

2018

Crummer SunTrust Portfolio Recommendations: Crummer Investment Management [2018]

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2018

Crummer SunTrust Portfolio Recommendations

Crummer Investment Management



Introduction

Dear Members of the Committee,

We would like to thank you for your service to the Crummer SunTrust Portfolio. Without your participation, Crummer students would not benefit from the unique insights 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: Chris Enger, Aviance Capital Management; Marc Miller, DePrince, Race and Zollo; Professor William Seyfried, Crummer Graduate School of Business; James Ferrell, Ferrell Wealth Management, Inc.; Rick Ahl, Ahl Investment Management; Sean Warrington, Alfred I. duPont Testamentary Trust; James Hunt, Tupperware; Jay Menozzi, Orange Investment Advisors, LLC; Rob Roy, Adventist Health System; Deryck Harmer, Triloma Energy Advisors; Marc Bianchi, Cowen & Company; Scott Conner, Doyle Wealth Management; and Derek Grimm, Merrill Lynch.

This portfolio was endowed by SunTrust 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 award \$40,000 in scholarships. We are extremely grateful for SunTrust's generosity and investment in higher education. We have all learned a great deal from this experience and the responsibility of managing real money.

Our first challenge was to establish a portfolio position that takes advantage of economic opportunities while avoiding unnecessary risk and conforming to the Crummer SunTrust 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 May.

The following report will walk you through this analysis beginning with an economic outlook, which in turn influences our portfolio design. The designated sector analysts then assess the portfolio holdings of each sector and determine whether the positions align with our forecast. This assessment includes a broad sector outlook, as well as a fundamental outlook, for each individual holding. The decisions to buy, hold, or sell are based on the sector analysts' valuations. Finally, the report concludes with an overall portfolio assessment given the proposed changes supported by Black Litterman and a value-at-risk diagnosis.

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 Graduate School of Business. Professor Philip Rich, who serves as Market Strategist for Seaside National Bank & Trust, also provided the class with weekly economic data points and led discussions to help us to arrive at a consensus. This outlook then drove our allocations among the ten S&P sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, and Utilities. This year we forecast moderate to strong economic growth and have tilted the allocations toward market sectors that do well in a strong and expanding economy.

Our asset class allocation embodies the long-run strategy of our portfolio. The IPS sets asset class ranges from low to moderate risk to keep the portfolio from being whipsawed by transitory market cycles. We are at the middle of the range for fixed income, large-cap growth, and value asset classes, and in the middle of the range for mid-cap growth. We have assigned minimum values for small-cap growth, small-cap value, international equity, and mid-cap value. More detail about our ranges and allocation decisions begins on page 14. An important decision for our asset allocation was the percentage we chose to allocate to bonds. This year we are allocating 10% towards bonds, which is a reduction from the decision of 15% last year. We made the decision to reduce our ownership of bonds to capitalize on what we believe will be a strong equity market over the next year. These allocations entail a moderate level of risk, consistent with our view that the stock market will continue to trend upward offering significant potential for returns. We maintain an allocation to a sector ETF in each sector to ensure diversification. Additionally, as a practical matter, we are limiting each sector to a maximum of four individual stocks.

Our decision to reduce bond ownership and allocate more cash into equities to capitalize on a moderate to strong economy is rooted in our belief that capitalism will thrive in the current economic and political landscape. Our philosophy

echoes Warren Buffett's remarks in his annual report, in which he states his strong belief in capitalism and optimism for the future:

"We believe in capitalism, we believe markets reward innovative and decisive management. Our security recommendations this year reflect that belief with strong companies that all have excellent prospects. While not every sector will prosper this year – or any year – we have chosen to focus on sectors that have the most promise and reflect our belief that markets will continue to reward those who take risk sensibly. We chose companies that we analyzed as undervalued, regardless of their popularity or lack thereof. While we considered the global political winds and domestic promises, our choices reflect our considered opinions and beliefs, grounded in economics and guided by all of those who have counseled us."

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

Sincerely,

Crummer Investment Management Team



From left to right: (front row) Min Sun Kim, Rebecca Marshall, Radoslava Perova, Prof. Phillip Rich, Walker Haymaker, Joseph Musumeci, Thao Ho; (second row) Josh Grubbs, Stephen Roskowskí, Richard Habgood, Dr. Clay Singleton, Alexis Natal, Hailey Cusimano, Kusal Matthew

Crummer Investment Management Team



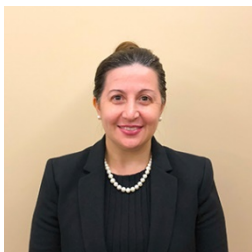
Thao Ho | Consumer Discretionary

Thao Ho is a corporate finance intern at Vistana Signature Experiences. She graduated from the University of Central Florida with a B.S.B.A. in Finance and Accounting. She is expecting to earn her MBA in May 2018, and her current concentrations are in Finance & Entrepreneurship.



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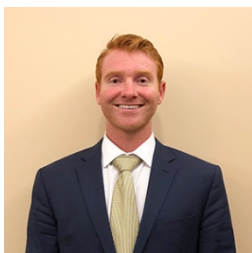
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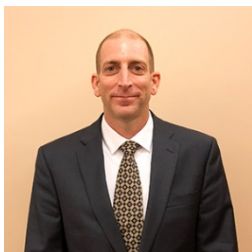
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Economic Outlook

Introduction

The Crummer SunTrust Portfolio's Investment Policy Statement requires that the management team determine portfolio allocations based on a consensus estimate of the market's behavior throughout the coming year. This team has conducted thorough economic research using a variety of respected sources, developed a comprehensive market analysis, and heard from a well-rounded selection of industry experts (including economists, portfolio managers, and financial advisors) to inform this year's investment decision.

The team analyzed and discussed a range of likely economic possibilities for the upcoming year to shape a consensus that would serve to inform portfolio decisions. The team evaluated the potential upsides and downsides relative to each economic factor to guide appropriate responses regarding individual stock selections and portfolio design. The team's investment strategy has been to select securities trading at a significant discount to market value. We believe this strategy will mitigate any market volatility while providing a larger total return.

Economic Thesis

Overall, the team's consensus maintains a positive economic outlook for the next year. Both domestic and global markets are enjoying a synchronized upswing as economies have mostly recovered from the Great Recession. Furthermore, key economic indicators including GDP growth, unemployment, and inflation suggest a healthy domestic economy, while the Trump administration's tax reform is likely to prompt increased spending and investment. For these, among other reasons, the team does not believe a recession is likely to occur over the next twelve months. In 2016, the S&P 500 returned 9.54%, and in 2017, it returned an impressive 19.42%. Although the beginning of 2018 has been more volatile, the various sectors and markets are still expected to maintain strong performance and substantial growth throughout the year.

GDP

The United States economy has been growing since 2009, representing one of the longest expansion periods in recorded history. Last year, it exceeded the management team's expectations by surpassing the team's 2.5% real GDP growth estimate. This year's management team believes the economy has the capacity to continue growing at approximately 2.8% over the course of the next twelve months due to drivers including tax reform, repatriation trends, increased buybacks, growing capital expenditures, and rising confidence levels. Low unemployment is leading to a tightening job market and expectations for greater wage growth, which will boost personal income and ultimately consumer spending.

This portfolio management team believes that these trends will support strong confidence for both businesses and consumers, leading to increased spending and investment, which will serve as a significant catalyst for real GDP growth throughout 2018.

Unemployment

The unemployment rate in the United States has declined steadily in the post-crisis recovery and some may argue that the economy has already reached “full employment”. While this decline was initially attributed in part to the post-recession drop in the labor participation rate, the unemployment rate is continuing to decline while the labor participation rate has not changed much over the past year. The previous year’s management team was faced with an unemployment rate of 4.9%, but the current unemployment rate is now only 4.1%, representing its lowest level in over a decade. Although the labor market continues to tighten, and the unemployment rate has nearly bottomed out, this year’s management team believes that it still has the potential to drop further, to 3.9%. Such low unemployment has led to increased employee confidence, suggested in part by higher voluntary quit rates. The tight labor market has also driven wages higher, which has led to increased consumer confidence and spending. Although concerns are mounting about the effect of robotic automation on the labor force, many scenarios suggest that this will only change the nature of the labor force and not the size.

Inflation

The portfolio management team believes that, after years of low inflation, rates are finally on the rise. Inflation is expected to pick up momentum due to a tight labor market, upward pressure on wages, increased consumer spending, and rising interest rates. Currently, inflation is hovering above 2%, but the management team believes these rates will reach as high as 2.4% over the next twelve months. This situation is expected to strengthen the case for tightening monetary policy.

Interest Rates

Jerome Powell has now replaced Janet Yellen as the Chair of the Federal Reserve and he is expected to raise short-term interest rates at least three times in 2018. One of these rate hikes has already occurred, and two more are still to be expected. The portfolio management team believes that short-term interest rates (currently between 1.5% and 1.75%) will ultimately reach between 2% and 2.5% by the end of 2018, while long-term 10-year interest rates (currently hovering around 2.95%) may reach as high as 3.7% by the end of 2018.

These predictions are primarily rooted in rising consumer confidence, increasing spending and investment, rising inflation, increasing pressures on the mortgage market, and the Federal Reserve’s commitment to reverse quantitative easing. Interest rates dropped after the Great Recession to encourage consumer spending and boost the economy. However, now that the economy is demonstrating impressive health and strength, the Federal Reserve believes it is time to raise these interest rates again.

Fixed Income

The expectation of rising interest rates in 2018 has most investment managers preparing for an unfavorable fixed income market. The portfolio management team agrees with this assessment and has therefore decided to allocate the minimum requirement (10%) to fixed income securities in 2018. Considering the current interest rate environment, the investment strategy with the potential to yield the highest returns would be investing the fixed income allocation in minimum duration, floating rate bonds. Based on the low levels of unemployment and expected GDP growth, the management team is willing to take on additional credit risk in return for lower duration, floating rate bonds.

