsically valued at \$272.41. Drawing on our sensitivity analysis, the intrinsic value of the stock is between \$200.82 and \$280.13. Even though our sensitivity analysis reveals Chubb to be a highly undervalued stock, we believe our most likely estimates are conservative, supporting \$272.41 as a reasonable intrinsic value for Chubb Corporation.

## Challenges

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As Chubb continues to pursue its high growth strategies, it may face regulatory pushback, evident by China's resistance to its increased stake in Huatai. Furthermore, in the past year, Chubb has been subject to abnormal risk factors out of its control such as the bottom-line impact due to the below-average crop year. Despite this challenge, Chubb has remained resilient and leaned into high-growth strategies to stabilize its bottom line. Finally, Chubb will likely yield stronger returns as agricultural yields return to normal.

## Conclusion & Recommendation

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Chubb's ability to pursue high-growth opportunities to boost its property and casualty business and maintain risk adjusted returns in the face of negative external events such as lower agricultural yields is a sign that in the future the price will rise to fair value.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Healthcare

### Introduction

The Healthcare sector encompasses companies engaged in the manufacturing, research, and distribution of medical products, services, and equipment. The sector is divided into two distinct industry groups: Healthcare Equipment & Services, and Pharmaceuticals, Biotechnology & Services. As of March 1<sup>st</sup>, the sector constitutes 14.39% of S&P 500. The United States is the highest spending country worldwide when it comes to healthcare, according to Statista, total healthcare expenditure in the U.S exceeded four trillion dollars and it is projected that healthcare as a percentage of GDP will grow to 20% by the year 2028.

### Opportunities

The Healthcare sector is often considered a defensive sector of the economy due to its inelasticity, resulting in steady demand despite overall deteriorating economic fundamentals. During economic downturns, healthcare stocks have consistently outperformed the overall market. The sector has evolved over the past 20 years from obtaining almost 80% of the sector revenue from pharmaceuticals alone to having a near equal share of total revenue across all its subsectors; Pharmaceuticals, Biotechnology, Medical Devices, Services, Technology, and Life Science Tools and Services. The sector is currently positioned to reap the benefits of both near-term and long-term growth catalysts. Federal funding for Medicare and Medicaid, the second largest source of revenue for the sector, is anticipated to rise rapidly at an annualized 6.7% until 2027. The Healthcare sector is expected to receive steady funding due to the combination of increased federal funding, the aging baby boomer generation, and increased life expectancy. This trend is expected to continue as total health expenditures continue to rise. Furthermore, consolidation within the sector has led to increased benefits, prompting significant players to emphasize mergers and acquisitions (M&A) activity. Although such activity was mostly subdued during 2022, it may make a comeback as firms are currently holding near-record-high levels of cash on their balance sheets.

### Challenges

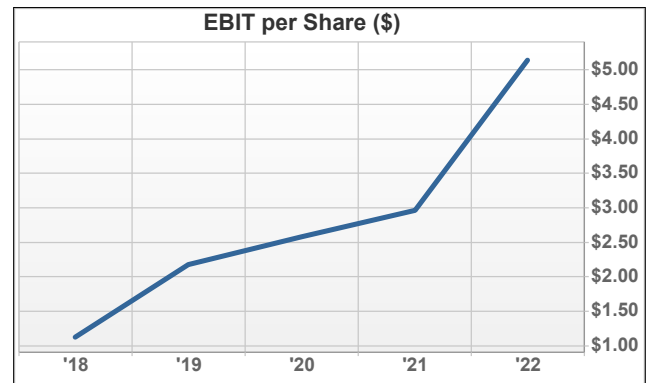
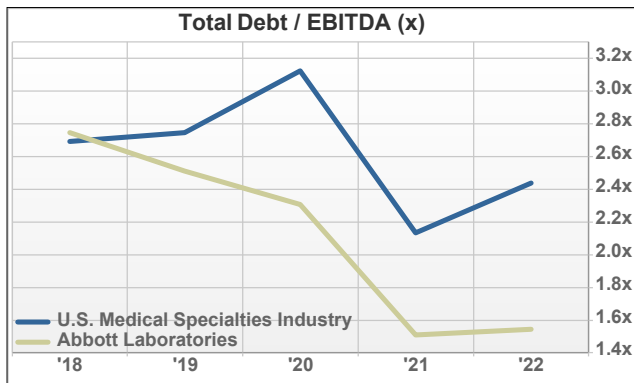
In 2023, the sector must navigate the challenges caused by labor shortages and increased inflation. According to Deloitte, there is a talent emergency of burnout, staff shortages, and turnover epidemic combined with growing concerns over employee safety. There are about 3.1 million registered nurses in the US, and the Bureau of Labor Statistics estimates that about 1.2 million new nurses will be needed by 2030. Increased inflation is also a growing concern for the sector. The recently passed Inflation Reduction Act (IRA) is set to combat rising inflation, climate change and supporting workers. This act will force leaders in the sector to maneuver already evident concerns around high prices. While it may not directly affect top line revenue, it will continue to impose downward pressure on margins.

### Conclusion and Recommendation

Considering the positive fundamentals of the Healthcare sector, along with its defensive and opportunistic capabilities, the Crummer Investment Management Team has decided to overweight this sector in the portfolio. The team recommends increasing Healthcare allocation to 16.2% of the equity portion. This decision reinforces the current trend of a “flight-to-quality” across investment opportunities and is seen as necessary to boost allocation during times of economic uncertainty.

## Abbott Laboratories (NYSE: ABT)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$125.79</b>	<b>\$100.83</b>	<b>1.2x</b>	<b>Large Core</b>	<b>2.0%</b>	<b>86</b>	<b>AA-</b>



### Introduction

Abbott Laboratories is a global healthcare company that focuses on the development, manufacturing, and distribution of an extensive variety of healthcare products, including medical devices, diagnostics, and nutritional's. The company operates in over 160 countries worldwide and is headquartered in North Chicago, Illinois, United States.

### ESG Status

Abbott Laboratories has established a sustainability plan with a target date of 2030. The plan is focused on designing access and affordability into their life-changing technology and products. Additional efforts include supporting global efforts to address noncommunicable diseases, expanding affordable access to healthcare for underserved, diverse and at-risk communities by delivering innovative, decentralized models of care. Abbott plans to prioritize diversity and inclusion, advancing STEM education and internships. Lastly, Abbott promised to reduce absolute Scope 1 and 2 carbon emissions by 30% from 2018 baseline by the end of 2030. Most recently, such initiatives are noticeable in their "What does STEM Look Like?" book release, aimed at introducing young girls to the field of STEM. In 2021, Abbott made significant efforts to mitigate their

environmental impact by purchasing 190M kWh of low-carbon energy, introduced 8 additional "Zero Waste-to-Landfill" sites, for a total of 46, launched 16 sites in water stressed areas to implement water stewardship management practices. Abbott's people impact was also substantial, improving 2.2 billion lives through its products and services. Overall, Abbott Laboratories is making conscious steps towards sustainable operations.

### The Story Behind the Stock

Abbott Laboratories is a global enterprise with a well-diversified foundation of businesses within the healthcare sector. The company's four business segments, all roughly of equal size, are nutrition (#1 brand in adult nutrition and hospital provided brand), diagnostics (#1 in point-of-care testing, infectious disease testing and blood and plasma serology screening), medical devices (#1 in remote heart-failure monitoring, transcatheter mitral-valve repair, heart pumps (LVADs) and Stents) and pharmaceuticals (#1 in pancreatic enzyme deficiency). Abbott has one of the largest global reaches among the healthcare companies with 70% of revenue generated in markets outside of the United States and 50% of revenue generated in faster-growing geographies where healthcare spending outpaces the country's GDP growth. Abbott has a robust foundation in multiple verticals within healthcare.

## Fundamental Analysis

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### Balance Sheet:

Abbott Laboratories has accumulated over \$74 billion in total assets, including a large cash balance of over \$10 billion, resulting in a Cash & Short-Term Investment/Current Assets ratio of 34.4%. The company has managed to secure a sound balance sheet despite its very active M&A activity, most visible in Abbott's acquisition of St. Jude Medical in 2017 for \$25 billion. Abbott's balance sheet achieves a low Net Debt/EBITDA multiple of 1.3x compared to the 3.6x of its competitors (chart). Also, a healthy five-year average capital leverage ratio (LT debt/Total Capital) of about 34% compared to the average of its peers of about a 42%.

### Income Statement:

Abbott has shown to increase their productivity by diminishing their SGA/Sales ratio by about 9% since 2017 to 32%. It has achieved a ROE of almost 20% in FY '22 and resulting in a five-year average of 14.6%. The firm has more than doubled its revenue and quadrupled its operating income over the last decade (chart), showcasing rapid growth, market share, and increasing operational efficiency.

