

CRUMMER TRUIST PORTFOLIO 2024



Prepared by: The Crummer Investment Management Team

In Memory: Rita Bornstein (1936-2024)

We learned of Dr. Rita Bornstein's passing on the day we began our journey in this class. As the 13th president of Rollins College, she left an indelible mark on our institution and the Crummer Trust Portfolio undeniably exemplifies her legacy. We dedicate our 25th anniversary to her memory. With her foresight, courage, and commitment to education, she championed more than a student-managed investment portfolio. She ignited a flame that shaped the future of many Crummer alums. True to her spirit, the Crummer Trust Portfolio is about empowerment, resilience, and the audacity to dream big. May her legacy continue to illuminate the minds of generations to come.



Photo by Scott Cook, Rollins College.

SunTrust Supports Crummer with \$1-Million Gift Student Teams to Manage Investment Portfolio

SunTrust Banks of Central Florida Foundation announced a \$1-million gift to the Crummer School, but it will be up to the students—not the school—to decide how to invest half the money.

The dollars will be divided equally between the school's new Bush Executive Center for the SunTrust Auditorium, and an innovative class to be added to the school's curriculum called the "Crummer SunTrust Investment Portfolio." The portfolio will be directed by Crummer students participating in the school's



George Koehn, Chairman & CEO SunTrust Banks, Central Florida, N.A. and Peter De Ceulaer '99, Finance Major and participant in Portfolio Management course.

new course entitled, "Portfolio Management: Theory and Applications."

The course in portfolio management is designed to provide students with knowledge of modern practices of portfolio management. The course will begin with the study of the latest academic approaches to portfolio theory and will end with a concentration on the application of theory to actual management.

Students will work with internationally recognized portfolio managers from the bank's investment subsidiary, STI



President Bornstein, Dean Moses & SunTrust Bank representatives: (l-r) President & CEO of Florida Ted Hoepner; Chairman & CEO of Central Florida George Koehn, President & COO of Central Florida Tom Yochum; and Chairman & CEO of STI Capital Management Tony Gray.

Capital Management, to invest the half-million-dollar account. Each spring semester, student teams will develop different strategies for managing the portfolio. A panel of investment-professional judges will select which strategy to follow. Earnings from the investments will fund individual SunTrust scholarships at the Crummer School.

Reprinted from *Crummer Connections*, Spring 1998, p. 2

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: J. Clay Singleton, Emeritus Professor, Crummer Graduate School of Business; Phillip Rich, Chief Investment Officer, United Community Bank; Rasha Mesharafa, Registered Associate, Wells Fargo Advisors; James Bishop, Director, Streamwise Capital; Matej Sušec, Research Analyst, DePrince, Race, and Zollo; 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; Sean Powers, Executive Director, AdventHealth; Jay Menozzi, Principal and Chief Investment Officer, Orange Investment Advisors, LLC; Kevin Kalicak, Senior Vice President, Darden Restaurants; Jennifer (Anderson) Murphy, AVP, Rockefeller Capital Management; Deryck Harmer, Managing Director, Springlake 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 \$50,000 to be used for scholarships. We are extremely grateful for this generous 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 UCBI. 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. Based on our economic outlook (which leans towards the optimistic side of the consensus), we tilted the allocation towards sectors that should do well in such a macro environment while paying attention to political factors as well as industry-specific dynamics.

Our asset 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 an opportunity to take on some risk, consistent with our economic outlook through the end of March 2024. We maintain an allocation to a sector ETF in each sector to achieve passive exposure. We also invest in two individual stocks per sector to outperform the sector index. Fixed income is our anchor sector, providing a hedge against the risk of an economic slowdown adversely impacting our equity holdings. Consistent with our flattening yield curve projection, we are at the high end of our IPS range for fixed income at 20% and taking on a bit more interest rate risk than the average permissible duration.

Furthermore, we have continued to incorporate investment themes. This year, in addition to Environmental, Social, and Governance (ESG) investing, we also identified Artificial Intelligence as an additional theme in our portfolio selection process. Regardless of a security's consistency with either of these themes, all recommendations must be undervalued

after rigorous quantitative and qualitative analysis. In other words, our intent is not to maximize the ESG or AI impact of our portfolio but to tilt towards these factors. Specifically, the proposed equity holdings in this year's portfolio have a ESG tilt of 18% and AI tilt of 14%, compared to the S&P 500.

Since the onset of the COVID-19 pandemic, we have witnessed extraordinary years in many respects. Inflation levels, monetary and fiscal policies, and global conflicts that were all unprecedented have contributed to an increased level of 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: Catherine Mitchell, Axel Einarsson, Nick Villamil, Zane Williams, Caroline Gastonguay, Bryan Campbell, Valeria Hernandez-Grisanti, Charlie Putrino, Ryan Astley, Nicholas Rojas, David Scupholm, Cole Trinter, Lily Thornevill, Trevor Siemon, Brad Vincent, Jay Kineon, Dr. Koray Simsek
Not pictured: Bridget Collis*

Crummer Investment Management Team

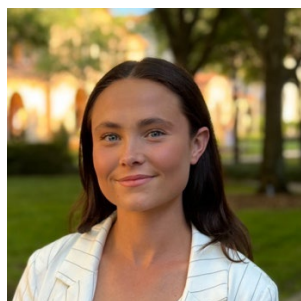
	<p>Bryan Campbell Communication Services</p> <p>Bryan Campbell has over 30 years of work experience in various industries, from sales to manufacturing. He is attending the Crummer Graduate School of Business and is working towards his MBA with a concentration in Business Analytics and Finance. He worked with the Rollins College Office of Alumni Engagement and is now interning as a Business Analyst at Massey Services. Upon graduation, Bryan is excited about the opportunity to work full-time at Massey Services as a Business Analyst.</p>
	<p>Nicholas Rojas Communication Services</p> <p>Nicholas Rojas is a 2023 graduate of Rollins College with a B.A. in Business Management and will earn his MBA in May of 2024 with a concentration in Finance. While at Crummer, Nicholas has completed internships in the nonprofit and sports sectors. He is also a member of the Rollins College golf team and is exploring career opportunities upon graduation.</p>
	<p>Axel Einarsson Consumer Discretionary</p> <p>Axel Einarsson graduated from the University of Utah in 2022 with a B.S. in Finance as a Business Scholar with honors. He was recruited to Utah from Sweden to play Division I collegiate golf and has since, due to injuries, transitioned his professional ambitions from sports toward buy-side financial services. Axel has recent internship experience in investment analysis, management consulting, and business development. Upon graduation in May, Axel hopes to remain in the U.S. and work in financial services.</p>
	<p>Catherine Mitchell Consumer Discretionary</p> <p>Catherine Mitchell graduated from Rollins College with a B.A. in International Business and a minor in Spanish. She is expecting to complete her MBA this May with a concentration in Finance. Currently working in commercial real estate, Catherine plans to pursue a career in real estate investment and development.</p>

	<p>Zane Williams Consumer Staples</p> <p>Zane Williams graduated Magna Cum Laude from Rollins College with a B.A. degree in Business Management, concentrated in Finance. He is the current Vice President of the Crummer Finance Organization and has experience in Wealth Management, Asset Management, and Corporate Finance. After graduation, Zane plans to pursue a role in investment management.</p>
	<p>Trevor Siemon Energy</p> <p>Trevor Siemon graduated from Rollins College in 2023 with a B.A. in Social Entrepreneurship and will finish his MBA with a concentration in Finance in May. Trevor has previous experience in strategy and project development in the energy sector and is looking to pursue a career in corporate finance upon graduation.</p>
	<p>Jay Kineon Financials</p> <p>Jay Kineon graduated Cum Laude from Rollins College with a B.A. in Economics in December 2022. He competed for four years on the Rollins Men's Rowing Team before pivoting into banking. He has experience in commercial banking and working with interest rate swaps for hedged loans. Jay expects to complete his MBA with a Concentration in Finance in May 2024 and plans to pursue a career in banking upon graduation.</p>
	<p>David Scupholm Financials</p> <p>David Scupholm is a Crummer MBA candidate with a concentration in finance. He earned a BA in economics at Davidson College in 2021 as a National Merit Scholar. David has experience working in the financial advisory business, having completed internships at firms in Michigan and Florida over the past two years. In his free time, he enjoys playing golf, exercising, and cooking. Upon graduating, David hopes to begin a career in the investment banking industry while staying in the state of Florida.</p>
	<p>Bridget Collis Healthcare</p> <p>Bridget Collis, a Client Service Associate at Morgan Stanley, graduated Magna Cum Laude from Rollins College in 2023 with a BA in International Relations. With expertise in client-facing roles, account setup, paperwork processing, and securities management, she ensures smooth advisory operations. Her induction into Beta Gamma Sigma while at Crummer underscores her commitment to excellence. Post-graduation, she will continue to excel in providing crucial support to clients and colleagues at Morgan Stanley.</p>



Lily Thornewill | Healthcare

Lily Thornewill graduated Magna Cum Laude from Rollins College in 2023 with a Business Management major in the (3:2) Accelerated Management Program where she will finish her MBA with a concentration in Finance in May 2024. She is a full-time Supply Planning Analyst for Brown-Forman Corporation and in her fifth year as an NCAA student-athlete on the Rollins Women's Lacrosse Team.



Caroline Gastonguay | Industrials

Caroline Gastonguay is pursuing her MBA with a concentration in Finance on the Portfolio Management Track at Crummer. After graduation, she hopes to find a job in sales. Caroline is also a student-athlete at Rollins as a member on the women's lacrosse team where she serves as a captain.



Charlie Putrino | Industrials

Charles Putrino graduated Magna Cum Laude from Rollins College in 2022 with a BA in Economics and has professional experience in supply chain finance. He is also captain of the Rollins men's tennis team and the current president of the Crummer MBA Association, representing the EA41 class. After graduation, he will be working as a private equity financial analyst at CNL Strategic Capital.






Valeria Hernandez-Grisanti | Information Technology

Valeria Hernandez graduated from Rollins College with a BA in International Business and was a member of the 'Women in Finance' program. She is the current President of the Crummer Finance Organization with internship experience in corporate compliance and wealth management. Upon graduation from Crummer, Valeria will be working as a Compliance Analyst at StoneX.



Nick Villamil | Information Technology

Nick Villamil graduated Cum Laude from Rollins College in 2022 with a B.A. in Economics. He is expecting to complete his MBA with a concentration in Finance in May 2024. While at Crummer, Nick has worked several different positions in commercial banking. Upon graduating from Crummer, Nick will continue to work as a commercial banker at Cypress Bank & Trust.

	<p>Cole Trinter Materials</p> <p>Cole Trinter graduated with honors from Rollins College with a BA in Business Management and has professional experience in growth equity, security analysis, and VC consulting. He is pursuing his MBA from Crummer, expecting to graduate in May with a concentration in finance. Outside of class, he is a member of both the Crummer Finance Organization and the Crummer Entrepreneurship Association. After graduation, he plans to pursue a career in finance, specifically in the M&A realm.</p>
	<p>Ryan Astley Real Estate</p> <p>Ryan Astley graduated from Rollins College with a BA in Economics. He is pursuing his MBA from Crummer expecting to graduate in May with a concentration in finance. Ryan has previous internship experience in asset management and sales. He currently works at Empowering Women Globally, a program that empowers women entrepreneurs in developing countries. Upon graduation from Crummer, Ryan will be working as a consultant for financial institutions at Deloitte.</p>
	<p>Brad Vincent Utilities</p> <p>Brad Vincent is a 2023 graduate from Rollins College with a B.A. in Business Management and will earn his MBA in May 2024 with a concentration in finance. Brad has worked for Ryan LLC since June 2022 as a member of the Credits & Incentives and Site Selection team. He is a former member of the Men's Lacrosse team and upon graduating from Crummer Brad will stay with Ryan LLC.</p>

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Economic Outlook

Introduction

The Crummer Investment Management team is tasked with overseeing the Crummer Truist Portfolio. Our duty is to provide suitable investment suggestions aligned with the Portfolio's Investment Policy Statement (IPS). We have dual objectives: to generate income to fund annual contributions to Crummer's scholarship program and to foster long-term sustainability growth for the portfolio. By prioritizing risk management in every step of our investment approach, we have structured the portfolio to capitalize on sectors with promising near-term prospects while avoiding unwarranted risks based on our economic projections.

Economic Thesis

The year 2024 started with a slow deceleration of inflation rates with expectation of multiple interest rate cuts, as the inflation rates began normalizing around 3.4% and were widely expected to continue their slow descent. Despite projections of interest rate cuts, there is a degree of uncertainty as to what will happen regarding the Federal Reserve's policy, especially considering it is an election year. Rate cuts are widely expected as the economy has appeared to slow, with GDP growth slowing down through 2023 and into 2024. As of February 2024, for the next twelve-month period, we project four rate cuts, bringing the Federal Reserve policy rate down to 4.25%-4.50% by the first quarter of 2025.

While there are recessionary possibilities with a slowing economy, high interest rates, potentially higher unemployment, and an uncertain outlook, we do not believe a recession is likely within the next twelve months, placing the chance of a recession at 30%. Geopolitical risks abound in Eastern Europe and the Middle East with both the Russia-Ukraine and Israel-Palestine conflicts continue to linger. However, while these risks generate greater volatility in some sectors, we do not believe they pose an extreme risk to the United States economy.

Lower interest rates are expected to facilitate attractive risk-adjusted returns on our public equities exposure. While it is unlikely that we will witness a broadly expansionary economy, we anticipate opportunities for growth in certain sectors that will benefit from lower cost of capital and higher consumer disposable income.

GDP

As a team, we expect a fiscal loosening over the next twelve months, with the Federal Reserve cutting rates up to four times to stimulate economic growth. The recent slowdown in GDP growth poses concerns over recessionary conditions, but we are confident that this will stabilize. Together, we project the GDP to continue to grow, albeit at a slightly lower rate of 1.8%-2.3% for the next twelve months. Based on this, we do not see recessionary conditions and believe that the economy will continue to build momentum, even it does so at a slower pace than the previous twelve months.

Unemployment

As we look ahead to the coming year, the prospect of Federal Reserve rate cuts holds significant implications for the unemployment landscape. The Federal Reserve officials have indicated that interest rate reductions are imminent, although an exact timeline remains uncertain. As of February 2024, market expectations place a 64% probability on a rate cut in June, despite the Fed's cautious stance on inflation, employment, and overall economic conditions. Consequently, if the economy continues to evolve as anticipated, it is likely that policy restraint will gradually ease throughout the year, potentially contributing to a slight increase in unemployment rates.

Inflation

Inflation has normalized in the past six months, cooling off from the extreme levels it reached immediately out of the pandemic. While high government stimulus spending and increased monetary supply during the pandemic pushed inflation high over the previous years, we are beginning to see a cooling off this rise as the Federal Reserve has tightened policy and raised rates. We project the inflation rates to decrease to 2.2%-2.7% in the next twelve months, as we are confident in a gradual deceleration over the coming months. While changes in monetary and fiscal policies could change this slightly, indications are that the federal government will be cautious in working towards maintaining a growing economy while preventing inflation from rising significantly again.

Interest Rates

As interest rates have been significantly elevated over the past twelve months, we expect them to be on their way down through the next twelve months. The Federal Reserve has indicated that interest rate cuts are likely in the coming months, and similarly, many experts and market participants predict these to commence soon. We expect to see policy rates to be lowered to between 4.25% and 4.5% in the coming twelve months, allowing for increased economic activity to fight off recessionary concerns. We do not anticipate a notable change on the long end of the yield curve. As a result, we expect the negatively sloped yield curve to somewhat flatten but remain marginally inverted.

Summary of Forecasts

We present a summary of our team's forecasts and how they compare against those of WSJ Survey of Economists (January 2024) and the Wells Fargo's 2024 Economic Outlook below.

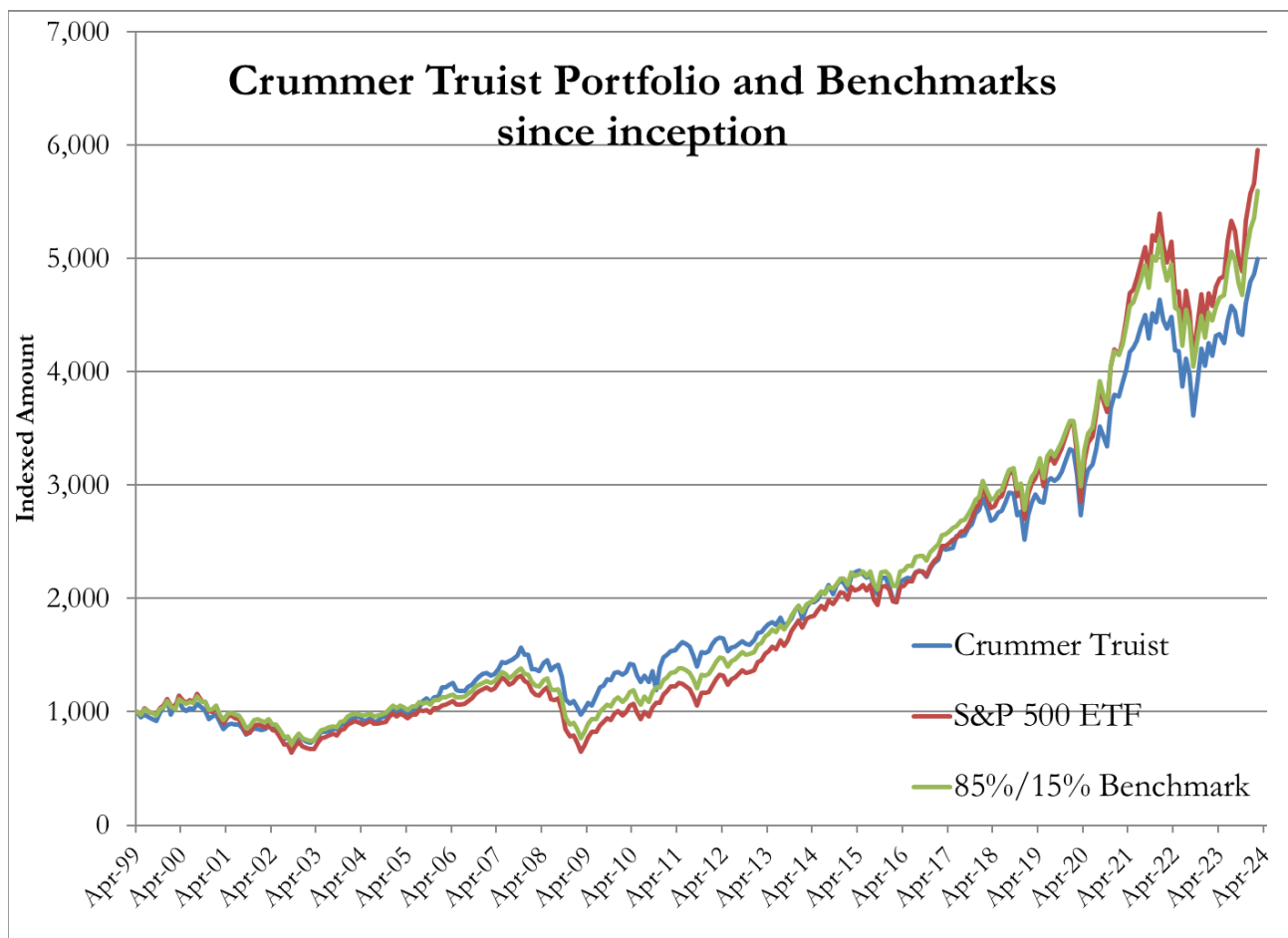
	Crummer Investment Management	WSJ Survey of Economics (Mean)	Wells Fargo Economic Outlook
GDP	1.80%-2.30%	1.01%	0.80%
Unemployment Rate	4.00%-4.20%	4.30%	4.20%
Inflation	2.20%-2.70%	2.33%	3.20%
Fed Policy Rate	4.25%-4.50%	4.26%	4.75%
10-Year Treasury	4.20%	3.79%	3.83%

Performance of the Crummer Truist Portfolio

In 2023, we witnessed a volatile year for asset allocation. Equity markets did well, but mostly driven by a few large cap stocks, while the bond markets perform poorly due to the upward trending yields. The “higher-for-longer” hypothesis was tested in both directions many times. Crummer Truist Portfolio followed the general market trend throughout the year, closely tracking the benchmark, but began to fall behind due to the weak performance of some stock selections. After last year’s trades and the disbursement of our scholarship donation of \$45,857, the Portfolio stood at \$1,107,877 on May 31, 2023. After a volatile stretch in September, the Portfolio rebounded strongly, and as of February 29, 2024, it was valued at \$1,302,690, which is 17.6% ahead of the value on May 31, 2023. Based on this performance, we plan to fund a \$50,000 scholarship this year, corresponding to 4.2% 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 \$685,000 in scholarships, including the 2024 contribution of \$50,000.

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 began shrinking in May 2019, a trend that has reversed since October 2023.



2023 – 2024 Plan Year Performance Highlights

From May 2023 through the end of February 2024, the Portfolio underperformed S&P 500 index and the 85/15 benchmark by 8.1% and 4.8%, respectively. Absolute performance without considering asset allocation is incomplete and the Portfolio achieved this performance at a lower risk compared to both. From May 2023 through February 2024, the Portfolio earned 15.4% with a monthly standard deviation of 3.3%, while the S&P 500 was up by 23.5% with a monthly standard deviation of 4.3% and the 85/15 portfolio gained 20.3% with a monthly standard deviation of 3.7%. The Portfolio's since inception annual return is 6.7% (with an annual standard deviation of 14.2%) versus the S&P 500 index's return of 7.6% (with an annual standard deviation of 15.4%) and the 85/15 benchmark's return of 7.2% (with an annual standard deviation of 13.1%) over the same period. Using the reward-to-risk ratios since-inception, the Portfolio (0.47) slightly underperformed both S&P 500 (0.49) and the benchmark (0.55).

Equity Sector Performance Attribution

For the 2023-24 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 2023, the portfolio was tilted toward sectors that were expected to outperform, e.g., Communication Services, Healthcare, Industrials, and Utilities. The Sector Index column of the table below shows Communication Services was a runaway winner. Each Crummer Truist Portfolio sector holds the sector SPDR ETF – even so, superior stock selection allowed the portfolio to outperform in two of the eight actively-managed sectors: Communication Services and Energy. The best stock selections came from Communication Services – Meta, Consumer Discretionary – Home Depot, and Energy – Diamondback.

Performance Attribution Analysis (April 7, 2023 - February 29, 2024)					
Sector	Crummer Truist	Benchmark	Allocation Effect	Selection Effect	Total Effect
Communication Services	42.4%	40.2%	0.0%	0.2%	0.2%
Consumer Discretionary	25.8%	32.5%	0.0%	-0.6%	-0.6%
Consumer Staples	2.0%	2.7%	0.1%	-0.1%	0.0%
Energy	14.3%	3.3%	-0.1%	0.6%	0.5%
Financials	28.1%	28.2%	0.0%	0.0%	0.0%
Healthcare	4.7%	10.0%	-0.3%	-0.9%	-1.2%
Industrials	1.8%	25.4%	0.0%	-2.2%	-2.2%
Information Technology	34.4%	44.9%	-0.2%	-2.5%	-2.7%
Materials	11.9%	11.9%	0.0%	0.0%	0.0%
Real Estate	8.7%	9.2%	0.0%	0.0%	0.0%
Utilities	-8.7%	-8.6%	0.0%	0.0%	0.0%
Equity Portfolio	19.8%	25.9%	-0.6%	-5.5%	-6.1%

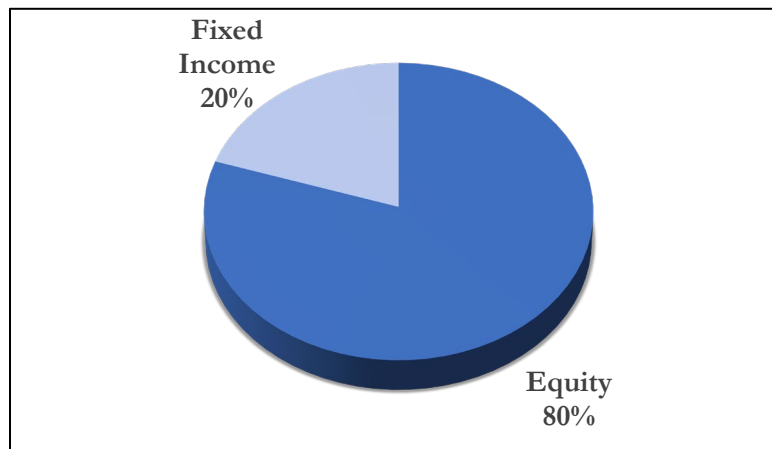
Bonds and Cash

By the end of May 2023, the Portfolio had distributed \$45,857 in scholarships, leaving 1.4% allocated to cash, 78.7% allocated to equities, and 19.9% allocated to fixed income (PGIM's Ultra Short Duration and the Vanguard Long-Term Investment-Grade mutual funds). The fixed income investments were up by 3.49% from May 2023 through February 2024. Even though the bond markets were down due to the upward shift in the yield curve, the fixed income portfolio was able to weather the storm with higher allocation to the PGIM's Ultra Short Duration Fund. After this year's proposed trades, the Portfolio will hold less than 1% in cash and will generate \$50,000 in scholarships – supporting future Crummer students and fulfilling the spirit of the original gift.

Portfolio Design

1. Asset Allocation

The 2024 Crummer Investment Management Team has methodically constructed the recommend composition for the Crummer Truist Portfolio, aligning it with the team's consensus economic outlook. The primary objective in portfolio construction is to optimize the blend of equity and fixed-income assets within the Portfolio. This strategic asset allocation is derived from our team's data-driven approach to research, which involves a thorough assessment of market benchmarks and the formulation of market forecasts. Outlined in the graph below, the proposed asset allocation mix is structured as 80% in equities and 20% in fixed income. This allocation, adhering to the bond allocation limit stipulated by the Investment Policy Statement (IPS), is intended to position the portfolio advantageously to capitalize on the risk-adjusted performance of debt instruments, especially during expected interest rate cuts. Our team anticipates a non-parallel mild downward shift in interest rates over the next twelve-month period.

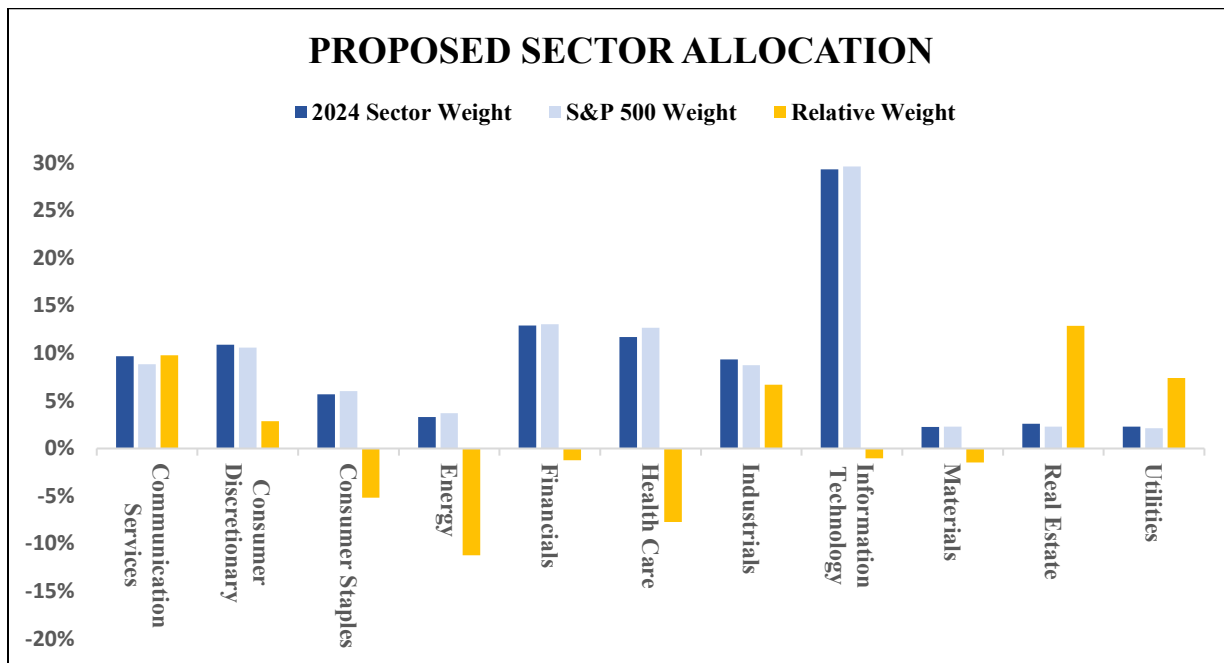


The decision to maximize the fixed income allocation to 20% is strategic, reflecting our confidence in the potential benefits derived from the risk-adjusted performance of debt instruments associated with targeted duration. This stance is particularly relevant amid the expected interest rate cuts. Simultaneously, the 80% allocation for equities is deemed appropriate, considering the heightened volatility in equity markets stemming from increased macroeconomic uncertainty. This asset allocation aims to position the Portfolio optimally for a dynamic market environment, reflecting our commitment to achieving resilient investment outcomes.