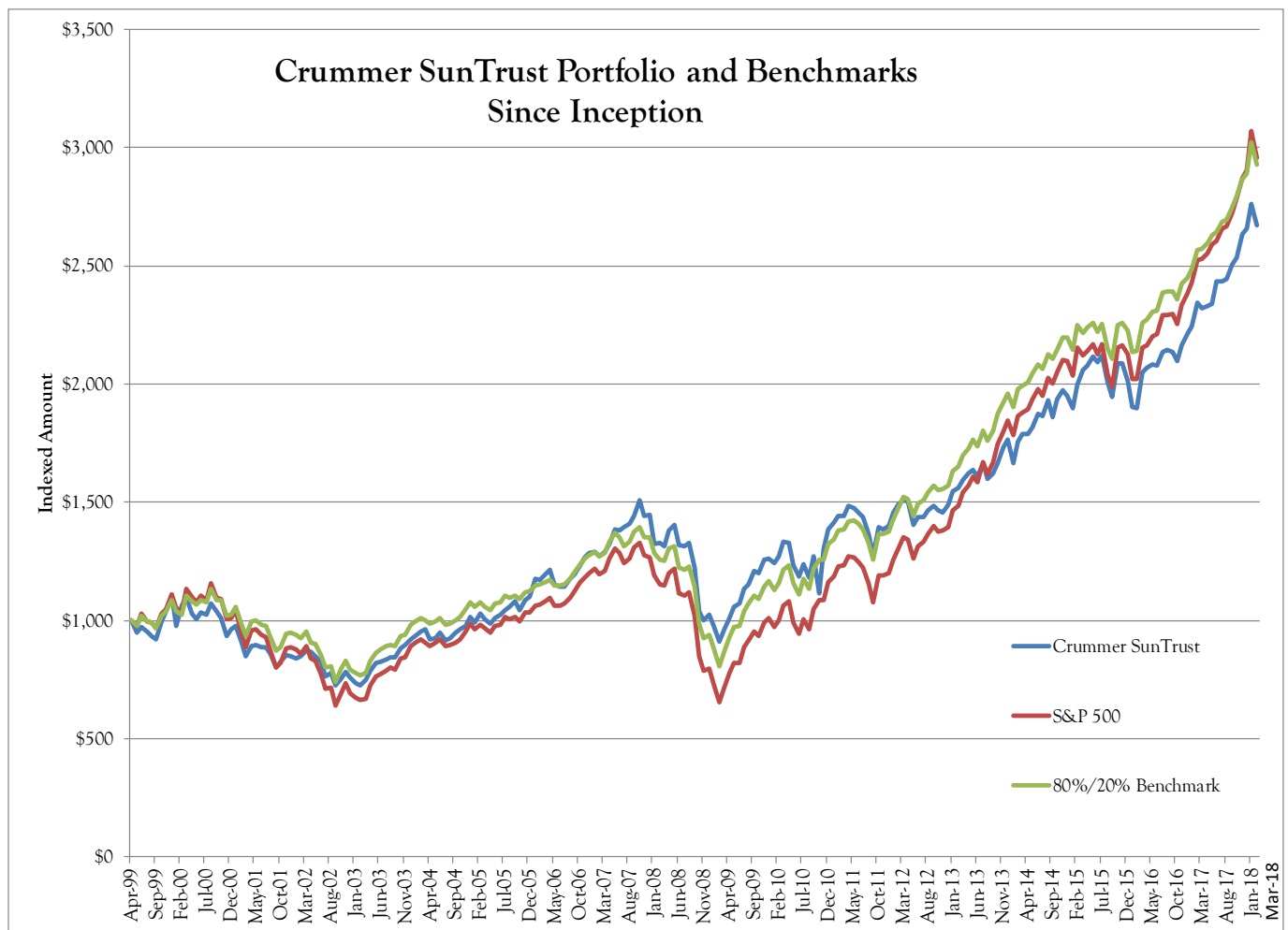
Market Outlook

The market outlook has been mostly positive over the last couple of years. Following the election of the Trump administration, major indices soared to record highs. Promises of pro-business policies and deregulation fueled confidence in the market, but the market has continued to experience small shocks in response to the release of new information regarding these promises. One of the most significant impacts of the new administration on the market is the effect of the recent tax reforms. While opinions vary about the long-term impact of these reforms, expectations include increased confidence, wages, capital expenditures, and overall spending. It is important to note, however, that the rapid acceleration of the market has not aligned consistently with domestic economic growth and thus may not be sustainable in the long-run. Various broad-based market multiples, such as the Shiller CAPE ratio, are at or near all-time highs. These multiples are dependent, in large part, on the low-interest rate paradigm the Fed is widely expected to unwind. Therefore, the persistence of these multiples depends on strong corporate earnings. The team expects mild multiple compression as rates begin to rise because the tax reform and GDP growth are expected to positively impact corporate earnings. Overall, this management team believes that the market currently possesses the potential to remain strong throughout the coming year given the robust performance of key economic indicators as detailed in this report.

Performance of the Crummer SunTrust Portfolio

On an absolute basis, the portfolio had a very good year. We briefly touched \$1,000,000 in January before falling back with the rest of the equity market. While we concur with Fed Chairman Powell when he says to expect volatility, we also believe, on balance, we will see another good year for the markets.

The Crummer SunTrust Portfolio invested 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 almost \$300,000 in scholarships, including the 2018 contribution of \$40,000. The chart below compares the portfolio’s performance with that of the S&P 500. The portfolio outperformed the index even during the difficult period of the Great Recession. Since July 2013, however, the portfolio has trailed the all-equity index by a small margin. The portfolio has traditionally held between ten and twenty percent bonds. With the Fed’s quantitative easing, bonds have been profitable, with an indexed 80% equity–20% bond benchmark portfolio besting both the S&P 500 and the portfolio since early 2012.



2017 – 2018 Plan Year Performance Highlights

From May 2017 through March 2018, the S&P 500 index outgained the portfolio by 1.47%. However, the portfolio beat the 80/20 benchmark by 3.92%. Absolute performance without considering asset allocation is incomplete. Compared to an 80% equity and 20% bond benchmark portfolio since inception, the portfolio has also underperformed. Adjusting for risk tells a different story. The portfolio's since-inception annual return is 13.0% (with a standard deviation of 13.7%) versus the S&P 500 index's return of 15.7% (with a standard deviation of 14.5%) and the 80/20 benchmark's return of 15.5% (with a standard deviation of 11.7) over the same period. Computing the risk-reward ratios, the portfolio (1.05) has performed better than either the S&P 500 (0.92) or the benchmark (0.75).

Equity Sector Performance

The portfolio's tactical equity investments are allocated among the S&P's ten sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, and Utilities. Last year, the portfolio was tilted toward sectors that were expected to outperform, e.g. Energy, Healthcare, Technology and Financials. The Sector Index column of the chart below shows that the sectors performed about as expected with Consumer Discretionary outperforming Consumer Staples (11.5% to -8.0%), and Financials outperforming Industrials (15.0% to 9.5%). The Healthcare and Energy sectors had positive but disappointing returns. Each sector holds the sector ETF – even so, superior stock selection allowed the portfolio to outperform in four of the ten sectors: Consumer Discretionary, Industrial, Materials and Utilities. Not surprisingly, some of the best stock selections came from these sectors (e.g. Boeing, Cisco Systems, LyondellBasell Industries, and Nike).

May 2017 through March 2018 Performance		
Sector	Crummer SunTrust	Sector Index
Consumer Discretionary	18.4%	11.5%
Consumer Staples	-12.8%	-8.0%
Energy	-7.8%	2.9%
Financial	13.3%	15.0%
Healthcare	-2.2%	6.2%
Industrial	27.7%	9.5%
Materials	14.7%	7.4%
Real Estate	-3.5%	-3.5%
Technology	13.1%	15.3%
Utilities	8.0%	-5.8%

Last year, Standard & Poors' merged the Telecommunications and Technology sectors and this year re-categorized Real Estate as a separate sector.

Bonds and Cash

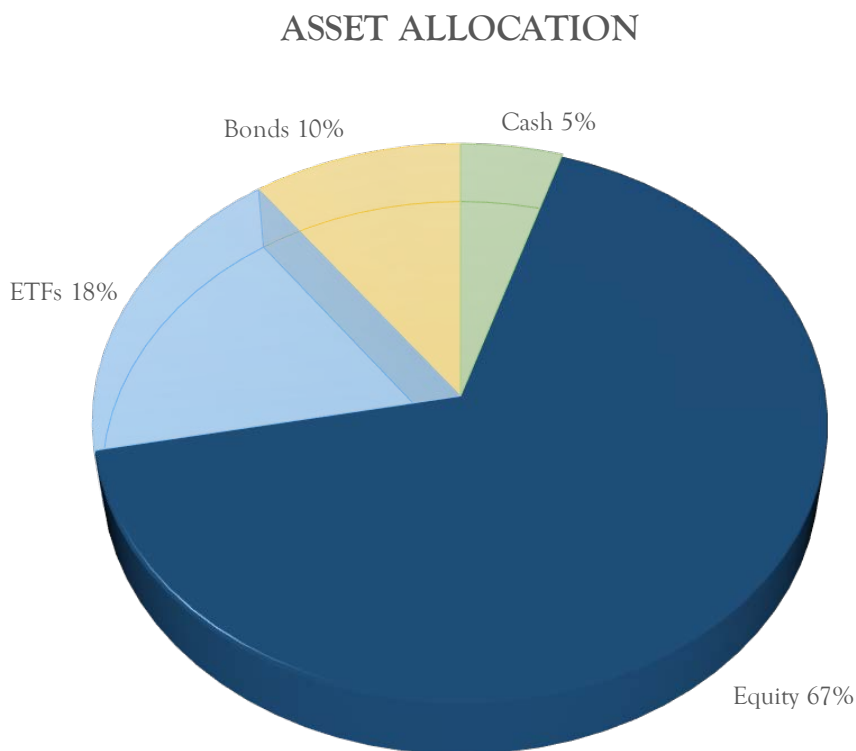
By the end of May 2017, the portfolio had distributed \$40,000 in scholarships, leaving 1% allocated to cash, 84% allocated to equities, and 15% allocated to bonds (DoubleLine Low Duration and the Hartford Floating Rate High Income funds). The bond investment gained 1.2% over the year. After the proposed trades, the portfolio will hold less than 1.0% in cash and again will generate \$40,000 in scholarships – supporting future Crummer students and fulfilling the spirit of the original gift.