### Free Cash Flows:

Abbott Laboratories generated almost \$18 billion in free cash flow and has achieved a return on invested capital of 11.7% over the past five years outpacing the industry average of 7.6% within the same period. The firm is known as a dividend distribution veteran, distributing 397 consecutive quarterly dividends since 1924 and has increased the dividend payout for 50 consecutive years, currently distributing a 2.0% dividend yield. Most recently, the company spent roughly \$1.5 billion on repurchasing shares in 2020 and 2021.

## Valuation

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Abbott Laboratories wide business diversification, improving efficiency, robust R&D pipeline of medical devices and attractive dividend yield and history all suggest a positive company outlook.

Using a bottom-up approach, we estimated Abbott's robust five-year average reinvestment rate of 7.9%

coupled with an additional 2% increase to account for increasing operational efficiencies and FDA-approved product pipeline for a total of 9.9% as the company's short-term growth rate. In line with the U.S long-term economic growth, we used a long-term growth-rate of 4% due to the favorable outlook of the medical device industry. Abbott has established itself as one of the business leaders driving innovation and market share within the medical device industry.

The company has had a steady share repurchase program, with 36% of the investor compensation coming from share repurchases over the past five years. Based on a three-stage dividend discount model, our sensitivity analysis estimates Abbott's intrinsic value between \$107.36 and \$131.23 with varying costs of equity and short-term growth rates for the company.

## Challenges

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Abbott is vulnerable to the innovation of its competitors achieving higher market share within the nutritional & medical device industry, although Abbott's mitigant to this threat is its own robust pipeline of regulatory and FDA approval on its substances and devices. Additionally, Abbott is exposed to product recall risk and has recently been involved in a baby formula recall that stemmed from a few Cronobacter poisoning cases, all of which could harm the image and credibility of the firm. The company spokesperson mentioned the firm is "cooperating fully" with the Justice Department's investigation and has previously denied any relationship between its products and the negative outcomes of the baby formula.

## Conclusion & Recommendation

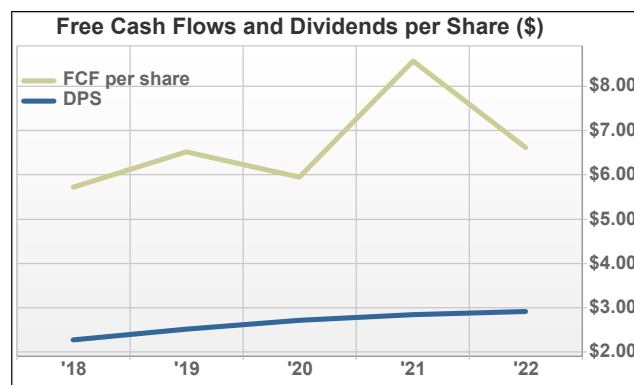
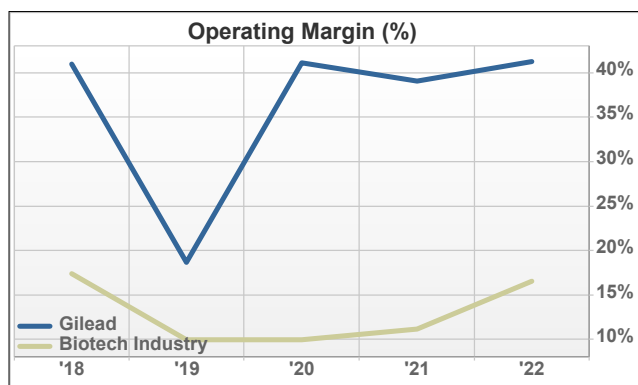
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Abbott Laboratories is a well-diversified firm with a sound balance sheet and robust business segments. The firm has displayed a strong ability to generate ongoing free cash flows, longstanding operational expertise and a leadership that prioritizes its shareholders. We believe there is unrealized potential in Abbott's stock.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Gilead Sciences, Inc. (NASDAQ: GILD)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>HOLD</b>	<b>\$114.29</b>	<b>\$79.59</b>	<b>1.6x</b>	<b>Large Value</b>	<b>3.8%</b>	<b>44</b>	<b>BBB+</b>



### Introduction

Gilead Sciences, Inc. is one of the largest biopharmaceutical companies in the world. It is headquartered in Foster City, CA and was founded in 1987. Gilead focuses on the research, development, and commercialization of life-threatening diseases.

### ESG Status

Gilead announced a Science Based Target goal to reduce absolute scope 1 and 3 (GHG greenhouse gas emissions 46% by 2030 from a 2019, also reducing scope 3 greenhouse gases by 15% over the same time horizon. Gilead has vocalized and proven their efforts to socially and environmentally responsible production of medicines that improve the global welfare by implementing sustainable plans around their green chemistry (reducing chemical waste), supply chain (joined Pharmaceutical Supply chain Initiative (PSCI) in 2018), and manufacturing and Distribution (by 2018, Gilead reduced annual ground freight mileage by 59% by consolidating product shipments). Most recently, Gilead and The World Health Organization (WHO) signed an agreement for a three-year collaboration (2023-2025), estimated at \$11.3 million, will help support coverage, diagnosis and treatment for communities affected by visceral leishmaniasis and also include a donation of

304,700 vials of AmBisome, for the treatment of the disease. Gilead Sciences has made remarkable progress and proven to their shareholders, clients, and overall population that they are the ethical operator that they have pledged to be throughout time, with additional important pledges to honor.

### The Story Behind the Stock

Gilead focuses on researching and developing antiviral drugs used in the treatment of HIV/AIDS, hepatitis band, among other life-threatening diseases. Gilead developed a drug called Sovaldi which cured Hepatitis C in most patients, making it one of the best-selling drugs in the world. It has been a long-standing pioneer within their respective research and drug development, but most recently caught additional traction and coverage from their famous antiviral product for COVID-19, Velkury. Gilead's robust HIV business alone cements the company as one of the industry leaders, when including the other successful lines such as their Cell Therapy, and pulmonary and cardiovascular diseases, and no near-term patent expiration, Gilead is a company with a large upside. The company also experiences growth through their engagement with the M&A markets and finding opportunities to further expand their already diverse pipeline of industry leading drugs and research.

## Fundamental Analysis

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### Balance Sheet:

Gilead has managed to maintain a healthy balance sheet despite consistent leveraged acquisitions of companies. During the third quarter of 2022, Gilead achieved a total net debt value of \$14.6 billion. The company has historically raised debt to fund their larger acquisitions as well as funding their share repurchases. Net debt to EBITDA ratio of 1.5 times is not a great concern, especially when the larger portion of their debt matures after 2025.

### Income Statement:

Gilead operates as one of the higher margin companies when compared to their competition, achieving a five-year average operating margin of over 36%, compared to the industry five-year average of 13% (chart). They have also experienced CAGR in sales and EBITDA of 12.5% and 14.4% respectively over the past decade. Gilead has outpaced many of the profitability metrics within its industry, achieving a five-year average of 9.3% return on invested capital, compared to the industry average of 2.5%. The company most recently beat Wall Street expectations on COVID and HIV product sales during the fourth quarter of 2022, doubling the estimates.

### Free Cash Flows:

Gilead Sciences, Inc has a long-standing healthy dividend to its investors, well above the industry average, combined with sporadic share repurchases that increase overall returns. Currently distributing a 3.8% dividend yield. The company has been able to achieve 11.9% CAGR on Free Cashflow over the past decade (chart).

## Valuation

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Gilead's successful acquisitions of credible companies, product diversification, emphasis on ESG commitments and a history of healthy financial and operating statements all yield a positive company outlook. The valuation methodology consisted of a two-stage dividend discount model to arrive at an intrinsic valuation of the company's stock.

Using a bottom-up approach, we estimated Gilead's robust sustainable growth rate of 7.7% as the company's

short-term growth rate. In line with the U.S long-term economic growth, we used a conservative long-term growth rate of 3.5% due to the high growth outlook of the biotechnology industry and Gilead's already established competitive advantage and market share.

The company currently has a share repurchase plan in place to offset dilution, combined with a stable dividend payout policy. Based on a two-stage dividend discount model, our sensitivity analysis estimate's Gilead's intrinsic value between \$110.81 and \$130.83 with varying costs of equity and short-term growth rates for the company.

## Challenges

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Gilead's intrinsic valuation considers the possible risks associated with ESG ratings stemming from the drug pricing concerns (accessibility). The HIV drug space is a growing highly competitive space that puts Gilead's pricing power and overall market share within the space at risk. This puts pressure on Gilead's innovation by requiring continued safety and efficiency on the drugs to sustain and continue to grow market share. A large share of Gilead's sales come from the US, which poses an over-exposure risk, given that the medical landscape in the country is highly dependent on its everchanging political policy implementations. The ability to push products through the FDA approval pipeline is a challenge all companies within this industry face. Gilead's product diversification is an upside, venturing into new verticals will allow the company to increase market share in distinct market shares, ultimately diversifying their revenue streams and mitigate drug pricing concerns.