2. Sector Allocation

The Crummer Investment Management team systematically evaluates the potential risks and catalysts impacting equity markets, projecting their performance over the next twelve months. Our team anticipates Federal Reserve interest rate cuts commence at the end of the second quarter and the inflation rate to cool down to 2.2%-2.7% throughout the year. Mindful of these considerations, we have strategically proposed equity sector weights, delineating underweight, overweight, or neutral positions with respect to each sector's S&P 500 benchmark. The extent of overweighting or underweighting is derived from the sector analysts' confidence levels and is informed by a consensus within the team. To align with this approach, we have identified Communication Services, Consumer Discretionary, Industrials, Real Estate, and Utilities as the sectors to be overweighted at varying degrees. Conversely, we recommend underweighting sectors

such as Energy, Healthcare, and Consumer Staples. The Information Technology, Materials, and Financials sectors have been weighted neutrally relative to their benchmarks. These decisions are grounded in our team’s comprehensive economic outlook and our assessment of sector performance, particularly in times of decelerating inflation, while acknowledging the uncertainty surrounding the timing of interest rate cuts.



Sector	Portfolio Weight [c]	S&P 500 Weight [d]	Relative Weighting	Degree of Tilt vs S&P 500 [a]
Communication Services	9.70%	8.84%	Overweight	10%
Consumer Discretionary	10.90%	10.60%	Overweight	3%
Consumer Staples	5.70%	6.01%	Underweight	-5%
Energy	3.30%	3.72%	Underweight	-11%
Financials	12.90%	13.06%	Neutral	-1% [b]
Health Care	11.70%	12.68%	Underweight	-8%
Industrials	9.34%	8.75%	Overweight	7%
Information Technology	29.30%	29.61%	Neutral	-1% [b]
Materials	2.26%	2.29%	Neutral	-1% [b]
Real Estate	2.60%	2.30%	Overweight	13%
Utilities	2.30%	2.14%	Overweight	7%

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

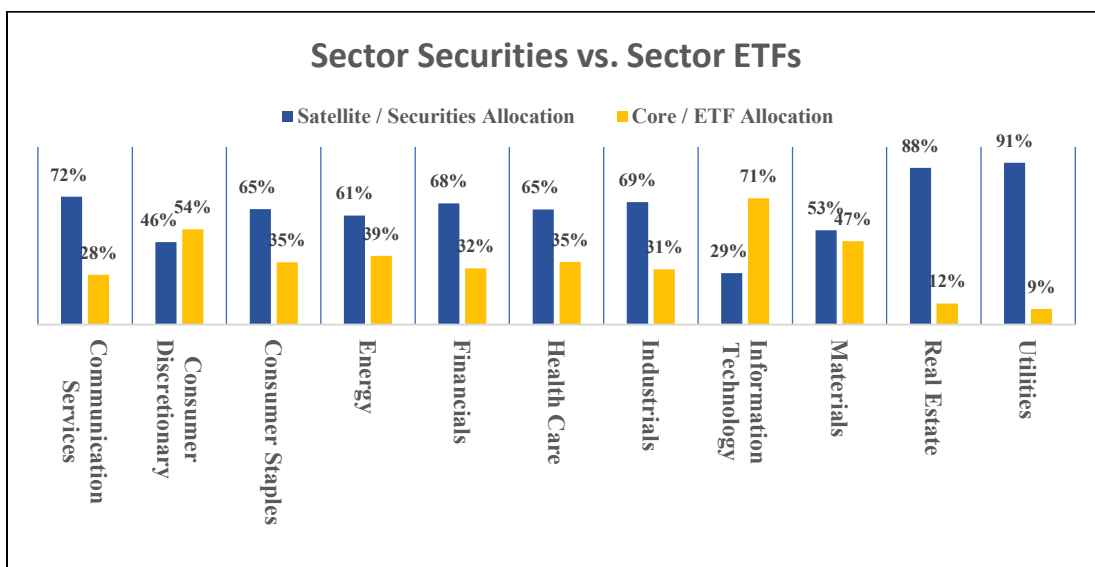
[b]: A range of +/-1% proportional tilt is considered neutral.

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

The Crummer Investment Management team has employed a data-driven risk-budgeting methodology to determine the allocation between the two-stock portfolios of each sector and their respective sector ETFs. This precise approach involves calibrating the risk levels within the actively managed stock portfolio relative to the passively managed sector ETF, thereby mitigating the potential for excessive risk-taking within the actively managed segment of the portfolio. This methodology leverages historical returns dating back to the portfolio’s inception, enabling the team to compute the annualized tracking error for each of the actively managed sectors against their corresponding sector ETFs. The primary objective is to ascertain the optimal percentage allocation for each sector ETF, guided by the team’s chosen tracking error tolerance.

The tracking error tolerance levels play a crucial role in active versus passive investments, where a tolerance level of zero implies a full allocation into the sector ETF, and higher tolerance levels suggest a greater allocation to the two-stock portfolio within the sector. To ensure a well-balanced distribution of risk across sectors, the team has established a portfolio-wide tolerance level, mitigating the natural variability of tracking errors across different sectors. This approach underscores our commitment to maintaining prudent risk management practices and promoting consistency in portfolio performance across diverse sectors.

The Crummer Investment Management team has decided to use a 10% tracking error 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 displays the composition of sector securities versus sector ETFs, while the table further below also presents 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 14.5%. Given that the sector’s tracking error tolerance is set to 10%, the sector allocation for the two-stock portfolio is 68.9%, while the remaining 31.1 % is invested in the sector ETF.



Sector	Satellite / Securities Allocation [a]	Core / ETF Allocation [b]	Tracking Error
Communication Services	71.9%	28.1%	13.9%
Consumer Discretionary	46.4%	53.6%	21.5%
Consumer Staples	64.9%	35.1%	15.4%
Energy	61.4%	38.6%	16.3%
Financials	68.3%	31.7%	14.7%
Health Care	64.8%	35.2%	15.4%
Industrials	68.9%	31.1%	14.5%
Information Technology [c]	28.9%	71.1%	17.3%
Materials	53.0%	47.0%	18.9%
Real Estate	88.2%	11.8%	11.3%
Utilities	91.1%	8.9%	11.0%

[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 comprehensive analysis conducted across various sectors, the Crummer Investment Management team advises an allocation of 45.4% of the equity portfolio to sector Exchange-Traded Funds (ETFs), with the remaining 54.6% to be allocated to carefully selected individual stock portfolios. These recommended proportions are designed to furnish the portfolio with requisite active exposure while simultaneously anchoring it to sector benchmarks. Such a strategic allocation is anticipated to yield risk-adjusted returns amidst the prevailing uncertain economic landscape.

4. Sector Equity Allocation – A Risk Parity Approach

The Crummer Investment Management team employed the risk parity approach to precisely determine how to allocate funds between the two chosen stock selections within every sector. Risk parity methodology, renowned for its effectiveness in risk management, ensures an even distribution of risk across all elements within a portfolio. Using the historical volatility of each selected stock, we were able to craft a well-balanced risk profile for each sector's two-stock portfolio. For example, applying the risk parity approach to the Industrials sector, the weight of General Dynamics (GD) will be different than that of Rockwell Automation (ROK) because the volatility estimates for these stocks are not the same. In fact, the relative weighting of these stocks would be 58% to 42% in favor of GD. We adopted this approach due to its goal of mitigating potential downsides associated with overexposure to any individual security. By adopting such a risk-conscious strategy, we strive to safeguard against unforeseen market turbulence and enhance long-term performance.

5. Security Selection

As most sectors demonstrate a triumphant return to pre-pandemic levels; we hold a high degree of confidence that the lingering effects of the pandemic will exert minimal influence on our selected stocks moving forward. Looking ahead to the second half of 2024, we anticipate interest rate cuts and a decline in inflationary pressures, factors poised to positively impact the market landscape. The Crummer Investment Management team meticulously selected twenty-two undervalued companies spanning across all eleven sectors of the S&P 500 index. These selections were chosen based on rigorous assessments of financial performance and growth prospects, while seeking alignment with the overlay themes of Environmental, Social, and Governance (ESG) principles and Artificial Intelligence (AI). Two of these stocks were already

in the Portfolio and received HOLD recommendation. Consequently, the remaining fourteen stocks that are part of last year's securities received a SELL recommendation. This comprehensive approach underscores our commitment to identifying promising investment opportunities while mitigating potential risks across a diverse array of market sectors.

In pursuit of selecting two appropriate stocks for the Portfolio, each of the seventeen team members took charge of individual sector coverage, conducting thorough quantitative and qualitative analyses. Our quantitative examination involved utilizing a discounted cash flow model tailored for dividend-paying stocks and a proforma free cash flow model for those that do not pay dividends. Our primary goal was to pinpoint stocks deemed undervalued based on their prevailing market prices (as of February 28, 2024), coupled with our assessment of their growth potential. Concurrently, our qualitative assessment delved into identifying emerging trends and potential catalysts that might be inadequately reflected or only partially priced into the current market valuation of the securities. For instance, we paid significant attention to environmental, social, and governance (ESG) momentum and initiatives, recognizing them as potential drivers of growth. Similarly, we also recognized the rise in Artificial Intelligence and how various companies are positioned to benefit from it. To derive our sub-sector and individual security growth assumptions, we employed a macro-based research methodology, laying the foundation for our comprehensive analysis. This approach ensured that our evaluations were not solely reliant on historical performance but also factored in future potential and industry dynamics, thereby enhancing the robustness of our stock selection process.

We anticipate moderate growth heading into the next twelve months. With potential rate cuts and decreases in inflation, we are confident that our recommended stocks will outperform their respective sectors over this period. 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	2.18%
Consumer Discretionary Select Sector SPDR Fund	XLY	ETF	4.67%
Consumer Staples Select Sector SPDR Fund	XLP	ETF	1.60%
Energy Select Sector SPDR Fund	XLE	ETF	1.02%
Financial Select Sector SPDR Fund	XLF	ETF	3.27%
Health Care Select Sector SPDR Fund	XLV	ETF	3.29%
Industrial Select Sector SPDR Fund	XLI	ETF	2.32%
Technology Select Sector SPDR Fund	XLK	ETF	16.67%
Materials Select Sector SPDR Fund	XLB	ETF	0.85%
Real Estate Select Sector SPDR Fund	XLRE	ETF	0.25%
Utilities Select Sector SPDR Fund	XLU	ETF	0.16%
Interpublic Group of Companies, Inc.	IPG	Stock	3.19%
Meta Platforms Inc. Class A	META	Stock	2.39%

Name	Ticker	Security Type	Portfolio Weight
Hasbro, Inc.	HAS	Stock	1.99%
Tractor Supply Company	TSCO	Stock	2.06%
Hershey Company	HSY	Stock	1.85%
Target Corporation	TGT	Stock	1.11%
Enterprise Products Partners L.P.	EPD	Stock	0.82%
TotalEnergies SE Sponsored ADR	TTE	Stock	0.80%
Blackstone Secured Lending Fund	BXSL	Stock	3.80%
Toronto-Dominion Bank	TD	Stock	3.24%
Novo Nordisk A/S Sponsored ADR Class B	NVO	Stock	3.06%
Pfizer Inc.	PFE	Stock	3.01%
General Dynamics Corporation	GD	Stock	2.98%
Rockwell Automation, Inc.	ROK	Stock	2.16%
Baidu Inc Sponsored ADR Class A	BIDU	Stock	2.25%
Microsoft Corporation	MSFT	Stock	4.52%
LyondellBasell Industries NV	LYB	Stock	0.56%
Ternium S.A. Sponsored ADR	TX	Stock	0.40%
Essential Properties Realty Trust, Inc.	EQIX	Stock	1.08%
Essential Properties Realty Trust, Inc.	EPRT	Stock	0.76%
American Electric Power Company, Inc.	AEP	Stock	0.80%
Duke Energy Corporation	DUK	Stock	0.88%
PGIM Ultra Short Bond ETF	PULS	ETF	13.33%
Vanguard Long-Term Investment Grade Fund Admiral	VWETX	Mutual Fund	6.67%

Based on these details, we have analyzed the market cap and equity style exposure for the recommended Portfolio. These exposures are compared against S&P 500 in the following table. Morningstar styles as of February 28, 2024 are used for this analysis. Sector ETF style exposures are reflected in the CIM weights through the ETF constituents.

Style	CIM Weight (Overall)	CIM Weight (in Equity Portfolio)	S&P 500
Large Value	14.8%	18.5%	16.8%
Large Core	16.6%	20.8%	30.7%
Large Growth	24.5%	30.7%	30.7%
Mid Value	6.9%	8.6%	7.4%
Mid Core	9.2%	11.5%	10.2%
Mid Growth	1.2%	1.5%	3.9%
Small Value	3.9%	4.9%	0.3%
Small Core	2.7%	3.4%	0.0%
Small Growth	0.0%	0.0%	0.0%
Total	80%	100%	100%

List of Securities Recommended for Sale

Name	Ticker	Sector / Asset Class
Verizon Communications Inc.	VZ	Communication Services
Home Depot, Inc.	HD	Consumer Discretionary
Procter & Gamble Company	PG	Consumer Staples
Tyson Foods, Inc. Class A	TSN	Consumer Staples
ConocoPhillips	COP	Energy
Diamondback Energy, Inc.	FANG	Energy
BlackRock, Inc.	BLK	Financials
Chubb Limited	CB	Financials
Abbott Laboratories	ABT	Healthcare
Gilead Sciences, Inc.	GILD	Healthcare
Lockheed Martin Corporation	LMT	Industrials
3M Company	MMM	Industrials
Cisco Systems, Inc.	CSCO	Information Technology
International Business Machines Corporation	IBM	Information Technology

ESG Overview

Recent Shifts in ESG Discourse

Environmental, Social, and Governance (ESG) Investing has faced a recent downturn in public perception. Concerns about greenwashing, political influences, and uncertainties regarding investment outcomes have cast doubts on its validity moving forwards. Consequently, the terminology surrounding ESG is evolving, with terms like “Transition Economy,” “Socially Responsible Investing,” or “Impact Investing” gaining prominence. Despite this linguistic evolution, the fundamental idea persists: a growing awareness of the societal, environmental, and employee-related impacts of corporate actions.

Consumer Awareness Driving Corporate Change

As consumer consciousness regarding social and environmental issues continues to grow, companies are under pressure to prioritize ESG considerations. Research by PwC indicates that a significant majority, 76% of consumers, are willing to boycott products from companies showing inadequate ESG commitments. Conversely, products with strong ESG credentials have experienced an eight percent increase in sales over the past five years compared to those without such credentials. This shift underscores the increasing significance of ESG factors in corporate decision-making.

Integration of ESG Metrics: The Crummer Truist Portfolio Approach

The Crummer Truist Portfolio integrates ESG theme into its investment strategy as a fundamental aspect. By assessing companies based on their ESG initiatives, the portfolio aims not only to encourage positive societal impacts but also to improve investment returns while managing risks. Research indicates that companies involved in ESG controversies have historically underperformed global benchmarks by twelve percent over a two-year period.

Utilizing Truvalue as an ESG Benchmark

The Crummer Truist Portfolio employs a rigorous approach, utilizing various qualitative and quantitative ESG information throughout the screening process. Truvalue SASB Scores provide comprehensive assessments across 26 ESG categories outlined by the Sustainability Accounting Standards Board (SASB). Additionally, Truvalue offers Dynamic Materiality scores to pinpoint the most financially significant ESG categories for individual companies.

The portfolio’s absolute Truvalue Industry Percentile rating of 37.50 surpasses the S&P 500’s rating of 31.80, which corresponds to an 18% positive tilt. Highlights include Equinix, named to the Carbon Disclosures Project A-List, and IPG, which ranked in the highest category by Sustainalytics. IPG is also included in the Dow Jones Sustainability Index, placing it within the top 20% in North America. Only two of our sectors, Healthcare and Consumer Staples, were below the benchmark in both metrics we measured. We believe that these stocks still provide strong value for the Portfolio, despite the risks associated with lower ESG scores.

Sector	S&P 500 Average	CIM Average	Relative Tilt
Communication Services	30.86	58.72	90%
Consumer Discretionary	24.78	37.80	53%
Consumer Staples	31.16	20.97	-33%
Energy	26.11	42.28	62%
Financials	29.08	34.07	17%
Health Care	35.80	28.76	-20%
Industrials	39.26	48.28	23%
Information Technology	29.27	30.72	5%
Materials	46.79	52.28	12%
Real Estate	59.65	71.49	20%
Utilities	35.16	33.83	-4%
Overall Equity Portfolio	31.80	37.50	18%

Future Prospects and Strategic Focus

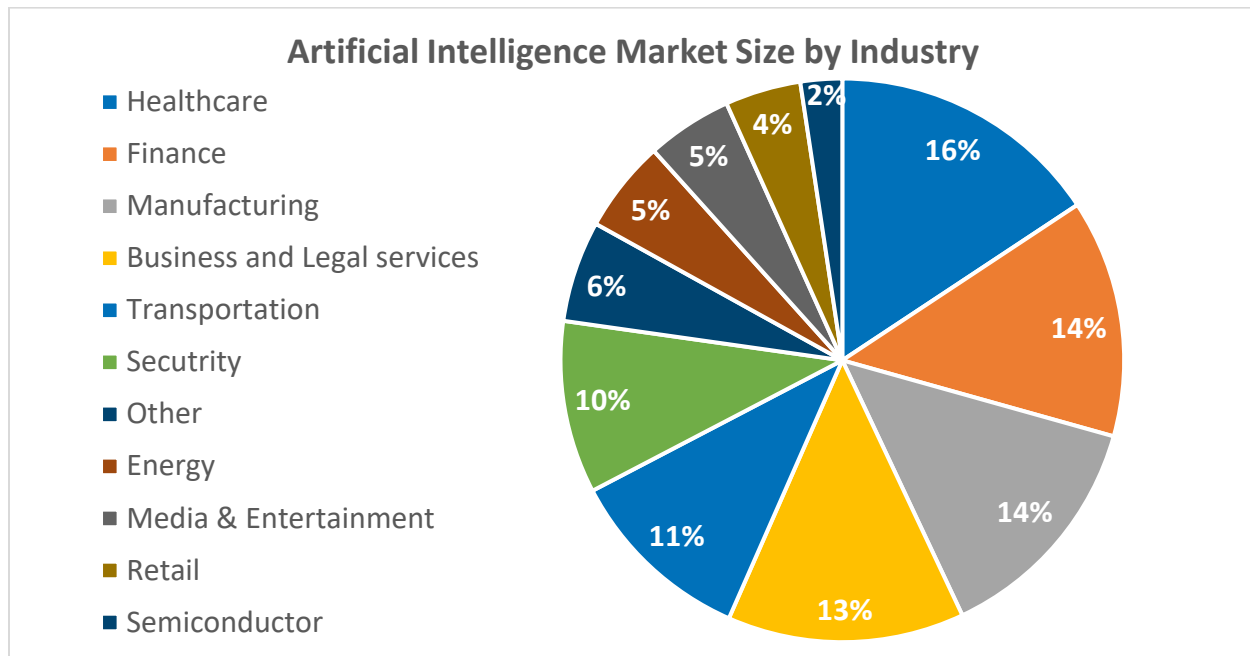
The Crummer Truist Portfolio's Truvalue ESG Momentum score of 57.53 exceeds the S&P 500's 54.65, emphasizing its focus on ESG improvement. This gives a 5% edge for the Portfolio, demonstrating its commitment to responsible investing. This metric guides ESG trajectory, aiding risk management and long-term returns, positioning the portfolio to outperform benchmarks and align with sustainable investing practices.

Sector	S&P 500 Average	CIM Average	Relative Tilt
Communication Services	49.29	65.74	33%
Consumer Discretionary	47.35	46.85	-1%
Consumer Staples	55.85	37.81	-32%
Energy	53.08	64.63	22%
Financials	43.74	55.59	27%
Health Care	50.84	42.68	-16%
Industrials	57.55	71.14	24%
Information Technology	62.82	62.55	0%
Materials	61.54	70.95	15%
Real Estate	64.20	61.23	-5%
Utilities	59.09	62.01	5%
Overall Equity Portfolio	54.65	57.53	5%

Artificial Intelligence (AI) Overview

The rise of Artificial Intelligence (AI) has propelled technological advancements across industries, promising transformative changes in the way we work and interact with technology. The Crummer Investment management team acknowledges the momentous technology innovation and the recent regulatory developments, as well as the relevant challenges and opportunities in the global business climate.

The proliferation of AI technologies has led to exponential growth projections, driven by factors such as infrastructural advancements, increased data availability, and substantial investment. Notably, the emergence of generative AI has captured the attention of tech companies, signaling a shift in product offerings and revenue streams. From 2020 to 2030, the artificial intelligence market size is expected to grow from \$108 billion to \$739 billion, or at a CAGR of 20.2%. Additionally, AI is expected to impact a wide range of industries including, healthcare, manufacturing, and transportation. Below is a breakdown of current total market size by industry. AI will have an impact in a wide variety of industries bringing more efficiencies and innovation.



However, amidst this rapid growth, concerns about misrepresentation, commonly referred to as “AI-washing,” have emerged. The term “AI-washing” refers to the practice of exaggerating or misrepresenting AI capabilities, leading to concerns about transparency and accountability. This phenomenon underscores the importance of responsible AI development and deployment to ensure the integrity and trustworthiness of AI technologies.

Recent regulatory initiatives, such as the EU’s AI Act and President Biden’s executive order in the United States, highlight the need for robust regulatory frameworks to govern AI technologies. The EU’s AI Act, expected to take effect in 2024, adopts a risk-based approach, emphasizing transparency, accountability, and human oversight in AI implementations. Similarly, President Biden’s executive order seeks to promote safe and secure AI development and use, directing federal agencies to develop voluntary and mandatory guidance for AI governance.

Incorporating AI technologies into business portfolios is essential for staying competitive in a rapidly evolving landscape. However, success hinges on understanding and complying with regulatory frameworks, harnessing AI innovations effectively, and implementing viable monetization strategies. By embracing responsible AI practices and strategic partnerships, businesses can unlock the full potential of AI while navigating challenges and driving sustainable growth. Considering the rapid innovation and “AI-washing,” the portfolio evaluates AI on a per-company basis and if the innovation supports long-term growth.

Based on our long-term optimism regarding the benefits of AI, seven of our twenty-two stocks have a direct AI thematic overlay, and many others have tailwinds through their partnerships and investments. We also attempted to measure our portfolio’s AI tilt by utilizing our portfolio’s alignment with a prominent index that represents the AI-related industries. S&P Kensho New Economies Composite Index (KNEX) represents companies that are focused on new areas such as AI, hyperconnectivity, robotics, and automation. Six of our stock picks, corresponding to 17.55% of our entire portfolio are also represented in KNEX, which is investable through a SPDR ETF with ticker KOMP. When the indirect investment through the sector ETFs is also considered, we overweight exposure to this index by 14% relative to the S&P 500.

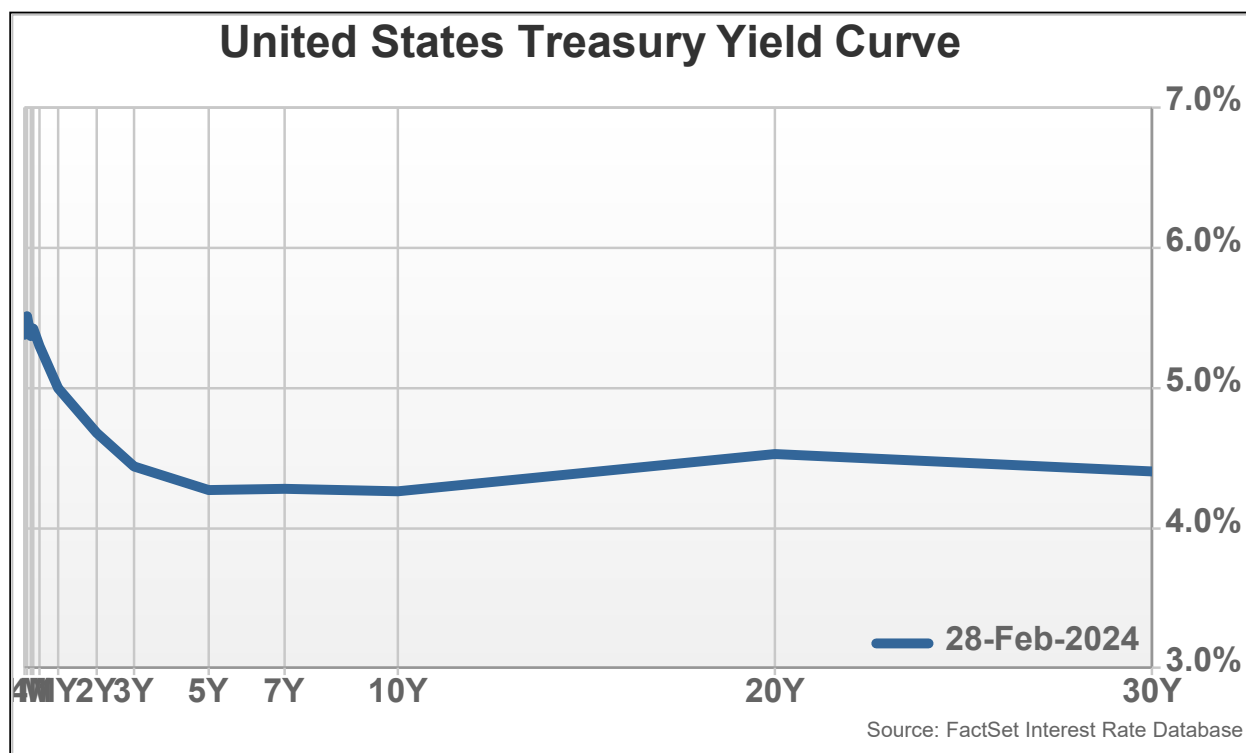
Fixed Income Assets

2024-25 Outlook and Overview

As highlighted in our economic outlook, we believe that the Fed policy rate will drop to 4.25%-4.50% over the next twelve months. This will materialize in lower rates for lower maturity bonds, specifically for maturities of three months or less. We expect the yield curve to begin flattening during this period, while remaining slightly inverted at the end of the twelve months. This is due to recent comments from the Federal Reserve indicating expected interest rate cuts to offset cooling within the greater economy. This sentiment is also echoed by the greater market.

Our team has chosen to maintain our fixed income exposure at the maximum amount (20%) allowed by the IPS. Despite depressed returns within fixed income last year, we have confidence that this allocation will allow us to capitalize on widely expected interest rate movements. Included within this outlook are recommendations for adjusting to the overall fixed income portfolio duration accordingly. Within similar historic episodes, bond funds with high durations achieved high returns following large interest rate cuts.

One consideration to note is the number of interest rate cuts projected over the next twelve months. While the Federal Reserve has expressed the intent to enact rate cuts, they have delayed the timing of these cuts recently. This has been due to inflation dropping at a slower rate than anticipated. We have included the US Treasury yield curve below to illustrate that we understand the risks of our increased allocation and the volatility of yields in this environment. However, we maintain our expectation that the yield curve will begin to flatten, with short-term bonds moving to a greater degree than mid- to long-term bonds.



Fund Weights, Duration and Credit Quality

Given the current economic indicators and central bank signals, we anticipate a series of eventual rate cuts. In this context, securities with a longer duration stand to benefit significantly due to their greater interest rate sensitivity. As rates are cut, the price of longer-duration bonds increases more than that of shorter-duration bonds.

Consequently, we have increased our investment in Vanguard's Long-Term Investment Grade Fund (VWETX), which will now represent 33.3% of our portfolio. This represents an increase of approximately 8% from its current standing at 25.4%. VWETX has a high duration which affords greater exposure to expected interest rate cuts. The long-term holdings within this fund will appreciate in price during interest rate cuts due to their high duration. This fund also contains remarkably high credit quality assets.