Portfolio Design

1. Asset Allocation

Strategically, we allocated funds between stock and bonds to reflect our economic outlook for a strong market over the next year. The management team looked at past performance and volatility to identify the most desirable allocation. The asset class benchmarks and their target ranges are provided by the IPS as constraints to make the asset class allocation suitable for the portfolio's long-term horizon.

Our overall allocation recommendation for our 2018 portfolio, as shown in our pie chart below, is 85.0% equity (67% equity, 18% ETFs), 10.1% bonds, and 4.9% cash. Our lowered allocation to fixed income has a tactical component in that we propose to remain at the low end of the yield curve, which we believe may benefit from interest rate rises at the low end. We plan to allocate 20% to investment-grade bonds and 80% to short-term bank loans. This will assist the portfolio in reacting to the remaining expected interest rate hikes in 2018.



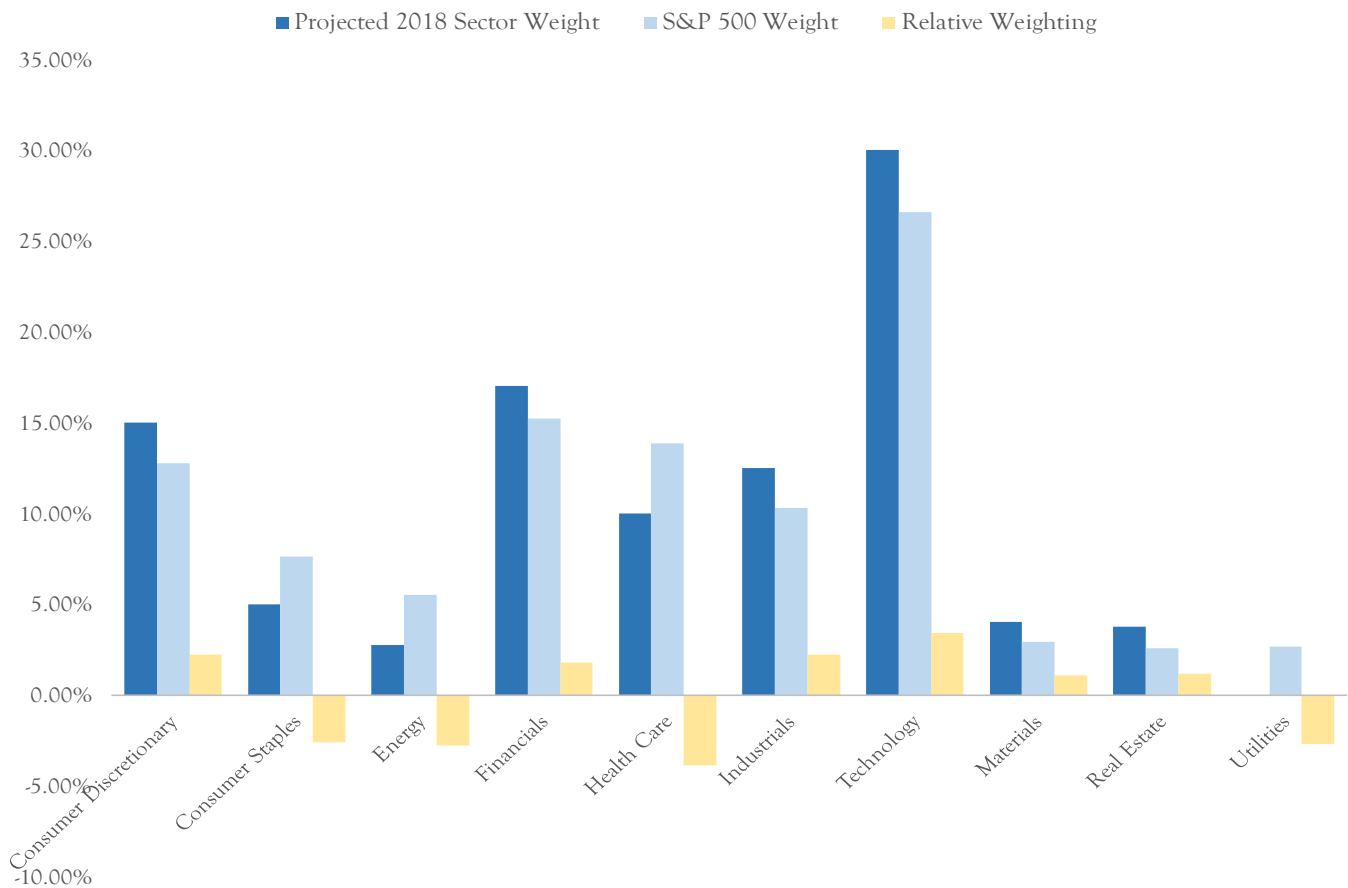
2. Sector Allocation

On a tactical level, we predict a period of strong economic growth, low unemployment, and rising interest rates in the near-term. Consequently, we have chosen to overweight sections that we believe will experience growth in a strong economy as well as those that will flourish in a period of expansion (consumer discretionary, financials, industrials, information technology, materials, and real estate). The sectors that we have chosen to underweight were those that do

not typically suggest strong growth according to the expected economic cycle. The degree to which we weighted these sectors was based on our confidence in their performance. The most dramatic of which was the slow moving and highly-regulated utilities industry. The management team chose to remove all allocation to utilities to maximize portfolio growth in response to the expected rise in the 10-year treasury rate for the coming year. This strategy was implemented with the intent to generate the greatest overall returns.

The following charts display our sector allocations. For example, the weight of the Consumer Discretionary sector in our 2018 portfolio, which is represented by the dark blue bar, is 15% while its benchmark’s weight – the S&P 500’s – for this sector, which is displayed in the light blue bar, is 12.76%. This allocation suggests that the Consumer Discretionary sector is over-weighted by approximately 18% above its benchmark. The sector overweight is represented by the yellow bar above the horizontal axis. On another instance, the Consumer Staples sector is assigned a 5.00% weight while its corresponding S&P 500 weight is 7.60%, suggesting the sector is under-weighted to the extent that it only weighs 66% of its benchmark. The sector underweight is represented by the yellow bar below the horizontal axis. Overall, we believe our recommended sector allocations offer the most desirable portfolio design to ensure growth in returns throughout the next year.

PROPOSED SECTOR ALLOCATION



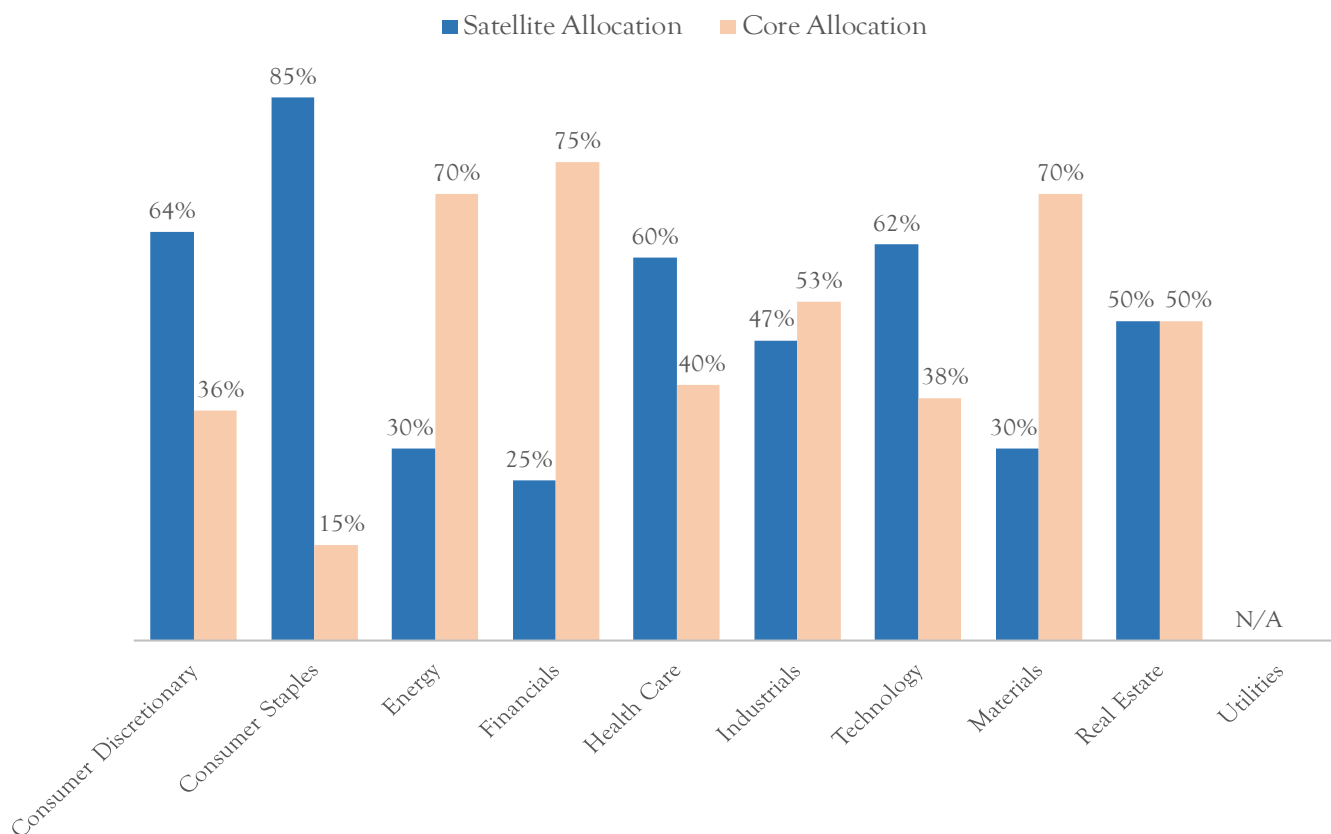
Sector	Portfolio Weight	S&P 500 Weight	Relative Weighting	Degree of Tilt vs. S&P 500
Consumer Discretionary	15.00%	12.76%	Overweight	118%
Consumer Staples	5.00%	7.60%	Underweight	66%
Energy	2.75%	5.52%	Underweight	50%
Financials	17.00%	15.20%	Overweight	112%
Health Care	10.00%	13.86%	Underweight	72%
Industrials	12.50%	10.28%	Overweight	122%
Technology	30.00%	26.58%	Overweight	113%
Materials	4.00%	2.94%	Overweight	136%
Real Estate	3.75%	2.58%	Overweight	145%
Utilities	0.00%	2.68%	Underweight	0%

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

The management team has decided to use risk budgeting to determine the split between the securities (the satellite/active asset class) and ETF (the core/passive asset class) within each sector. Due to the complexity of the interrelationships between sectors in a portfolio, risk budgeting is often represented in terms of tracking errors. Tracking error is best described as a byproduct of active management that measures the degree to which the securities selected by our sector analysts differ from their sector ETFs.