## Conclusion & Recommendation

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Gilead Sciences is a company with a strong balance sheet and remarkable ability to generate cash flows paired with a robust portfolio of market leading drugs within the pharmaceutical industry and cemented status among its peers. We believe there is unrealized potential in Gilead's stock.

With our intrinsic value, the company is currently undervalued. We recommend a HOLD.

## Industrials

### Introduction

The Industrials sector accounted for approximately 21% of the U.S. GDP in 2020 and is represented by 70 firms in S&P 500. The sector encompasses a diverse range of companies, including those involved in manufacturing, construction, aerospace & defense, transportation, commercial services, and engineering & infrastructure. Industrials is often considered a “secondary sector,” as the products and services it provides are intended for other businesses rather than individual consumers.

### Growth Opportunities

Governments and investors are demanding that the Industrials sector shift toward more sustainable practices, while maintaining cost competitiveness. This transition, based on the tenets of ESG, presents a significant opportunity for firms to revitalize operations. Many firms within the sector will reap the rewards of various federal and state government programs that incentivize these practices, as well as financial support of investors who seek ESG-focused companies. This sector has also witnessed substantial investment into emerging technologies, such as artificial intelligence and advanced robotics. These technologies improve efficiency, produce higher-quality products, increase safety, mitigate risk, and accelerate innovation. The World Health Organization estimates that by 2030, 1 in 6 people in the world will be 60 years-of-age or older, and the 80+ group is expected to triple from 2020 to 2050. Given such trends, we can expect growing demand for medical devices, diagnostic equipment, and pharmaceuticals, which will create significant opportunity for companies within Industrials that sell to companies manufacturing these products. It is also worth noting that China is a major component to the Industrials sector, considering its abundance of natural resources and manufacturing capacity. In the wake of its reopening, a resurgent China in could lead to strong Industrials sector performance moving forward.

### Challenges

If the U.S. economy were to experience stagnation or recession over the next year, the Industrials sector would suffer setbacks. However, these effects would only be short-term and less significant compared to other sectors, as many Industrials firms possess experienced management teams, as well as product catalogs laced with non-discretionary items. The last few years have demonstrated the fragility of our global supply chain networks, with inflated prices among various commodities and materials. Given the abundance of resources and materials demanded by Industrials, companies are vulnerable to global supply chain disruptions. Moreover, given the proximity to the most recent supply chain crisis, another major disruption is unlikely soon. It should be noted that there is a shrinking pool of skilled labor throughout the Industrials sector, as many Baby Boomers have reached retirement age. Such a labor shortage can have significant implications, not the least of which are decreased productivity, increased labor costs, and reduced innovation. That being said, companies will continue to utilize automation to reduce their reliance on labor moving forward.

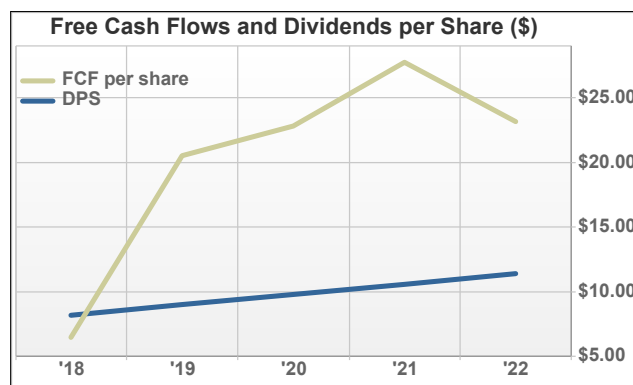
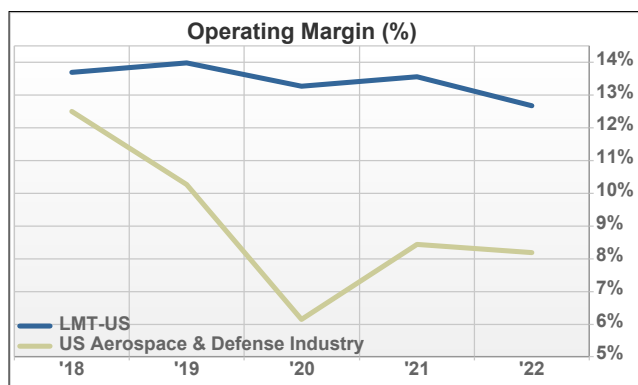
### Conclusion and Recommendation

The Industrials sector tends to exhibit greater resilience during economic downturns compared to other sectors due to its critical role in the functioning of the economy. Industrials provide essential infrastructure and equipment required by other sectors to operate efficiently. Consequently, while certain industries may curtail their investments during a downturn, others may find it necessary to increase investments in infrastructure and equipment to maintain competitiveness. As a result, we recommend overweighting the Industrials sectors at 9.5% relative to the benchmark weight of 8.58%.



## Lockheed Martin Corp. (NYSE: LMT)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$530.97</b>	<b>\$474.33</b>	<b>1.1x</b>	<b>Large Core</b>	<b>2.5%</b>	<b>64</b>	<b>A-</b>



### Introduction

Lockheed Martin was the product of a merger in March 1995. Since then, Lockheed has become one of the world’s premier aerospace, arms, and information security developers operating in over 60 countries.

### ESG Status

In recent years, Lockheed has overhauled its efforts to become a more environment-friendly enterprise by implementing a myriad of policies directed toward sustainability, highlighted by its 2025 Sustainability Management Plan (SMP). The SMP’s four main tenants include modeling business integrity, advancing resource stewardship, fostering workplace resiliency, and elevating digital responsibility. Since adopting “Go Green”—an internal initiative directed towards environmentally conscious operations—Lockheed has reduced carbon emissions by 53%, energy consumption by 19%, and waste-to-landfill by 49%. These efforts culminated in Lockheed sporting an exemplarily relative FTSE ESG rating of 64, which is high among its competitors in aerospace and defense (A&D), as well as the Industrials Sector at large.

### The Story Behind the Stock

The A&D sector is one of the most difficult to penetrate given pre-existing relationships between government and established firms, limited labor force, and lengthy approval processes. In fact, only five companies drive more than 70% of A&D revenues. However, Lockheed has managed to stand out among the leaders by being responsible for over 18% of all industry revenues—the highest share within the sector.

A significant event occurred in 2016 when Lockheed freed up capital by purging its Information Systems & Global Solutions unit. In the interim, it invested in the development of hypersonics and ultra-high temperature ceramic matrix composites (CMC’s)—both of which continue to experience increased demand. By decreasing the overall diversity of its product portfolio, Lockheed reaffirmed itself as the industry leader, focused on products of the future.

Companies in the A&D space rely heavily on the U.S. government for revenues. While over-dependence on a single customer may be a weakness to many firms, this is not the case in A&D. There is no customer like the U.S. government, which leads the world in terms of defense spending. Of course, this relationship goes both ways. As the U.S. has become dependent on the success

of these companies to ensure that it can uphold its national security infrastructure, A&D is provided a reliable revenue stream. Not surprisingly, and bolstering Lockheed's bottom-line, U.S. defense spending is projected to increase over the next decade. In 2020, Lockheed was responsible for over 16% of all U.S. spending to defense contractors—more than 3x greater than the next largest contractor. Lockheed is also the leader, with over \$40 billion of guaranteed obligations from the Department of Defense.

## Fundamental Analysis

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### Balance Sheet:

Lockheed's cash flow continues to be hindered by the COVID-19 pandemic, with a 29.3% decrease in cash and short-term investments from 2021. It also increased its long-term debt by 28% in 2022, while increasing total debt by \$3.7 billion. This increase coincided with a minor increase of Lockheed's debt-to-asset ratio from 27.3% to 31.5% from 2021–2022.

### Income Statement:

Lockheed suffered minor decreases across its income statement, but numbers remain well above where they were a decade ago, while it maintained a ten-year revenue CAGR of 3.4% from 2012–2022. The company experienced a 55.3% increase in its gross margin alongside a ten-year net income CAGR of 7.6%, despite seeing an overall 30.8% growth in COGS over the same period. We believe these trends are due to Lockheed's consolidation of operations and separation from its Information Systems & Global Solutions unit in 2016.

Over the last ten years, Lockheed's gross margin has hovered between 10% and 16%, while its net margin reached a four-year low of 8.7% in 2022, when it reached an EPS (diluted) of \$21.66, which is a 159% increase from 2012.

### Free Cash Flows:

Lockheed's dividends have grown 52.8% over the last five years with an average dividend payout ratio of 52.6%, along with a robust indicated annual dividend of \$12/share. Lockheed has maintained a five-year dividend CAGR of 8.9% and a ten-year dividend CAGR of 10.6%. It has also engaged in various share

repurchase programs since 2012, with a repurchase of \$10 billion in common stock planned over the next three years. Increased dividends combined with stock repurchase strategies, during a volatile market period, is indicative of excellent management.