We have decreased our investment in PGIM's Ultra Short Duration Fund (PULS), from the current 74.6% allocation to now constituting 66.6% of our portfolio. This fund's ultra-short duration of 0.30 years allows us to offset the risk associated with changes in interest rates and to effectively balance the portfolio given the high allocation to fixed income this year. In addition to risk mitigation, maintaining a high allocation in PULS allows the portfolio to benefit from higher coupon payments if interest rate cuts are postponed. The impact of this adjustment would be an increase in the overall weighted duration from the current level of 3.50 to an overall weighted duration of 4.50 with this year's suggested reallocation. This enhances our ability to benefit from expected interest rate movements from VWETX, while retaining the higher coupon on PULS.

Given the current narrow credit spreads, we anticipate a widening trend, which historically benefits high credit quality bonds. Narrow spreads imply a smaller yield advantage for taking on credit risk, making it an opportune time to hold higher credit quality securities as the negligible benefit from lower credit securities is not warranted by the increased risk. As a result, we recommend maintaining PULS and VWETX within the portfolio given their high average credit quality, shown in the table below.

Fund	Weight	Duration	Maturity (Years)	Average Coupon (%)	Avg. Credit Quality
PULS	66.7%	0.3	1.2	4.80	A-
VWETX	33.3%	12.9	22.4	4.48	A+
Overall	100.0%	4.5	8.3	4.69	

Sector Analysis

Communication Services

Introduction

The Communications Services sector plays a pivotal role in our interconnected world. It encompasses companies that provide essential services, enabling billions of consumers and businesses to communicate, access information, and stay connected. This sector includes Meta Platforms Inc., Alphabet Inc. (Google), Walt Disney Company, and Warner Bros Discovery. As of February 28th, 2024, the Communications Services sector represented 8.84% of the S&P 500.

Growth Opportunities

Let us look at some of the critical areas of growth for this sector in the future, starting with the hot topic of the moment: Artificial intelligence (AI). The industry has witnessed a resurgence due to AI advancements. Companies like Meta Platforms Inc. (META) and Google-parent Alphabet (GOOGL) have capitalized on AI's promise. New developments in generative AI could enhance digital content creation and advertising efficiency, fostering deeper customer-company relationships. The communications sector has rebounded from the “tech wreck” of 2022. Advertising firms within the communications sector, including IPG, are poised for continued expansion, driven by digital advertising and evolving market dynamics. Lastly, the advertising industry is projected to reach \$1 trillion by 2025. Digital advertising has been a driving force, accounting for approximately 60% of total global advertising in 2021. Companies like Alphabet and Meta have significantly contributed to growth in digital ad spending.

Challenges

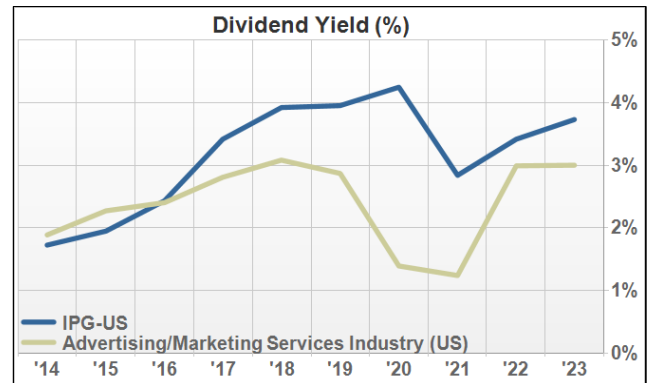
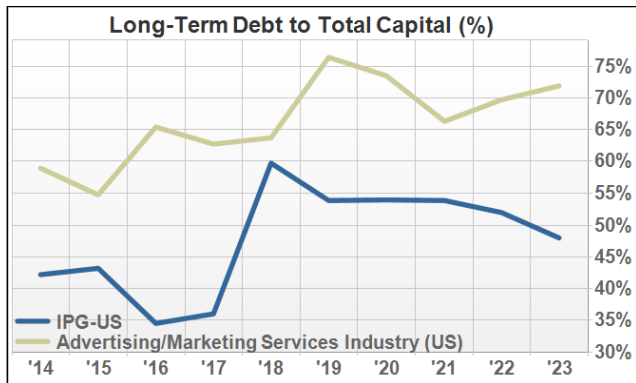
The sector's challenges include evolving privacy regulations, net neutrality, and antitrust concerns; therefore, balancing innovation and compliance is crucial. Cybersecurity risks are a concern because these threats escalate as communication services become more digital. Companies must invest in robust security measures to safeguard user data and maintain trust. Competition and consolidation should also be considered, as intense competition among tech giants and traditional telecom players can lead to pricing pressures.

Conclusion and Recommendation

Due to undervaluation and the growth opportunities from tech-related innovation, an overweight recommendation at 9.7% of the equity portfolio has been placed on the Communications Services sector. Earnings recovery, AI enthusiasm, and favorable valuations have fueled its resurgence. While past performance does not guarantee future results, the sector's open runway suggests further potential. The recipe is clear: Monitor regulatory developments by staying informed about regulatory changes and their impact on sector dynamics. Evaluate innovation and assess companies at the forefront of AI and content delivery like Meta Platforms, Inc. Look for sustainable competitive advantages. As investors, we navigate both risks and opportunities. The Communication Services sector remains a fascinating landscape shaped by technological evolution and consumer behavior.

Interpublic Group of Companies, Inc. (NYSE: IPG)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$42.17	\$31.74	0.5x	Mid Value	4.2%	93.3	BBB



Introduction

IPG was founded in 1930 in New York City and is one of the 'Big Four' advertising agencies, consisting of dozens of businesses operating around the world specializing in advertising and marketing.

ESG Status

IPG has implemented comprehensive strategies to mitigate its ecological impact, including initiatives to reduce energy consumption and emissions. They are a founding member of AdGreen, a program helping advertisers reduce their environmental impact caused by production, with the end goal of achieving zero waste production processes. In their last ESG report, they announced their climate action plan, with intermediate goals in 2030 and the intent to reach net-zero carbon by 2040. Furthermore, for the past three years, Forbes has named them one of 'The Best Employers for Diversity.' This can be attributed to the many initiatives they take part in such as incentives for diversity hiring, promotions, and representation. IPG has rigorous governance standards, such as their commitment to women being in leadership positions. They are a member of the 30% Club, which aims to have at least 30% of corporate boards to consist of women. Furthermore,

their board of directors consists of ten members, eight of which are independent, and the two others are Philippe Krakowsky (CEO) and their executive chairman.

The Story Behind the Stock

IPG is one of the most established companies in the marketing and advertising space, offering stability in a sector that can be negatively impacted during times of economic downturn. Due to its consistent revenue and earnings growth, IPG shows resilience and reliability in its operations. Their commitment to innovation and digital transformation ensures it remains at the forefront of industry trends. They do this through investment in emerging opportunities such as incorporation of Gen AI across the enterprise, high growth media channels, digital commerce, and development of new media buying models. They also stay ahead of the curve of the industry, because of its diverse workforce. With employees hailing from various companies under the IPG umbrella, the organization benefits from a wealth of perspectives. This diversity enables IPG to utilize an open architecture approach to bring their clients the best solution for their business. Coupled with competitive dividend yields (chart) and share buyback programs,

Communication Services Crummer Investment Management

IPG's stock represents a compelling investment opportunity.

Fundamental Analysis

Balance Sheet:

Interpublic Group of Companies has a strong balance sheet compared to the average firm in its industry, as demonstrated by its long-term debt to capital ratio of 48% last year with a five-year average of 52% (chart). They have a management team that is allowing them to make prudent decisions to continue their position within the sector. Their commitment to growing IPG is seen through key indicators such as total debt, which has been dropping steadily over the last three years, by 5.2% in 2022 and 2.7% in 2023. Additionally, IPG's stable revenue streams and consistent earnings growth contribute to a positive outlook, indicating resilience against economic downturns.

Income Statement:

Looking at revenue growth rates over the past few years can reveal the company's trajectory, with an average annual growth rate of 6.8% indicating sustained revenue growth. Furthermore, calculating key profitability ratios such as gross profit margin of 23.5% and net profit margins of 5.2% allows evidence of the company's ability to generate profits, and continue to do so. Their net income has been steadily increasing since the pandemic affected them in 2020 when it fell to \$351 million, while in 2023 it was \$1.01 billion. This can be attributed to the strong economic recovery since COVID and the company's ability to cut down costs. In 2020, the difference between net and gross income was \$710 million. In 2023, this gap was reduced to only \$451 million.

Free Cash Flows:

IPG has steadily increased its dividends since they began paying them in 2011, starting at \$0.24 and now most

recently at \$1.24 this past December. IPG's free cash flow has been somewhat low over the past two years, but this has been due to share repurchases where they repurchased \$320 million in 2022 and \$350 million dollars in 2023.

Valuation

Interpublic Group of Companies (IPG) has strong indicators of growth and stability, due to their industry leading practices and ESG initiatives. Using a three-stage dividend discount model, we were able to find a most likely intrinsic value of \$42.17 adjusted for expected share repurchases. Through our sensitivity analysis of IPG's estimated intrinsic value between \$36 and \$47 adjusted for share repurchases, the most likely value previously stated represents a 30% upside compared to the current price.

Challenges

The Interpublic Group of Companies (IPG) faces intense competition within the industry from both established players and new entrants pressuring IPG's market share and pricing power. They combat this by continuing to hire top diverse talent and adapting to emerging digital platforms and technologies while maintaining traditional advertising and marketing values.

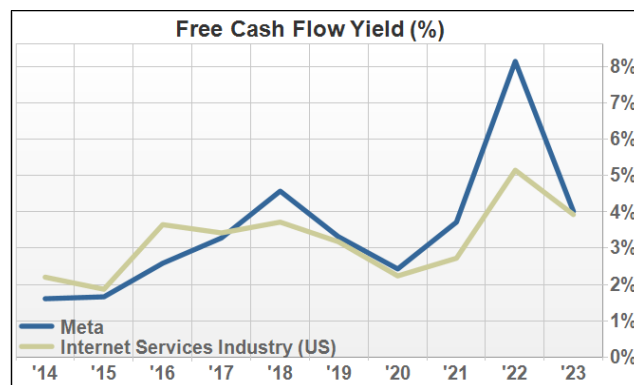
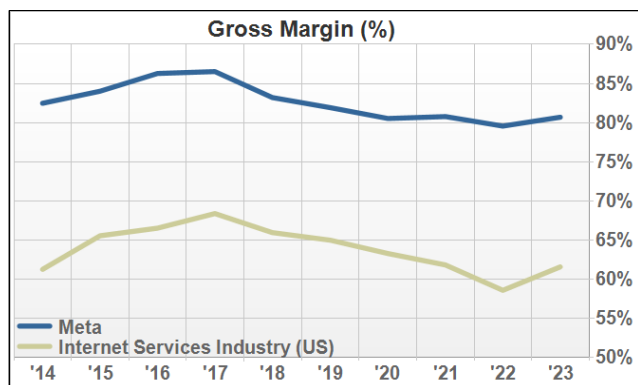
Conclusion & Recommendation

The Interpublic Group of Companies (IPG) commitment to their employees, their planet, and future are what make them the titan they are. With continued reinvestment into the companies practices along with innovation coinciding with the emergence of AI, IPG should continue to grow and thrive.

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

Meta Platforms Inc. Class A (NASDAQ: META)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
HOLD	\$655.05	\$484.02	1.1	Large Growth	0.4%	41.2	AA-



Introduction

Meta Platforms, Inc. develops social media technology that allows people to share, communicate, find like-minded people, and grow businesses. It has two segments: the Family of Apps (FoA) and Reality Labs (RL). It was founded in 2004 by Mark Zuckerberg, Dustin Moskovitz, Chris Hughes, Andrew McCollum, and Eduardo Severin. It is headquartered in Menlo Park, CA.

ESG Status and Connection to AI Thematic Investing

Meta Platforms, Inc. recognizes the importance of both sustainability and AI potential. It prioritizes areas where they can make the most significant impact, tracking metrics that matter. According to its 2023 Sustainability Report, Meta aims to reach a 50% reduction in workplace carbon emissions by 2030 through various initiatives, including energy efficiency improvements, waste reduction, and sustainable commuting options. 100% renewable energy resources and greenhouse gas reduction targets are ways they are collaborating with suppliers to drive net-zero progress.

CEO Mark Zuckerberg stated AI will be their most significant investment in 2024. Continued improvement to Meta AI, AI-powered smart glasses, large language models (LLMs), and AI investment will reinforce their social media dominance.

The Story Behind the Stock

Let us begin with the biggest news of 2024 in stocks: “Meta will begin paying dividends.” This announcement saw their stock jump by over 20%. Meta’s return to its investors has been well over 1000% since its IPO in 2012, so adding dividends to its stock will only increase its value and make it a reliable long-term investment. The expansion of Threads and Instagram, including Instagram moving into Europe and Threads accessible on Fediverse platforms (users from different platforms can engage with Threads content without a direct Threads or Instagram account), shows that the company is working to improve and expand. The other elephant in the room is AI, and Meta is moving all in on investment by partnering with Nvidia. They plan to acquire H100 graphics cards from Nvidia to bolster its AI infrastructure, including enhancing advertising campaigns and supporting new products.

Fundamental Analysis

Balance Sheet:

Meta saw their total assets grow by 24% in FY '23 compared to FY '22. One metric that we can look at that shows how well Meta is operating is their current ratio, which is 3.50 and well above the industry average. The other metric to look at is debt-to-equity, which is 25% and shows how low of a risk investing in them is. These metrics show that Meta continues to demonstrate robust financial performance, and with heavy investment, the probability of further success is exceedingly high.

Income Statement:

Meta has seen revenue increase 16% in FY '23 to \$1.35 trillion compared to FY '22. Gross margin (81%) and net margin (28%) are two ratios that show the strength of Meta's financial situation. These metrics again highlight Meta's strong financial performance in 2023, with substantial revenue growth and healthy gross profit (chart). Investors monitor these metrics, and Meta continues to shape the social media and digital landscape.

Free Cash Flows:

The free cash flow for FY '23 was over \$43 billion compared to FY '22 at \$19 billion, which is a 230% increase. Meta's FCF yield (chart) was 4.71% compared to Alphabet Inc. Class A (Google) 3.91%, LinkedIn 1.02%, and Snap Inc. (Snapchat) .13%. It shows the company's ability to pay off debt and, more importantly, have the resources to invest and expand. In short, Meta's healthy and robust cash flow shows that this company is leading the industry segment and shaping its path.

Valuation

Meta partnering with Nvidia for access to H100 graphic cards to spearhead their efforts in AI investment, added to their robust and proven track record financially, helps explain the assumptions in our valuation model. We used a Free Cash Flow to the Firm (FCFF) model to determine Meta's stock's intrinsic value. We arrived at 30% sales CAGR for the next five years, reflecting their financial stability and free cash flow surplus. We estimated a long-term sustainable growth rate of 4%.

The most likely intrinsic value was \$655.05. Our sensitivity analysis estimates Meta's stock intrinsic value between \$574 and \$761. Our most likely intrinsic value represents roughly a 35% upside compared to the current price.

Challenges

Meta's user base is older than companies like Snap, which would have an advantage in the younger demographic, so investment in its Instagram company should be watched closely. Content regulation and disinformation must be closely watched as we enter an election year, and the EU is monitoring their compliance with rules and regulations. Apple released their version of Meta's Quest Pro (the Apple Vision Pro). Fortunately for Meta, the price is over double that of the Quest Pro.

Conclusion & Recommendation

Meta Platforms, Inc. is financially sound, and they have partnered with Nvidia, one of the hottest firms of 2024 due to AI, amongst others, and are set to invest heavily in this technology. Competitors like Apple releasing products after Meta that are more expensive (Apple Vision Pro \$3499 vs Meta Quest Pro \$1499) only help increase their revenue and financial dominance. They continue to lead the way in innovation, making it extremely difficult to overlook.

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

Consumer Discretionary

Introduction

The Consumer Discretionary sector encompasses companies that provide nonessential goods and services. Investments in the sector are often influenced by consumer sentiment, economic indicators, and trends in consumer behavior. As a result, companies within this sector tend to thrive during periods of economic growth when consumer spending is high. The sector includes a diverse range of industries such as retail, leisure, entertainment, and apparel. Amazon, Tesla, Home Depot, McDonald's, Nike, and Airbnb are examples of prominent companies in the sector.

Trends and Opportunities

The Consumer Discretionary sector is entering the next twelve months with some positive momentum. Real disposable personal income growth has recovered to pre-pandemic levels. This combined with anticipated rate cuts could entice nonessential consumer spending. Still, U.S. personal savings continue to hover around its lowest levels since 2008. That combined with all-time-high personal debt levels currently discourage nonessential purchases. We believe that probable rate cuts in FY24 may alleviate some consumer spending restraints and that many companies in the sector will see slightly growing demand for their offerings. This dynamic landscape will favor companies within the sector with strong balance sheets, high customer retention, and access to creative financing of capital expenditure. In such, companies can strategically position themselves as front-runners for a coming period of high growth in demand, whenever that may be.

Economic Outlook and Sector Impact

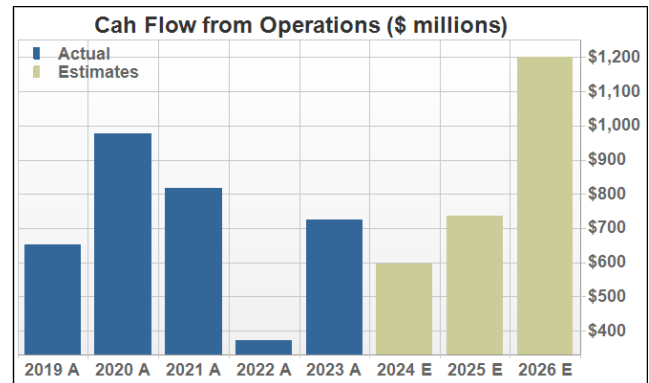
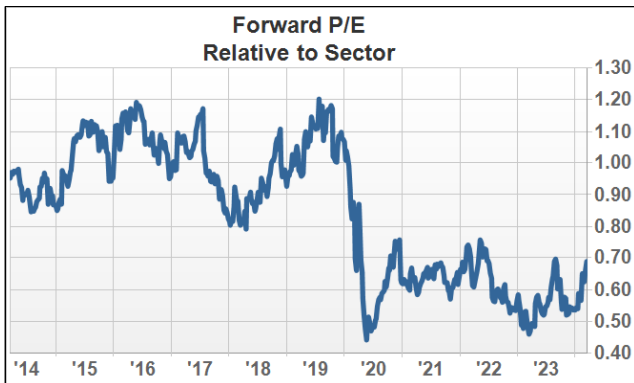
In evaluating the sector's outlook, we consider the current and future condition of the U.S. macroeconomic landscape. Despite ongoing high inflation, there are signs of it leveling off, prompting expectations for the Federal Reserve to soon decrease interest rates in pursuit of stabilizing prices. Recent FOMC meetings suggest a forthcoming downward trend in interest rates, possibly causing positive pressures on the labor market. Amid economic shifts and potential interest rate adjustments, the sector braces for evolving consumer behaviors, mindful of the diverse financial challenges facing households across the spectrum. In general, we anticipate a rise in disposable income levels to prompt increased nonessential spending in the coming year. However, discretionary spending may remain subdued among lower-income households who deal with prolonged effects of high interest rates.

Conclusion and Recommendation

The current macroeconomic landscape and anticipated strengthening disposable consumer income led the team to recommend slightly overweighting the Consumer Discretionary sector. We propose allocating 10.9% of the equity portfolio to the sector, compared to the S&P 500 index benchmark weight of 10.6%. Estimated intrinsic values for the recommended stocks are rooted in bottom-up valuation incorporating dividends and future share repurchases.

Hasbro, Inc. (NASDAQ: HAS)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$70.13	\$50.42	0.7x	Small Core	5.6%	41.2	BBB



Introduction

Hasbro was founded in 1923 and engages in the provision of family leisure time products and services. Hasbro delivers brand experiences through toys, consumer products, gaming, and entertainment. The company operates in over forty countries worldwide.

ESG Status

Hasbro is dedicated to environmental responsibility, aiming for 100% recyclable and sustainably sourced packaging. Notably, the company is part of the Science-Based Target initiative (SBTi), pledging a substantial 47.5% reduction in Scope 1 and Scope 2 emissions by 2033. Hasbro was voted 2022 World's Most Ethical Companies. A climate action plan was launched in 2023 to strengthen existing environmental work. The next Science-Based Target (SBT) is 90% reduction in GHG combined with the use of carbon removal credits for the residual 10% to reach net-zero goal by 2050.

The Story Behind the Stock

The company's outlook is shaped by industry leadership, digital innovation, and proactive strategies, underscoring its resilience and future potential. With a storied history of evolution and growth, Hasbro emerges as a resilient player in the entertainment sector. The onset of challenges, including shifts in consumer behavior and heightened competition from electronic entertainment modes, prompted Hasbro to strategically adapt. The company's leadership response, characterized by high-cost initiatives and strategic planning, reflects its commitment to overcoming obstacles and maintaining market relevance. The company's 50% ownership of The Hub, an AI-immersed television network, signifies its forward-looking approach to digital innovation.

Boasting a diverse brand portfolio, Hasbro has maintained a strong market presence, featuring beloved names like Monopoly, Play-Doh, and Nerf. Proactive strategies include partnerships and licensing agreements, exemplified by collaborations with YouTube Icon Mr. Beast and basketball all-star Luka Dončić in 2023, showcase Hasbro's innovative approach to expanding its reach and entering new customer segments. With over 1,500 brands, Hasbro ensures a comprehensive offering for a wide audience, cementing its status a leader.

Fundamental Analysis

Balance Sheet:

Hasbro, Inc. impresses investors with a robust balance sheet. Noteworthy features include a steady cash position of \$545.4 million, effective receivables management at \$1,029 million, and prudent inventory control at \$332 million. Hasbro has a current ratio of 1.13. The consistent growth in shareholders' equity, reaching \$2,862 million, and stable book value per share at \$20.50 affirm the company's financial strength and potential for value creation.

Income Statement:

Hasbro's income statement reflects a financially attractive profile for investors. In the fiscal year ending December 2023, the company reported sales of \$5 billion, highlighting consistent revenue generation. The gross income amounted to \$2.3 billion, indicating a healthy margin. Despite a \$1.7 billion nonoperating loss, Hasbro maintained a positive net income of \$1.5 billion. Since the beginning of the pandemic, Hasbro has been undervalued relative to the sector (chart). Hasbro has a five-year sales CAGR of 2.4%. The EBITDA of \$851.1 million and a high Earnings Persistence score underline Hasbro's financial stability.

Free Cash Flows:

Hasbro's cash flow statement displays financial strength with a robust operating cash flow of \$725.6 million (chart) and a positive free cash flow of \$516.3 million. The impressive 7.3% free cash flow yield highlights its capacity for substantial returns. In 2023, dividends were \$2.80. Hasbro's commitment to shareholder value is seen through consistent quarterly dividend increases, recently at \$0.70, and a proactive share repurchase initiative, buying back 1.4 million shares totaling \$125 million in 2022. The challenges of cash flow generation are projected to fade with a coming significant boost in operations. Because of this forecast coupled with its

current undervaluation, Hasbro is an attractive investment prospect.

Valuation

Applying a three-stage DDM, Hasbro Corporation emerges as a compelling investment opportunity, reflecting a positive outlook driven by its prominent market presence and robust financial performance. Informed by historical growth patterns, the model considers a 5.8% short-term growth rate and a 4% long-term sustainable growth rate, aligning seamlessly with Hasbro's strategic vision. Focusing on the intrinsic value, calculated at \$70.13, the analysis indicates that Hasbro is currently undervalued, presenting a 39% upside potential. A sensitivity analysis based on cost of equity and a short-term growth rate resulted in a target price range of \$59-\$88.

Challenges

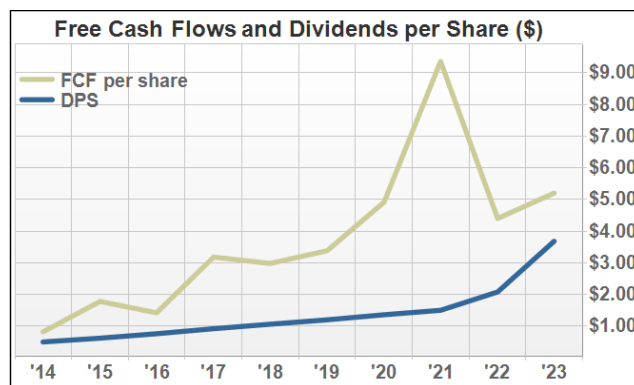
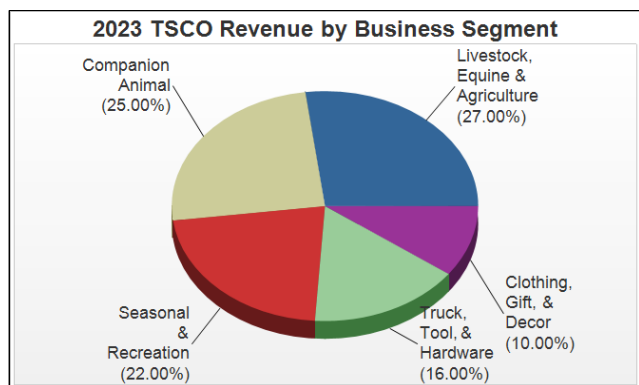
The company's proactive high-cost initiatives aim to counteract reduced sales and revitalize market interest. Yet, the pervasive influence of electronic entertainment poses a formidable hurdle. Strategically navigating this landscape requires a balanced approach, integrating technology and exploring collaborations. Hasbro's success in addressing these challenges will be pivotal, and optimism must be tempered with an acknowledgment of the complexities inherent in adapting to a digitalized market.

Conclusion & Recommendation

As a resilient force in the toy industry, Hasbro demonstrates growth potential amid challenges, buoyed by its esteemed legacy. Considering all factors, a BUY recommendation aligns with expectations of sustained growth and favorable returns.

Tractor Supply Company (NASDAQ: TSCO)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
HOLD	\$303.77	\$252.60	1.2x	Mid Core	1.7%	64.1	BBB



Introduction

Tractor Supply is the largest rural lifestyle retailer in the U.S. with 2,414 stores in forty-nine states, serving the needs of recreational farmers, ranchers, homeowners, gardeners, and pet enthusiasts.

ESG Status and Connection to AI Thematic Investing

Tractor Supply originally launched its sustainability program in 2008 and remains committed to sustainable and ethical business practices, aligning its business with seven of the United Nation’s sustainable development goals. The company is a member of the Sustainability Consortium and the Renewable Energy Buyers Alliance, together addressing environmentally and socially sustainable imperatives in product supply chains and energy consumption within the consumer goods industry. The company’s goals are to reduce its carbon footprint and achieve net zero emissions across all operations by 2040 and to reduce its water usage by 25 million gallons by 2025. Governance highlights include a CEO-led diversity, equity, and inclusion council, an approximately 50% female workplace, and a Board of Directors that is 90% independent and 40% female.

Tractor Supply leverages AI to create state-of-the-art customer service, a personalized customer experience

and to optimize team member productivity. Tractor Supply developed an in-house tech assistant called ‘Gura’ a decade ago. Now paired with Microsoft’s Azure, Gura has evolved into a knowledge tool that can interact with store associates and customers.

The Story Behind the Stock

Until recently, Tractor Supply was a maturing company. Now, 85 years after its inception, Tractor Supply is being led into a decade of high growth. Shareholders have seen several impactful updates in top management since 4Q19 with heavyweight additions at CEO and CMO. Hal Lawton, current CEO hired in 2020, holds a rich background in the retail industry and has reinvented Tractor Supply’s strategy and loyalty program, both proven to be core sales drivers. The revised leadership managed to consistently grow sales, expand margins, and increase operational efficiency each quarter throughout the prolonged post-pandemic weak consumer demand: a 24-month period during which Tractor Supply’s largest competitors suffered. This while accelerating Lawton’s already aggressive expansion plan: the company will add 90 stores annually until reaching the new total store count target of 3,000. The stock has been range-bound since 2H21, trading near all-time highs. We believe that Tractor Supply’s indicated growth in the decade ahead deserves higher valuation multiples, we anticipate

increasing consumer demand in 2H24 due to lowered inflation, and we value management's commitment to returning cash to shareholders through a healthy dividend and consistent share repurchases.

Fundamental Analysis

Balance Sheet:

Tractor Supply carries a healthy balance sheet. Notable to CEO Lawton's growth plan execution is that the company elevated its debt-to-equity ratio from 28% to a staggering 173% within his first year with the firm, moving to currently 234%. This is attributable to much new debt but also a ramped-up share buyback program, repurchasing for \$600 million to \$1 billion annually. Tractor Supply can comfortably service this debt as Net Debt/EBITDA is only 0.73x while EBIT covers the interest expense almost thirty-two times.