The risk budget sets the percentage invested in the sector ETF as a function of the tracking error between the securities and ETF in that sector and the sector tracking error tolerance. The lower the tolerance for active tracking error, the more risk averse the risk budget would be, meaning a higher the allocation to the sector ETF. The level of tracking error tolerance depends on the amount by which the management team is willing to let each sector's securities perform differently from its sector ETF.

To achieve the desired results, the management team has decided to set our tracking error tolerance at 10% across sectors, which suggests that each sector will have a different split between the securities and the sector ETF. For instance, at the 10% tracking error tolerance, 64% of the Consumer Discretionary sector will be allocated to the satellite assets while 36% of the sector will be allocated to ETFs. At the same level of tracking error tolerance, the Consumer Staples sector instead has an 85% satellite allocation and 15% ETF allocation. The graph and table below detail the equity vs. ETF split for each sector:



Sector	Satellite /Equity Allocation [a]	Core/ETF Allocation [b]	Tracking Error
Consumer Discretionary	64%	36%	27.16%
Consumer Staples	85%	15%	69.40%
Energy	30%	70%	14.22%
Financials	25%	75%	13.34%
Health Care	60%	40%	24.59%
Industrials	47%	53%	18.80%
Technology	62%	38%	26.00%
Materials	30%	70%	14.33%
Real Estate [c]	50%	50%	n/m
Utilities [d]	N/A	N/A	

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

[c]: The tracking error for Real Estate was not meaningful as we had too little data to match the tracking error calculations of the other sectors.

[d]: The tracking error for Utilities is not relevant as we have decided to remove all allocations from the sector for reasons stated earlier

Although risk budgeting is not insurance against underperformance, we believe it is a rational approach to managing active risk and achieving the best possible returns.

4. Sector Equity Allocation – A Risk-Parity Approach

We utilized the risk parity approach to allocate among the equities within each sector. The traditional risk parity technique balances the allocation of risk across economic sources of risk (e.g., equity, bonds, commodities, inflation) to ensure that the riskiness of each asset class contributes equally. We applied risk parity by assuming the securities in each sector were sources of risk and matched their allocation to their contribution to the sector's security risk. This approach should allow each sector and the portfolio to be diversified and ultimately enhance positive total returns. We believe risk parity is a good approach to providing returns with reasonable risk.

5. Security Selection

The market for security returns is competitive. While our academic setting limits the time and resources we can apply to security selection, we do have a comparative advantage – we are Gen-Y (mostly). We have brought our generation's perceptions, habits and beliefs to the security selection process, looking for investment opportunities that should appeal to our cohort. Our generation does not have the investable assets of earlier generations – but we will soon. We have stayed away from the obvious (and obviously overvalued) names like Facebook, Tesla, and the like. In our search for value, we have tried to balance our generational bias with the need to recommend solid public companies.

Fixed Income Assets

2018-2019 Outlook

In 2018, United States' economic growth will boast the second longest consecutive expansionary period in history. Contemporaneous with this economic growth in the real economy is the enviable growth in risk asset prices and financial market returns. As bond yields begin the tenuous rise from generational lows due to a confluence of factors discussed below, equity markets sport multiples significantly above historical averages. The rate increases we anticipate are likely to compress equity multiples somewhat and require ever stronger corporate earnings growth to continue this aging economic expansion, our baseline expectation.

In late 2017, the Trump administration and House Republicans pushed the Tax Cuts and Jobs Act of 2017 through Congress along party lines. This initiated a parabolic move in Treasury yields. On the fiscal policy side, we believe this tax bill and potential infrastructure spending and immigration reform could drive financial markets higher over the next year. Therefore, we expect real GDP to grow 2.8 - 3.0% over the next twelve months. Similarly, we expect the headline employment rate to fall further below its full employment rate, to 3.9 - 4.0%.

We expect the new FOMC composition led by recently confirmed chairman Powell to continue with reversals of the emergency QE programs and increases in the overnight fed funds rate. Conscious of policy error risk, we expect three 25 basis point increases in the overnight rate. We believe any deviation from this expectation would spook financial market investors and business confidence in the real economy.

Consistent with fiscal expansion and monetary contraction, we expect PCE and Core CPI inflation numbers to trend higher in the coming year. We expect headline CPI to print at 2.4% y/y as rates rise, spending increases, and wage growth strengthens to fill vacant job requisitions.

A confluence of factors including synchronized global growth, the United States' fiscal expansion, and the global central bank monetary contraction, all point to a continuation of the recent melt-up in interest rates across the yield curve. As productivity growth is in a structural decline in the aftermath of the Great Recession, long-run growth in United States' potential GDP is expected to moderate. Therefore, the above trend economic growth we anticipate is likely to drive inflation and rates higher across all maturities.

Fixed Income Positioning

Expectations of rising rates across the yield curve represent a challenging environment for our fixed income strategic positioning. We expect shorter-term rates to move in tandem with telegraphed FOMC decisions. Evolution of the long end of the yield curve over the next year is likely to be driven by unpredictable fiscal policy and the resultant inflation expectations. Since the passage of the Tax Cuts and Jobs Act of 2017, five and thirty-year inflation expectations have narrowed. However, we expect the longer end of the yield curve to maintain the historical inflationary spread over the shorter end. Our expectation of three 25 basis point increases puts the overnight rate at 2 - 2.25%. Further, we expect the benchmark 10-year Treasury yield to reach 3.7% within the next year. This 150-basis point spread represents our baseline expectation of a parallel shift up in the yield curve.

Consistent with our expectations regarding interest rates and macroeconomic metrics, we recommend a defensive strategic positioning of fixed income allocations. Short to intermediate term and ultra-low duration fixed income securities will provide a robust diversification element to our equity tilted portfolio. The low duration, short maturity funds will provide consistent and attractive returns in an increasing rate environment while minimizing downside interest rate risks. We recommend a tilt towards floating rate securities for the next year given the economic and interest rate paradigms we expect.

Given our macroeconomic and fixed income outlook over the next twelve months, we believe rising rates across the yield curve is the most likely scenario. Fixed income investments will struggle in this regime. Therefore, we recommend an 80/20 allocation among the Hartford Floating Rate High Income fund and DoubleLine Low Duration Bond fund. The

weighted effective duration of this portfolio is roughly 0.60 years. This is considerably below the CIM IPS duration constraint between 3.5 and 5.0 years. Given the long-awaited unwinding of nearly ten years of rock-bottom interest rates and massive Fed asset purchase programs, we believe limiting duration risk to this extent amid inflationary pressures and an aging economic expansion is warranted. As we expect an upward shift in the yield curve, longer-dated maturities are expected to struggle in this environment to a greater degree. Given low recession risk, we feel greater risk-adjusted returns can be had in the short term and variable rate fixed income space, over the next twelve months.

Most importantly, our 10% allocation to fixed income is at the low end of the 10% to 20% guideline specified in the investment policy statement. We believe, given our economic outlook and the widely expected monetary tightening from the Fed, that such a low fixed income allocation is warranted. We ask the board's acquiescence in our tactical shift to ultra-low duration securities.

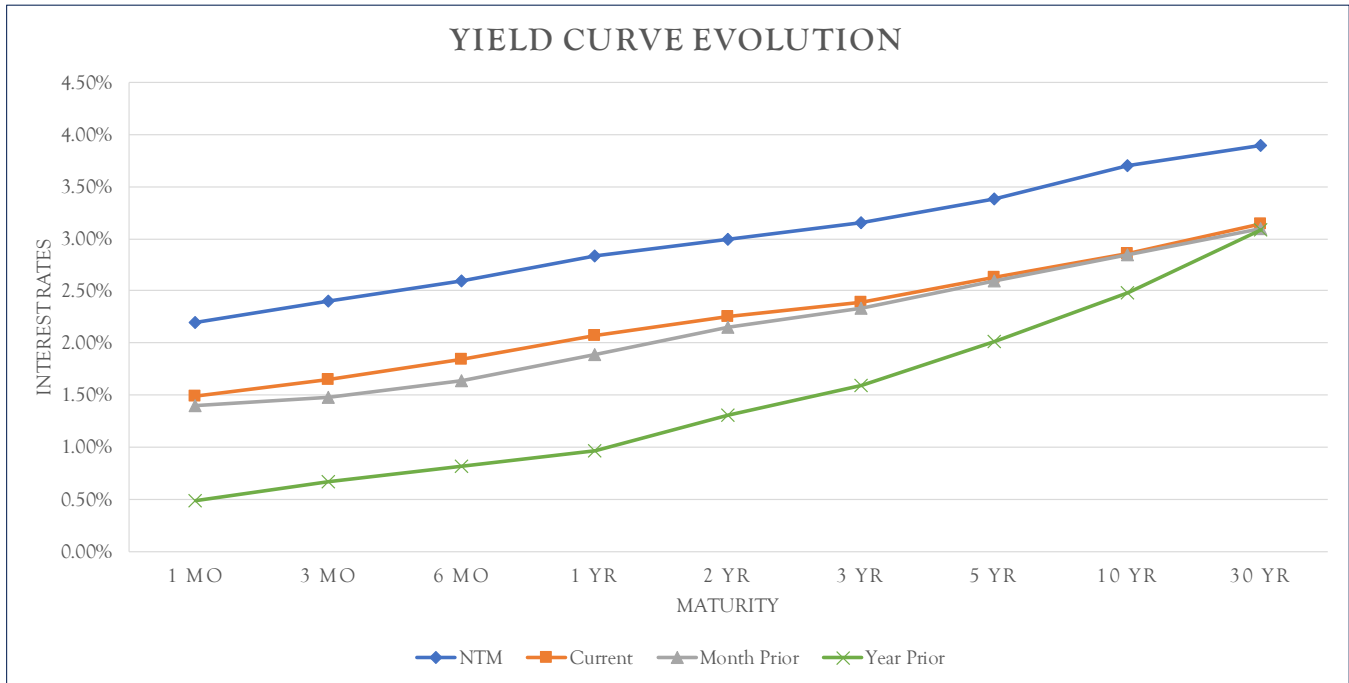
DoubleLine Low Duration Bond (DBLSX) 20%