## Valuation

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Five factors set Lockheed apart from its competitors: (1) Innovation in the sector; (2) An actionable sustainable enterprise plan; (3) Financial backing of the U.S. DoD; (4) Strong YoY dividend growth; and (5) Regular share repurchasing programs. Accordingly, we utilized a three-stage dividend discount model to arrive at an intrinsic value for Lockheed Martin's stock.

Using a bottom-up approach, we were able to calculate a short-term growth rate of 19%. We estimate a conservative sustainable long-term growth rate of 3.5%. After accounting for share repurchases, we arrived at an intrinsic value range of \$515.61–\$564.98, giving our valuation a minimum upside of 8.7% and a maximum upside of 19.2%.

## Challenges

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Lockheed's market value is tied to political and economic stability across the globe. Events such as global recessions and supply chain disruptions can be damaging to the company's bottom-line. At the same time, aggressive actors such as Russia, China, North Korea, Iran & others can spike revenues. So, Lockheed must always consider how its controversial product-line is viewed by the public. If its weapons of war were being utilized by a rogue state it could negatively impact Lockheed's market valuation.

## Conclusion & Recommendation

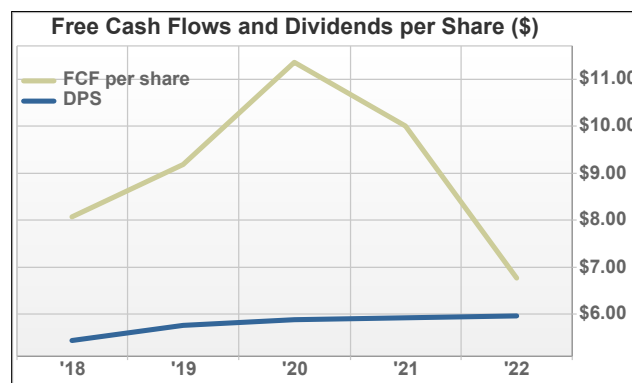
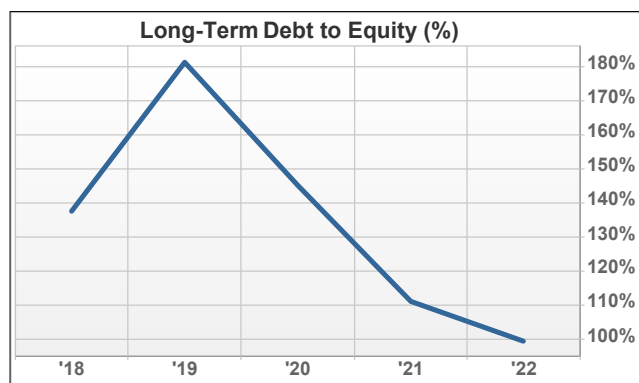
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Lockheed has developed a reputation as one of the A&D's most reliable companies. Alongside its catalog of saleable products and strong financials, it has also committed to various ESG initiatives. These factors position Lockheed's stock price for future growth.

With our intrinsic value, Lockheed Martin is currently undervalued. We recommend BUY.

### 3M Company (NYSE: MMM)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$139.99</b>	<b>\$110.21</b>	<b>0.5x</b>	<b>Large Value</b>	<b>5.4%</b>	<b>91</b>	<b>A</b>



#### Introduction

Founded in 1902, 3M is a leading manufacturer for a broad range of products from building materials and adhesives to medical and home cleaning supplies. The 3M Catalog is comprised of over 60,000 products, and the company operates in more than 70 nations.

#### ESG Status

Since 2002, 3M has reduced its absolute Scope 1 and Scope 2 Greenhouse Gas emissions by 72% and is approaching its goal of 50% renewable electricity at all global sites by 2025. The company has also laid out eight separate ESG-related objectives over the next decade. Goals include doubling the representation of African American and Hispanic/Latino employees in the U.S. and maintaining or achieving 100% pay equity globally. The company also has plans to invest \$1 billion over the next 20 years to accelerate air and water stewardship, and to implement new goals to reduce the company’s use of plastics. Due to these initiatives, 3M boasts an exceptional FTSE ESG rating of 91—among the highest scores in the Industrials Sector.

#### The Story Behind the Stock

In recent decades, 3M developed one of the largest and most diverse catalogs in its sector. A sizable portion of

the catalog features medical supplies, but cleaning supplies, automotive hardware, and construction tools are in the mix as well. Such product diversity allows the company to tap into a wide range of markets and industries, which reduces the risk of dependence on any one product or market and helps maintain a stable revenue stream even if certain products experience market fluctuation. The broad portfolio allows 3M to act as a one-stop shop for its customers, who benefit from convenience, efficiency, and economies-of-scale.

However, while catalog size and diversity is one aspect of the overall operation, content and quality of the product lines are equally important. In the last decade, 3M has made a concentrated effort to move towards non-discretionary products, which are essential for everyday life. These products are typically used in industries that are less affected by economic downturns. Accordingly, 3M’s revenue stream has become more predictable and less vulnerable to economic fluctuation.

3M also promotes a strong culture of innovation that has allowed it to stay ahead of its competitors and maintain a competitive edge in many of its markets. Observers attribute this to 3M’s “15% Culture,” which encourages employees to dedicate 15% of their time each day towards proactively cultivating and pursuing innovative ideas. 3M also managed to align its innovative

culture with ESG initiatives by focusing its R&D department on sustainability to help attract socially responsible investors and customers.

## Fundamental Analysis

### Balance Sheet:

3M's balance sheet continues to reflect the consequences of the pandemic, with cash and short term-investments down 18.3% from 2021. However, since 2021, 3M has decreased its long-term debt by 12.5%, and decreased its total liabilities by 0.8% (chart). Long-term investments increased 222.11% from 2021 and 3M's debt-to-asset ratio saw a marginal decrease from 38.9% to 36.3% from 2021–2022.

### Income Statement:

3M experienced 14.5% growth in annual revenues from 2012-2022, along with a ten-year revenue CAGR of 1.4%. After remaining stable in the years leading up to the pandemic, 3M's COGS saw an increase of 14.5% since the start of 2020 due to rising costs for supplies driven by the supply chain crisis.

There was an 8% dip in its gross margin from 2012-2022, amounting to a -0.8% ten-year revenue CAGR. In 2022, 3M achieved an EPS (diluted) of \$10.18—a 61% increase from 2012.

### Free Cash Flows:

3M reports a five-year dividend growth of 22.2%, with an average dividend payout ratio of 58.6%, and a strong indicated annual dividend of \$6/share. Additionally, 3M delivered a ten-year dividend CAGR of 9.7% (chart). The company has a strong record of share repurchasing programs, but there seem to be no such programs scheduled in the near future.

## Valuation

These factors set 3M apart from its competitors: (1) Large and diverse product catalog; (2) Non-discretionary products; (3) Powerful innovation culture; and (4) Strong YOY revenue and dividend growth. Accordingly, we

utilized a three-stage dividend discount model to arrive at an intrinsic value for 3M's stock.

Using a bottom-up approach based on return on invested capital, we estimate a short-term growth rate of 7.14%. We forecast a conservative sustainable long-term growth rate of 3.5% by using the long-term nominal GDP annual growth rate in the U.S. We arrived at an intrinsic value range of 3M's stock to be \$133.37–\$150.41, giving our valuation a minimum upside of 21% and a maximum upside of 36%.

## Challenges

Possessing a vast and diverse portfolio can leave 3M vulnerable to supply chain challenges that can jeopardize distribution of many of its products. However, as we've seen throughout the last decade, 3M's movement toward greater numbers of non-discretionary products should insulate the company from substantive losses.

As a major producer of chemicals, and other industrial products, 3M will have to deal with a changing regulatory environment as governments aim to restrict the production of hazardous or environmentally unsafe goods. It is worth noting that some of 3M's chemical products have been controversial. For instance, 3M's production of polyfluoroalkyl substances (PFAS)—which have contaminated water supplies across the world—has negatively impacted 3M's market value.

## Conclusion & Recommendation

3M developed a reputation for innovation within the Industrials Sector and boasts one of the market's most impressive product catalogs. Efforts made by the company toward more sustainable manufacturing and distribution, combined with increased R&D into non-discretionary products, should insulate the company from an economic downturn and make 3M an attractive investment.

With our intrinsic value, the company is currently undervalued. We recommend a BUY.

## Information Technology

### Introduction

The Information Technology (IT) sector is comprised of companies primarily in the business of building or optimizing systems used for storing, retrieving, and sending information. More granularly, this boils down to those who manufacture or manage physical devices that facilitate information transfer and storage, or software-focused companies that build or manage programs that transform information. As of March 1<sup>st</sup>, 2023, the IT sector makes up 27.2% of the S&P 500. Through the fallout of the pandemic, we have seen this sector outperform up until the inception of the new bear market, in which we have seen IT underperform the market substantially.