Income Statement:

Tractor Supply achieved record sales and record earnings FY23 despite rising interest rates, unfavorable weather hurting certain revenue segments, and inflation impacting consumer spending (chart). This can be attributed to supply chain improvements and the company's growing market share. For example, lower transportation rates allowed a 129 bps YoY gross margin expansion to 35% of sales in 4Q23.

In 3Q23 Tractor Supply announced a real estate strategy of owned development of new store builds accompanied by sale/leaseback agreements of 117 already owned stores. This will raise necessary financing for its footprint expansion and capture incremental cost savings, materially benefitting both revenue growth and operating margin. Five stores were sold in 2H23, benefitting SG&A by 40 bps for the year, and management expects approximately a decade of execution runway increasing cash flow and lowering new store rent.

Free Cash Flows:

Tractor Supply's dividend per share has grown at a ten-year CAGR of 15.5% and the company will pay a quarterly dividend of \$1.1 in FY24. Free cash flow per share has grown at a parallel 14.5% ten-year CAGR and net income has covered cash dividends five times on average (chart). Further, Tractor Supply has repurchased

common stock for \$610 million annually on average over the past five years.

Valuation

Tractor Supply revamped growth targets, reinvented strategy, improving operational highlights, and impressive shareholder compensation have set the premise for our valuation model. We used a three-stage dividend discount model to arrive at an intrinsic value for Tractor Supply's stock. Bottom-up estimates suggest a 15% short-term growth rate, backed up by the company's updated growth profile and expanding margins. We estimate long-term sustainable growth of 4%, around long-run US GDP and inflation rate estimates. We estimate Tractor Supply's intrinsic value at \$303.77, adjusted for expected share repurchases. Our model includes a sensitivity analysis estimating the stock's intrinsic value to fall between \$277 and \$333 adjusted for share repurchases. Our valuation of Tractor Supply represents 20% upside on average.

Challenges

Looming inflationary pressures on consumer spending aside, Tractor Supply is most notably subject to segmental revenue and market share risks. Droughts in Texas and Oklahoma in, regions accounting for 15% of sales, would hurt local revenue periodically. Further extreme weather could squeeze margins within the fast-growing Livestock & Pet segment, comprising approximately 50% of revenue. Tractor Supply does not hedge this risk, rather it puts trust in its downturn perseverance and has historically on average captured more surprise upside than downside from nonuse of derivative instruments.

Conclusion & Recommendation

Tractor Supply is growing faster than its competition, improving profitability despite industrywide demand drought, and has undergone impactful top leadership adjustments. The once maturing company is now being led into a decade of higher growth.

Tractor Supply Company is rated HOLD, representing a 20% intrinsic value upside on average.

Consumer Staples

Introduction

The Consumer Staples sector is made up of companies whose operations consist of food, drink (alcoholic and non-alcoholic), retail, tobacco, personal products, household goods, and general merchandise. The companies within the sector are known for selling products that consumers need, hence the name ‘staples.’ Since the companies in this sector produce goods that are necessary for everyday life, this sector is less sensitive to economic turmoil. The Consumer Staples sector makes up 6.01% of the total S&P 500 index as of February 28, 2024.

Challenges

In 2023, our Consumer Staples holdings were outperformed by the sector benchmark by just 0.2%. The story of 2023 was investors falling ‘out of love’ with the Consumer Staples sector and moving capital into higher risk trades such as mega-cap tech companies. Companies in this sector have faced pricing challenges due to high inflation over the past two years, and some brand names have been losing market share to private-label alternatives. Companies attempted to slow their price increases in 2023 to combat declining market share, however this only led to decelerated revenue growth. Even though most companies in the sector delivered better than expected earnings, this slow revenue growth has weighed stocks down. Another challenge for the Consumer Staples sector in 2023 involved the Fed’s decision to hike rates. The Fed raised rates eleven times and, as a result, investors focused more of their capital on fixed income and less on mature companies paying high dividends. Many of these challenge factors for the Consumer Staples sector will be dependent on inflation in 2024 and how many times the Fed cuts rates this year. Lower rates generally correlate to lower consumer prices in the sector. Lastly, the Consumer Staples sector tends to be a laggard in booming economic cycles, meaning other sectors outperform. With our team being optimistic in our economic outlook, we project that more capital in the markets will be allocated towards the Consumer Discretionary sector as it tends to boast higher returns in strong economic periods.

Opportunities

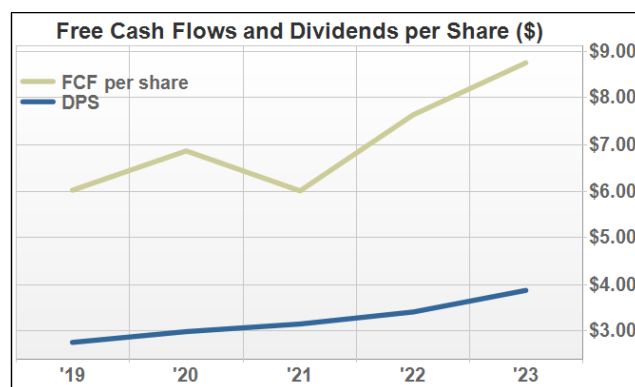
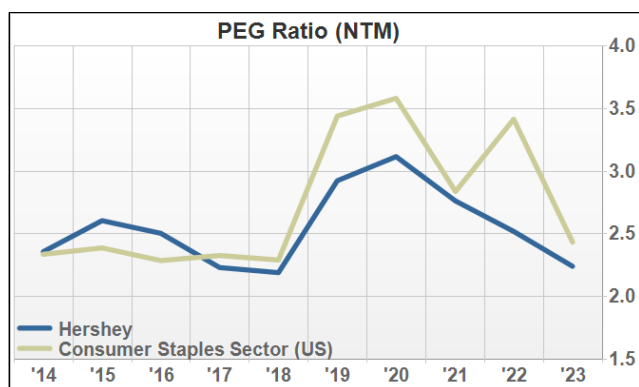
Despite the challenges that the Consumer Staples sector faced in 2023, many analysts are optimistic about 2024 and believe that many stocks in the sector are priced at a discount. The key indicator to watch will be the sales growth, specifically the quarter over quarter sales growth figures. We believe that Consumer Staples sales growth in 2024 is primed by the Fed’s decision to cut rates. Back in December, Fed officials envisioned three rate cuts for 2024, with the goal of reducing their benchmark rate to roughly 4.6%. As discussed in the challenges section, the Fed’s decision to cut rates will allow for brand names within the Consumer Staples sector to have more pricing power over their goods, thus affecting sales. Additionally, a decline in interest rates makes high-yield dividend stocks more attractive to investors.

Conclusion and Recommendation

We expect the Consumer Staples sector to experience a small, constant growth in sales throughout 2024. Despite being optimistic about the price of stocks within the Consumer Staples sector, we believe that the sector’s growth is not as opportunistic when compared to other sectors such as Consumer Discretionary. We recommend an underweight of 5.70%.

Hershey Company (NYSE: HSY)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$242.02	\$186.21	0.9x	Mid Core	2.9%	10.6	A



Introduction

The Hershey Company was founded in 1894 and operates within the Sweets and Snack Production industry. The company prides itself on delivering “moments of goodness” for people around the world through its brands. The company owns and operates in over 90 brands, specializing in chocolates, sweets, mints, and other snacks.

ESG Status

The company has ESG pledges in the following areas: cocoa, human rights, environment, people, youth, and community. Regarding cocoa, the company has pledged to improve traceability and monitor deforestation in Côte d’Ivoire and Ghana. In responsibility to human rights, the company has pledged to have 100% of priority ingredients and materials to be responsibly and sustainably sourced by 2025. The goal here is to induce “goodness” into the entire value chain with responsible agreements. With the environment, they are expected to eliminate 25 million pounds of packaging by 2030. The company has already eliminated 13.7 million pounds of packaging and further eliminations will improve distribution efficiency by reducing secondary and transport packaging. Thus, this will decrease shipping and storage costs throughout the supply chain.

The Story Behind the Stock

Hershey has just entered a recent partnership with Performance Food Group, an industry leader and one of the largest food and food distribution services in North America, to incorporate Hershey ingredients and products into its desserts. The CEO of Performance Food Group, George Holm, is quoted saying: “Hershey’s is a trusted, well-known brand with a rich tradition that consumers love...We are excited about this new partnership and look forward to providing our customers access to our top-quality desserts products that include Hershey’s ingredients.” This provides a massive brand awareness boost as the partnership will provide co-branded packaging that highlights the Hershey ingredients in the Sweet Encore® desserts line.

The company has a diversified product portfolio with a loyal customer base. Sales of the company never experience volatile swings even in economic downturns, making it a resilient option. To illustrate this point, here are the sales numbers from the 2020 recessionary period: \$7,986, \$8,150, and \$8,971. The numbers previously mentioned are in millions of dollars, rounded to the nearest whole number, and from 2019 through 2021, respectively. The following sales figures are from the 2009 recessionary period: \$5,133, \$5,299, and \$5,672. Once again, the numbers previously mentioned are in

millions of dollars, rounded to the nearest whole number, and from 2008 through 2010, respectively. The compound annual growth rate for the 2020 recessionary period was 4% and the compound annual growth rate for the 2009 recessionary period was 3%. Looking at some of the competitors, Nestle's compound annual growth rates for the 2009 and 2020 recessionary periods were -5% and -2% respectively. Lindt & Spruengli posted compound annual growth rates of -4% for the 2009 recessionary period and 0.5% for the 2020 recessionary period. All compound annual growth rates were calculated over a three-year period with the recessionary year being the middle year.

Fundamental Analysis

Balance Sheet:

Hershey has significantly strengthened its balance sheet over the past several years. Long-term-debt-to-equity has decreased by 57% since 2018 and is currently at 99%. Its current ratio has increased by 21% last year to 0.97. This strength has also positively affected operational efficiency. The company has an asset turnover of 0.98 as of 2023 fiscal year end, which is a 4% improvement compared to 2020.

Income Statement:

Hershey Company has a five-year average gross margin of 44.5%. Each year has teetered around this average without volatile swings. The company has a capex to sales ratio of 6.9%. This is a 64% increase from FY 2018 and displays that the company is continuing to invest more proceeds from sales into future investments. Compared to the rest of the sector, the company has a lower forward PEG ratio, which points toward an investment opportunity (chart).

Free Cash Flows:

Hershey Company's five-year average cash flow return on invested capital is 31.52% and a five-year average return on invested capital of 22.75%. The company has had no issues generating cash flow over the past five years: FCF per share has increased 16% since 2018 from \$6.53 to \$7.55. Dividends per share have experienced a five-year compound annual growth rate of approximately 8% (chart).

Valuation

A dividend discount H-model was used to determine an intrinsic value of \$242.02, giving a 30% upside. Using bottom-up estimation, we arrived at a 14.6% short-term growth rate. We used a 4% long term growth rate by assuming long-term expectations about GDP plus inflation.

We also performed a sensitivity analysis using the cost of equity and short-term growth rate as inputs. This produced a target price range of \$239-\$248.

Challenges

Cocoa prices have consistently affected the operating margins of Hershey Company. The higher the cost of cocoa, the more costly production becomes. The inverse is also true: if cocoa prices decrease, margins will see improvement. In times where cocoa prices are high, Hershey puts its efforts into its focus into salty and savory products, as chocolate sales, from all providers across the industry, fall during times of high cocoa prices. Another risk that the company may face is through the supply chain. With such a large portfolio of brands also comes many supply chains. Issues within the supply chain would hence have a negative effect on the cash conversion cycle of Hershey Company. To mitigate this risk, Hershey Company has pledged to increase capital expenditure to build and upgrade their enterprise resource planning system. This initiative is expected to generate on-going supply chain, manufacturing, and operating expense savings of \$300 million by 2026.

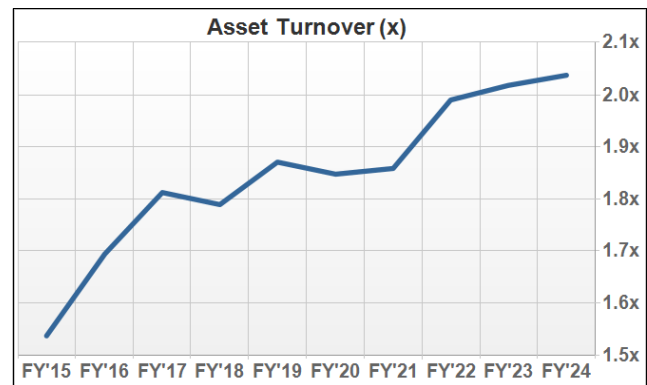
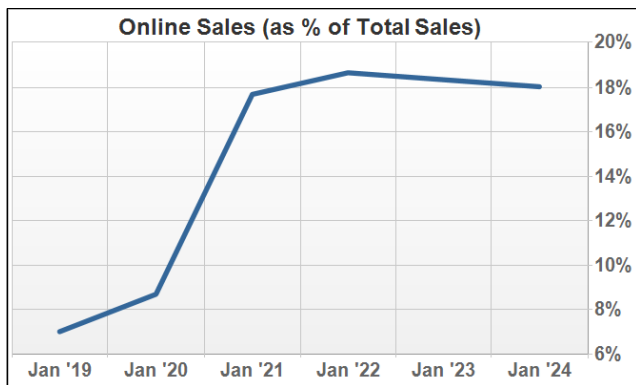
Conclusion & Recommendation

We believe that Hershey Company presents an exciting opportunity due to its partnership with Performance Food Group and its constant sales growth throughout periods of economic uncertainty. It owns one of the largest, most recognizable brand portfolios in any sector.

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

Target Corporation (NYSE: TGT)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$193.93	\$151.44	0.8x	Large Value	2.9%	23.6	A



Introduction

Target was founded in 1902 by George Draper Dayton. Target engages in the operations and ownership of over 2,000 general merchandise stores. It offers grocery products, home goods, toys, electronics, and more. Target’s channels include in-store shopping, online shopping, or home delivery.

ESG Status

Target aims to promote their ESG strategy through their initiative called “Target Forward”: a vision to create “regenerative future,” regarding their materials that they source for their own products, and an “engaged, diverse, inclusive, safe and purpose-driven culture” in which their employees will thrive. Some action steps taken are identifying Universal Thread and Everspring as the first two brands that will be designed for circularity by 2025 and launching Target Zero in 2022: an initiative to help guests more easily find hundreds of products that create less packaging waste. These are just two of the many initiatives Target has taken on to promote sustainability. Using more recyclable material in their brands will promote lower costs of production in the future.

The Story Behind the Stock

Target bases their product display strategy based on consumer demand, meaning if consumers are requesting a certain product, Target will then put that product on display. They have been very strategic in partnerships. Over the past few years, Target has partnered with Apple, Ulta Beauty, Levi’s, Disney, Starbucks, and more to ensure the best shopping experience for their customers. In a Statista survey done on Target’s key performance indicators, 89% of people are familiar with the brand and rough one in every three people use Target for everyday shopping. This is a solid statistic, yet there is still room for growth. The reason we expect this number to grow is Target’s “shop-in-shops” concept. Essentially, Target’s partnership with top brands such as Apple, Disney, and Starbucks, allows customers to enhance their shopping experience by gaining easy access to top brands. In other words, Target puts Ulta Beauty, Apple Shops, Starbucks Cafes, and more within their stores. In 2023, Target opened 80 Starbucks Cafes, 140 Ulta Beauty locations, 40 Apple Shops, and 20 Disney Clubhouses.

Another key driver for Target’s future success is the company’s digital transformation. Target has recently made plays into developing its digital infrastructure and e-commerce capabilities to build a more profound

presence in online shopping (chart). In 2023, Target announced a \$100 million investment to build more supply chain hubs to speed up online order processing while reducing costs at the same time. This investment is largely due to the desire to compete in the drive-up and home delivery spaces. It is estimated that Target delivered 50 million packages in 2023 from this investment. Target's drive-up feature has been appearing at more locations and has been using artificial intelligence to maximize customer satisfaction with the drive-up feature. The artificial intelligence used by Target locates items in store, processes store transactions, processes online orders and drive-up interactions.

Fundamental Analysis

Balance Sheet:

Target has been steadily increasing their property, plant and equipment on the balance sheet which makes sense due to the recent new investments discussed above. This has led to a small stall, but consistent current ratio. The compound annual growth rate for the past three years is 1.1%, from a ratio of 0.89 to 0.92. The five-year average for long-term debt to total equity is 122%, meaning the company has used more debt than equity to finance their investments.

Income Statement:

The Capex to Sales ratio for the company has increased by 30% between the previous fiscal year and three years ago: from 3.9 to 5.1. This signals increased investment in growth strategies such as artificial intelligence, e-commerce, and partnerships. All these investments have improved the efficiency of the company significantly, as demonstrated by the consistent growth in the asset turnover ratio (chart). Sales per share has experienced a compound annual growth rate of 12% over the past five years.

Free Cash Flows:

The company has had significant dividend per share growth over the past few years: 25.2% from 2021-2022,

22.5% from 2022-2023. Current dividends per share reads \$4.14 from FY 2023. Cash flow per share has had a five-year average of \$14.40.

Valuation

We used a dividend discount H-model and arrived at an intrinsic value of \$193.93 with a 28% upside from its current price. Using bottom-up analysis, we estimated a short-term growth rate of 19.2%. We assumed a long-term growth rate of 3% using company guidance, and long-run forecasts about real GDP growth plus inflation.

In addition to our model, we performed a sensitivity analysis using the cost of equity and short-term growth rates as inputs. From this, we arrived at a target range of \$166-\$216.

Challenges

The biggest challenge facing Target currently is a change in leadership. Recently, Target announced the upcoming retirement of chief legal and compliance officer Don Liu. Additionally, in merchandising, Rick Gomez will now oversee essentials and beauty while Jill Sando will manage more discretionary categories. Gomez is currently the chief food and beverage officer, while Sando is the chief merchandising officer. Changes in these categories will likely result in strategy changes regarding these categories. While this may be a risk since each position is made up of a "new hire," each of these "new hires" comes from within Target's company, culture, and operations.

Conclusion & Recommendation

Target's exciting partnerships and investments into future operations make it an attractive long-term growth candidate. The company's robust dividend growth is also promising for a long-term outlook.

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

Energy

Introduction

The Energy sector consists of companies that are responsible for the development of fuel resources such as crude oil, natural gas, and renewable energy. The primary areas are upstream production through exploration, drilling, and extraction of natural resources, the transportation of these fuels through pipeline and compression infrastructure, and the refinement of these resources into usable fuels. The Energy sector's portfolio is expanding to include a larger proportion of alternative fuels such as liquefied natural gas (LNG), hydrogen, and biofuels. The downstream industry uses of these energy resources include energy production, transportation, manufacturing, and retail sale.

Global Trends

The Energy sector is a large driver of the global economy, as price changes have large impacts to all energy intensive business and petroleum-based products. The industry is volatile due to supply and demand forces, geopolitical factors, government regulation, technology innovation, and market speculation. The price of crude oil is expected to plateau in 2024 with a slight decline into 2025. The forecast is due to the expectation that supply and demand forces will remain balanced. 2023 spot crude oil prices averaged \$82.41 per barrel in 2023. The U.S. Energy Information Administration (EIA) forecasts \$82.42 in 2024 and a drop to \$79.48 in 2025. However, the price of crude oil is highly susceptible to changes in global supply. Currently, the conflict in the critical Red Sea shipping channel has increased the Brent crude oil price by \$2 per barrel from December 2023 to January 2024. That instability has increased shipment time and cost. The global uncertainty around the Red Sea and other geopolitical instability might lead to increased prices if the conflict intensifies. On the production side, the EIA expects Organization of the Petroleum Exporting Countries (OPEC) to have restrained production in the next two years driving price stability. The 2024 forecasted decrease in production from OPEC by 450 thousand barrels per day and the continued rise in production from the U.S. to an increase of 380 thousand barrels per day, will lead to relative growth in the Western Texas Intermediate (WTI) market.

Energy Transition

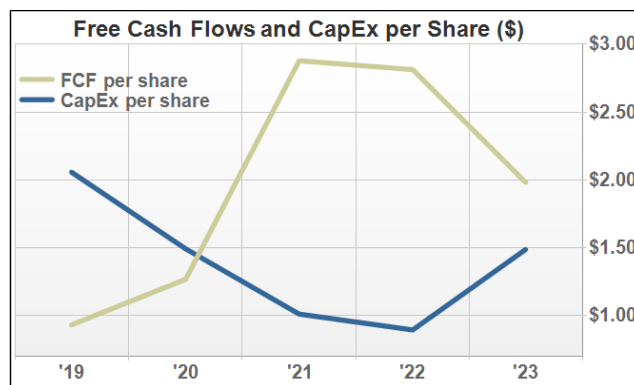
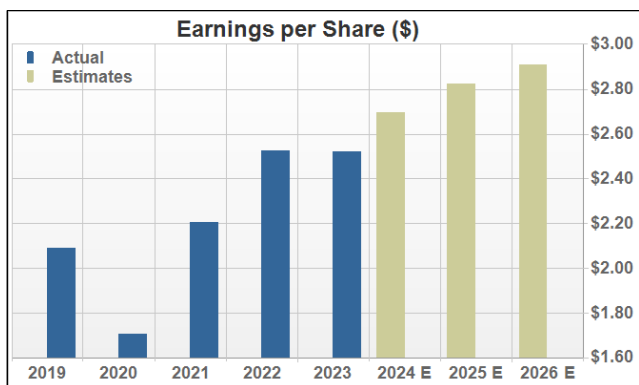
The global awareness of the climate crisis is leading to government and market pressure to lower reliance on fossil fuels. The result is the increase in government regulation and ESG driven investments. The Energy sector is in the midst of a transition to lower carbon intensity fuels and renewables. Although fossil fuels will continue to be a major part of the global energy infrastructure, companies will have to expand their portfolio to a broader range of technologies. Legislative pressure will likely lower margins for traditional fossil fuels both on upstream production and downstream transportation, refinement, and retail.

Conclusion and Recommendation

The Crummer Truist Portfolio will utilize an Energy sector tilt due to geopolitical risk, plateaued price forecasts, and legislative constraints. We propose underweighting the Energy sector by 11% for an equity portfolio weight of 3.30% relative to its S&P index weight of 3.72%.

Enterprise Products Partners L.P. (NYSE: EPD)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$44.74	\$27.39	0.5x	Large Value	7.5%	37.8	A-



Introduction

Enterprise Product Partners L.P., headquartered in Houston, Texas, is an American company specializing in the transportation of natural gas and crude oil. Established in 1968, the company has built a powerful reputation for its expertise in hydrocarbon transportation, particularly from the Permian Basin and the gulf coast of Texas. With its extensive infrastructure of critical pipeline routes, EPD plays a key role in facilitating the efficient movement of vital energy resources.

ESG Status

Enterprise Product Partners is committed to reducing its environmental impact and keeping communities safe. The company has system wide programs to regulate transportation and minimize the risk of incidental leakage of oil or gas. The main avenues used to reduce fugitive emissions across the system include capturing & liquefying vapors, installing low emission equipment, investing in modern technologies, and minimizing waste streams. The company also has training and preparedness plans in the case of a spill to reduce environmental harm quickly and efficiently. EPD is in full compliance with all regulatory frameworks and conducts voluntary audits on their systems to ensure

best practices are conducted throughout the organization. Through their framework they were able to achieve a safe delivery rate of >99.999%. In CO₂ emissions, EPD reduced CO₂ Intensity (CO₂/Thousand BOE) by 30% over the last 10 years. EPD has been able to keep Scope 1 emissions flat despite a large increase in transported volume. CO₂ per gross margin has been reduced by 51% since 2011.

The Story Behind the Stock

Enterprise Product Partners controls key pipeline infrastructure out of the two largest hydrocarbon production regions in North America: the Permian Basin and Eagle Ford in Texas. The company is currently making large investments totaling \$6.8 bn to further expand their infrastructure including a large expansion to the western Texas piping system and two additional processing plants that are expected to be completed in 2024. With this growth, EPD is poised to further take control of hydrocarbon transportation. Enterprise Product Partners transported the equivalent of 12.7 million barrels of oil per day in 2023. The company exports 2.3 million barrels of hydrocarbons per day including LPG, ethane, crude oil, and natural gas. The company relies on the strong supply of oil and gas produced in Texas. EPD then transports the supply through the country from and to refineries. Volumes of

hydrocarbons increased for EPD every quarter of 2023 to produce record financials. In 2023, the company generated \$7.6 billion in distributable cash flow. The Q4 2023 earnings call explained their strategy to dedicate substantial amounts of capital to project development as they look to rapidly expand their pipeline infrastructure within the United States. 2023 marked EPD's 25th anniversary as a publicly traded company and in this time, they have brought the enterprise value from \$1.2 billion to almost \$90 billion. Distribution has also increased in the 25 years by 7% CAGR.

Fundamental Analysis

Balance Sheet:

EPD has a higher book value per share than competitors at 13.0 to the average of 11.8. The company has \$68bn in assets with \$28bn in equity and \$40bn in liabilities. Debt-to-equity has dropped to 1.46 from 1.55 as the company reduces its total leverage. In the last decade, assets have grown by 6.1% CAGR, equity by 6.7%, and debt by 5.6% indicating a long-term reduction of D/E. EPD has tight working capital with a current ratio of 0.86 in 2022 and a five-year average of 0.96.

Income Statement:

Enterprise Product Partners has a discounted P/E of 10.3 to competitors average at 12.6. They also have a higher-than-average EPS at \$2.68, that is expected to grow consistently over the next three years (chart). EPD, grew net income by 2% in 2023 to \$5.5bn and grew net margin from 9% in 2022 to 11% in 2023. Net income has a five-year CAGR of 5% with consistent year-over-year growth outside pandemic years. Top line sales have an 11% CAGR with a 14% decline from 2022 to 2023. EPD has a high payout ratio of 79% returning majority of earnings to shareholders.

Free Cash Flows:

In the last decade, EPD grew free cash flow per share by 31% CAGR (chart). EPD has a strong payout policy with a 94% adjusted FCF payout ratio returning majority of earnings to shareholders. In 2023, EPD had \$8.1 bn in cash flow from operating activities and \$3.2 bn in capital expenditures for a free cash flow of \$4.8 bn. This was used with \$4.3 bn in dividends and \$0.2 bn in repurchases.

Valuation

EPD controls many key hydrocarbon transportation routes out of the Midland and Gulf Coast of Texas that ensure that they have a strong competitive advantage and revenue base in the long term. Currently, the company is expanding their network quickly with pipeline infrastructure, storage stations and processing plants. The company is well positioned for sustainable growth and to continue to be a major player in the industry. As an established large-cap business with a 7.5% dividend yield, the company is set for sustained growth and consistent return to shareholders. Considering this, the two-stage dividend discount model is used to model the price. The short-term growth is estimated to be 7.62% using bottom-up approach. The long-term growth rate of 3% is chosen as the sector will likely see a reduction in global demand for fossil fuels. The DDM resulted in a valuation of \$44.74 to its current price of \$27.39.

Challenges

In the oil and gas sector, challenges stemming from global price volatility, geopolitical tensions, government regulations, and a decline in international production create uncertainty in oil and gas prices. However, Enterprise Product Partners (EPD), as a hydrocarbon transportation company, is less sensitive to the adverse impacts of price fluctuations, with its revenue being more significantly influenced by hydrocarbon volume. Within the sector, EPD stands out as a comparatively stable company, less susceptible to the negative effects of price uncertainty. Additionally, being a U.S.-based entity, EPD enjoys operational insulation from international conflicts.