Consistent with our emphasis on short maturity fixed income securities to minimize duration risk, DoubleLine's DBLSX presents a partial hedge to our large tilt on HFHIX. The heavy corporate bond and ABS concentrations in this portfolio provide a welcome counterpoint to the credit riskiness of floating rate securities overweighed in HFHIX. Interestingly, until recently DBLSX has lagged behind the Bloomberg Barclays US Aggregate Bond index. We expect this to change given our economic and interest rate forecasts for the next year. The holdings have an average credit rating of BBB presenting an aggressive lower investment grade allocation. DBLSX has a 2.75% yield, average effective duration of 1.35 and average effective maturity of 2.62 years.

Hartford Floating Rate High Income (HFHIX) 80%

The Hartford HFHIX fund presents a viable opportunity to reach for yield and minimize interest rate risk in a rising rate environment. Nearly 85% of this fund's holdings are in variable, floating rate bank loans to medium and small companies. The periodic adjustments to the relevant reference rates specified in the loan indentures offer the lowest duration risk among investable fixed income securities. In addition, the historically low correlations between floating rate securities and equities present a unique source of diversification. Furthermore, the requisite move down the credit quality spectrum is justified given our expectations of macroeconomic developments over the next year. The holdings have an average credit rating of B presenting a tolerable risk of default, and correspondingly higher recovery rate, in an aging expansionary economy. Although not our expected economic outlook, a selloff in low or sub-investment grade debt in a risk-off environment would have a negative impact on this allocation. HFHIX has a 3.93% yield, average effective duration of 0.41 and average effective maturity of 1.52 years.

Fund	Weight	Duration	WA Duration	Yield	WA Yield
DBLSX	20%	1.10	0.88	2.32	1.86
HFHIX	80%	0.65	0.065	3.84	0.77
Total	100%		0.95		2.63



Sector Analysis

Consumer Discretionary

Introduction

The consumer discretionary sector consists of companies producing goods and services seen as non-essential by consumers; thus, this sector is typically characterized as being sensitive to economic cycles. When consumers have sufficient disposable income to spend, demand for these goods and services is high, but when consumers have limited disposable income to spend, demand for these goods and services is typically lower. The sector includes the following industries: automobiles, auto components, household durables, leisure products, textiles and apparel, hotels and restaurants, diversified consumer services, media, distributors, internet and direct marketing retail, multiline retail, and specialty retail.

Macroeconomic Environment

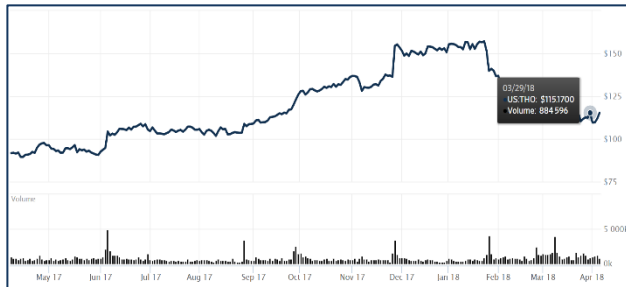
The economy has recovered well from the Great Recession, and markets have shown significant strength since the election of President Trump in November 2016. Unemployment is low, interest and inflation are low, and consumer confidence is high. Although there is some speculation that the economy is beginning to overheat, this does not seem to be a major concern yet. Given the economy's success, the Federal Reserve is expected to authorize at least two more interest rate hikes this year. Over the last five years, the consumer discretionary sector has emerged as one of the top performing sectors, continuously outperforming other sectors and the S&P 500 Index. Although rising interest rate expectations may negatively impact consumer discretionary spending, this sector has generally proven to be successful even during economic hardships such as the Great Recession. This is counterintuitive to the traditional tendencies of this sector, but newer generational spending patterns may be shifting. Millennials represent one of the largest generations in history—larger than the Baby Boomers—and they are now entering their prime spending years. While millennials typically have less disposable income than earlier generations, they tend to spend this disposable income indifferently. They are heavily influencing the market with their high demand for technology, online shopping, and experience-driven services. Some of the experience-driven services that are most highly-demanded by millennials are those related to travel and recreation. Millennial travel rates are surpassing those of previous generations, motivated more by the desire to see and engage something new than to simply relax. Another millennial-driven trend is a demand for transparency, which is leading to a shift toward more sustainably-minded products, services, and business models.

Conclusion

Given the demonstrated resilience of the consumer discretionary sector, we recommend overweighting this sector relative to the S&P 500 Index by 18%. This sector is poised to perform well even if consumer confidence and spending begin to drop, thus giving this sector a defensive advantage over other sectors. Individual stocks within this sector were valued using either a three-stage dividend discount model or a free cash flow model. Short-term growth rates for these models were estimated using regression analysis of company sales and a related macroeconomic factor. Share repurchases were incorporated into the models as appropriate.

Thor Industries, Inc. (THO)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$268	\$115.17	16.6	Mid Growth	1.1%



Introduction

Thor Industries, Inc. (THOR) was founded in 1980 and is headquartered in Elkhart, IN. Since going public in 1984, Thor has grown organically and through strategic acquisitions in both recreational vehicle (RV) and bus industries. Today, Thor is considered one of the world's largest RV manufacturers. In North America, Thor operates primarily in two segments: Towable RVs and Motorized RVs with market shares of 50.7% and 39.6%, respectively, as of June 30, 2017.

Fundamental Analysis

Sales for FY2017 were at a record high of \$7.25 billion, up 58.2% from \$4.58 billion last year. It was over quadruple the increase of 14.35% from FY2015 to FY2016. Net sales grew at an annual rate of 22.4% and earnings growth is at 27.9% over the past five years.

Thor's sales are highly correlated with Personal Disposable Income per Capita (Current Dollars) and the U.S. Population 65 Years and Over at the levels of 0.90 and 0.89, respectively. Therefore, these two drivers are used to project the short-term growth rate for Thor. Our multi-regression analysis suggests a short-term growth rate of 29.10% over the next 5 years. Also, at the end of the five-year period, Thor is expected to grow more steadily at approximately 2.8% - 3.0%.

Furthermore, Thor's variable-cost structure and decentralized operating model create a competitive advantage that no other competitor can replicate. This model allows for low fixed costs and the flexibility to adjust capacity based on the market demand, thus enabling Thor to operate very efficiently.

Financial Statement Analysis

Thor's net income for FY2017 reached a record of \$374.3 million, up 45% from \$258 million in FY2016. Similar to its sales, this was a significant increase compared to a 27.7% increase from FY2015 to FY2016. Thor's earnings per share (EPS) for FY2017 were up 44.4% to a record of \$7.09 while FY2017 EPS were up 29.6% from FY2015.

Thor's cash balance has always been strong with a low level of leverage from its recent acquisition of Jayco. Thor's operating cash flow has expanded at a CAGR of nearly 29% over the past 5 years. This will help the company improve its working capital, strengthen its balance sheet even further, and finance growth through investments and acquisitions.

Conclusion & Recommendation

With the competitive advantage in its cost structure and its active participation in strategic acquisitions, coupled with the strengthening economy, Thor is poised for remarkable success in the year to come.

Using the three-stage dividend discount H model with projected growth rates, Thor is currently undervalued. Thor's forward P/E ratio of 16.6 is well below the 21.2 ratio held by the consumer discretionary sector of the S&P 500, suggesting an undervalued position. Thus, we recommend a hold position for this year.

Nike, Inc. (NIKE)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$55.99	\$66.44	21.11	Large Growth	1.1%



Introduction

Nike, Inc. operates primarily in the apparel industry, engaged in the design, development, marketing, and sale of athletic apparel, including footwear, accessories, equipment, and services. Headquartered in Beaverton, Oregon, Nike generated over \$34 billion in revenue during the 2016-2017 fiscal year. Most of this revenue stems from the United States (41%), although the company has developed a growing presence in China (11%). Subsidiaries include Converse, Inc., Speakeasy, Inc., and Hurley International LLC. Major competitors include Adidas, Puma, and Under Armour.

Fundamental Analysis

The current economy is marked by both rising wages and low unemployment, each of which exerts a different influence on leisure and sport expenditures. Rising wages generally puts more money in consumers' pockets for such expenditures, but low unemployment leads to less free time available for these activities. Thus, the current economic impact on Nike is debatable. Demographic shifts also affect Nike's performance as the millennial generation enters its prime spending years. Millennial demand is characterized by a desire for experiences over things, leading to more spending on unique engagements and less on material possessions. Nike is attempting to stay ahead of its competition through both technological and environmental investments, which are expected to represent approximately 4% of overall revenues. The company recently launched its NikeiD Direct Studio, an in-store interface which allows consumers to design customized Nike shoes from scratch. This service aims to satisfy

consumer demand for expanded options and enhanced shopping experiences. The company also aims to expand its direct-to-consumer sales to offset revenue setbacks from declining brick-and-mortar sales. Environmentally, Nike has announced an aggressive goal to transition 100% of its North American operations to renewable energy, kicking off this commitment with a Texas wind farm.