### Major Trends

The Information Technology sector has been in vogue over the past decade. This sector has been a global driver of growth. In the U.S., we have seen Apple and Microsoft provide a return of 826% over the past decade versus only 117% for the S&P 500. These two companies alone make up 12.6% of the S&P 500 weighting, indicating that a significant amount of recent market returns stem from the two largest companies within this sector.

Despite outperforming the broad market by a wide margin over the past decade, these stocks have recently been under pressure due to rising interest rates. High interest rates increase the cost of capital for these companies substantially while simultaneously cutting the equity multiplier in the process. A higher cost of new debt issuance lowers the number of projects that are NPV positive, limiting growth opportunities. Furthermore, all future cashflows are discounted at rates roughly 5% higher than the lows of the past decade, leading to a decline in the fair value of equity. To combat these effects, CEOs are looking to cut costs to improve profitability through this changing environment. As of the beginning of March, the sector accounts for over 7.7 million jobs in the United States. This year, however, has seen over 124,000 layoffs in this sector alone. CEOs are citing drags on profitability through rising costs of input goods, employee wage inflation, and costs of floating rate debt rising.

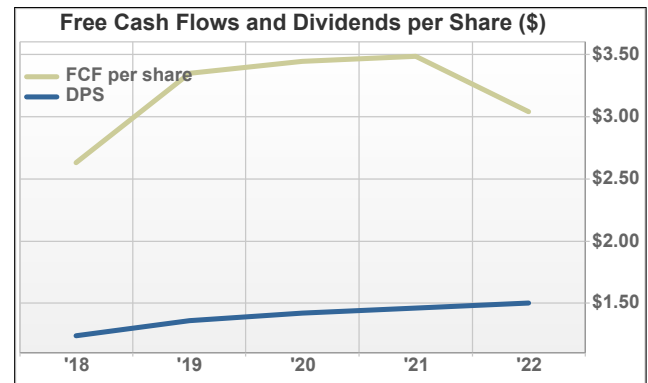
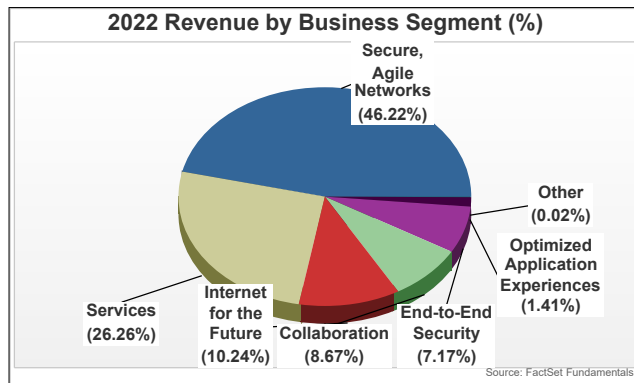
There are also reasons to be excited about the future of this sector. Recent developments in artificial intelligence (AI) have given investors a new hope for growth. AI mentions in earnings calls are up 77% year over year. The distribution of companies looking to AI for growth is widespread, ranging from banks to drug manufacturers. AI is promising future increases in productivity and problem solving. Furthermore, cloud computing and cybersecurity is becoming more and more valuable as businesses are hinging on the cloud to help manage data. Cybersecurity follows this trend as digital warfare is becoming more and more common as businesses and governments continue to store sensitive information on local and cloud networks. While these are reasons to be excited about future growth, these factors are years away from causing a material difference in the sector.

### Conclusion and Recommendation

Rising interest rates, wages, and input costs for companies in the information technology sector are sizeable headwinds to short term growth and valuations. Despite the recent surge in AI technology, we anticipate the macroeconomic trends to overshadow all other growth developments in the sector. Therefore, we recommend underweighting the Information Technology sector with a weighting of 25%.

## Cisco Systems, Inc. (NASDAQ: CSCO)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>HOLD</b>	<b>\$57.08</b>	<b>\$48.34</b>	<b>0.7x</b>	<b>Large Value</b>	<b>3.2%</b>	<b>87</b>	<b>AA-</b>



### Introduction

Cisco Systems, Inc. was founded in 1984 and is one of the largest networking hardware, software, and telecommunication providers in the world operating in over 115 countries.

### ESG Status

Cisco has devoted itself to being a socially responsible enterprise. In terms of social justice, they have increased African American representation in their workforce to 60% since 2020. For communities, Cisco has contributed over 494 million to community programs through the Cisco Foundation. Also, Cisco takes a global view of ESG by financially supporting global crisis responses and distributing internet access to developing nations. In terms of the environment, Cisco has set a goal of net zero by 2040. Currently, 89% of the energy used for Cisco operations is directly attributable to renewable energy. Cisco has pledged that it will continue to be an employer at the cutting edge of environmental and social programs and innovations. As for governance, Cisco prioritizes garnering insight from all stakeholders and prioritizes catering to their needs through operations. Lastly, each major decision is predicated on ESG materiality analysis to mitigate unforeseen consequences.

### The Story Behind the Stock

Cisco remains an attractive investment as it is not only the leader in office connectivity and technological operations, but also a fast-growing, multifaceted software as a service (SaaS) company. Strategically, Cisco prioritizes enterprise technology and optimizations in a world that is ever moving towards a multiconnected future, regardless of location of workers. Cisco also provides network security products and services which is proving ever important as cybersecurity is coming at the forefront of national and enterprise risk mitigation tactics. As the world becomes increasingly digitized, Cisco is doing an excellent job of being pervasive in each level of enterprise technology. Previously, Cisco was known to provide hardware solutions for networks. Present day, Cisco is providing solutions that span beyond hardware, into data management, automating business processes, monitoring enterprise devices, and even computing data for the client (chart). As technology continues to improve and becomes more integrated to every level of business, we see Cisco being seen as not only a tech provider, but also a partner for businesses across the globe.

## Fundamental Analysis

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### Balance Sheet:

Cisco's balance sheet tells a story of a company poised to grow long term. In 2018, long-term investments and tangibles were less than 90% of cash and short-term investments, while the same ratio exceeded 250% in 2022. This balance sheet shift echoes management's vision statement of building the internet of the future. Within the same period, Cisco was able to downsize its total assets from 108.8 billion to 94 billion to run a more efficient operation as sales grew by 5%. While shifting the balance sheet towards growth, Cisco has remained liquid and solvent. In terms of liquidity, Cisco has a 1.34 quick ratio, indicating an ability to pay short-term creditors. Cisco has a long-term debt to equity ratio of 0.7, pointing to a conservative use of leverage.

### Income Statement:

Within the last five years, Cisco has derived most of the revenue growth from secure and agile networks in lieu of some antiquated offerings such as 'switching'. Today, we see considerable amounts of revenue coming from the future of enterprise technology. Although hybrid work revenues peaked during COVID, we see increases in end-to-end encryption and collaborative products, up from less than 1% in 2020 to 15% in 2022. Services also have taken a large share of revenue, from less than 1% pre 2018 to roughly 26% in 2022. Lastly, internet of the future products surged to 10% of revenues in 2022.

Through these changes, Cisco has kept gross margins between 62% and 63% of revenue. We expect this trend to continue, as mature SaaS companies' gross margin tends to range from 75% to 85%. Net margin for Cisco has steadily increased over the six years from 20.02% in 2017 up to 22% in 2022. This progress has largely come from EBIT improvements (70 basis points) and more efficient tax management (40 basis points). Overall, we see a company that is poised to increase profitability.

### Free Cash Flows:

Cisco Systems, Inc.'s dividends have grown at an average of 6.5% annually over the past decade with an average dividend payout ratio of 49.7%. At the same time, Cisco repurchased an average of \$7.3 billion in shares each year. This has been funded by an average free cash flow per share of \$3 (chart). Cisco's steadily increasing

dividends and consistent stock repurchases are signs of effective management that rewards stockholders.

## Valuation

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Cisco's historic success as an enterprise network company has provided shareholders with great value over the years. The recent—and successful—pivot to a SaaS company has only bolstered the projected growth of Cisco and thereby future shareholder value. With this in mind, we used a two-stage dividend discount model to arrive at an intrinsic value for Cisco.

Using an estimated short term growth rate of 8.7%, we ran a DDM and sensitivity analysis. By discounting at 8.48% cost of equity, the most likely intrinsic value was \$57.08, adjusted conservatively for share repurchases. Our sensitivity analysis estimate's Cisco's stock intrinsic value between 13% and 28% upside.

## Challenges

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Cisco's strategic pivot to SaaS while maintaining market share in its legacy network solution business will prove to be a challenge. Management mentions that the costs of this strategic shift may not be accounted for yet, and the first hit to profitability will come from gross margin compression should Cisco run into issues. We believe this is not a large threat as increased revenue and further efficiencies will offset this over the coming years. Beyond this, the highly competitive market of network solutions and SaaS may become more competitive through consolidation of competition. However, Cisco has done a great job to avoid this by acquiring smaller competitors and fledging out product lines to help stave off competitors taking their position in the market.