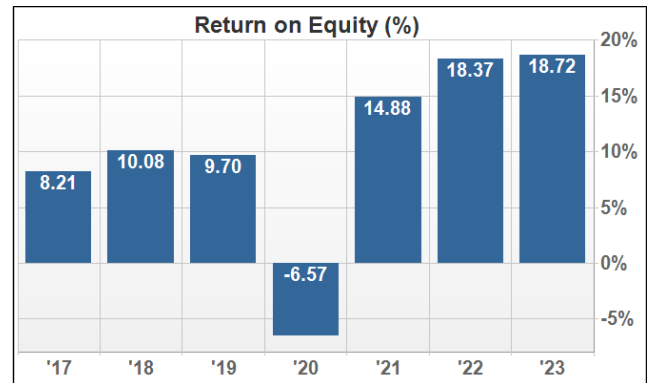
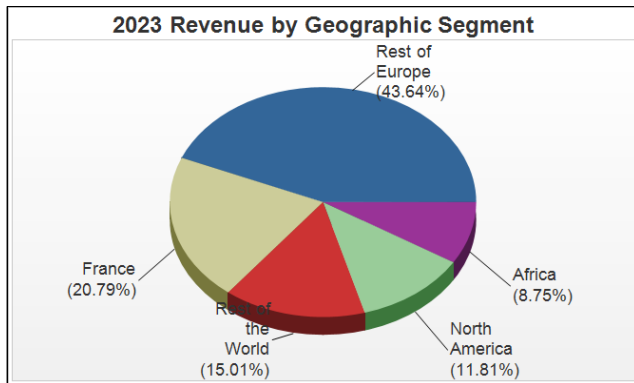
Conclusion & Recommendation

In the short term, EPD's control over hydrocarbon transportation in Texas, their extensive safety precautions, and expanding infrastructure will give EPD a place in the energy sector despite price hydrocarbon uncertainty.

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

TotalEnergies SE Sponsored ADR (NYSE: TTE)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$87.72	\$63.92	0.3x	Large Value	4.1%	67.5	A+



Introduction

TotalEnergies, a France-based multinational, is the sixth largest oil and gas drilling and exploration company by market share in the world. The company has a presence in 107 countries with main exposure in France, Germany, U.S., and the U.K.

ESG Status

TotalEnergies has the highest ESG score out of all 'supermajor' oil and gas companies. Its management is committed to identifying opportunities to transition the oil and gas industry to lower carbon intensity. The company accomplishes this goal by developing clean fuel and carbon management technologies. Their expanded portfolio includes renewable power, biofuels, green hydrogen, and carbon capture utilization and storage (CCUS). TotalEnergies has some of the most ambitious diversification goals; their vision is to transition to 75% renewable and low carbon technologies by 2050. Currently, they are growing 4% per year in renewable electricity sales and energy generation. They are also a global ambassador for clean energy solutions as a member of the Oil & Gas Decarbonization Charter and the World Bank's Methane Reduction Trust Fund. Overall, they are an industry leader in the clean energy transition.

The Story Behind the Stock

In 2024, TotalEnergies proudly marks its 100-year anniversary, commemorating a century of achievements and evolution. From its inception, the company has undergone substantial diversification beyond its core competencies in the oil and gas sector, establishing a global presence. TotalEnergies stands as a leader in industry innovation and the development of new energy infrastructure, aligning its strategic focus with the heightened global awareness of the climate crisis. The company's approach encompasses a dual-pillared strategy, emphasizing both hydrocarbon production and integrated power solutions. During the Q4 2023 earnings call, TotalEnergies outlined a forward-looking trajectory, projecting a 2-3% growth in its oil and gas business. Notably, the company is poised for expansion into liquefied natural gas (LNG), driven by its profitability and low emissions profile. In 2023, LNG production experienced a noteworthy 9% increase, while oil and gas production grew by 2%. In addition, TotalEnergies is actively advancing its portfolio in renewable energy. This includes investments in wind, solar, and combined cycles with carbon capture technologies. The company achieved a substantial growth of 22 gigawatts in its renewable energy portfolio from 2022 to 2023. Forward looking, TotalEnergies projects a Return on Capital Employed (ROCE) of 12%

on renewables by 2028, accompanied by a net positive cash flow. Even with its diversification strategy, TotalEnergies continues to be highly profitable, with the highest return on equity in the industry (chart).

Fundamental Analysis

Balance Sheet:

In the last decade, TTE has grown net assets by \$44 bn to \$283bn. This growth comes from \$28 bn in liabilities and \$16 bn in assets. Over the last 10 years, TTE has increased leverage for expansion in oil and gas operations and energy portfolio diversifications. Currently, management's goal is to utilize cash flow to reduce leverage for sustainable growth. Total liabilities dropped by 13.3% from 2023 to 2022 with a 10.6% reduction in long-term debt and a 19.1% decline in current liabilities. This lowered debt-to-equity from 1.65 to 1.37. Equity grew by 4.3% and the net reduction in leverage resulted in a total asset decline of 6.7%. The company already has lower than average D/E and is preparing for sustainable asset allocation. In working capital, TTE has maintained a current ratio averaging 1.3 for the past decade which is on par with the industry.

Income Statement:

In the last five years, TTE grew sales by 5.6% CAGR and earnings by 17.4% CAGR. The sales growth has been resilient thanks to its geographic diversification (chart). TotalEnergies saw a 4% increase in earnings from 2022 to \$21.4 bn in 2023. They also saw improved net margin from 8% to 10%. Total sales dropped by 16.8% as oil and gas prices normalized, however, historically they have strong sales growth. Compared to the industry, TTE has lower than industry average net margins of 8.6% to 12.7%; this is due to a more diversified portfolio into new energy than the hydrocarbon focus of competitors. Their FY1 P/E of 7.0 is discounted compared to competitors of 9.3. TTE also has a remarkably high EPS at \$9.1.

Free Cash Flows:

In the last ten years, free cash flow per share grew by 31.3% CAGR. In 2023, TotalEnergies generated \$41bn in operating cash flow and invested \$18bn in capital expenditures for \$23 bn in free cash flow. Of this, \$18 bn in debt servicing, \$9 bn in share repurchases, and \$8 bn in dividends. In the last five years, free cash flow

averaged 35% to servicing debt, 44% to dividends, and 24% to repurchases.

Valuation

As an established large-cap business with a 4% dividend yield, the company is set for sustained growth and consistent return to shareholders. Considering this, the two-stage dividend discount model is used to estimate the target price. The short-term growth rate is modeled top-down due to a high correlation with gasoline prices. 2028 gasoline price estimates produce a short-term growth rate of 7.34% which is adjusted to 5.34% due to increased regulation up and downstream in the oil and gas sector. The long-term growth rate of 3% is chosen as the sector will likely see a reduction in global demand for fossil fuels; however, TTE is making headway on the energy transition. Overall, despite the outlook of fossil fuels, TTE is making the right investments to position itself for long-term growth. The DDM resulted in a valuation of \$87.72 compared to its current price of \$63.92.

Challenges

The main challenge TotalEnergies will have to overcome is the decarbonization of the energy sector. This transition will reduce reliance on fossil fuels like oil and gas reducing TTE's main market. However, this is also what makes TTE a strong company in the energy sector as they have already made substantial progress on the energy transition with reallocation of assets to low-emission technologies and fuels. TotalEnergies is ahead of the industry by making clean energy a significant part of their portfolio of investments. Regardless of the hydrocarbon market, TTE has a foundation to be a significant part of the energy sector.

Conclusion & Recommendation

With TotalEnergies' strong investment in new energy infrastructure and globally diversified portfolio, they are prepared for long-term growth within the sector.

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 key role in the global economy, these companies are tightly regulated by government agencies. The sector currently represents 13.06% of the S&P 500.

Growth Opportunities

The sector is likely to experience moderate growth overall. We anticipate a slight initial slowdown to give way to moderate growth as expected interest rate cuts facilitate access to capital. In the short term, we believe that insurance companies will see a slight decline in profits due to an increased frequency of extreme weather events. Despite this, we expect insurance companies to experience moderate growth in the long term due to a predicted increase in M&A activity alongside the utilization of generative AI to lower operational costs. Similarly, we expect growth of investment advisory firms to remain subdued early in the year, mirroring the decrease in performance recently seen within open-ended funds. Moderate growth is expected over the long term due to increases in adoption of quantum computing and strategic M&A activity. Banks are likely to experience headwinds alongside a cooling global economy and increased regulatory oversight, but we expect the implementation of modern technologies like generative AI to reduce operational costs. Activity in the private equity space is expected to increase as dry powder is deployed in tandem with the utilization of AI.

Challenges

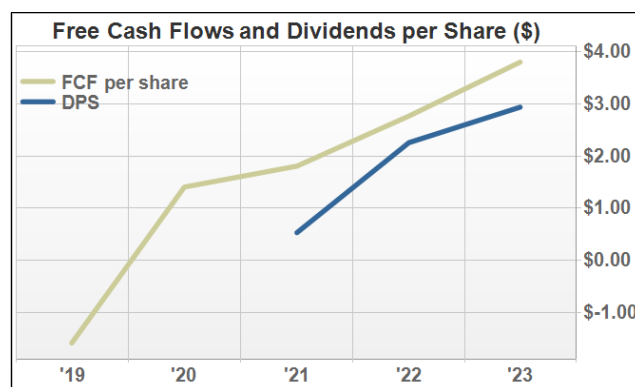
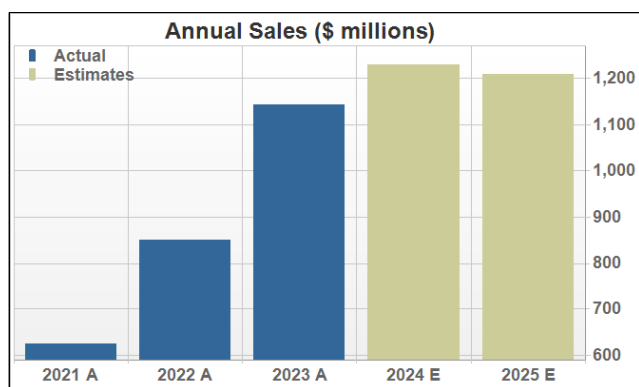
We anticipate the largest challenges faced within the Financials sector to be related to two major considerations for the upcoming year: interest rates and bank deposit stability. Following the collapse of Silicon Valley Bank and the resulting fallout from the incident, there was reason for uncertainty surrounding the financial sector. The collapse sent shockwaves of concern throughout the industry, but stabilization of other institutions has helped ease concerns along with this seeming to be an isolated incident. The other main concern for this sector is the interest rate outlook for the coming year. With concerns over rate cuts leading into a presidential election year, our team predicts that we will likely see four cuts over the following year. However, this is always subject to change, as we cannot know exactly what the Federal Reserve will choose to do, leaving a degree of uncertainty in this area.

Conclusion and Recommendation

Our recommendation is to neutral weight the Financials sector at 12.9% due to optimism surrounding technological advances related to AI and computing power over the course of the year. While there are merited concerns regarding interest rate changes over the coming year and continued economic growth, we believe these challenges are ones that can be overcome and do not pose undue concern for investment in the Financials sector. We have strong reason to believe in the stability and growth potential of the selected companies in this sector. The two securities that we have selected show strong operational foundations along with trusted management and a large potential for growth due to their current undervaluation by the market.

Blackstone Secured Lending Fund (NYSE: BXSL)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$44.25	\$29.63	0.4x	Small Value	10.4%	50.0	BBB-



Introduction

Blackstone Secured Lending was launched in 2018 as a business development company that primarily invests in the first lien senior secured debt of private U.S. companies. The company is a subsidiary of Blackstone Inc. With significant backing and a historic track record from Blackstone, there is great reason to believe in the future for this company.

ESG Status and AI Thematic Investing

Blackstone Secured Lending has a strong ESG status currently, with a 50th percentile score for historical ESG status, and a 90.8 momentum score. Together, these scores indicate a positive history with ESG factors and a strong future outlook. Recent documents point to a continued focus on ESG values for the company, pointing to the strong values maintained at Blackstone, Inc, and the ability of Blackstone Secured Lending to leverage all of the related tools available to them through this connection. Regarding AI, Blackstone Secured Lending has its largest percentage of investments in the software industry, giving exposure to companies working on the frontlines of AI development.

The Story Behind the Stock

Since its inception, Blackstone Secured Lending has demonstrated strong performance with management consistently making effective investment decisions. The company's stated objective is to focus on first lien senior secured opportunities with structural protection, which allows investments with a lower risk profile for BXSL. Since inception, Blackstone Secured Lending has an annual total net return of 10.9%. Currently, 98.4% of investments are first lien senior secured debt, with \$9.5 billion of investments. First lien senior secured debt allows Blackstone Secured Lending to have the first claim towards collateral of a company receiving the loan should this become necessary, granting greater financial security to this company. An offshoot of Blackstone Inc, the Blackstone Institutional Credit program has been successful since 2005, with Blackstone Secured Lending launching in 2018. Blackstone Secured Lending operates with the backing and some of the management, along with access to all of the internal operations of the Blackstone Institutional Credit program. This is a leading factor in our belief in the upside of this company, as while the history of the company is technically short, it has conceptually had a long history before becoming an official separate entity.

Fundamental Analysis

Balance Sheet:

The balance sheet for Blackstone Secured Lending has remained strong since inception. Their assets are almost entirely held as investments, with large growth to this section of the sheet in the years after inception, stabilizing around \$9 billion for the last two years.

Income Statement:

Blackstone Secured Lending has seen its operating income increase in each of the past five years since inception, growing from zero to \$598 million in 2022, with \$817 million for the last twelve months preceding September 2023. Earnings per share figures have remained strong since inception as well, with an initial value of \$3.14 in 2019, a small dip afterwards, but sustained performance around the \$3.00 level. Similarly, the last twelve months up to September 2023 offer a positive current picture for the company, with earnings per share increasing to \$3.39. Revenue projections for the next years are stable (chart).

Free Cash Flows:

Blackstone Secured Lending began paying dividends in 2021 with a cash dividend paid of \$0.53 per share for the final quarter of 2021. The company has continued along this trend with consistency and moderate growth, with quarterly dividends since then rising slowly, and yearly dividends based on the last four quarters rising each year. The company, while young, is showing a commitment to paying strong dividends, using a sizable portion of the realized cash flow each year to pay out dividends to shareholders (chart). Estimates for the next 3 years predict similar sustained growth in the dividends of the company, based on the robust performance and commitment to a high dividend payout ratio.

Valuation

Using a three-stage dividend discount model, there is strong reason to believe that the company is undervalued. Using conservative estimates for growth rates, both short and long term, cost of capital, and length of growth stages, the model values the stock at \$44.25 corresponding to a 49% upside. When conducting sensitivity analysis surrounding both the growth rates and cost of equity, we arrived at a target price range of \$41-\$47. Based on the range of estimates used, we are confident that even conservative estimates give a strong outlook for this stock.

Challenges

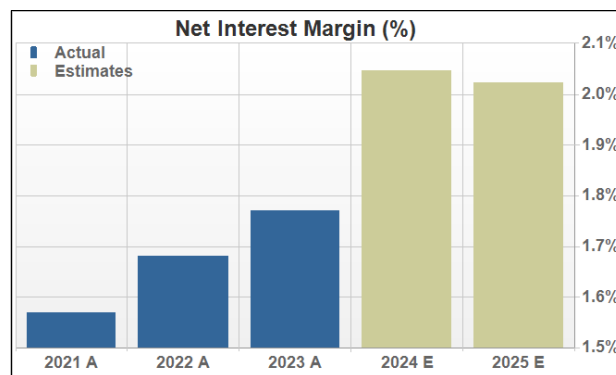
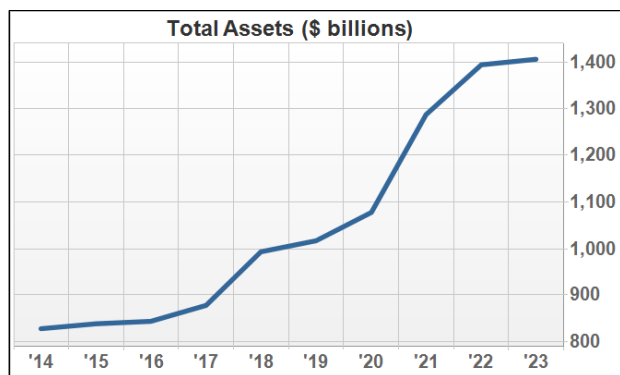
The largest challenges anticipated for Blackstone Secured Lending are either general economic conditions or simply a brief history of operations. In terms of economic conditions, as a firm focused on offering debt to companies, economic risks in the US, where most investments are located, will continue to be a major factor in the company's performance. Economic considerations, while a crucial factor to consider, should be viewed confidently, as Blackstone as a whole has weathered multiple difficult economic time periods well. Additionally, the company managed to navigate the 2020 pandemic-induced economic conditions well. In terms of the historical operations, the company is an offshoot of Blackstone Inc, which gives legitimacy to their operations and inspires confidence.

Conclusion & Recommendation

The fundamentals of the company, the connection to Blackstone Inc., and a safe, profitable business model led us to conclude that the company is undervalued. We recommend a BUY.

Toronto-Dominion Bank (NYSE: TD)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$76.09	\$59.41	0.5x	Lage Value	4.9%	20.4	AA-



Introduction

TD Bank was founded in Toronto, Canada in 1852 and is one of the largest banks in North America. It has over 10 million U.S. customers and 1,100 branches across the East coast. Its core business lines include Canadian Personal and Commercial Banking, US Retail, Wealth Management & Insurance, and Wholesale Banking.

ESG Status

TD Bank has demonstrated an ongoing dedication to ESG. The social component of their score is likely attributed to the fact that they recently (in January 2024) enacted a three-year community plan to promote banking opportunities in low and moderate income and underserved communities across 15 states. Their plan involves \$10bn in support of residential lending for LMI and minority borrowers, \$7.5bn in community lending and investment, \$2.8bn in small business lending, and \$70 million in CRA related philanthropy.

In December 2023, TD Bank ranked among the top banks in the Dow Jones Sustainability North America Index. They signed an agreement to purchase 27,500 metric tons of direct air capture CO2 removal credits over a four-year period. TD Bank also introduced a new 500bn CAD sustainable and decarbonization finance

target to support key environmental, decarbonization, and social activities by 2030.

The Story Behind the Stock

TD Bank is the second largest bank in Canada and the tenth largest bank in the U.S, affording multinational exposure to investors of the stock. While its core U.S. presence is strongest in the Northeast, it has been expanding its branch footprint significantly in the Southeast and intends to continue doing so. TD Bank plans to open 150 new stores by 2027 and also intends to double its wealth advisor hiring. The expansion will be focused on Boston, New York, Philadelphia, and the Southeast. TD received a 13.5% stake in Charles Schwab in 2020, when they sold TD Ameritrade to Charles Schwab. This represents additional investment into the U.S. financial sector and afforded TD a revaluation gain of about \$2.3bn from the transaction in addition to their stake.

TD Bank has also consistently demonstrated a commitment to their employees and clients. This has resulted in TD Bank being one of the highest median tenures of international banks (6.6 years for employees). They also recently launched TD Goal Assist in Canada to help customers set financial and investment goals. TD Bank tripled their digital capacity for customers in response to the pandemic, focusing on features

including mobile deposit and email money transfer. The bank recently launched TD Career Solutions to assist their employees with internal career development.

Fundamental Analysis

Balance Sheet:

TD Bank has shown strong balance sheet growth over the past 10 years. Their total assets have grown by over 68% since 2014 (chart). This has primarily been attributed to increases in their net loans and investments. Net loans grew by 54% while investments grew by 90% over the same period. The majority of net loan growth occurred between 2020 and 2021. This demonstrates a high trust from borrowers who either have begun to bank with TD Bank or have increased their existing credit with the bank. This was echoed by the growth of their deposits in the liabilities section, as deposits grew by 51% to \$863bn. Their book value per share has also shown significant appreciation, as it grew by 61% to \$40.73 during the same period.

Income Statement:

TD Bank's net income has shown robust growth from 2014-2022 at a 90% cumulative growth rate, but recently dropped from \$13.5bn in October 2022 to \$8bn in October 2023. This can be attributed to rapid growth during the pandemic driven by expansionary fiscal and monetary policy in both the U.S. and Canada, but the credit crunch in both countries driven by intense interest rate hikes has prompted an abrupt slowdown in lending activity in the second half of 2023 and into 2024 for banks across both countries.

The bank's net interest margin has shown steady growth since 2021 and is projected to further increase by approximately 15% in 2024 (chart). This is likely due to increases in lending activity associated with more attractive borrowing rates from interest rate cuts.

Free Cash Flows:

The bank has shown steady growth in their deposits since 2014, with a notable influx of \$161.6 billion in 2020. A slight dip in deposits occurred in 2023, though this was preceded by another large influx in 2022. TD Bank's dividend payout ratio has shown healthy growth from 44.34% in 2014 to 68.48% in 2023 (54% CAGR).

Valuation

TD Bank's continued strong balance sheet growth, expansionary U.S. investment, and commitment to their employees and customers has formed the foundation for our valuation of their stock. We used an H-stage dividend discount model to reach the intrinsic valuation of TD Bank's stock. A bottom-up analysis was conducted to reach the five-year short-term sales growth estimate based on ROIC. We estimate a long-term sustainable growth rate of 3.5%. This was based on forecasted GDP and inflation within both Canada and U.S. The intrinsic value of TD Bank's stock is likely \$76.09. Sensitivity analyses were run varying the beta and short-term growth rate, resulting in a range of intrinsic values from \$73.50 to \$78.50. Our most likely intrinsic value indicates a 28% upside compared to the current price.

Challenges

TD Bank recently (on 2/9/24) agreed to a federal settlement of \$95 million on the Telexfree Ponzi scheme. While the bank was initially dismissed in 2021, they were brought back into it along with Bank of America (Fidelity Bank was also involved) as they had allowed Telexfree to open new accounts. While this has likely resulted in a short-term decline in the stock's share price, it also represents an opportunity to buy in at a discount given the strong financials backing the bank.

TD also is being fined by FinTRAC (Financial Transactions and Reports Analysis Centre of Canada) ~\$10 million for faulty anti-money laundering controls. Despite these challenges, TD bank has been strengthening its security and has even begun integrating virtual reality to teller training for intense situations.

Conclusion & Recommendation

TD Bank's growing U.S. investment, commitment to employees and clients, and strong balance sheet growth will lead to steady future growth of their stock and firm. With our intrinsic value, the company is currently undervalued. We recommend a BUY.

Healthcare

Introduction

The Healthcare sector, a linchpin of the global economy, occupies a pivotal role in advancing medical outcomes and improving the quality of life for individuals worldwide. Embracing a diverse spectrum of activities, including the manufacturing, research, and distribution of medical products, services, and equipment, this sector comprises critical sub-sectors like Healthcare Equipment & Services, Pharmaceuticals, and Biotechnology & Services. As of February 28th, the Healthcare sector constitutes 12.68% of the S&P 500.

Opportunities

The Healthcare sector envisions lasting opportunities amid rising demand for innovative pharmaceutical solutions, including weight-loss drugs. Sub-sectors like Pharmaceuticals and Biotechnology benefit as major players strategically position themselves, driving advancements. Robust Research and Development (R&D) investments empower companies within the sector. The evolving landscape, fueled by weight-loss drug demand, boosts pharmaceutical firms and aids managed-care providers amidst transformative changes in U.S. healthcare plans. Despite challenges like rising inflation, the sector's defensive nature ensures stable demand, facilitating acquisitions and market presence strengthening. Globally, with the United States leading healthcare spending exceeding four trillion dollars, the sector's influential global role is evident. Projections foresee healthcare's GDP share reaching 20% by 2028, emphasizing its impact on economic trajectories. Navigating the evolving healthcare market necessitates strategic resilience, commitment to innovation, and a focus on sustained growth, crucial for companies given the sector's enduring importance and global impact.

Challenges

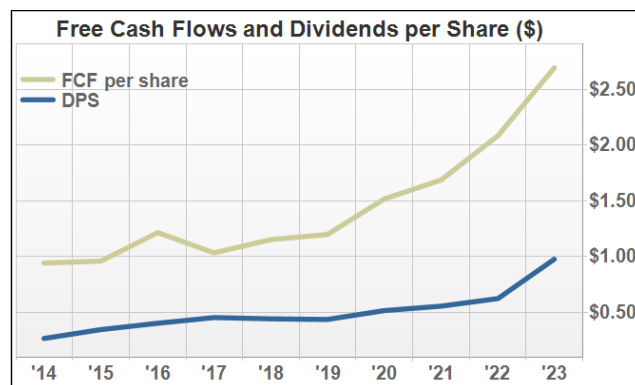
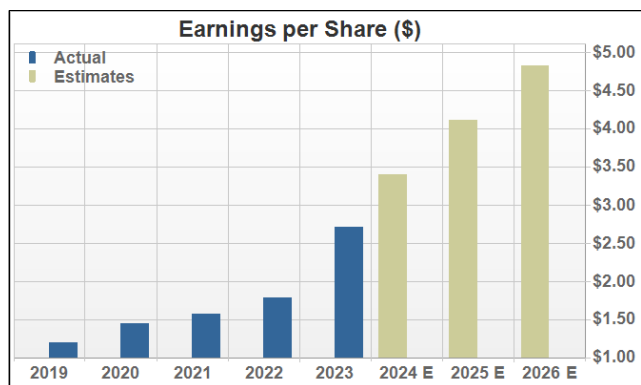
In the consideration of optimal portfolio weighting for the healthcare sector in 2024, short-term challenges emerge, urging a prudent stance and signaling potential underweighting. Historical trends underscore a proclivity for healthcare to underperform during presidential election years, substantiated by the S&P 500 healthcare sector lagging in four of the last six election cycles. The recent market rally and subsequent rebound in biotech and medical device segments, while contributing to overall sector recovery, are perceived as transient gains. Challenges arising from the impending Inflation Reduction Act drug price negotiations, scheduled to commence in February 2024, exert regulatory pressure on pharmaceutical companies, presenting a short-term hurdle. The regulatory landscape, coupled with uncertainties tied to an election year, particularly in the health insurance sector, may pose transient challenges. Despite the sector's improving fundamentals, the short-term nature of these challenges, combined with historical trends, suggests a potential strategy of underweighting the healthcare sector for the immediate future.

Conclusion and Recommendation

Considering the short-term challenges and uncertainties looming over the healthcare sector in 2024, the Crummer Investment Management Team propounds a recommendation for an underweight position in this sector within the portfolio. In alignment with the prevailing trend of seeking stability amidst economic uncertainty, the team advocates for a reduced Healthcare allocation, reaching 11.7% of the equity portion. This approach recognizes potential temporary headwinds and emphasizes caution in line with the current economic landscape. While acknowledging the sector's vital global role, the team underscores the importance of addressing short-term hurdles and the benefits of underweighting. It positions investors to navigate the evolving healthcare landscape with flexibility in response to immediate economic conditions.

Novo Nordisk A/S Sponsored ADR Class B (NYSE: NVO)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$166.03	\$121.54	1.7x	Large Growth	0.8%	29.1	AA-



Introduction

Novo Nordisk (NVO) is a pharmaceutical company that is best known for developing innovative medicines and delivery systems to address medical needs. They specialize in prevalent health conditions including diabetes, obesity, and weight loss. Their best-known products include Ozempic and Wegovy.

ESG Status

NVO works with projects to utilize more renewable natural gas and steam, and reduce propane, diesel, and heavy fuel usage. In 2023 their production site waste decreased by 11% from their implementation of waste reduction initiatives and increased focus on energy recovery and internal recycling. The organization’s social responsibility strategy, Defeat Diabetes, is currently working towards long-term diabetes prevention and innovation for every country. Furthermore, they aim to impact 100,000 vulnerable children with type 1 diabetes by 2030 through the ‘Changing Diabetes in Children’ (CDIC) partnership where a total of 52,249 children and youth have already been reached mainly in India, Pakistan, Indonesia, and Vietnam as of 2023.

The Story Behind the Stock

Over the past 85+ years, Novo Nordisk has significantly increased their footprint in the industry, now holding 32% of the diabetes treatment market. The company has a high expected demand growth due to a steady increase in obesity and consequently, diabetes. Approximately 537 million adults in the world currently live with diabetes, which is projected to rise to 783 million by 2024. Due to this widespread effect, they have focused on offering accessible and affordable products to their consumers. In 2023, they provided sales discounts and rebates that amounted to 74% of their US gross sales.

Novo Nordisk’s diabetes treatment drugs have also gained additional popularity for their effectiveness in weight loss from a side effect of reducing adult appetite. This led to a steady demand surge since it was put on the market in 2018, due to off-label prescribing for weight loss, specifically for their drug ‘Ozempic’. Novo Nordisk holds a significant advantage and growth potential in weight control for this drug, which is projected to continue booming as there are only a handful of effective weight loss methods currently in the market.

Internally, Novo Nordisk has a heavy focus on their employees’ mental and physical health, overall wellbeing, and having a safe, diverse, and inclusive workplace. Due to this, they attract and develop strong talent from around the globe. From 2022 to 2023, their employee turnover

rate decreased from 8.2% to 5.5%. Since 2014, they have been part of the living wage program to ensure all employees can achieve a basic standard of living. In 2023, management was given an 86% sustainable employer score from their employees.