A valuation analysis using a three-stage dividend discount model revealed Nike to be overvalued by 16%. The model used a short-term growth rate, derived from a regression analysis comparing Nike's sales with US per capita disposable income (0.99 correlation). Estimated share repurchases were incorporated into the valuation.

Financial Statement Analysis

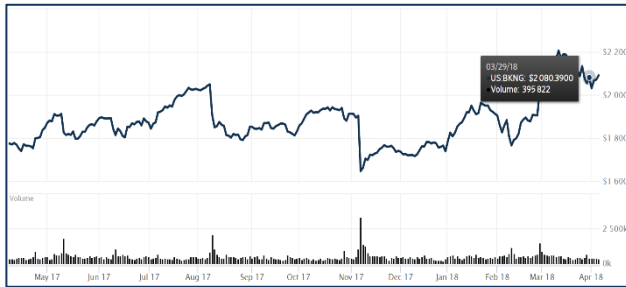
Following the recession, Nike suffered a marginal 1% sales decline, while the industry experienced a near 6% sales decline, suggesting Nike's superior financial management during hardships. Although Nike has averaged almost 9% annual sales growth since the recession, this growth has fallen to about 5% over the past couple of years – lower than its pre- and post-recession levels, but still higher than the current industry average of 3%. While Nike's P/E ratio for the 2016-2017 fiscal year was slightly lower than the industry average (21.11 and 22.87, respectively), Nike's five-year average P/E ratio is still slightly above the five-year industry average (25.02 and 23.87, respectively).

Conclusion & Recommendation

Nike has maintained positive sales growth for the past seven years, yet this growth is slowing as consumer demand patterns shift. While Nike is aiming to stay relevant with consumer trends, it remains to be seen whether its efforts will be successful. Given the analysis suggesting Nike is overvalued by 16%, the current recommendation is to sell this security.

Booking Holdings, Inc. (BKNG)

Recommendation BUY	Valuation \$3,320.00	Last Price \$2,080.39	Adjusted P/E 22.27	Style Large Growth	Dividend Yield N/A
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Introduction

Booking Holdings, Inc. is the world's leading provider of online travel and related services to consumers for local partners in over 220 countries, including the U.S., through six primary brands: Booking.com, priceline.com, KAYAK, agoda.com, Rentalcars.com, and OpenTable.

Fundamental Analysis

Growth has been a huge factor in the success of Booking Holdings. In Q3 2017, its revenue rose 20% to \$4.43 billion, marking its second straight quarter of accelerating sales growth. The growth was primarily driven by an 18% spike in travel bookings, which exceeded its prior guidance for 11% - 16%. Over the past five years, its revenue has grown at a CAGR of nearly 20%.

Given the absence of a dividend policy, the free cash flow model was utilized to estimate the value of the firm's stock. As a result, we projected a short-term growth rate of 14.43% based on the company's return on invested capital and retention rate for the next five-year period. Also, by evaluating the current capital structure of the firm, we are able to arrive at 17.19% for its weighted average cost of capital (WACC) value.

One of Booking Holdings' most critical competitive advantages over its competitors is its emphasis on cost efficiency. Over the past decade, the firm's growth strategy

has immensely reduced its cost of revenues (down 41% last quarter), thus enabling it to retain slightly higher than 80% of its revenues as gross profits. The company has also been expanding its overseas operations to somewhat offset the slower growth of the U.S. market. This strategy is focused on the greater growth potential for international markets and has left most competitors playing catch-up as they try to go beyond the domestic travel market to capture global opportunities.

Financial Statement Analysis

Booking Holdings' gross profit rose 20% in Q3 2017 year-over-year, 40% of which came from overseas operations. Its operating margin grew from 22.6% to 47.4% in the same quarter compared to the same period last year. Furthermore, its adjusted EBITDA increased 18% to \$2.2 billion in the quarter, which beat the consensus analyst expectations by \$50 million.

Booking Holdings' forward P/E ratio of 22.27x is lower than the industry average of 28.33x, signaling to the market that the stock is undervalued. Also, its P/E ratio is currently at one of its lowest points over a one-year period, suggesting now is an appropriate time to consider entering a position in the company's stock.

Conclusion & Recommendation

Based on our short-term growth rate forecast and WACC estimate, our free cash flow model result suggests Booking Holdings' stock is undervalued by at least 60%.

The company's strategic initiatives in maintaining its focus on cost efficiency and pursuing international opportunities, coupled with the above stock valuation and its forward P/E ratio being at its lowest point, we recommend a buy position for this security.

Vail Resorts, Inc. (MTN)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$283.38	\$221.70	40.38	Mid Growth	2.6%



Introduction

Vail Resorts, Inc. is headquartered in Broomfield, Colorado and operates primarily in the leisure industry. Its business involves three segments: mountain, lodging, and real estate. The mountain segment drives most of the revenue through its operation of mountain and ski resort areas, including dining, retail, instruction, and rental businesses. During the 2016-2017 fiscal year, Vail Resorts generated nearly \$2 billion in sales. Major competitors include Hyatt and Hilton.

Fundamental Analysis

The current economy boasts rising wages, low unemployment, and high consumer confidence, thus creating an environment that is ripe for both leisure and business travel. Furthermore, as millennials enter their prime spending years, the purchasing power of their demand is shaping this travel. Millennials appreciate variety and new experiences and are likely to take both shorter weekend and longer extended vacations. Additionally, millennials have demonstrated strong demand for travel regardless of economic fluctuations, so travel demand is expected to remain steady.

Vail Resorts appeals to travelers' desires for new experiences through its diverse locations and variety of activities. A seasonal pass allows travelers to visit these different locations throughout the same season. This value-added option is particularly appealing to those desiring more flexibility and now comprises nearly half of all ski lift revenues. Vail Resorts also appeals to tech-savvy travelers by allowing them to track and share their resort activity, which also serves to inform management of visitor trends to guide more efficient operational decisions. In late 2016, Vail Resorts acquired the Whistler

Blackcomb resort in Vancouver, Canada – the largest and most-visited year-round mountain resort in North America. This acquisition increased net earnings by over \$140 million and is expected to drive additional revenue as it attracts more international travelers.

A valuation analysis using a three-stage dividend discount model revealed Vail Resorts to be undervalued by 28%. The model used a short-term growth rate, derived from a regression analysis comparing Vail Resorts' sales with US per capita disposable income (0.94 correlation). Estimated share repurchases were incorporated into the valuation.

Financial Statement Analysis

Despite having dropped more than 15% during the recession, Vail Resort's revenues enjoyed a relatively quick recovery—surpassing pre-recession levels by 2011 and averaging over 13% annual growth for the last five years. Meanwhile, the industry has only averaged 7% annual growth over the same period. Vail Resorts' margins have also increased significantly with current net income more than double the pre-recession levels. Although the company's P/E ratio is much higher than the industry average (40.38 and 25.55, respectively), this gap is expected to decrease as the company's performance improvements continue to drive earnings growth.

Conclusion & Recommendation

As travel demand increases, particularly among millennials and regardless of the economic environment, Vail Resorts is well-positioned for success. Given this company's strategic initiatives, coupled with the valuation analysis suggesting that the market currently undervalues the company by nearly 30%, a buy position is recommended for this security.

Consumer Staples

Overview

The Consumer Staples sector includes manufacturers and distributors of food, beverages, and tobacco; as well as producers of household goods and personal products. Consumer Staples is considered a defensive sector because this industry is less sensitive to economic cycles. Moreover, this sector provides a hedge for the overall portfolio because it tends to maintain steady performance during economic upturns and outperform during recessionary periods. High dividend yields and safe, reliable growth are attractive features of Consumer Staples. As of February 2018, the S&P 500 Consumer Staples Index was down just over 1% compared to the prior year, contrary to the 16.83% annualized return of the S&P 500 Index from the year before.

Outlook

Although we expect a modest growth rate for GDP of about 2.8% - 3% for the year ahead, Consumer Staples is not as likely to fuel much of that growth. In light of our optimistic economic outlook, we have decided to underweight Consumer Staples once again, down to 5% in the overall portfolio, compared to 6.36% in 2017, while the S&P 500 benchmark weight is at 7.60%.

Trends

In a saturated market, innovation can be a key driver for consumer product companies to deliver exceptionally strong results. However, a general lack of differentiation presents a challenge to achieve outperformance this way. Companies can also pursue growth through cost control measures, strategic marketing initiatives, and competitive pricing decisions. Merger and acquisition activity has been a popular tactic for companies in the sector to increase market share and improve margins.

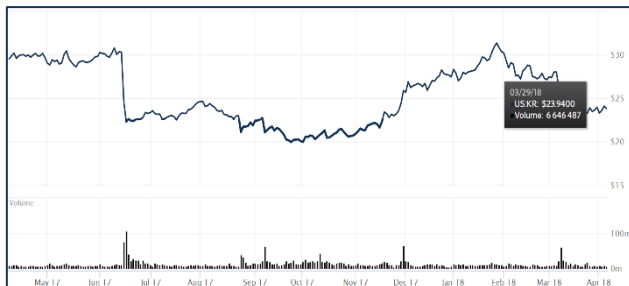
Technology is bringing new players into the Consumer Staples sector. Profit margins are expected to continue to see downward pressure. Changing consumer preferences are extremely influential for companies in the industry. In the United States, consumers have been increasingly favoring more natural, organic food choices and convenient ways to get access to them. Shoppers are moving away from processed foods, which could hurt producers and retailers of packaged foods, while demand for healthier options is growing and regional and local chains are becoming more competitive versus larger companies in the industry.

Another trend worth mentioning and gaining quick popularity is home delivery of consumer staples. Walmart, Kroger, Whole Foods, and even smaller local grocery chains have added the convenient service to their websites.