## Conclusion & Recommendation

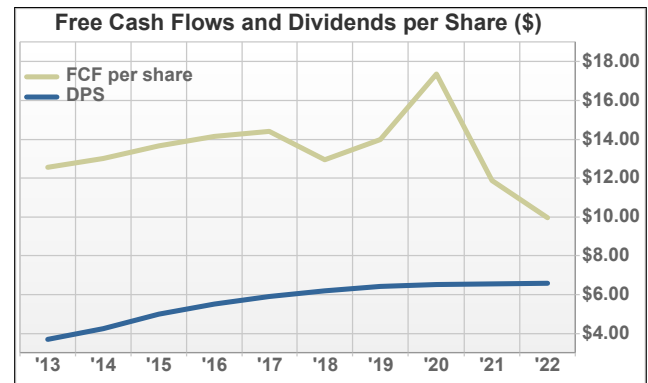
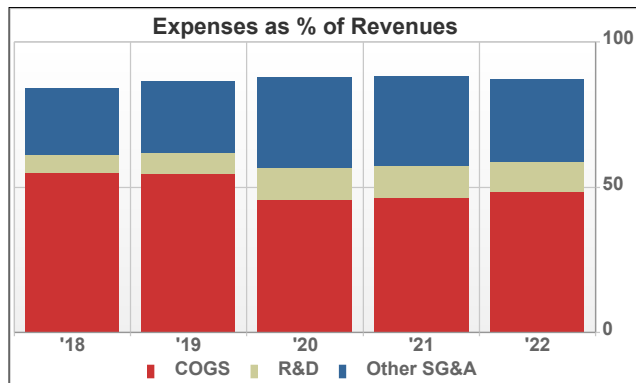
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Cisco's added focus on the technology services segment and continued investments in R&D should lead to continued growth. As cloud integration proliferates throughout businesses, Cisco is quickly becoming a leader in cloud integration, enterprise technology solutions, and network security for the rapidly changing world of business.

With our intrinsic value of 57.08, we view Cisco as currently undervalued. We recommend a HOLD.

## International Business Machines, Inc. (NYSE: IBM)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
<b>BUY</b>	<b>\$170.27</b>	<b>\$128.19</b>	<b>3.6x</b>	<b>Large Value</b>	<b>5.1%</b>	<b>98</b>	<b>A-</b>



### Introduction

International Business Machines, Inc, is a multinational technology firm based in Armonk, New York. Founded in 1911, IBM started by inventing groundbreaking technology such as the digital scale and time recorder. Today, IBM offers a wide variety of hardware, software, technology consulting, and technology-based services.

### ESG Status

IBM's ESG purpose statement is "To be the catalyst that makes the world work better." And to this point, IBM has been fulfilling that purpose. Environmentally, IBM has been busy setting up to be net zero by 2030. They are doing this through acquisitions that not only help provide themselves with green energy, but also include green energy solutions in their technology consultations. Socially, IBM created the IBM apprenticeship program. This program allows students to work at IBM in hands-on environments without obtaining an advanced degree or attending college when the cost is prohibitive. Lastly, IBM's governance practices are in line with the rest of its ESG program. IBM champions trust, equity, and transparency at all levels of its business.

### The Story Behind the Stock

IBM has a strong legacy business in enterprise data infrastructure and professional software. IBM has had a lot of success in the cloud computing and digital storage marketplace, along with offering a wide variety of services to enterprises that provide value in finding and building tailor made technological solutions to support business activities. IBM has recently expanded its scope, looking to add AI to their suite of business infrastructure. The addition of AI provides great value for IBM, allowing them to not only provide AI services to clients, but also automating solutions for clients. AI alone should significantly increase revenue while increasing profitability as it increases productivity.

Further, we are excited about the strategic acquisitions made by IBM in the past few years. These acquisitions provide synergistic services for IBM such as API specific data management and data management software manufacturers. This stable of new and innovative products sets IBM up to provide more comprehensive and advanced solutions for their customers. IBM's core business—technology infrastructure consulting and solutions—is becoming broader and more potent through these solutions, giving IBM the potential to grow revenues and customer satisfaction over the next few years.



## Fundamental Analysis

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### Balance Sheet:

IBM's balance sheet reflects the changing nature of the business while still maintaining stability. In terms of liquidity, IBM has a current ratio of 0.9 and a quick ratio of 0.84. Although the liquidity is not industry leading, this is largely attributable to collecting accounts receivable quicker and using cash to facilitate acquisitions. Short term debt has fallen roughly 50% since 2018, showing that IBM is looking to boost liquidity down the line. In terms of solvency, IBM is strong. As of 2022, IBM had a long-term asset to long-term liability ratio of 1.3 and a long-term debt to equity ratio of 2.2. One consideration within IBM's balance sheet is the large portion of assets being intangible in nature. While not as ideal as having mostly tangible assets, we are not concerned because the information technology sector is highly reliant on intangible assets.

### Income Statement:

IBM's income statement illustrates a company going through a substantial restructuring. Sales are down from 79.6 billion in 2018 to 60.5 billion in 2022, while up 5.5% from the bottom in 2021. IBM's gross margin rose from 45.3% in 2018 to 55.1% in 2022. This increased profitability doesn't transfer down to net income as much as one would expect, as SG&A rose 10.6% over this period, from 29.2% to 39.8% (chart). We are not concerned about this, as over half of that increased SG&A came from research and development, which we are confident will grow the top line in the next few years. Another drag on net income is nonoperating losses in 2022. We do not expect this to be recurring, as they were tied to impairments of former acquisitions. With IBM's strategic restructuring, we expect these drags on profitability to be transitory as management enacts their strategic plan and trims the fat in these categories as it settles into the next phase of growth.

### Free Cash Flows:

IBM's dividends have grown at an average of 5.9% annually over the past decade. At the same time, IBM repurchased an average of \$4.7 billion in common and preferred stock each year. Over this period, IBM has

printed an average free cash flow per share of \$13.11 (chart). IBM's steadily increasing dividends and consistent stock repurchases throughout its growth slump have rewarded investors who have stuck with the company throughout this period.

## Valuation

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IBM's ability to produce significant value for existing customers through their legacy business while also bringing AI solutions to the market makes the potential risk-reward relationship with this stock very attractive.

Using a bottom-up approach to arrive at a short-term growth rate estimate range of 6.6% to 9.0%. We found an upside range of 22% to 38%. We assumed a long-term growth rate of 3.8%. By discounting at 8.43% cost of equity, the most likely intrinsic value we found was \$170.27.

## Challenges

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IBM should be able to increase sales and decrease SG&A costs to reach the next level of growth and success. IBM will have to prove its integrated AI solutions valuable to the end consumer in terms of the overall package price. With the right implementation, this can surely boost IBM's value add and overall market share for IBM in the data service sector, which we believe will happen. However, if the large investment in AI proves unsuccessful, IBM will be falling back into a lower growth situation without the excess capital that was used to undergo this operation.

## Conclusion & Recommendation

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IBM's recent focus on growth provides a low-risk, high-reward play for investors. Already leaning on a mature, albeit extremely slowly growing, technology infrastructure business model provides safety and consistent revenue for the company. Looking forward, AI and previous strategic acquisitions should be able to significantly improve margins and sales growth while helping to cut down on SG&A costs. With this in mind alongside our valuation, we see IBM as a strong BUY.

## Materials

### Overview

The Materials sector consists of companies that engage primarily in the discovery, development, and processing of raw materials used for the development of end-user materials in both commercial and consumer sectors. This includes mined products, forestry products, chemical producers, and plastics. The sector serves as the beginning of the supply chain and the foundation of all basic materials such as soap, paper, clothing, and construction. Some major companies in this sector include DuPont (DD), Ecolab (ECL), and Air Products and Chemicals (APD). This sector represents 2.82% of S&P 500 as of March 1, 2023.

### Sector Outlook

As there is only a finite supply of materials, the costs of procurement and development are major factors in the price of materials. In the past year, the prices for metals and other basic materials rose following Russia's invasion of Ukraine and the adoption of sanctions against Russia. On the other hand, prices for other basic commodities and raw materials, such as cotton and lumber, have fallen dramatically as interest rates have increased and inflation has soared. Amidst all these mixed dynamics and future uncertainty, we anticipate that supply will continue to be limited in 2023 and any modest growth in demand will support the current elevated price levels for many materials.

### Conclusion

Based on the sector outlook, we expect that Materials companies would have a favorable trend over the next twelve months. We recommend this sector to be slightly overweighted at 2.9%.

This sector will be managed passively in the sector ETF over the next twelve months.

## Real Estate

### Overview

The Real Estate sector is mostly composed of equity Real Estate Investment Trusts (REITs) across residential, commercial, and industrial segments as well as real estate management and development companies. As of March 1, 2023, the sector represents 2.66% of the S&P 500.