Fundamental Analysis

Balance Sheet:

First evaluating the company's leverage, NVO is in favorable financial positioning with debt management improving since 2014. Their long-term debt ratios suggest that Novo Nordisk has been reducing their reliance on debt in relation to their equity and assets. Furthermore, it shows that they have more cash and equivalents than total debt during the ten-year data period, implying strong liquidity and an ability to meet debt obligations. Analyzing their liquidity ratios suggests general improvements in their consistency to generate sufficient cash flow from operations to cover their short-term liabilities. Lastly, their ten-year operating cycle data shows an overall efficiency in payment collection and A/P management, indicating effective operational efficiency and working capital management.

Income Statement:

Novo Nordisk has maintained healthy earnings levels, efficient cost management, and strong shareholder returns over the last years. Furthermore, EPS estimates for the next several years are quite positive (chart), it is projected to almost double by 2026.

Free Cash Flows:

Novo Nordisk does not have challenges in growing cash flows on a 'per share' basis. They also continue demonstrate an improvement in asset utilization efficiency for generating revenue, as well as a strong ability to cover their debt obligations with available cash flow. The company has a high focus on expanding and developing new technology, which is supported by their adequate debt coverage shown in their FCF ratios. As shown in the chart above, FCF per share and dividends per share both increase gradually suggesting that NVO's financial health and ability to generate cash continue to improve. FCF per share is significantly higher than dividends per share, indicating that the dividend growth is sustainable.

Valuation

Applying a three-stage model, Novo Nordisk exhibits a promising valuation outlook, emphasizing its robust market presence and financial stability. The bottom-up estimates result in a 35% short-term growth rate, aligning with the company's strategic initiatives. A conservative 4% long-term growth rate underlines Novo Nordisk's enduring market position. The intrinsic value, estimated at \$166.03 adjusted for repurchases, underscores confidence in NVO's potential, corresponding to a 37% upside. A sensitivity analysis, ranging from \$144 to \$184, accommodates variations for cost of equity and growth rates.

Challenges

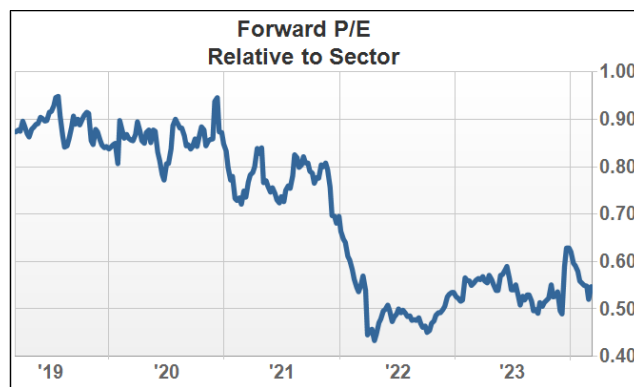
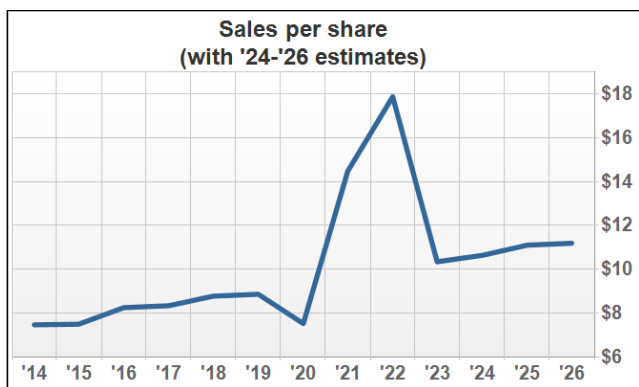
Novo Nordisk operates in a competitive market, with major competitors including Eli Lilly (LLY), Johnson & Johnson (JNJ), and Merck (MRK). However, they have an advantage among these competitors by being immensely innovative and continuously working towards new drug development and widespread accessibility for their consumers. This entire industry is faced with numerous challenges, especially after COVID-19, where there is a significant disruption in the supply chain. This has increased difficulty to produce and ship new drugs, such as Ozempic which has had a large inventory unavailability from booming demand. NVO is combating this challenge by cutting production of less popular products to boost their supply of top sellers. Additionally, the FDA is extremely strict on approving new drugs and medicines, which is the primary development focus of Novo Nordisk's innovation goals for the future. However, Novo Nordisk works to produce and develop drugs the safe and legal way to avoid any approval issues. In any past cases that they have not fully complied with FDA guidelines, they take immediate accountability to resolve any allegations.

Conclusion & Recommendation

Novo Nordisk has done an excellent job in combating and working to innovate and grow as a company. With our intrinsic value, the company is currently undervalued. We recommend a BUY.

Pfizer Inc. (NYSE: PFE)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$42.25	\$27.04	0.6x	Large Value	6.2%	20.7	A



Introduction

Pfizer, a well-established pharmaceutical company with a 175-year history of innovation, holds a significant position in the healthcare sector, making substantial contributions to medical progress. Demonstrating a steadfast commitment to innovation and tackling global health challenges, Pfizer has built a rich history of developing essential medicines and vaccines.

ESG Status

Aligning with the purpose of “Breakthroughs that change patients’ lives,” Pfizer strives to achieve Net-Zero status by 2040, earning Leadership Level recognition for Climate Change Disclosure. Socially, the company actively addresses global health challenges, securing a #1 ranking among pharma companies in the Global PatientView Survey. Governance, a cornerstone of Pfizer’s strategy, emphasizes ethical decision-making, with a diverse Board of Directors. Recognized as one of the World’s Most Ethical Companies, Pfizer integrates ESG KPIs into leader compensation, highlighting a holistic commitment to positive impacts.

The Story Behind the Stock

Amidst the challenges of 2023, Pfizer has not only weathered a substantial 44% stock value decline, which is largely attributed to a significant drop in COVID-19 revenue, but also solidified its resilience in the pharmaceutical sector. Now trading at a modest thirteen times the estimated future earnings, questions arise about whether the market’s response in 2023 was an overreaction. Pfizer is underscored by a noteworthy 7% operational revenue growth achieved in full-year 2023, amounting to \$58.5 billion. The company further solidified its commitment to innovation with a substantial \$10.7 billion investment in Research and Development (R&D). The financial strength, coupled with the acquisition of Seagen Inc. and FDA approvals for nine New Molecular Entities, exemplifies the company’s dedication to transformative healthcare solutions. Additionally, the company’s significant impact is reflected in the treatment of approximately 618 million patients in 2023. By returning \$9.2 billion to shareholders and outlining strategic priorities for 2024, Pfizer has positioned itself as a financially resilient and forward-looking investment in the pharmaceutical industry.

Fundamental Analysis

Balance Sheet:

Pfizer demonstrates financial stability through strong balance sheet ratios. Notably, the current ratio has improved to 0.91, indicating enhanced liquidity, and quick ratio is at 0.69, reflecting improved ability to cover short-term obligations without relying heavily on inventory. The operating cycle, at 108 days, demonstrates efficient conversion of resources into cash. Further with a Net Debt/EBITDA ratio of 5.62, Pfizer exhibits manageable leverage. These metrics collectively signify a sturdy financial position, position Pfizer as an attractive investment with improved liquidity, efficient operational cycles, and prudent debt management.

Income Statement:

In 2023, Pfizer faced a notable gross margin decline to 50%, deviating from the 62% five-year average. This reflects Comirnaty and Paxlovid revenues and shifts in sales mix. The 7% operating margin drop, down from an average of 22%, results from a \$10.7 billion R&D investment, Seagen Inc. acquisition, and FDA approvals for nine New Molecular Entities which impacted their short-term profitability. Despite the following, Pfizer still obtained a 7% revenue growth reaching \$58.5 billion. This is further supported in forward-looking data as market consensus estimates show a positive outlook for Pfizer's future sales (chart).

Free Cash Flows:

Pfizer's strategic agility is evident in various measures, including a \$3.5 billion cost-cutting initiative, illustrating adaptability to market dynamics. Despite incurring a one-time \$3 billion upfront cost for severance payments and program implementation, positive indicators prevail. Robust free cash flows, highlighting a substantial \$1.52 cash flow per share (Dec '23), align with favorable financial metrics, such as net debt/EBITDA ratio of 0.31 (Dec '23). In 2023, the company returned \$9.2 billion to shareholders, reinforcing Pfizer's perseverance through challenges and commitment to long term-success.

Valuation

Using a three-stage dividend discount model, Pfizer's valuation mirrors a positive outlook, driven by its market

presence and financial resilience. Bottom-up forecasts imply a 10% short-term internal growth rate, aligning with Pfizer's strategic initiatives. A conservative 3% long-term sustainable growth rate reflects its enduring market position. Additionally, their intrinsic value is estimated at \$42.25, which signifies confidence in Pfizer's potential. A sensitivity analysis, ranging from \$40 to \$45, accounting for variations, presents a compelling 56% upside on average from the current share price. On a forward P/E basis, this upside is confirmed relative to the industry (chart).

Challenges

Through navigating challenges such as the evolving COVID-19 revenue landscape, uncertainties in revenue projections, and the impacts of recent acquisitions, Pfizer demonstrates resilience. While acknowledging these hurdles, this pharmaceutical giant has displayed its commitment to overcoming them through a high-profile Super Bowl ad campaign. This campaign focuses on the positive impact of science and highlights Pfizer's cancer-related initiatives. By celebrating scientific achievements, featuring founders alongside renowned figures, and directing attention to cancer-focused endeavors, Pfizer strategically addresses their current challenges. The company's approach not only aims to engage the public but also to inspire employees and reassure stakeholders, reflecting a balanced effort to navigate the evolving pharmaceutical landscape.

Conclusion & Recommendation

Pfizer (PFE) presents a compelling investment opportunity supported by financial stability, strategic resilience, and growth potential. Despite challenges, including notable gross margin decline and evolving revenue landscapes, Pfizer's commitment to overcoming hurdles is evident. Strategic initiative, robust cash flows, and a positive outlook in valuation models contribute to confidence in the company's potential.

The recommendation to BUY is underlined by Pfizer's current undervaluation, demonstrated ability to navigate challenges, and its position for sustained growth in the pharmaceutical industry.

Industrials

Introduction

The Industrials sector accounts for approximately 8.75% of the S&P 500. It is a critical component of the economy, encompassing a wide range of companies involved in construction, machinery, manufacturing, defense, aerospace, transportation, and more. The diversity within the sector reflects its broad impact on both the economy and daily life.

Opportunities

The Industrials sector is poised for significant growth opportunities in the coming years, driven by a combination of macroeconomic trends and sector-specific tailwinds. One of the most promising areas is reshoring, as geopolitical tensions and supply chain vulnerabilities have underscored the benefits of bringing manufacturing back to domestic soil. Defense spending is another area set to expand, given the global geopolitical landscape. Increased budgets for defense and security are likely to benefit companies within the Industrials sector that cater to these needs, offering a stable source of demand. The aerospace industry, particularly commercial aerospace, is experiencing a resurgence as it continues to recover from the COVID-19 pandemic's impacts. With air travel demand rebounding, there is a pressing need for new aircraft to meet both replacement and growth requirements, especially in emerging markets. This demand creates significant opportunities for manufacturers and suppliers in the aerospace ecosystem. Lastly, the Industrials sector's valuation relative to its growth prospects suggests that it may be undervalued, offering attractive investment opportunities. The anticipation of a soft landing for the economy further bolsters optimism, suggesting that now may be an opportune time to invest in Industrials. With the sector showing resilience and potential for innovation and expansion, the outlook for Industrials is increasingly optimistic, making it a sector worth watching for investors looking for growth opportunities.

Challenges

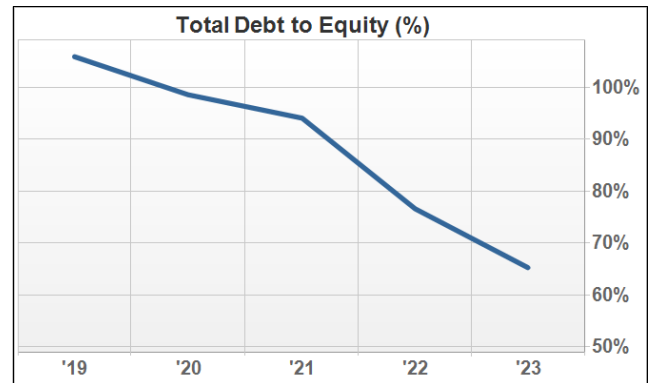
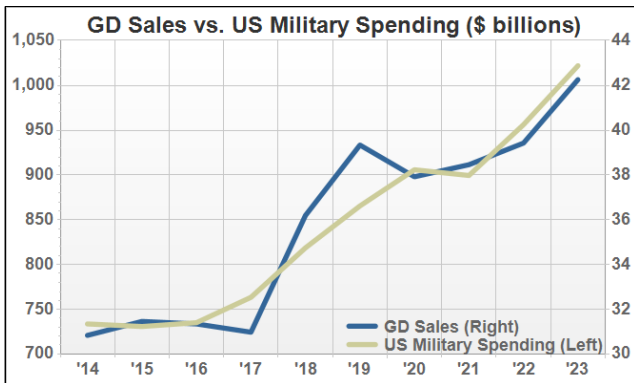
With talk of a recession affecting the economy, the Industrials sector should be wary of supply chain challenges and a shortage of skilled workers. Furthermore, as society increasingly prioritizes sustainability, the Industrials sector must capitalize on this potential challenge and turn it into an opportunity. Since the outbreak of Covid-19, it is widely known that the economy has been impacted by supply chain problems. However, the increased use of artificial intelligence can compensate for the lack of skilled workers and expedite supply chain procedures. Finally, as more companies aim for sustainable practices, the Industrials sector must also follow the pattern.

Conclusion and Recommendation

Overall, we believe that the Industrials sector should be overweighted in our portfolio. The potential growth opportunities far outweigh the potential risks and in today's technology-focused world, we also believe that companies in the Industrials sector will continue to use these practices to achieve greater efficiency, sustainability, and innovation which will positively impact the sector. We decided to overweight the Industrials sector at 9.34%.

General Dynamics Corporation (NYSE: GD)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$311.99	\$274.31	0.9x	Large Core	1.9%	55.6	A-



Introduction

General Dynamics was founded in 1952 and is a premier aerospace and defense company that provides a wide range of products and services in various domains including aerospace, marine systems, combat systems, and technologies segments.

Connection to AI Thematic Investing

General Dynamics is an attractive investment opportunity because of its strategic focus on artificial intelligence (AI) across its operations. The company is leading the way in integrating AI in critical sectors such as cybersecurity, defense, and healthcare. In cybersecurity, AI is used to scale defense techniques and improve intelligence operations. Predictive AI is being used in the defense industry to streamline administrative tasks, while generative AI is utilized for advanced battlefield simulations and training. Additionally, AI is expected to significantly reduce healthcare costs by automating administrative tasks and securely managing medical data. General Dynamics' Information Technology business (GDIT) has a dedicated department for AI and data insights, displaying the company's forward-thinking approach. This commitment to AI innovation strengthens General Dynamics' competitive edge and indicates significant

growth potential. Utilizing AI insights in various areas at General Dynamics makes the company a promising investment for those looking to capitalize on the transformative impact of AI across industries.

The Story Behind the Stock

Amidst a world of increasing security challenges and geopolitical unrest, highlighted by conflicts such as Israel/Palestine and Russia/Ukraine, General Dynamics is poised to address the growing global demand for advanced defense and security solutions. General Dynamics, with its extensive portfolio in defense systems, is well-positioned to benefit from increased defense spending and the heightened demand for security solutions, positioning the company for sustained growth. Furthermore, the expected certification of General Dynamics' new state-of-the-art jet, the G700, in 2024, represents a significant achievement. The launch of the G700 is expected to improve GD's aerospace division, potentially increasing product diversity, profit margins, and strengthening its position in the luxury and corporate aviation market. Moreover, GD's commitment to returning value to shareholders is evidenced by its large dividend yield and consistent dividend increases over the past 29 years. This track record not only showcases the company's financial health and stability but also makes it an attractive option

for income-focused investors. GD's position in defense and aerospace, combined with its innovative product launches and steadfast commitment to shareholder value, positions it well for robust growth and investment appeal.

Fundamental Analysis

Balance Sheet:

Over the past five years, General Dynamics has made remarkable strides in enhancing its balance sheet, notably through the substantial reduction of its total debt to total equity ratio from a high of 106% in 2018 to a more favorable 52% by the end of 2023 (chart). This marked improvement demonstrates the company's effective debt management strategies and commitment to strengthening its financial foundation. While there has been some inventory backlog facing the company due to supply chain disruptions in 2023, resulting in higher than-usual days of inventory on hand at, the company was able to maintain an operating cycle of around 175 days by improving days of sales outstanding, which is consistent with industry norms.

Income Statement:

Thanks to a steadily increasing defense budget, GD has achieved stable sales growth over the past five years (chart). This trend is expected to continue due to escalating tensions worldwide. In 2023, approximately 70% of General Dynamic's revenue was from the U.S. government, so the U.S. defense budget increasing provides a strong tailwind for General Dynamics. The company's current operating margin of 10% is in line with other defense companies, but it is expected to improve with the G700 certification anticipated in 2024. This certification is poised to open new revenue streams and further bolster GD's financial performance.

Free Cash Flows:

The company allocates most of its free cash flow towards dividends and share repurchases, reflecting a robust capital allocation strategy. The company has increased its dividend over the last 29 years and most recently paid a dividend yield of 1.9%. The company generated a free cash flow yield of 5.32% for the year, and it paid out over \$1.4 billion in dividends and repurchased \$434 million of stock.

Valuation

GD's significant investments in AI, positioning in the tense geopolitical landscape, upcoming G700 certification, and impressive payout policy have set the premise for our valuation model. We used a three-stage dividend discount model to arrive at an intrinsic value for General Dynamic's stock. A bottom-up valuation model yielded a 16.8% short-term internal growth rate, which reflects the upcoming FAA approval of the G700 business jet. We estimated a long-term sustainable growth rate of 3.5%, with global tensions providing the defense industry with a long-term tailwind. The most likely intrinsic value was \$311.99, with our sensitivity analysis estimating an intrinsic value between \$280 and \$345. Our most likely intrinsic value represents roughly a 14% upside.

Challenges

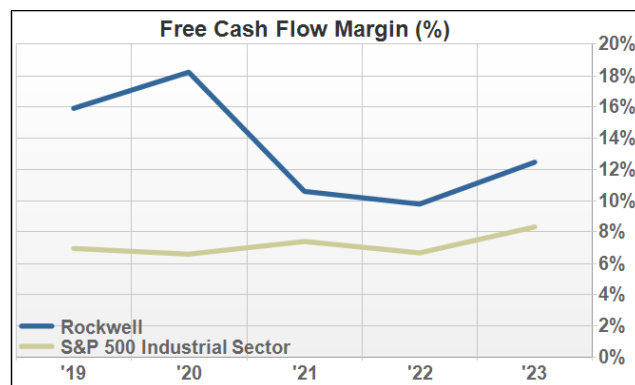
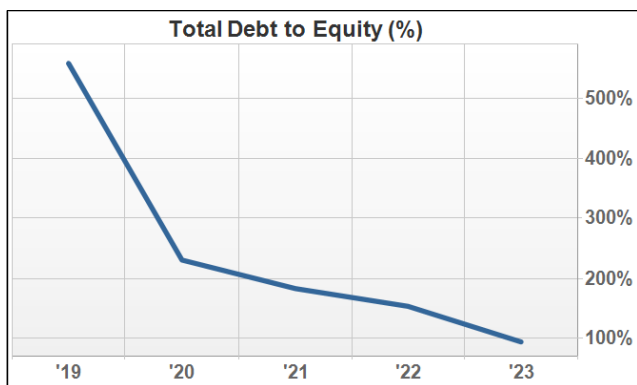
General Dynamics faces potential challenges related to supply chain disruptions. The complexity of sourcing materials and components essential for their high-tech products could be impacted by global supply chain issues. The company has been proactive in addressing these concerns through strategic supplier relationships and inventory management. Nonetheless, General Dynamics will need to continue evolving its strategies to mitigate supply chain risks effectively. We assess this challenge as having a medium probability, given the company's robust response mechanisms and the critical nature of its offerings.

Conclusion & Recommendation

General Dynamics' strategic emphasis on artificial intelligence, its pivotal role in addressing the needs arising from global geopolitical tensions, and the anticipated boost from the G700 jet certification collectively underscore its growth trajectory. Considering the calculated intrinsic value, we see General Dynamics as undervalued at its current price. With a solid foundation for both short-term gains and long-term stability, we recommend a BUY for General Dynamics.

Rockwell Automation, Inc. (NYSE: ROK)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$333.05	\$286.41	1.1x	Mid Core	1.7%	47.9	A-



Introduction

Rockwell Automation, Inc. (ROK) was founded in 1903 in Milwaukee, WI by Lynde Bradley and Stanton Allen. Rockwell Automation, Inc. engages in the provision of industrial automation and information services. Specifically, ROK operates in the following segments: Intelligent Devices, Software and Control, and Lifecycle Services.

ESG Status

Rockwell has a low ESG risk rating compared to competitors with a score of 19.1 (Sustainalytics). They also have a 4:7 female-to-male board ratio. Found in their 2023 Sustainability Report, ROK’s new ESG initiatives including the UN Global Compact, the Science Based Targets initiative, and the addition of a Product Design for the sustainability team are all examples of their push towards a more sustainable future. They also have the goal to be carbon neutral by 2030. By being awarded one of 2023 World’s Most Ethical Companies by Ethisphere, joining Sustainable Development Goals, and the IFRS Sustainable Alliance, they have proven their commitment to sustainability and ESG. ROK also collaborates with the global manufacturing community where Rockwell is a part of the World Economic Forum (WEF). The CEO Blake Moret also sits as co-chair of

the WEF CEO Industry Group for Advanced Manufacturing Industry Strategy Officers Group. According to the 2023 Sustainability Report, 88% of total waste was recycled at ROK, \$192.4m was spent with small businesses including veteran, minority women, and LGBTQ owners, and there was \$10.3m in total giving to philanthropic causes. Additionally, in 2023 they had a revenue generation of \$2.1 billion from energy efficient products and offerings.

The Story Behind the Stock

Rockwell has taken steps to put their business at the center of the world’s technological revolution. Specifically, Rockwell has continued their strategic alliance with Microsoft. On October 26, 2023, Rockwell Automation and Microsoft expanded their partnership to leverage generative AI capabilities for enhanced productivity and faster time-to-market. By combining both of their technologies, the companies will start combining Microsoft’s OpenAI services into Factory Talk Design Studio. This will decrease the amount of time it takes to build industrial automation systems. This will compensate for a lack of a skilled workforce, further creating an environment where productivity can thrive. Combining these two technologies allows for engineers to develop code with natural language prompts which leads to design efficiency. The future of automation is

also dependent on integrating AI into everyday work, as new members of the workforce will be able to learn more efficiently and effectively. Furthermore, Microsoft and Rockwell plan to use this technology to solve a wide array of problems such as quality management and improvement, failure mode analysis, and training workers with this integrative AI.

ROK focuses significant resources on acquisitions that aim promote growth by further strengthening their technology differentiation, increasing domain expertise, and expanding market access. Rockwell has had success acquiring several companies throughout the years. According to ROK's press releases, in 2023, ROK acquired Verve Industrial Protection which is a cybersecurity software that focuses on industrial environments. They also acquired Clearpath and OTTO Motors who are leaders in autonomous robotics for industrial applications. Finally, they acquired Knowledge Lens which is a digital technology consulting company that provides AI, sustainability, and digital transformation solutions. According to Rockwell's 2024 Q1 Financial Report, their sales increased 1.4% from acquisitions alone this quarter. Furthermore, Timothy Knavish was elected to the Board of Directors on February 7th, 2024. As CEO of PPG, he specializes in acquisition projects and has been successful in the past.

Fundamental Analysis

Balance Sheet:

Rockwell Automation, Inc. has several positive key indicators when looking at their balance sheet. ROK's long term debt has declined year over year (chart). Due to this, their debt-to-equity ratio (94%) has also declined to its lowest in five years which attributes to lower financial risk. Finally, ROK has a higher price-to-book ratio than the industry at 9.21%.

Income Statement:

ROK has seen a very consistent gross margin over the past few years. At the end of the fiscal year, Rockwell ended with a gross margin of 46%. ROK also has a higher operating margin compared to previous years at 18%. This promotes higher profitability. Additionally, Rockwell has seen significant sales growth year after year. Specifically, 2023 sales are \$9.1 billion, the highest

in recent years. The CAGR for Rockwell for five years is 6.3% for sales.

Free Cash Flows:

For over the past 25 years, Rockwell has increased their dividends year over year. Specifically, a metric to note is their free cash flow margin which has been significantly higher than the sector (chart). Currently, Rockwell's indicated annual dividend is \$5 with a dividend yield of 1.7%.

Valuation

To create Rockwell's valuation, we used the three-stage dividend discount model. Valuing Rockwell was based highly on their ability to innovate, potential acquisitions, and their generous equity payout policy. We used the bottom-up approach to estimate the short-term growth rate, which was calculated to be 25% along with a long-term growth rate of 4%. The most likely intrinsic value is \$333.05 after adjusting for share repurchases. The range calculated goes as low as \$285 and as high as \$380 found through our sensitivity analysis. About a 16% upside was found with our new intrinsic value compared to the current share price.

Challenges

As acknowledged by CEO Blake Moret in a CNBC interview, Rockwell has been fighting the nagging supply chain issues from 2022 into this first quarter. They missed a few shipments which sent their share price plummeting. They are continuing to navigate the supply chain by shifting processes which will give a faster lead time. Their distributors are getting rid of their last constrained product lines which will allow for faster supply chain in the future.

Conclusion & Recommendation

Rockwell Automation, Inc. has been a leader in the industrial sector for decades. They have continued to innovate and put themselves ahead of competition by engaging in new technology, strategic partnerships, and improving their leadership. With our intrinsic value, ROK is undervalued. We recommend a BUY.

Information Technology

Introduction

The Information Technology (IT) sector is a vital and dynamic segment of the equity market, composed of companies that develop, manufacture, and provide technology-based goods and services. The largest companies are Microsoft, Apple, and Nvidia, which comprise 22%, 18%, and 7% of the sector, respectively. The sector's performance has been primarily focused on adopting emerging technologies (e.g., artificial intelligence, blockchain), cybersecurity concerns, and the proliferation of digital transformation initiatives. It has historically shown resilience and outperformance during periods of rapid technological change. As of February 28, 2024, the IT sector makes up 29.61% of the S&P 500.

Growth Opportunities

The shifting macroeconomic environment in 2023 helped bring the information technology sector back into favor with investors. Investments in cloud computing, artificial intelligence (AI), and cybersecurity are expected to drive rapid growth in conjunction with enterprise spending on software and IT services, projected to fuel market expansion. Cloud computing enhances business efficiency and innovation while reducing costs through flexible, scalable, and accessible computing resources. The global cloud computing market was valued at \$484 billion in 2022 and is expected to grow at a CAGR of 14% from 2023 to 2030. After the launch of ChatGPT in November of 2022, AI has become a new focus for companies looking toward the future. The generative artificial intelligence (GenAI) market is currently \$67 billion and is projected to grow to \$207 billion by 2030, 21% CAGR. Additionally, this trend is prevailing toward the integration of AI as companies aim to establish the required infrastructure for the deployment of this technology. The most recent developments in the semiconductor industry are chips that support AI technologies. The semiconductor market size is estimated to reach \$990 billion by 2030, growing at a CAGR of 7%. Companies within this industry actively engage in pioneering initiatives to fortify their systems against cyberattacks and breaches. The global cyber security market size was estimated at \$223 billion in 2023 and is projected to grow at a CAGR of 122% from 2023 to 2030. Companies that fail to invest adequately in cybersecurity face potential financial losses and harm to their reputation.

Challenges

The technology sector has also weathered a series of challenges in recent years, such as macroeconomic uncertainties, geopolitical tensions, and supply chain disruptions. Over the past twelve months, many investors have linked the slowing inflation to a weakening in the US economy, increasing the likelihood that the Federal Reserve will begin to reduce rates. However, recent inflation data has shown that rates may stay higher longer than investors initially thought.