An overall positive economic outlook, with optimistic views on business conditions, employment, and income are supporting the ongoing tendencies for higher quality household goods and food items. Emerging markets may present opportunities for faster growth than can be achieved domestically, particularly as disposable income levels are increasing abroad. The stocks held in the Consumer Staples sector of the Crummer SunTrust Portfolio were valued using a dividend discount model. Regression analysis of company sales and a related macroeconomic factor were applied to estimate short-term growth rates for these models. Share repurchases were also accounted for.

The Kroger Co. (KR)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$29.70	\$23.94	12.84	Large Value	2.1%



Introduction

The Kroger Co. is the nation's largest grocery store chain with nearly 2,800 locations in 35 states. The company was founded in 1883 and is headquartered in Cincinnati, OH. Kroger also operates multi-department stores, jewelry stores, and several food processing plants where it produces its own line of private-label goods.

Fundamental Analysis

The price cutting trend in the industry for supermarkets and grocery stores is continuing to increase margin compression. There is constant competitive pressure in the sector. Nevertheless, Kroger benefits from the scale of its wide footprint, having approximately 16% of the market share in the United States.

Kroger's strategy to remain competitive has included M&A activity in recent years. The company purchased Harris Teeter in 2013, retaining the name and brand, and giving Kroger expanded reach into new geographic territories. In 2015, it acquired Roundy's Supermarket, which added 151 stores and 101 pharmacies generating \$4 billion in revenue. In 2016, Kroger formed a strategic partnership with Lucky's Market, which competes more directly with other independent, specialty retailers such as Trader Joe's and The Fresh Market. In February 2018, Kroger announced that it has entered into a definitive agreement to sell its convenience stores to U.K.'s EG Group for \$1.5 billion.

To remain competitive in the face of threats from e-commerce options like Amazon's Prime Pantry, Kroger has reportedly engaged China's Alibaba in negotiations to form a partnership to aid in the integration of online and offline sales.

Financial Statement Analysis

Kroger has paid increasing dividends to its shareholders at a compounded growth rate of about 12% annually for over a decade. Since 2000, the company has repurchased a generous \$12.9 billion in shares. The company has continued to extend its share repurchase program and so far, it has been approved through September 2018.

As of the latest fiscal year ending January 2018, the company's income statement showed only a slight decline in net income from \$2.02 billion in 2016 to \$1.96 billion in 2017. Same applies to earnings per share compared to the year prior, from \$2.06 to \$2.04. The company has also taken on more debt in the past eight years, reported at \$30.8 million as of the end of 2017, albeit to fund acquisition activity and continue its share repurchases. This indicates that the company has a history of increasing dividends at a "comfortable" payout ratio, 19.78 in 2016 to 22.74 in 2017.

Conclusion & Recommendation

Although the fundamental outlook appears to be uneventful across the sector, Kroger should be able to sustain its history of earnings growth in the long run by continuing to lean its operations. Increasing inflationary conditions should drive pricing power and lead to higher prices for consumer staples. Lastly, Kroger's financials will benefit from the corporate tax reform. Based on our discounted cash flow valuation model, we recommend holding our position for another year.

PepsiCo, Inc. (PEP)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$115.00	\$109.15	32.59	Large Value	2.94%



Introduction

PepsiCo is a global enterprise that manufactures, markets, distributes, and sells a variety of beverages, food, and snacks. Frito-Lay, Gatorade, Quaker, and Tropicana are among its portfolio of brands. The company is based in Purchase, NY and has operations throughout the Americas, Europe, Asia, the Middle East, and Africa.

Fundamental Analysis

Health conscious trends continue to impact the traditional soft drinks and packaged snacks industry, presenting an obstacle for PepsiCo's growth. Sales from Frito-Lay North America provide about half of Pepsi's operating profit. PepsiCo's management team has identified this trend and seems to have acted ahead of time by adapting its product mix to match consumer preferences. In the last year, there have been no major acquisitions. Per the company's financial report for the fiscal year 2017, the increased raw materials cost, especially in North America is negatively impacting all aspects of the business.

Financial Statement Analysis

PepsiCo's income and balance sheet statements reflect financial health and low downside risk; however, the

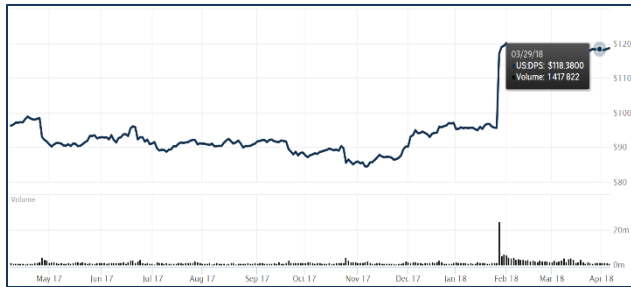
company's net income in 2017 is down to \$4.9 million from \$6.3 million in 2016. Since 2014, earnings before interest and taxes (EBIT) have not increased much, currently at \$10.5 million. The company maintained positive net margins and consistent free cash flow yields throughout the Great Recession, but the last three years showed a downward trend. Free cash flow went from \$7.8 million in 2015 to \$7.0 million in 2017. The payout ratio constantly increased to over 60% since 2009. It is at an optimal stage and there is no significant room for additional growth. In fact, decreasing cash flow and higher payout ratios cannot continue indefinitely unless the company holds the dividend constant or even cuts it signaling a negative development to shareholders. As of February 2018, the company's share repurchase program is only authorized through June of this year.

Conclusion & Recommendation

PepsiCo stock price has reached our valuation targets and because our discounted cash flow model indicates that the stock is trading close to its fair value (and actually surpassed it in January, before the February's market correction), we suggest a sell. The company is not presently growing. It does pay a significant dividend, but it seems to have "missed the boat" on healthier snacking and does not appear to be acquiring companies to counter that. We believe it is time to look for other opportunities.

Dr Pepper Snapple Group, Inc. (DPS)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$132.15	\$118.38	16.48	Large Blend	2.0%



Introduction

Dr Pepper Snapple Group, Inc. is a manufacturer, marketer, and distributor of non-alcoholic beverages and soft drinks. The company also manufactures and sells branded concentrates and syrups. Currently headquartered in Plano, TX, Dr Pepper Snapple Group, Inc. was founded on October 24, 2007, and has over 21,000 employees.

Fundamental Analysis

Mergers and acquisitions are a successfully used practice to increase market share in the consumer staples sector. On January 31, 2017, the company completed the Bai Brands Merger and on January 5, 2018, Dr Pepper Snapple Group, Inc. acquired a 5.4% equity interest in Core Organics LLC ("Core") for \$18 million. On January 29, 2018, Keurig Green Mountain Inc., a subsidiary of Acorn Holdings BV, entered into a definitive agreement to acquire Dr Pepper Snapple Group, Inc. for \$21 billion in special cash dividend and stock. Shareholders of Dr Pepper Snapple Group, Inc. will receive a one-time special cash dividend of \$103.75 per share and retain a 13% stake in the combined company.

Financial Statement Analysis

In 2017, the company's net income increased by \$229 million, driven primarily by the income tax benefits related to the impact of the recent federal tax law change and the adoption of the new accounting standard for stock-based compensation. Both net sales and gross profit have increased by 4% from the prior year, by \$250 million and \$137 million, respectively. The combined company had \$11 billion in net sales in 2017, and this is expected to grow by 2% in 2018. The pro-forma financials state EPS will be at \$1.11 and EBITDA will advance by 7–8% this year.

Dr Pepper Snapple Group Inc. has a commendable return on equity, that has grown to 46.94% at the end of 2017 from 18.70% in 2010. The company's reinvestment rate follows the trend at 28.88% in 2017 from 11.83% in 2010. Strong financial performance is also supported by higher free cash flow per share from the previous year, 4.57 compared to 4.07.

Conclusion & Recommendation

Across all its product lines, Dr Pepper Snapple Group, Inc.'s major short-term growth driver of 10.9% is contributed to rising consumer confidence and positive outlook from the upcoming acquisition. In the long-term, we expect the combined company to utilize its scale and distribution channels to strengthen its market presence worldwide, delivering savings of \$600 million by the proposed synergies.

Even with these modest growth forecasts, our discounted cash flow model estimates the company is currently undervalued by more than 10%. We recommend a buy position in Dr Pepper Snapple Group, Inc. shares.

Energy

2018 Outlook

Low oil prices mean many companies, particularly offshore drilling companies, cannot produce oil at a profitable rate. The Organization for Oil Exporting Countries (OPEC) tried to support higher prices by managing their collective exports with unsuccessful results - the barrel price fell to nearly \$40.

Even though, according to the US Energy Information Administration, the world's fastest-growing energy sources are renewables and nuclear power, petroleum-based liquid fuels remain the largest source of the world's energy consumption.

Production oil companies are experiencing a profitability challenge due to crude oil prices fluctuating between \$45 to \$65 a barrel. This itself attracted the attention of many U.S.-based exploration and production companies (E&P) toward adapting their cost structures based on the commodity price. One of the main keys to potential growth in this sector is the application of new technologies to increase the output and efficiency of production. Exxon Mobil, our sole buy recommendation, is a leader in oilfield technology, producing high-quality crude oil at a lower cost, increasing efficiency by 20%. The cost of oil production under the market price of the commodity translates into a profitable operation.

Natural Gas

Natural gas is the fastest-growing fossil fuel in the projections, with an increase of 1.4% per year. Abundant natural gas resources and rising production contribute to the historically low price of natural gas. The problem is North America is swimming in natural gas but lacks the export infrastructure in the near-term to support profits.

The (Very) Possible U.S. Ban on Venezuelan Oil Purchases

The Trump administration announced a possible ban on oil purchases from Venezuela if the Venezuelan government refused to postpone the presidential election scheduled for April 22, 2018, due to the current political turmoil in the country. If the ban occurs, Citgo, Valero, and Chevron will be severely affected by the shortage of Venezuelan crude oil. These companies mix Venezuelan heavy oil with lightweight Texan oil to produce gasoline. Venezuela produces 2.4% of the world's oil crude. This situation can be an advantage for the E&P companies that do not depend on the Venezuelan oil.