### Sector Outlook

According to the U.S. Census Bureau, the real estate sector in the U.S. is expected to have a compound annual growth rate of 2.15% from 2023-2025. The real estate brokerage housing market in the U.S. is anticipated to continue to slow down from its 2021 highs given the likelihood of rising mortgage rates related to interest rate hikes. The Fed has signaled a partial reversal of softening trends in inflation from late 2022, suggesting that the Fed will pursue faster tightening and increase the pace of interest rate hikes. This monetary policy will significantly affect the profitability of REITs. Commercial real estate forecasted trends through 2023 are more optimistic but still face challenges ahead. According to Moody's Analytics, the vacancies for multifamily properties are a 4.4%-5% year low indicating higher occupation of units and higher demand for these properties. This is likely due to owners' ability to adjust rent in response to cost increases. Furthermore, according to JPMorgan, e-commerce volume continues to increase suggesting a higher demand for warehouses and industrial space, although commercial REITs may realize lower profitability due to decreasing cash flow from office buildings. While corporations are incentivizing employees to return to the office by creating entertainment spaces, offering childcare services, and providing catering, it is too early to tell the future of office spaces. Finally, as interest rates are likely to continue to rise, dividend yields from REITs will be less attractive as compared to fixed income securities.

### Conclusion

We anticipate REITs will experience lower profitability as higher interest rates will lower demand for these products in the short-to-medium term. Additionally, the real estate brokerage housing market in the U.S. will continue to slow down as mortgage rates remain high. As we anticipate the economy to slow down to very stagnant growth, we believe that consumer spending will become weaker and negatively impact e-commerce which supports the industrial segment. Finally, we believe hybrid work is here to stay in the short-medium term which will lower cash flows for office buildings and negatively impact the commercial segment. In conclusion, our team recommends underweighting the sector at 2.4%.

This sector will be managed passively in the sector ETF over the next twelve months.

## Utilities

### Overview

The Utilities sector is comprised of utility companies such as electric, gas and water generators and distributors. It also includes independent power producers, energy traders and companies that provide electricity using renewable sources. As of March 1, 2023, the Utilities sector constituted 2.78% of the S&P 500.

### Sector Outlook

The Utilities sector is typically one of the least sensitive sectors to economic cycles and is considered a defensive holding through periods of economic slowdown or volatility. Given the rise in inflation and interest rates along with the geopolitical unrest of the last year, the defensive qualities of the sector proved favorable, relatively speaking, as it finished 2022 well above the market at 0.03% compared to -11.3% for the S&P 500. Performance for the sector has taken a downturn at the beginning of 2023, but the sector should prove to be a stable one in the face of continued uncertainty in the market.

Macroeconomic trends towards infrastructure investment and clean energy give reasons to be optimistic about long-term potential growth for the sector. In August 2022, the Inflation Reduction Act was passed. The legislation aims to reduce greenhouse gas emissions and make clean energy more affordable. It includes tax subsidies intended to lower the costs for utility companies transitioning to renewable energy. These trends have sent average earnings growth across the sector to the highest level in years, and IBISWorld expects to see demand and revenue in this sector increase over the next five years. Rising inflation and commodity costs and disruptions from severe weather will continue to pose challenges for this sector in 2023, but the year also brings opportunities that this sector has not seen for years.

### Conclusion

Companies in the Utilities sector currently deliver an average dividend yield of nearly 4% and their fundamentals and balance sheets remain solid. The sector's safe-haven status in the current economic climate combined with macroeconomic trends towards creating renewable and clean energy sources give compelling reasons to be optimistic about the sector for the coming year. We recommend an overweight at 3%.

This sector will be managed passively in the sector ETF over the next twelve months.

**Appendix**

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## Crummer Trust Portfolio Investment Policy Statement

(Revised March 2023)

### Crummer Trust Portfolio

1.1 History The SunTrust Banks of Central Florida Foundation contributed all of the Crummer Trust Portfolio's (Portfolio) initial assets, totaling \$500,000 beginning with \$100,000 per year in 1999, and no additional contributions are expected. The Portfolio is part of the Rollins College endowment and is exempt from federal income taxes.

1.2 Purpose The Portfolio was established to fund periodic scholarships for students at the Crummer Graduate School of Business and to provide Crummer students with practical experience in portfolio management. The Portfolio expects to exist in perpetuity and the only required distribution is the funding of scholarships.

1.3 Trust Scholars Trust Scholarships are funded by an annual amount established by the Crummer School that generally follows the endowment distribution policy of Rollins College.

### Governance

2.1 Students The students in Crummer's portfolio management class (class) act as security analysts and portfolio managers, making recommendations on portfolio strategy and individual asset selection, subject to the guidelines and limitation set forth in this Investment Policy Statement. This statement assumes the class is only offered in the spring term (January to April).

2.2 Oversight An Oversight Committee (Committee), consisting of industry practitioners, a member of the Rollins College Board of Trustees, if the Board so chooses, a member selected by the Vice President of Finance at Rollins College and a Crummer faculty member, provides guidance for the Portfolio. The overall philosophy of the Committee is one of oversight and not direct portfolio management. When the class is not in session, however, changes in the portfolio can be made by the Committee but only in light of events with the potential to significantly impact the portfolio's value.

2.3 Prohibited Transactions No transactions for the portfolio can be undertaken that are contrary to the SunTrust gift agreement, if any, or to applicable Rollins College Trustee policies.

### Long-term and Short-term Investment Approaches

3.1 Long-term Strategy The Portfolio operates in both long-term and short-term environments. As a perpetual portfolio, its long-term investment strategy is designed for a conservative investor who seeks a real total rate of return that will maintain the purchasing power of the Portfolio after distributions and net of expenses. A long-term portfolio will inevitably encounter many market cycles, so the asset allocation is expected to be relatively constant. Table A contains the current long-term real growth and inflation expectations. These expectations are subject to an annual review by the class.

3.2 Short-term Tactics On an annual basis the Portfolio will adopt a tactical (short-term) sector tilt relative to the sector market weights of the S&P 500 Index. This investment tactic is designed to take advantage of short-term (one year or less) market movements by establishing the managers' economic outlook and then underweighting sectors that are expected to do poorly and overweighting sectors that are expected to do well. The current S&P 500 sectors are shown in

Table B. Tactical sector targets may deviate as much as +/- 50% from each sector's S&P 500 market weight (e.g. if the Consumer Discretionary sector has a market weight of 12%; the tactical target weighting may vary from 6% to 18% of the total equity allocation). Up to two sectors may be eliminated from any representation in the portfolio provided that the resulting re-allocation does not violate upper bound (150% weighting) of the remaining sectors. Both individual equity securities and sector exchange-traded funds (ETFs) can be used to achieve the desired sector allocations.

3.3 Objective These short-term and long-term approaches are consistent with the intent to protect the Portfolio's value in down market environments and increase its value in up market environments while funding scholarships—all without incurring a permanent destruction of principal value.

## Long-Term Perspective and Asset Allocation

4.1 Risk in the Portfolio comes, in part, from the allocation among asset classes and investment styles within asset classes. The Portfolio's asset classes, strategic targets, and designated benchmarks are discussed in Section 10.2 and listed in Table C. Monitoring asset allocation, combined with a sector focus, is designed to keep the Portfolio consistent with both its short and long-term goals.

4.2 Quantitative analysis is used to address risk management. Techniques include, but are not limited to, Value-at-Risk and evaluation of portfolio alternatives such as risk parity, mean-variance optimization, minimum variance, and equal allocation. Risk should be consistent with the portfolio's target rate of return.

## Rate of Return

5.1 Target The Portfolio's target rate of return incorporates the investment goals and spending policy. The target rate of return, investment goals, and expected volatility are interrelated and must be viewed as such. The long-term target rate of return goal that accommodates the Portfolio's expenses and distributions is attached as Table A.

5.2 Horizon The investment horizon of the Portfolio is perpetual and preservation of the real value of principal is necessary with such a long-term perspective.

5.3 Investment Decisions Long term objectives guide asset allocation decisions. Short term opportunities guide sector weight decisions.

5.4 Growth The primary source of Portfolio growth is expected to be judicious and timely security selection. While the Portfolio might fund additional scholarships with a more aggressive asset allocation (e.g., all equity)—prudence, and the perpetual life of the Portfolio, suggest a less risky approach that will allow the value of the Portfolio to rise with the US economy. This organic economic growth is expected to be in line with historical experience—in the range of 2 to 2½%.

## Portfolio Transactions

6.1 The class recommends one portfolio composition per year to the Committee. The Committee has the authority to make changes in these recommendations.

6.2 Trades in the Portfolio are made in only one batch each year, typically in mid-April, following the class presentation to the Committee. See Section 2.2 for exceptions.

## Cash Requirements

7.1 Scholarship Funding Because the date of the scholarship draw varies around the end of the College's fiscal year (May 31), as of May 1 the Portfolio will hold a cash reserve large enough to cover the annual scholarship funding rather than requiring security liquidation.