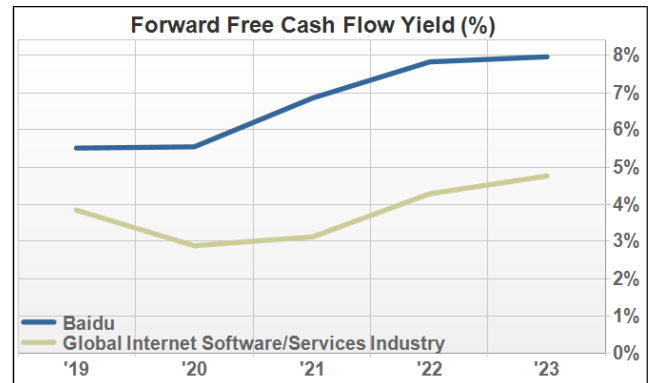
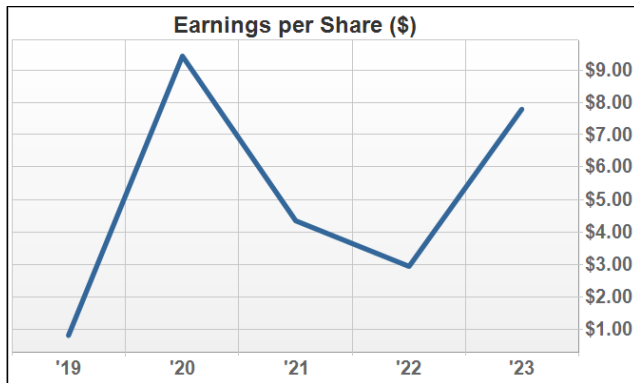
Another challenge this sector faces is the justification of the rapid increase in value of many large holdings in this sector. For example, Nvidia is up over 250% in the past twelve months, and fund flows have been some of the largest seen since the pandemic. This has led to uncertainty about the underlying valuation of these companies and whether their future cash flows will be able to justify them. In conjunction with higher interest rates and a potential economic slowdown, the technology sector's performance is particularly challenging to predict over the next twelve months.

Conclusion and Recommendation

The sector remains a critical and dynamic force within the equity market, characterized by rapid innovation and continuous technological advancements. While we remain optimistic about the long-term growth prospects of this sector, macroeconomic uncertainties and questionable valuations present near-term challenges. Therefore, we recommend a neutral weight of the Information Technology sector at 29.3%.

Baidu Inc Sponsored ADR Class A (NASDAQ: BIDU)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$137.30	\$103.31	0.5x	Large Core	N/A	72.8	A



Introduction

Baidu is a multinational technology company based in Beijing, China. The company was founded in 2000 and specializes in Internet-related services, products, and artificial intelligence (AI). Today, Baidu Inc. is one of the world's largest AI and Internet search engine platforms.

ESG Status

In 2023, Baidu was awarded the 'Forbes China ESG Innovation Enterprise' for its outstanding contributions to the field of ESG. Baidu is at the 72nd industry percentile in the ESG Rank in the SASB Industry, increasing its rank from average to above-average in the Truvalue ESG Rank in 2023, demonstrating the firm is working towards more sustainable practices. Additionally, Baidu has increased efforts to achieve the "carbon neutrality" goal at the group's operational level by 2030. The firm has continued to deepen green practices around several paths. Baidu introduced 1 billion kWh of green electricity to their data centers, and the solar photovoltaic power generation in their campus will produce 2.6 million kWh of clean electricity for yearly operations.

The Story Behind the Stock

Baidu has a track record of being a market leader. The firm generated \$2.7 billion of core revenue from its search engine's online marketing services in 2023, an increase of 6% from the prior year. Baidu's major growth initiatives outside its search engine are artificial intelligence cloud, video streaming services, voice recognition technology, and autonomous driving. Baidu successfully pivoted to mobile internet by releasing various apps, like the Baidu app (663 million active users in 2023). The firm's extensive user behavior data database in China has accumulated data for almost two decades.

Furthermore, Baidu is a first mover in autonomous driving. Baidu is the only firm offering ride-hailing services that connect roads to highways. The expansion of operations for their first autonomous bus to Wuhan Airport is pioneering driverless transportation. Fully driverless orders were up at 45% in Q3 2023 from 40% the prior quarter. In 2024, Baidu launched its Robotaxi fleet, making service accessible to the public for full-service driverless rides.

Fundamental Analysis

Balance Sheet:

Baidu's balance sheet demonstrates the company's expansion while concurrently sustaining a stable financial condition. The firm has a current ratio of 2.8, higher than that of its major competitor, Bytedance, and translates to favorable liquidity. Baidu's balance sheet risk is low as it is in a net cash position, which translates to favorable liquidity. Baidu's balance sheet risk is low as it is in a net cash position. It had CNY 135.7 billion net cash and cash equivalents in 2023. This demonstrates a strong solvency position. Regarding short- and long-term debt, Baidu's debt levels have been slowly decreasing since 2021. Lastly, Baidu's return on invested capital has been higher than its weighted average cost of capital of 9.8% over the past ten years.

Income Statement:

Baidu continues to work towards cost optimization and business efficiency, which began during COVID-19, aiming to create a stronger, leaner company. Baidu Core's non-GAAP operating profit grew 27% in 2023, with non-GAAP operating margin expanding to 25% from 22% in 2022. The main revenue drivers are Baidu Core's businesses, online advertising, and AI cloud segments. Baidu has maintained a very stable gross margin of around 48%. Lastly, SG&A has increased over the last three years, which can be attributed to its heavy investments and expansion of its product portfolio. The company also beat its EPS estimate most of the time in the past twelve months and has an earnings per share of \$7.78 for FY23(chart).

Free Cash Flows:

In terms of free cash flow yield, Baidu had its best year ever in 2023 at 8%, which is forecasted to continue the upward trend (chart). Additionally, free cash flow per share increased in the past year from \$7.56 in 2022 to \$10.12 in 2023. The free cash flow margin in 2023 was 28%, compared to the industry average of 26%.

Valuation

Baidu demonstrates the capacity to create significant value for investors through their search-engine business

and generate new AI-related proposals that would expand their industry leadership. Using a long-term growth rate of 4% within the FCFE valuation framework, the stock is intrinsically valued at \$137.30. Based on our sensitivity analysis, the stock's intrinsic value is between \$123 and \$158. Even though our analysis reveals BIDU to be a highly undervalued stock, we believe our estimates are conservative, supporting \$137.30 as a reasonable intrinsic value for Baidu Inc. Furthermore, the company has a forward P/E of 9.2x, which makes it attractive among relatively expensive tech stocks.

Challenges

Baidu has navigated challenges influenced by prevailing macroeconomic factors and tensions within China, impacting the company's operational dynamics and financial performance. Despite the macroeconomic headwinds in China, Baidu has experienced a notable surge in advertising growth attributed to advancements in artificial intelligence (AI). This success underscores Baidu's technological prowess in the landscape of cloud services. Furthermore, Baidu's strategic foray into international markets is an opportunity for geographic diversification and access to untapped segments. This expansion aligns with the company's vision for growth and its approach to leveraging global opportunities while mitigating risks associated with regional economic challenges and geopolitical considerations. Despite the challenges, we hold an optimistic view, we assess this as a medium-probability event.

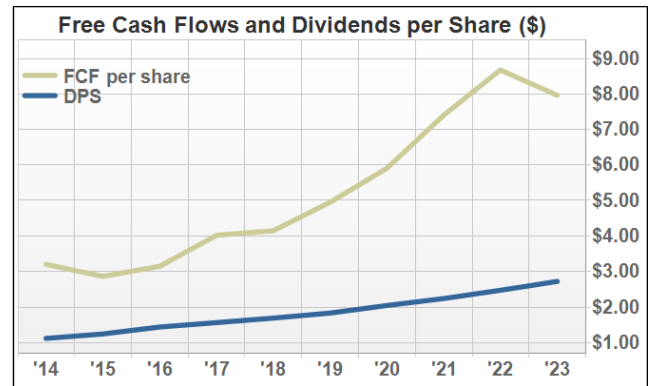
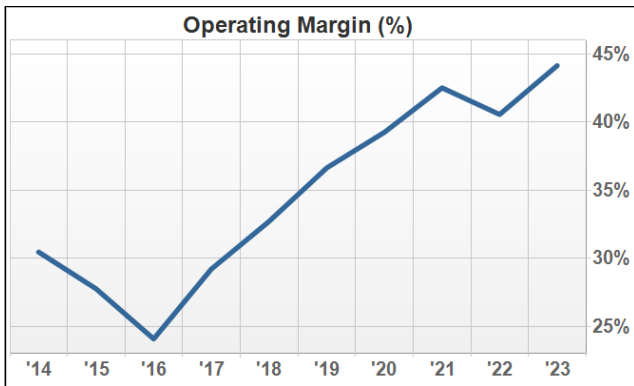
Conclusion & Recommendation

Baidu's strategic approach positions the company to outperform competitors in this industry. The focus on artificial intelligence, paired with its extensive customer database, establishes Baidu as an industry leader with significant growth potential, offering investors a high-reward opportunity.

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

Microsoft Corporation (NASDAQ: MSFT)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$501.38	\$407.72	1.5x	Large Growth	0.7%	15.1	AAA



Introduction

Microsoft Corporation is a technology company that develops and supports software, services, devices, and solutions. It operates through three segments: Productivity and Business Processes, which includes Office Commercial, Office Consumer, LinkedIn, and Dynamics business solutions; Intelligent Cloud, which consists of server products, cloud services like Azure, SQL Server, and enterprise support services; and More Personal Computing, which encompasses Windows, devices, gaming, and search and news advertising.

Connection to AI Thematic Investing

In late 2023, Microsoft made a \$13 billion investment into a leading generative AI company, OpenAI. OpenAI is known for creating one of the first consumer friendly artificial intelligence platforms ChatGPT. Microsoft has begun integrating artificial into its suite of products through the development of Copilot. Microsoft Copilot can assist with searches, provide information, generate content, ask for summaries, generate emails, receive coding help, and more. This tool is designed to facilitate a wide range of tasks and is integrated with all Microsoft products.

The Story Behind the Stock

Despite the challenging macroeconomic environment of 2023, Microsoft saw robust growth across all its core business segments. Intelligent Cloud (IC) revenue grew 20% YoY, Productivity and Business Processes revenue grew 13% YoY, and More Personal Computing (MPC) grew 19% YoY. Of this growth, AI contributed 6% growth to Azure, Microsoft's intelligent cloud software. The company experienced a significant boost of 6% in growth thanks to AI advancements. Azure AI Services demonstrate robust performance, underscored by significant achievements. Firstly, there's notable traction among new customers, with over a third of Azure AI's 53,000 customers having joined within the past year. Secondly, the adoption rate among Fortune 500 companies is impressive, with over half already leveraging Azure OpenAI. Thirdly, GitHub Copilot's remarkable success is evident, with over 1.3 million paid subscribers and a 30% increase in the last quarter alone. Moreover, the integration of GitHub Copilot into the operations of more than 50,000 organizations has fueled GitHub's revenue growth to over 40% year over year. These achievements collectively illustrate the formidable position of Azure AI Services within the market landscape, solidifying Microsoft's standing as a leader in AI technologies. Looking forward, we anticipate a stabilizing growth in Azure revenue. The company

attributes this stability not only to the ongoing expansion of AI initiatives. CEO Satya Nadella remarked most AI implementation has been primarily focused on optimization without significant new workload initiation, which we believe will create a tailwind to Microsoft's long-term success.

Fundamental Analysis

Balance Sheet:

Microsoft has been aggressive versus peers when it comes to utilizing debt. MSFT currently has a debt to equity and debt to assets of 0.4x and 0.2x, respectively. Microsoft has a return on assets of 19.8% and return on equity of 39.2%, which is better than 97% of peers in the software industry. Total assets have a five-year CAGR of 9.7% and shareholder equity has a five-year CAGR of 20.1%.

Income Statement:

Microsoft Corporation experienced growth across key financial metrics over the past five years. In 2023, they had reported revenue of \$211.9 billion and a five-year CAGR of 13.9%. In 2023, Microsoft had a net income of \$72.4 billion and a five-year CAGR of 34.3%. Notably, Microsoft has had eight consecutive years of operating margin expansion with a five-year CAGR of 20% (chart).

Free Cash Flows:

Microsoft's free cash flow (FCF) per share is \$9.04. Microsoft's FCF has greatly improved over the last five years, growing from roughly \$32 billion to \$59 billion (13% CAGR). This shows company's ability to generate excess cash that can be used for various purposes such as investing in new projects, paying down debt and returning value to shareholders through dividends or buybacks. Microsoft's five-year dividend growth rate is 10.2% and dividend per share is \$3. Both are well below the amount of free cash flow the company generates and its FCF growth rate (chart). \$40 billions of their share buyback program remains from the approval in 2021.

Valuation

Given the large potential growth for Microsoft, we choose to utilize a discounted free cash flow model to calculate the intrinsic value. In our model, we project YoY revenue growth to remain strong at 20%, which is

primarily driven by the rapid growth in Microsoft's Intelligent cloud solutions and synergies with artificial intelligence. However, we expect this growth to stabilize down to 12%, which is more in line with the company's five-year revenue growth rate. Additionally, we see COGS declining by about 1.5% YoY into the future. This is because Microsoft has a history of maintaining margins through strong cost controls. Our FCF model shows an intrinsic value between \$490 and \$512. The most likely value of \$501.38 implies an upside of 23%.

Challenges

While we remain bullish on Microsoft, we have identified a few possible challenges that might impact our valuation. Our main concern is that government intervention leads to growth headwinds for Microsoft. For example, Microsoft's acquisition of Activision was under scrutiny by both the EU and US due to concerns of harming competition. However, Microsoft was able to eventually win regulatory approval. This is because since the 1990s Microsoft has utilized expansive lobbying and renewed legal operations. Today, Microsoft has developed deep relationship with regulatory agency's all over the world. In addition to these relationships with regulators, Microsoft it utilized legal resources to challenge regulatory opposition and negotiate private deals with competitors to preempt potential antitrust concerns. Given these factors, we feel that Microsoft is well equipped to handle any future regulatory scrutiny.

Conclusion & Recommendation

In conclusion, Microsoft Corporation's strategic investments in artificial intelligence, coupled with its robust financial performance and strong fundamentals, position it as a leading player in the technology industry. Despite potential challenges, such as regulatory scrutiny, Microsoft's proactive approach to addressing issues and its demonstrated ability to navigate complex landscapes instill confidence in its long-term growth prospects. With a focus on innovation, strategic partnerships, and financial discipline, Microsoft continues to pave the way for transformative advancements in technology while delivering value to its shareholders. All of which reinforces our BUY rating.

Materials

Introduction

The Materials sector encompasses a diverse range of companies involved in the discovery, development, and processing of raw materials. This sector plays an essential role in the global supply of basic inputs for various other industries. Companies in the Materials sector are mainly involved in the exploration, development, and refinement of raw materials for the production of finished goods for the consumer and commercial markets. The industry is the starting point of the supply chain and the source of all essential materials used in construction, paper, soap, and clothes, among others. Linde PLC (LIN), Ecolab (ECL), Rio Tinto PLC (RIO), and BHP Group Ltd. (BHP) are a few of the leading businesses in this industry. As of February 28, 2024, 2.29% of the S&P 500 is composed of stocks within this sector.

Major Trends

The Materials sector is closely tied to the economic cycle, rising and falling with the overall state of economic growth. In the past year, the sector delivered positive but sluggish returns, reflecting concerns over recession risk. The economic cycle will inevitably continue to evolve in 2024 and, with that, Materials stocks tend to rise with the broader economy. Any eventual positive economic swings could act as a catalyst for the stocks within the materials sector. With its track record of strong early-stage economic growth, the Materials sector may be well-positioned for a future economic rebound.

Long-term investment potential has been found in a number of segments of the sector that have shown favorable supply-and-demand dynamics. The overall rise in supply-and-demand would support the sector's sluggish but positive performance over the past year. A rising tide lifts all ships.

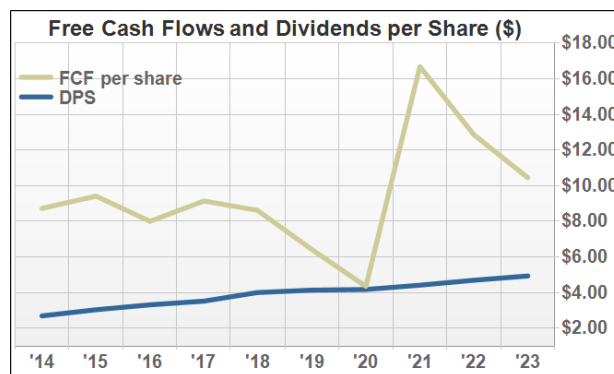
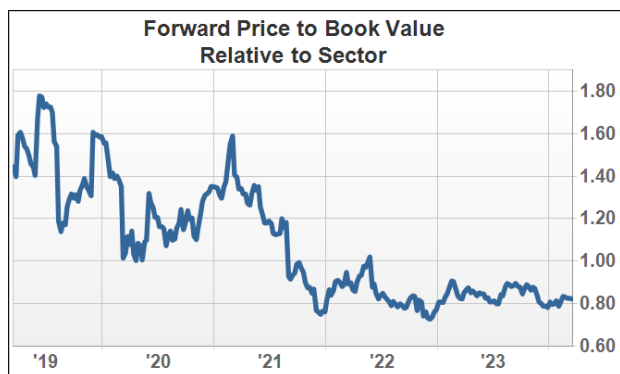
As the Materials sector plays such a crucial role at the start of the supply chain for many other industries and naturally is adjusted on the supply-and-demand of the economy, there is no reason to believe that it is going to outperform the S&P 500. Oftentimes, products affected by the materials industry, at the end of the supply chain, such as Consumer Staples, have a higher beta relative to the S&P 500 and would be able to capture more upside than the index would with the equal risk of it underperforming to the same magnitude. With an industry that is so closely correlated to the economy, there is no way to make a case one way or the other.

Conclusion and Recommendation

So long as a recession does not hit, based on the sector outlook, we expect that Materials companies would have a favorable trend, closely tied to the S&P 500, over the next twelve months. However, this favorable trend would not be outperforming the market but level with its performance. We recommend this sector to be neutrally weighted at 2.26%.

LyondellBasell Industries NV (NYSE: LYB)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$113.99	\$98.79	0.6x	Mid Value	5.1%	61.6	BBB



Introduction

LyondellBasell is a leading global manufacturer of chemicals, polymers and fuels used in plastic products spanning sectors like consumer goods, automotive, healthcare, and packaging. Headquartered in Houston, LyondellBasell operates facilities worldwide to produce materials like polyethylene and polypropylene that are made into everyday plastic items.

Connection to AI Thematic Investing

As of 2020, LyondellBasell has been working alongside C3 AI (NYSE: AI), the leading enterprise AI software provider for building enterprise-scale AI applications and accelerating digital transformation within companies. In March 2022, LyondellBasell signed a five-year contract extension with C3 to continue developing AI solutions in asset optimization, supply chain logistics, and plant reliability.

This contract renewal demonstrates LyondellBasell’s commitment to leveraging AI in the long term. Within the press release, Anup Sharma, SVP of Global Business Services at LYB, stated that “through an industry-leading approach, we will leverage strategic relationships to accelerate our journey and continue to unlock trapped value, improve the safety and reliability of our assets, and increase efficiency across the entire value chain.”

The Story Behind the Stock

Being one of the world’s largest producers of polypropylene, LyondellBasell holds a powerful and defensive position in the market. Polyethylene is more resistant to recessionary market conditions compared to other large industries, as shown in the graph above. Being a leader in essential industrial materials allows the company to have some pricing power in its diverse range of offerings.

Constant dividend increases and shareholder payouts are cornerstones of the company’s business model. The streak is now thirteen straight years of dividend increases, with this most recent increase being 5%. In 2023 alone, LyondellBasell returned \$1.8 billion to shareholders in the form of dividends and share repurchases.

Fundamental Analysis

Balance Sheet:

There was a swing in share affordability around 2021, demonstrated by the drop in the price-to-book ratio (chart). Additionally, over the past five years, LyondellBasell has averaged a 13.6% ROIC, indicating that the company is effectively allocating its capital to profitable investments to ensure healthy growth.

Over the past several years, notably since 2020, LYB has reduced their LT Debt/Equity by over half. In 2020, this figure was 207.1% while the figure for 2023 was 90.8%. Deleveraging in this manner signals moving towards a conservative capital structure, especially in times of economic uncertainty.

In their latest 10-K, the company stated, “Our focus on funding our dividends while remaining committed to a strong investment grade balance sheet continues to be the foundation of our capital allocation strategy.”

Income Statement:

In terms of gross margin and operating margin, both figures have been steadily on a consistent level over the past ten years, signaling a dependable sale to COGS figure.

In 2019, the company reported \$34b in sales, which has now been surpassed in 2023 with a figure of \$44b. This increase of nearly 30% on the revenue figure pre-COVID speaks volumes in terms of the growth direction of the company.

This sales growth translates into the company’s five-year average gross margin of 14.4%. Shareholders can capture a portion of the company’s sales growth and gross margins by receiving, on average, over the last five years, an ROE of 32%.

Free Cash Flows:

The company generates a large amount of free cash flow (chart). One major factor driving FCF production is that, unlike companies with mostly illiquid assets, LYB’s factories quickly become high-cash-producing operations once they are built, especially during positive economic times. LyondellBasell’s current payout ratio is 58%, driving its consistently high dividend yield while remaining affordable. The company’s current dividend yield of 5.1% outpaces both the diversified chemical industry yield (1.9%) and the S&P 500 (1.6%).

Valuation

LyondellBasell’s rebound of revenues which are currently surpassing pre-pandemic levels by being one of the world’s leaders in polypropylene production, elevated level of internal short-term growth rate, and

strong history of high-yield dividends with a quick cash-producing business model have set the premise for our valuation model. We used an H-model DDM to arrive at an intrinsic value for LyondellBasell stock. A bottom-up valuation model yielded a relatively high figure in terms of a 17% short-term internal growth rate, and growth in their digital platform. We estimated a long-term sustainable growth rate of 3%. Long-run US GDP and inflation rate estimates were used because LyondellBasell is a U.S. market-traded stock and mostly operates within the country’s borders. The most likely intrinsic value was \$113.99. Our sensitivity analysis estimates LYB’s stock intrinsic value between \$108 and \$122 adjusted for share repurchases. Our most likely intrinsic value represents roughly a 15% upside compared to the current price.

Challenges

As stated in the company’s annual report, “the cyclicality and the volatility of the industries in which we participate may cause significant fluctuations in our operating results.” The chemical and, specifically, plastic production industries are expected to continue to be affected by economic volatility. Historically, the chemical industry has experienced periods of capacity shortages, raising prices and profit margins, followed by periods of excess capacity’s, causing oversupply that declines prices and profit margins. These swings in the market are factors that LyondellBasell is not immune to but is more resistant to than other large industries, as shown in the graph above.

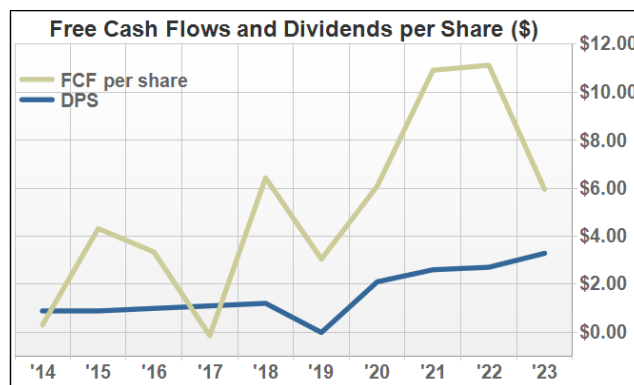
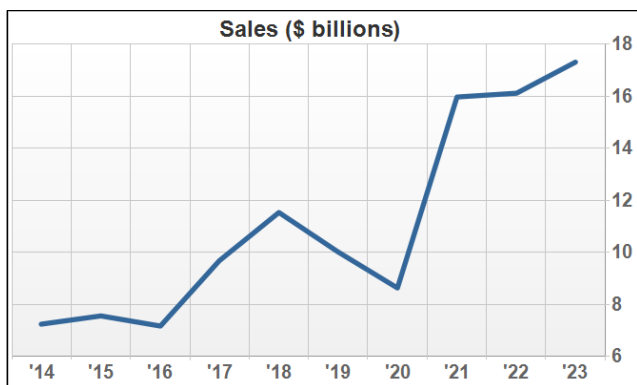
Conclusion & Recommendation

LyondellBasell’s rebound in revenues, market position in polypropylene production, and high level, relative to the industry, of internal short-term growth have set the premise for our valuation model. With the presence of a growing dividend and the company’s consistent share repurchase program, we believe these will contribute to LyondellBasell’s growth story and eventually be reflected in the stock price.

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

Ternium S.A. Sponsored ADR (NYSE: TX)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$55.73	\$39.65	0.2x	Mid Value	5.2%	51.1	AA+



Introduction

Ternium is a leading steel producer in that manufactures and processes a range of steel products for the construction, automotive, home appliances, capital goods, container, food, and energy industries. Ternium operates facilities across Mexico, Brazil, Argentina, Colombia, the United States, and Central America.

ESG Status

Ternium's roadmap for decarbonization was released in 2021. This plan begins with the initial goal of 20% reduction in carbon dioxide from steel production by 2030. In 2022, the company announced that they will embark on a new phase of development with their Pesquería Industrial Center. The company has expanded this factory to produce 4.4 million tons annually. This factory is equipped with the latest technologies through carbon capture capabilities and readiness to switch from natural gas to hydrogen for DRI production.

Beyond these environmental initiatives, the company is committed to "strengthening its educational programs by building a new technical school in Santa Cruz, Brazil, and enhancing its existing programs to create more opportunities for all," according to Máximo Vedoya, CEO of Ternium Mexico.

The Story Behind the Stock

Being the leading steelmaker in Mexico, Ternium has a strong grip on the steel industry in South America, as demonstrated by their achievement of a record amount of flat steel consumption in 2023 in Mexico. To capture this upswing, the company has established a plan to begin nearshoring in Mexico with the closure of competitor AHMSA and the construction of its own \$2.2 billion plant.

Ternium's geographic reach allows for large scalability of operations, backed by newly established production facilities in proximity to the lucrative U.S. market. Recently, the company has seen increasing shipments in Mexico and expects the near-shoring-boosted demand for steel from USMCA, Tesla, Kia, and other auto manufacturers investing heavily in the country to be captured by their new state-of-the-art facility in Pesquería. Additionally, they will see higher electric furnace production going forward. This means margins should become more stable from capital expenditure initiatives, thus increasing the proportion of more environmentally friendly production and positively impacting investors' perceptions. There is a turnaround opportunity with the main furnace industry ramping up and efficiency improvements from verticalization.

Finally, Ternium has acquired a controlling stake in Brazil's largest flat steel producer, Usiminas. This acquisition was made using cash on hand and further widens the company's market reach and control over South America.

Fundamental Analysis

Balance Sheet:

Ternium is sitting on a large amount of liquid assets, amounting to over \$3.5b in cash and cash equivalents. This figure is up 382% from where it was pre-COVID at year-end 2019. This easily covers the company's long-term debt, which is \$1.4b. This gives them plentiful financial flexibility if they plan to acquire another business, pay higher dividends, or reinvest internally.

Income Statement:

Looking at the chart above, one can see their revenue figure fluctuated between \$7b-\$11b in any given year leading up to COVID-19. Post-COVID, that figure has surpassed to over \$19b in 2023.

From a margin standpoint, both operating and gross margins are up from 10 years ago, indicating improved pricing power, cost controls, operational efficiency, and more than anything else, improved profitability. Operating margin increased from 13% to 17%, while gross margin increased from 22.6% to 23.9%.

Based on strong EBITDA and net income figures for FY2023, the board proposed an annual dividend of \$3.30, corresponding to a 22% YoY increase.

Free Cash Flows:

Outside of 2017, the company has been able to produce a greater amount of FCF per share than dividends per share (chart). This signals potential for future dividend growth, and financial flexibility with excess cash to pay down debt, reinvest in the business, or return value to shareholders through repurchases.

The company's net operating cash flow has improved drastically over the last 10 years, more than doubling, and they have added \$1b since pre-COVID, bringing their current figure up to nearly \$2.7b. Over the last 10 years, outside of 2020, Ternium has increased or maintained its dividend per share. This dividend figure has increased

from \$0.75 in 2013 to their most recent figure of \$2.90 per share on a stock that costs almost \$40.

Free cash flow growth has outpaced dividend growth over the past five years, which indicates a growing ability to implement capital expenditures due to a relatively conservative payout policy.

Valuation

Ternium's market dominance in Latin America, revenue growth post-COVID, consistently increasing dividends, strong cash-flows, and high amount of liquid assets relative to long-term debt have set the premise for our valuation model. For our DDM, we used an H-model to arrive at an intrinsic value for Ternium's stock. A bottom-up estimation model yielded a 15% short-term earnings growth rate, which reflects their new acquisitions and growth in revenue. We estimated a long-term sustainable growth rate of 3%. The most likely intrinsic value was \$55.73. Our sensitivity analysis estimates Ternium's stock intrinsic value between \$49 and \$59. Our most likely intrinsic value represents a 41% upside from the current price.

Challenges

As a steel producer, Ternium is vulnerable to economic cycles and volatile commodity and raw material prices that cause earnings fluctuations. Much of Ternium's operations are in Latin America, which brings risks like political instability, currency volatility, and infrastructure challenges. Lastly, the company relies heavily on exports and could be impacted by protectionist measures like tariffs, quotas, or trade agreements.

Conclusion & Recommendation

Attractiveness of the security has been driven by continuous, increased dividend payments since its inception. Our thesis is that Ternium is a profitable, market-leading company that is continuing to dominate certain markets through expansion, while also providing an, as mentioned, appealing dividend framework.

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

Real Estate

Introduction

The Real Estate sector is largely made up of Real Estate Investment Trusts (REITs) and often specialize in one area of real estate. Examples are single-family residential, commercial, industrial, and multi-family residential. REITs are unique in the stock market, paying 90% of their taxable income as dividends to shareholders. This makes them strong investments for income-minded investors. The Real Estate sector currently makes up 2.3% of the S&P 500.

Interest Rates

The outlook for Real Estate is relatively positive, especially compared to the last two years. Real Estate is susceptible to elevated interest rates, which we experienced in 2023. With interest rates expected to be cut in the upcoming year, this provides a strong tailwind for the sector. Companies in Real Estate have faced slimming profit margins recently. This is largely due to the elevated interest rates. These interest rates have made it difficult for REITs to finance their new acquisitions, reducing their ability to grow into the future. Companies with strong balance sheets and underleveraged compared to their competition should be in a strong position to capitalize on the demand for real estate in the upcoming year.

Varying Sub-Sector Performance

With work-from-home and hybrid working seemingly here for the long term, office real estate has faced significant challenges since the beginning of the pandemic. Industrial REITs have fared better, due to continued growth in e-commerce. An emerging sector of REIT is data centers, focused on supplying the storage of files and computing power needed for businesses in today's world. This sector has shown promise, especially with the AI boom, and has many tailwinds affecting its outlook.

Demographics

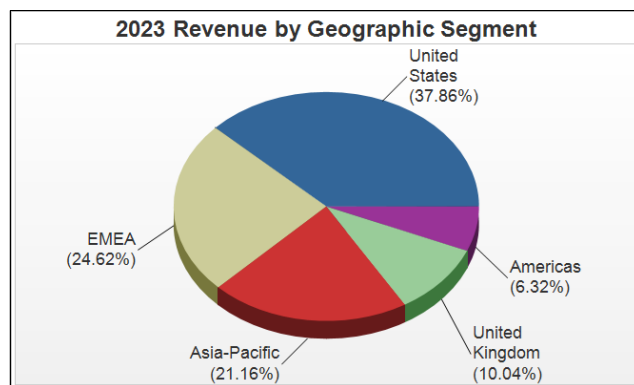
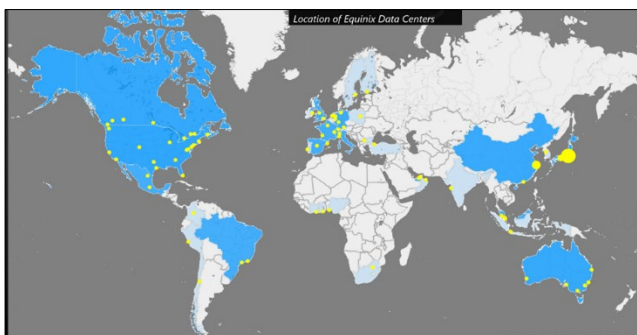
Demographics also play a key role in the real estate sector. The Sunbelt, or southeastern United States, has seen a large population growth since COVID-19. This trend is expected to continue going forwards, helping increase demand for REITs positioned in that area. Globally, rapid expansions in Africa, South Asia, and South-East Asia should heighten the demand for real estate looking forwards. In addition, their technological advances require more data centers to power, providing significant tailwinds in that sub-sector.

Conclusion and Recommendation

In conclusion, real estate is in a strong position to rebound after back-to-back years of lack luster performance relative to other sectors. With interest rate cuts expected this year by the Fed, real estate stands to benefit significantly. We believe an overweight at 2.6% best achieves our goals for the Crummer Truist Portfolio.

Equinix, Inc. (NASDAQ: EQIX)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$971.28	\$891.87	3.7x	Large Growth	1.9%	89.3	BBB



Introduction

Equinix Inc. is a REIT that specializes in data centers. It operates in thirty-two countries across six continents. They provide turnkey solutions to many customers around the world.

ESG Status and Connection to AI Thematic Investing

Equinix is very well connected to our themes for this year. They are the first data center company to commit to use 100% renewable energy and have 96% renewable energy coverage. In addition, they were named to CDP’s A list for sustainability in 2022. They have a foundation, where they have pledged over \$50 million to support causes globally. They also promote their suppliers to improve their ESG metrics, creating improvement across their entire supply chain. For AI, their core product of data center is pivotal to feed all the information for AI to run at peak efficiency. They are the backbone that many companies will need to leverage to fully implement AI into their business.

The Story Behind the Stock

Equinix is a data center company when the economy is amid a technological boom with AI. They have partnered with Nvidia to provide turn-key AI solutions to companies, attaching themselves to one of the companies best positioned to leverage AI in the future. They also support many other key technologies, such as AWS, where they have partnered with Amazon to offer solutions for business to leverage AWS securely. They have many partnerships across the world and are expanding into developing markets that have begun to leverage data centers to increase productivity. They recently opened data centers in Malaysia and have others in India. These two locations will soon be able to harness data analysis and collection and Equinix will be their preferred data center provider to work with. They have operations in thirty-two countries, meaning they are well diversified, reducing risk from one geo-political event significantly impacting their operations (chart). Being the largest data center company, they benefit from the name brand of Equinix being well respected in the industry, with over 95% of their revenues coming from recurring customers. These factors will help Equinix continue to grow in the future at AI and data collection becomes an increasingly more important factor of all business globally.

Fundamental Analysis

Balance Sheet:

With Equinix being the largest data center REIT, they can use their size to expand quickly into new markets. They have many data centers opening around the world, from Brazil to Frankfurt and Seoul. This helps them continue to increase their assets and combined with their strong management, should continue to have an attractive balance sheet into the future.

Income Statement:

Equinix has many strengths in its income statement. 95% of its revenue are from recurring customers, showing that Equinix has a strong product to offer and that customers are not leaving. This can lead to referrals in the future, bolstering EQIX's income statement, while retaining current customers (chart). This, along with stable products connected to AWS, Google, Oracle, and Azure, means that their income statement should continue to be strong and grow into the future.

Free Cash Flows:

Equinix has seen remarkable growth in their dividend in recent years. In 2023 alone, they increased their dividend by 37%, and in the last three years they have grown their dividend by an average of 17% a year. This rapid growth provides an attractive investment opportunity, as their AFFO reinvestment rate growth numbers remain close to these dividend growth rates at 13.7% in the last eight years. This dividend growth rate that is supported should provide incredible value for shareholders of EQIX.

Valuation

To find Equinix's intrinsic value, we used a three-stage DDM model. We used an AFFO reinvestment rate to find the short-term growth rate, as AFFO reinvestment rate is a more comprehensive metric for REIT's. Using this, we arrived at a 15.5% short term growth rate. We expect this to last four years, as the AI boom will propel it, along with data centers in growing countries such as India and Malaysia. We used a long-term growth rate of 4%, as we believe technology will outpace GDP growth in the long-term as technology increases its presence in everyday life. Using these numbers, we found an intrinsic value of \$971.28, or an upside of 9% from current share price. In our sensitivity analysis, we found a low of \$885 and a high end of \$1,165, assuming beta and short-term growth rate are higher than our base expectations.

Challenges

Equinix does have some challenges regarding how expensive the stock is relative to competitors. However, we think Equinix is in a position to continue to grow using its size and global presence as competitive advantage to still outperform its expensive P/E and P/B ratios.

Conclusion & Recommendation

EQIX is a company perfectly suited to capture the group of the next wave of technology. With strategic partnerships and geographic diversity, Equinix has many opportunities to continue to grow well into the future.

We recommend EQIX as a BUY with a target price \$971.28.

Fundamental Analysis

Balance Sheet:

EPRT is focused on a conservative balance sheet and strong liquidity. They have \$990 million in liquidity, while their investment costs were around \$200 million. Both of those numbers are from Q3 of 2023. This, combined with their average investment into properties being the lowest of named competitors, at \$2.6 million, means they are positioned to have ample liquidity on hand to repay loans or rapidly expand in the future. Furthering this point, their total liabilities make up only 35.7% of their total assets, below the industry average of 39.2%. This liquidity and lack of leverage enables EPRT to be in an excellent position for the future.

Income Statement:

EPRT has strong management at the helm, evidenced by their impressive margin performance. In 2023, their net margin was 52.5%, highest among NNN REITs. They also have a projected net margin of 54%, further increasing on their lead as many of NNN REITs are projected to slip back in terms of the Net Margin. In addition, their AFFO per share is \$1.65, placing them above the average for NNN REITs. This shows their ability to use their revenue efficiently, providing more value to their shareholders.

Free Cash Flows:

EPRT's dividend growth in the past five years has been 6.3%. This shows a great ability to generate additional income for the firm, as 90% of net income must be paid in dividends to shareholders. This ability to constantly grow the dividend, even throughout COVID-19, shows a resilience in the company and strong fundamentals that will be invaluable as the economy remains uncertain. Combined with their liquidity and conservative balance sheet emphasis, EPRT will be able to outperform its peers in this time of influx of the economy.

Valuation

To find EPRT's intrinsic value, we used a three-stage DDM model. We used an AFFO reinvestment rate to find the short-term growth rate, as AFFO reinvestment rate is a more comprehensive metric for REITs. Using this, we arrived at an 8.8% short term growth rate. Long term, we used a 3.5% growth rate, as they only operate in the USA. However, they are advantageously positioned in the Sun Belt, which will lead to higher growth at demographic trends continue. EPRT has not repurchased any shares and has not announced plans to do so. Instead, they return money to shareholders via dividends, as REITs are required to pay 90% of their net income to shareholders as dividends. Using these numbers, we found an intrinsic value of \$29.51, compared to the current stock price of \$23.78. This represents a 24% upside. Conducting sensitivity analysis, we find on the low end the target price is \$27 to a high end of \$33.

Challenges

EPRT does face risks in its portfolio. One of its industries that it invests in is family restaurants, which is susceptible to consumer spending changes. However, EPRT has many quick-serve restaurants, which is often where consumers go in times of uncertainty, balancing the losses from the family restaurant portion of their portfolio. In addition, being solely in the US could pose risks in terms of political or interest rate risks, though we see these risks being minimal and EPRT's strong financial position able to weather any storm that these risks may cause.

Conclusion & Recommendation

EPRT is a company with a strong balance sheet, long-term stability, and advantageous geographic placement. With these three factors, along with interest rates expecting to be cut soon and our valuation suggesting the company is undervalued, EPRT is in a position to outperform the sector. This is why we assigned a BUY rating to EPRT for the Crummer Truist Portfolio.

Utilities

Introduction

The Utilities sector consists of utility companies that produce and distribute gas, water, and electric power. The sector also includes the production of renewable sources of energy. Major companies in this sector include Duke Energy (DUK), NextEra Energy (NEE), and American Electric Power (AEP). As of February 28th, 2024, Utilities represent 2.14% of the S&P 500.

Growth Opportunities

The Utilities sector saw a dip in performance in 2023 like other defensive sectors, but the sector is set to see improvement and robust growth in the near future. The ongoing recovery from the COVID-19 pandemic has had lingering effects on Utility stocks. Factors such as changes in energy consumption patterns and remote work trends indicate a need for reliable energy production. The ongoing transition toward renewable energy sources such as wind and solar power could impact utility stocks. Utilities investing in renewable energy infrastructure will see growth opportunities, while those heavily reliant on traditional fossil fuels may face challenges due to regulatory pressures and changing consumer preferences. In 2023 energy production consisted of 24% renewable energy but based on the U.S. Energy Administration this number is predicted to rise to 49% in 2030. Companies investing in sustainability now will see strong returns in the near future. In 2022, the president signed The Inflation Reduction Act of 2022. This act was formed to catalyze the transition to renewable energy. The legislation aims to put the country on the path to sustainability and reduce harmful emissions. The act will provide tax credits and incentives to broaden the adoption of renewable energy. In a recent survey conducted by EPA 79% of Gen Z respondents said they would pay more for clean energy, further solidifying the possible opportunities for the Utilities sector. The Utilities sector is sensitive to changes in interest rates, as utility companies often carry elevated levels of debt to finance infrastructure investments. With the Fed likely to cut rates in 2024, this will bode well for the Utilities sector. Although other defensive sectors will be underweighted, we believe the Utilities sector will not follow other defensive sectors in 2024. The combination of government tax credits, potential rate cuts, and the strong trend towards sustainable energy, the Utilities sector is poised to have robust performance in 2024.

Challenges

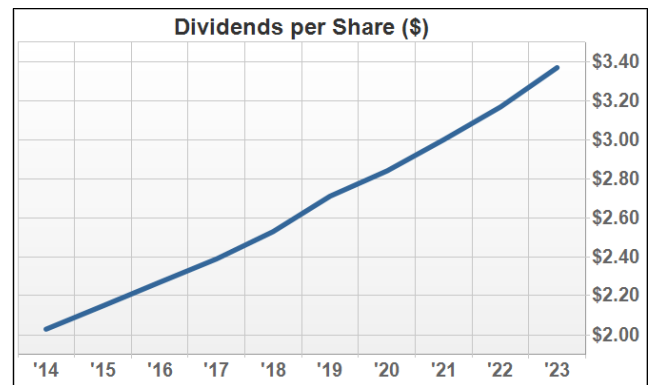
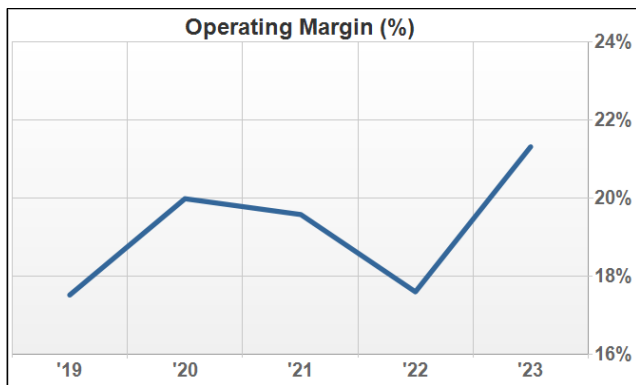
Utilities are susceptible to the impacts of climate change and extreme weather events. Hurricanes, wildfires, floods, and other natural disasters can damage infrastructure, disrupt operations, and increase costs for utility companies. These events can destroy and damage the grid structure potentially affecting both customer satisfaction and customer retention.

Conclusion and Recommendation

Companies in this sector are poised to take advantage of the macro-economic trend towards sustainable energy and the likely rate cuts by the Fed. In addition to these factors, we believe the strong balance sheets of the leading utilities providers make us optimistic about the performance of the Utilities sector. We recommend an overweight at 2.3% of the equity portfolio.

American Electric Power Company, Inc. (NASDAQ: AEP)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$93.93	\$83.32	0.7x	Mid Value	4.2%	42.0	BBB+



Introduction

American Electric Power Company primarily engages in the generation and distribution of electricity in the Midwest region. American Electric Power was founded in 1906 and is headquartered in Columbus, OH. AEP has over 5.6 million customers across eleven states and currently has just over 17,000 employees.

ESG Status

AEP has committed to becoming carbon neutral by 2045 and to start this process the company has begun to transform their fossil fuel facilities into renewable energy. These facilities include updates to solar and wind power. In addition, AEP has pledged \$43 billion over the next 5 years to make the grid more reliable and sustainable. The size of this investment puts AEP in the top three utility companies investing in their grid infrastructure in the next five years. AEP started a new program in which the company donates \$5 million a year to organizations that promote racial and social justice in the U.S. AEP has also begun working on a new company-wide volunteering project in which each region would participate in community volunteering projects.

The Story Behind the Stock

AEP has been a staple in the Midwest when it comes to the Utilities industry. Since 1906, the company has grown exponentially to become one of the biggest energy suppliers in the U.S. The company's EPS and sales have grown consistently for the past decade and with new investments in the growing trend of sustainability, these are sure to improve even more going forward. Innovation and flexibility have become a bigger part of the organization's growth strategy. AEP CEO Julia Sloat mentioned in their most recent earnings call the necessity of de-risking their operations as much as possible. The company is putting an emphasis on making the grid as reliable and sustainable as possible which will give AEP a leg up on the competition in the Midwest. The pandemic had negligible impact on AEP, but the Utilities industry as a whole is feeling the effect of supply chain issues. AEP recently completed the sale of their unregulated assets. This was done in order to streamline and de-risk the business. AEP is set to net \$1.2 billion from the sale, and Sloat has confirmed that the money from the sale is being used to shore up the regulated assets. Finally, AEP was named in Site Selection Magazine's 'Top Ten Utilities for Economic Development' and Fortune Magazine's 'World's Most Admired Companies in Electric and Gas Utilities Sector.' These accolades further reaffirm the positive direction

that AEP is headed in terms of their innovation and sustainability.

Fundamental Analysis

Balance Sheet:

AEP has been making aggressive investments in their inventory growing it consistently over the past nine years with a CAGR of 11%. The company also has a nine-year CAGR of 16.4% in their PP&E. In addition, the company's assets have grown exponentially with a nine-year CAGR of 23%. These factors indicate that AEP has the ability to grow consistently due to their presence in the Midwest.

Overall, AEP may look to have taken a small dip in their performance in Q3 and Q4 of 2023 but based on their earnings call and reports from the CEO, these dips in cash have been used for their investments into ESG projects and grid reliability.

Income Statement:

AEP has seen a consistent rise in sales for the past ten years with a CAGR of 11.2%. The company saw a ten-year CAGR of 13.5% in their net income. When looking at the company's income statement we can see that the rise in COGS is slower compared to the rise in sales and net income. In 2023, they had their best operating margin in the past five years (chart). Lastly, the company boasted a ten-year CAGR of 12.8% in their EBITDA. The company's financial information show that AEP is consistently going in a positive direction.

AEP predicts to see larger sales growth in 2024 and 2025 due to their investments in their grid infrastructure and sustainability practices.

Free Cash Flows:

Most recently, AEP paid a dividend of \$0.88 (quarterly). Another impressive growth rate is seen in their dividends per share, the company had a ten-year CAGR of 16.6% (chart). AEP's FCF dropped in 2023 but we know this to be because of the extensive investments made by the company. This is not an abnormality in the FCF of AEP.

Although it was historically lower in 2023 than 2022, AEP has exhibited a trend of aggressive investment dating back to 2016, which has resulted in sales growth and facility improvements. Overall, the company's FCF did not perform as well as previous year, but this is because of the investments and new strategy being taken in 2024.

Valuation

AEP's investment into renewable energy, steady dividend growth, and AEP's sale of their unregulated assets have set the basis for our valuation model. We used the H-model to find the intrinsic value for AEP's stock. The historical performance and regulation of the Utilities sector reflect the choices for the growth rates that were chosen. With a short-term growth rate of 5.4% and a long-term growth rate of 3%, the most likely intrinsic value is \$93.93. Our sensitivity analysis estimates AEP's intrinsic value to be between \$84 and \$100. Our most likely intrinsic value represents around a 13% upside compared to the current price.

Challenges

AEP has suffered from long interconnection issues as of late. This is a sign of an aging transmission infrastructure. To mitigate this issue, the company has made investment pledges, and plans for the next two to three years to completely overhaul their grid infrastructure to modernize the entire system.

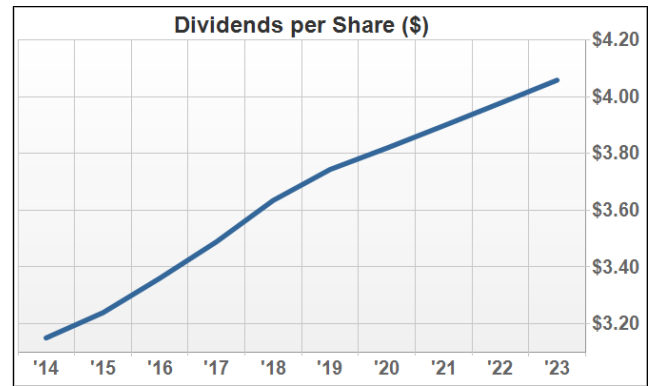
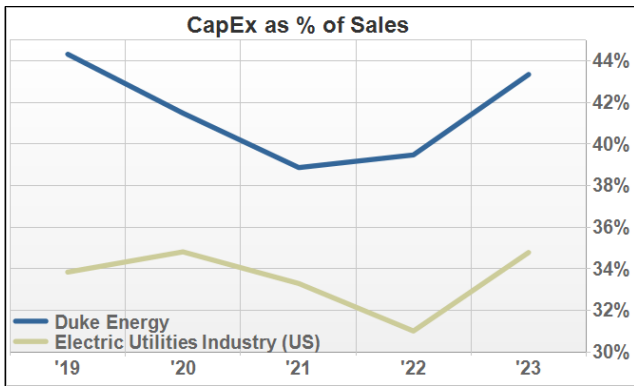
Conclusion & Recommendation

AEP's investments in renewable energy, steady dividend growth, sale of unregulated assets, and commitment to grid reliability will help to increase performance in the future. The commitment to sustainability will help AEP solidify themselves as the go to energy provider in the Midwest and drive an increase in share price.

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

Duke Energy Corporation (NYSE: DUK)

Recommendation	Valuation	Last Price	Relative P/E	Style	Dividend Yield	ESG Rating	Credit Rating
BUY	\$117.79	\$90.74	0.7x	Large Value	4.5%	26.2	BBB+



Introduction

Duke Energy’s primary functions include the distribution of natural gas and energy services. Duke Energy was founded in 1904 and is currently headquartered in Charlotte, NC. Duke Energy primarily conducts operations in the Carolinas, Florida, and the Midwest.

ESG Status

Duke Energy is falling in line with the trend toward sustainable energy. The company has pledged to invest \$145 billion over the next ten years in solar, wind, hydro, and nuclear energy as the company shifts away from fossil fuels. On the social front, Duke has made efforts to partner with non-profit organizations in North Carolina and the company has donated over \$70 million to those organizations in this brief timeframe. Finally, Duke has created a program for their employees and retirees that encourage volunteering and giving back to the local communities.

These two factors separate Duke from other utilities providers because Duke has the capital to make these large investments that other companies cannot match.

The Story Behind the Stock

Duke Energy has been growing slowly, but consistently as it has spread from North Carolina to the Midwest and Florida. The company attributes its constant growth in sales and performance to the continued migration of potential customers to the southeast, and its previous investments into strengthening the power grids in North Carolina and Florida to protect their customers from power outages. Duke boasts a place on the Fortune Magazine’s ‘World’s Most Admired Companies for 2024.’ This recognition comes from Duke’s commitment to innovation and sustainability. Unlike other utility companies, Duke has the resources to make large investments in sustainability. This will help the company move away from fossil fuels, and it becomes a powerful marketing tool to key demographics. Duke primarily operates in the Southeast region which has the highest domestic migration pattern in the US. Also, Duke is one of the largest energy suppliers in the southeast region, a region with the highest migration rate in the US. This gives Duke no shortage of new customers. Duke CEO Lynn Good has responded to the small loss in customer retention by making plans for investment in the reliability and safety to combat power outages during extreme weather events. Duke has made investments into grid safety and innovation in their transformers putting Duke on the front line of modern utility

companies. Overall, Duke has proved to be a stable, consistent, and reliable company that has been able to remain a staple in the utilities industry for decades due to the company's leadership and ability to change with new trends in the industry.

Fundamental Analysis

Balance Sheet:

Duke has seen growth in their total inventories and assets over the past decade. This is due to their acquisition of Piedmont Natural Gas, and investments into new energy facilities. Duke has a ten-year CAGR for long-term investments of 18%. This percentage bests their competition and mirrors Duke's aggressive investment strategy (chart). Also, Duke's ROE was a five-year average of 7.22%, which is better than all but two utility companies in the U.S. In our opinion, we see this as a good sign because these facilities and investments are projected to increase sales in 2024 and 2025. Duke has put itself into a position to take more market share and increase their total customers from its current count of 7.2 million.

Income Statement:

Duke has reported a consistent rise in sales since 2014 with a ten-year CAGR of 12.1%. The company's COGS had a ten-year CAGR of 10.7%, which was less than their competitors. The operating income had a ten-year CAGR of 13.3% and the EPS had a CAGR of 13.6%. In addition, the company exhibited an increase in dividends per share with a ten-year CAGR of 12.8%, which is higher than their competitors (chart). Finally, the company boasted a ten-year CAGR in their EBITDA of 14.7%. These factors all point toward a financially healthy company.

Free Cash Flows:

As previously mentioned, Duke has made heavy investments in the previous year towards sustainable energy. This resulted in a negative FCF for Duke in 2023. This is not reason for alarm as these investments are projected to increase sales in the near future for Duke. Duke has increased their dividend payments over the

past ten years and most recently paid a dividend of \$1.03 (quarterly). Finally, over the past ten years, we can see a trend of a year or two of positive cash flow that is then turned into aggressive investments the next year. Duke's negative FCF in 2023 is just part of the trend that the company has exhibited for more than a decade.

Valuation

Duke's investments in sustainability, grid safety, and favorable demographic trends, as well as its dividend history have been instrumental in the creation for our valuation model. We used the H-model because of the consistency and regulation within the utilities industry. Based on the growth history of the company and the industry we have estimated the short-term growth to be 3.9% and the long-term growth rate to be 3.5%. These percentages reflect the recent investments and the regulation within the industry. The most likely intrinsic value for Duke was \$117.79. Our sensitivity analysis estimates Duke's stock intrinsic value between \$95 and \$142. Our most likely intrinsic value represents a 30% increase from the current price.

Challenges

The Utilities sector has not been immune to supply chain issues that are still present due to the pandemic. Shortages in steel, aluminum, and transformers have disrupted the industry and boosted costs. To combat this, Duke's CEO has made investments in their transformer design to increase efficiency and durability to cut down on the COGS of the company.

Conclusion & Recommendation

Duke's commitment to sustainability, constant innovation, and third spot in market share among utility companies in the U.S. are key factors in our choice to recommend this stock. We believe that we will continue to see constant growth in the future.

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

Appendix

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

<u>S&P 500 Sector</u>	<u>Benchmark</u>
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

In financial analysis, we often turn to Value at Risk (VaR) to gauge potential losses within an investment portfolio over a defined period, while assuming a specific confidence level. This statistical tool is instrumental in safeguarding a portfolio against unforeseen downturns by focusing on low-probability events. While calculating the Expected Shortfall (ES), the magnitude and likelihood of potential losses that exceed the VaR threshold are taken into consideration. The result is a more appealing strategy for conservative investors, as this provides a more comprehensive picture of the risk that an investment portfolio poses on the downside.

Analytical Approach

Employing an annual review cycle, the Crummer Truist Portfolio adopts a consistent one-year investment horizon. Our team employs historical monthly return data spanning over two decades to compute VaR and ES with a confidence level of 95% while ensuring continuity and alignment with past analyses. Our inquiry revolves around determining the maximum potential loss (VaR) and the average loss in scenarios exceeding VaR (Expected Shortfall), both given a confidence level. This choice was made to ensure that the results are consistent with those of previous years. 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)

Model Assumptions

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. The calculations were carried out solely on the equity portion of the portfolio, which accounts for 80% of the total, on the basis of the assumption that this particular segment is the one that carries the most significant risk. We ran monthly simulations using rolling one-year historical returns to assess how well our portfolio performed in comparison to the benchmark.

Conclusion

As of February 28, 2024, the value of the proposed equity portion (i.e., 80%) of the Crummer Truist Portfolio was \$1,055,009. Based on our VaR calculations, we are 95% confident that the Portfolio will not lose more than \$242,300 over the next year. When compared to the benchmark's values, both the VaR and ES values indicate slightly higher risk (table below). These values are in line with the recommended sector allocations that are slightly more risk-seeking than the benchmark. 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.

	Benchmark	Proposed Weighting
Value at Risk (VaR)	\$239,835	\$242,300
Expected Shortfall	\$331,645	\$333.768
Average Historical Return	9.42%	9.41%
Historical Volatility	17.22%	17.32%