7.2 Transactions Costs and Fees Trading costs and fees will be funded in cash and incorporated into the annual transactions to avoid forced security liquidation and will usually be covered by normal sell recommendations.

## Volatility

8.1 The target rate of return will ultimately dictate the level of risk in the Portfolio. If the expected volatility of the Portfolio is deemed inappropriate, the class will recommend a change in the target rate of return to the Committee.

## Income, Appreciation and Taxes

9.1 The Portfolio pays no taxes on investment income and, therefore, the investments are not tax sensitive. Portfolio distributions are not limited to realized income and, therefore, the Portfolio need not generate income to fund its spending policy. The cash requirements can be met by liquidating securities (see Section 7) and usually will be covered by normal sell recommendations.

## Sector and Asset Allocation

10.1 Short-term Sector Allocation To achieve its short-term tactical investment objective the Crummer Truist Portfolio's assets shall be managed by under- and overweighting S&P's market sectors. The current sectors are listed in Table B, but these may change from time to time. The tactical target deviations are +/- 50% of their S&P 500 market weights. Cash is a separate asset class and governed by the asset allocation policy.

10.1.1 Exchange Traded Funds To allow the class to thoroughly analyze current and prospective security holdings, each sector shall hold an appropriate ETF and, at most, three individual securities. The amount allocated to the ETF and the individual securities in each sector is subject to a risk budget. Justification of the risk budget is part of the annual report.

10.2 Long-term Asset Allocation Asset classes are outlined in Table C. In the short-term, security selections are driven by sector weights and, although stable asset class allocations are important for risk control, they are flexible enough to allow tactical sector allocations in the short run.

10.2.1 Equity Styles Asset allocation recognizes equity investment styles to help manage the risk of the portfolio. Investment styles within the equity asset class are defined as follows:

10.2.1.1 Value—companies believed to be undervalued with potential for capital appreciation.

10.2.1.2 Growth—companies that are expected to have above average long-term growth in earnings and profitability.

10.2.2 Market Capitalizations Asset allocation differentiates between securities based on the market capitalizations of different companies. Market capitalizations are defined as follows:



10.2.2.1 Small Cap—companies with total market capitalization less than one billion dollars.

10.2.2.2 Mid Cap—companies with total market capitalization between one and five billion dollars.

10.2.2.3 Large Cap—companies with total market capitalization greater than five billion dollars.

10.2.3 International—equity investments in companies domiciled outside the U.S. are limited to American Depository Receipts (ADRs) listed on major U.S. exchanges or to mutual funds or exchange traded funds.

10.2.4 No target allocation will be set for equity styles and market capitalizations; however, each equity selection will be identified with a style and market capitalization. Overall weightings with respect to style and market capitalization will be supported by the current economic and market outlook. Overall market capitalization weightings will not deviate excessively from those found in the overall US equity market.

10.2.5 While equity styles go in and out of favor over time, the portfolio's strategic risk control relies on a stable asset allocation near the target. Chasing the best performing equity style is inconsistent with maintaining value in the long term.

10.3 Bonds Bonds function as both an asset class and a sector.

10.3.3 Allocation Range The portfolio relies on the bond asset class to moderate risk over the long term through diversification. Therefore, the bond allocation range is limited.

10.3.4 Bonds as a Sector Bonds are similar to a sector with an economic outlook that the managers have the flexibility to incorporate into the portfolio.

10.3.5 Risk Control The bond allocation's ability to temper the portfolio's risk is dependent on reasonable controls over the risk of the bond portfolio.

10.3.6 Effective Duration To establish risk control, the bond portfolio's effective duration is bounded between 2.5 and 5.5 years.

10.3.7 Flexibility and Risk Control By varying both the bond allocation and the effective duration, the managers have enough flexibility to take a view of the bond sector's prospects without distorting the risk profile of the portfolio.

10.4 Diversification Limit No individual asset in the portfolio may represent more than 5% of the total market value of the portfolio. This rule does not apply to mutual funds or exchange traded funds.

10.5 Derivatives The Crummer Truist Portfolio may contain derivative securities. Typically, the Portfolio will only use derivatives as a hedge in association with the derivatives class. In this case, a separate written proposal must be approved by the instructors involved. The cash required by these hedges will constitute no more than 10% of the Portfolio's market value.

**Rebalancing Procedure**

11.1 Should the asset allocation range for a particular asset class or sector be breached by reason of gains, losses, or any other reason, the class will recommend whether to rebalance the assets to the target asset class allocation, taking into account the transaction cost. In addition, the Committee shall have the authority to review the actual allocations at any time to insure conformity with the adopted tactical and strategic allocations. See Section 2.2. The assets will not be automatically rebalanced on any set schedule.

**Custodian**

12.1 Truist Bank (formerly SunTrust) is the custodian for the assets of the Crummer Truist Portfolio.

**Table A**

**Target Rates of Return, Components, and Spending Policy**

	<u>Long Term</u>	<u>Short Term</u>
Administrative and Trading Expenses	1/2 - 1%	1/2 - 1%
Allowance for Inflation	1 - 3%	Consumer Price Index
Distribution from Portfolio	3 1/2 - 5 1/2%	As Indicated Annually
Portfolio Real Growth	2 - 2 1/2%	> 0%
Target Total Return	8 - 11 1/2%	Dependent on Above

**Table B**

**Crummer Truist Portfolio Equity Portfolio Sectors**

<b>S&amp;P 500 Sector</b>	<b>Benchmark</b>
Communication Services	S&P Communication Services Index
Consumer Discretionary	S&P Consumer Discretionary Index
Consumer Staples	S&P Consumer Staples Index
Energy	S&P Energy Index
Financials	S&P Financials Index
Healthcare	S&P Healthcare Index
Industrials	S&P Industrials Index
Information Technology	S&P Information Technology Index
Materials	S&P Materials Index
Real Estate	S&P Real Estate
Utilities	S&P Utilities Index
Target Deviation for any sector is +/- 50% of its S&P 500 market weight	

Table C

**Crummer Truist Portfolio Asset Allocation Guidelines**

<u>Asset Class</u>	Target Range			<u>Benchmark</u>
	<i>Low</i>	<i>Mid</i>	<i>High</i>	
U.S. Equity	60%	70%	80%	S&P 500
International Equity	10%	15%	20%	MSCI - EAFE
Fixed Income	10%	15%	20%	Barclays US Float Adjusted Index (Vanguard Total Bond Market Index Fund)
Cash	Minimal			90-day T bill rate
Minimum weight for any asset class is 5% except Cash				

## Value at Risk

### Introduction

Value-at-risk (VaR) is a statistical measure that is used to estimate the potential loss for an investment portfolio over a certain period, at a specified level of confidence. By focusing on low-probability events, VaR helps investors manage downside risk and protect their portfolios against unexpected losses. Expected Shortfall (ES) considers the magnitude and likelihood of potential losses beyond the VaR threshold. This provides a more complete picture of the downside risk of an investment portfolio, resulting in a more appealing approach for conservative investors.

### Methods of Calculation

Due to the nature of the annual decision-making process, the Crummer Truist Portfolio has a continuously repeating one-year investment horizon. To remain consistent with previous years, this CIM team has computed VaR and ES using historical monthly returns from the past twenty-three years, at a 95% confidence level. Based on this confidence level, we aim to address the following queries:

1. What is the maximum value (in dollars) that the Portfolio is expected to lose over the next year? (VaR)
2. How much would the Portfolio lose on average if losses exceed VaR? (Expected Shortfall)

### Assumptions

The calculations were performed exclusively on the equity portion (80%) of the portfolio, under the assumption that this segment carries the most significant risk. Our benchmark portfolio was constructed using the current weights of the eleven GICS sectors in the S&P 500 index. Each sector is represented by the corresponding sector ETF in the portfolio. We then simulated monthly scenarios with rolling one-year historical returns to compare the performance of our portfolio against the benchmark.

### Conclusion

As of March 1<sup>st</sup>, 2023, the value of the proposed equity portion (i.e., 80%) of the Crummer Truist Portfolio was \$895,960.22. Based on our VaR calculations, we are 95% confident that the Portfolio will not lose more than \$193,465.45 over the next year. More importantly, both VaR and ES values point to less risk compared to those for the benchmark (table below). Note that risk budgeting and risk parity considerations were factored into our portfolio construction with respect to the equity portion as well as considerable asset diversification. Overall, it appears that we have successfully reduced the risk of the portfolio with minimal change to the overall expected return.

	Benchmark	Proposed Weighting
<b>Value at Risk (VaR)</b>	\$200,314.74	\$193,465.45
<b>Expected Shortfall</b>	\$280,643.77	\$277,488.60
<b>Expected Return</b>	9.21%	9.19%
<b>Volatility (Std. Dev.)</b>	16.92%	16.67%