Productivity and Profitability

Profitability in the energy sector is going to be difficult for most companies. Low oil and gas prices put a premium on companies that can use technology to achieve lower costs. This situation made it very difficult to find undervalued investments, hence our focus on the Energy Sector ETF and Exxon Mobil. We used a Dividend Discount Model in the sector with a dividend growth rate based on historical dividends.

Canadian Natural Resources Limited (CNQ)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$26.53	\$31.47	18.6	Large Blend	2.7%



Introduction

Canadian Natural Resources Limited (CNQ) is a senior independent crude oil and natural gas exploration, development, and production company. The company's operations are concentrated in North America, Western Canada, the United Kingdom, and South Africa. CNQ acquired Horizon Oil Sands Mining, and the last phase of the upgrading project will begin in early 2017.

Fundamental Analysis

The company's current production mix of 50% light crude oil blends, 25% heavy crude oil blends, and 25% natural gas, updated towards the second quarter of 2018. This is a significant change from 2016 when the production mix was approximately 32% light crude oil blends, 33% heavy crude oil blends, and 35% natural gas. The change in the production mix shows a decrease in production of the more profitable light crude blend, and this will directly impact future earnings.

Financial Statement Analysis

Canadian Natural Resources Ltd., one of the world's leading producers of oil and natural gas, announced its fiscal 2017 fourth-quarter and full-year earnings' results with a dividend increase. Gross earnings of \$2.4 million were realized in 2017, resulting in adjusted net earnings of \$1.4 million, representing an increase of \$2.1 million in adjusted net earnings compared to 2016 levels. However, even with the recent above-average earnings, CNQ's year on year earnings growth rate was negative over the past five years.

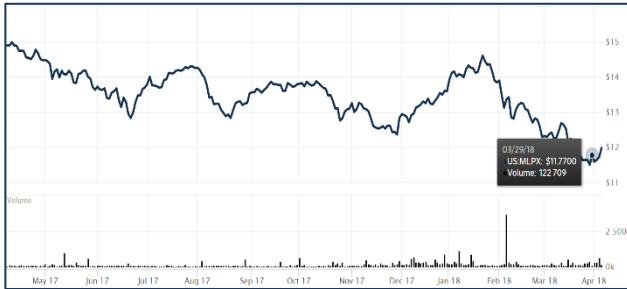
Our valuation forecast was based on the last five years' dividends per share.

Conclusion & Recommendation

We recommend a sell position for CNQ. The earnings growth is still marginal and we think that the boost in production by the acquisition of Horizon Oil Sands is not taking off just yet. The low crude oil prices added to the current cost of production heavily impacts CNQ and many other oil operations.

Global X MLP & Energy Infrastructure ETF (MLPX)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$12.77	\$11.77	37.17	International	4.07%



Introduction

The Global X MLP ETF (MLPX) invests in some of the largest, most liquid midstream Master Limited Partnerships (MLPs). The fund is currently composed of a portfolio of 21 companies.

Fundamental Analysis

Global X MLP ETF seeks to replicate the performance of its underlying index, the Solactive MLP Infrastructure Index. The fund invests at least 80% of its net assets in securities that have economic characteristics of the MLP asset class.

Financial Statement Analysis

2017 was a rough year for the Energy sector, particularly the crude oil industry. The companies' infrastructures, especially those that perform offshore drilling, were

impacted due to high costs versus the diminishing prices of crude oil. The investment announcement by Exxon Mobil, of \$50 billion in the next five years, may help to reactivate industry profitability and production. Even though Exxon Mobil is not part of this ETF, an increase in the supply of crude will indirectly and positively impact the performance of the companies that are part of this fund. More gas and oil to move indicates favorable conditions for growth.

Conclusion & Recommendation

We recommend a hold position for our shares in this fund. We determined the valuation based on the average daily trading volume. The fund just suffered a revamp of their holdings, reducing from 48 companies to just 21. The Organization of the Petroleum Exporting Countries (OPEC) has decided to manage the price of the crude oil through the reduction in the production of crude. A reduction in the production will affect the performance of the MLP's, however, since most of those in this fund are located in the US, the increase in the US production, especially in the Texas Permian, will compensate for the potential reduction in the crude supply. An optimistic perspective is possible growth in the dividend yield, currently at 4.07%, since there is a projected increase in the demand for midstream services in the oil industry.

Enbridge Inc. (ENB)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$30.31	\$31.47	25.85	Large Value	6.2%



Introduction

Enbridge Inc. is a Canada-based energy transportation and distribution company. The company's business is delivering energy from many sources. Enbridge Inc. operates through five segments: Liquids Pipelines, Gas Distribution, Gas Pipelines and Processing, Green Power and Transmission, and Energy Services. Liquid pipelines consist of a common carrier and contract crude oil, natural gas liquids (NGL), and refined products pipelines and terminals, including Canadian Mainline, Lakehead Pipeline System, Mid-Continent and Gulf Coast, and Regional Oil Sands System. Gas distribution consists of natural gas utility operations, the core of which is Enbridge Gas Distribution Inc. Green Power and Transmission consists of investments in renewable energy assets and transmission facilities. Renewable energy assets consist of wind, solar, geothermal, and waste heat recovery facilities in Canada.

Fundamental Analysis

Enbridge Inc. is the owner and operator of six major crude pipelines, originating in the Edmonton/Hardisty area that runs from Alberta, Canada down to Superior, Wisconsin. This is known as the Mainline System and enables the flow of up to 2.85 million barrels of crude from Canada to America. One of those pipelines, the 1,097-mile long Line 3, has been operating for 50 years and is going to be replaced by the L3RP or Line 3 Replacement Project.

Liquids pipelines generated \$6.4 billion in EBITDA for Enbridge Inc. in 2017, up from \$3 billion in 2015. The cash flow from these assets is used to support and grow its 6.2% yield, making any expansion noteworthy especially one as big as the L3RP. The Line 3 Replacement Project is ENB's largest project ever.

Enbridge Inc. is continuing with the integration of Spectra and is responsibly managing its debt.

Financial Statement Analysis

Enbridge Inc. shares are down 13% since the beginning of 2018, which concerns most investors. The main cause for the decline is that Moody's downgraded Enbridge to a rating of baa3. The reason for this rating is that the company is sitting on \$65 billion in debt, up from \$41 billion a year prior. This is due to the Spectra deal in which Enbridge agreed to take on \$22 billion of Spectra's debt. However, before the acquisition, the debt to equity ratio for Enbridge was more than double. Management recognized that the debt was massive and is working on adjusting the balance sheet and reducing its debt to cash flow by five times. To accomplish this, ENB issued \$2.1 billion in common equity, which was dilutive, to provide cash to the business. They identified \$5.5 billion in non-core assets to be sold through this year.

Conclusion & Recommendation

We recommend a sell position for the shares of ENB. The company is currently under heavy debt and there is a high level of distrust from investors. The company could be on a good path to recovery, but the stock market is not comfortable with the current debt levels of Enbridge Inc., nor the current ratings. The issuing of \$2 billion in equity shares in 2016, with the main objective of reducing debt, will also affect their capacity of sustaining its current dividend.

Exxon Mobil Corporation (XOM)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$82.82	\$74.61	17.0	Large Blend	3.9%



Introduction

Exxon Mobil Corporation explores and produces crude oil and natural gas in the Americas, Europe, Africa, Asia, and Australia/Oceania. The company operates through Upstream, Downstream, and Chemical segments. The company is also the manufacturer of petroleum products; manufactures and markets commodity petrochemicals, including, olefins, aromatics, polyethylene, and polypropylene plastics, as well as various specialty product. Exxon also transports and sells crude oil, natural gas, and petroleum products. It has approximately 35,047 gross and 29,375 net operated wells. Exxon Mobil Corporation has collaboration agreements with Eagle LNG Partners LLC and Crowley Maritime Corporation to collaborate on the development of LNG as a marine fuel. The company was founded in 1870, and its headquarters is located in Irving, Texas.

Fundamental Analysis

According to Clayton Allen, an analyst for Height Securities, if the Venezuelan government does not delay their presidential election, the United States will most likely will ban Venezuelan crude oil. Venezuela is currently the oil provider for Chevron, Citgo, and Valero. An eventual shortage in the supply of oil to the Gulf Coast Refineries, may provoke a boost in the current barrel prices. Exxon Mobil will benefit from this situation

since it gets crude from multiple operations around the world, but not from Venezuela.

Financial Statement Analysis

Exxon Mobil earned \$19.7 billion in 2017 that includes \$8.4 billion in the fourth quarter (42% of the annual revenue) in comparison with \$7.8 billion earnings in 2016. The net favorable non-cash impacts in the fourth quarter totaled \$4.6 billion, including \$5.9 billion relating to the U.S. tax reform, partially offset by asset impairments of \$1.3 billion. The full year cash flow from operations and asset sales exceed dividends and net investments, including additions to property, plant, and equipment. The company made the sixth discovery offshore in Guyana, added acreage in Brazil, and closed the acquisition in Mozambique.

Conclusion & Recommendation

We recommend buying Exxon Mobil shares. Some analysts agreed that the stock price is undervalued by 20%. However, our analysis suggests a valuation of approximately 11% over the current market value. A favorable perspective of growth due to a promising business climate created by the new tax reform and the planned worldwide expansion of the company, including its plans to invest \$50 billion in the U.S. over the next five years and, additionally, the possible disruption of the crude oil supply of their competitors, are drivers for an increase in the company's share price. Exxon Mobil's lead in technology will be a key profit driver for years to come.

Financials

Outlook

The new administration and economic trends are positioning financials for a strong year in 2018. The administration has worked towards creating a pro-business environment by promoting financial deregulation and enacting the Tax Cuts and Jobs Act of 2017, reducing corporate tax rates from 35% to 21%. As the U.S. economy continues to grow, inflationary pressures are beginning to increase, and interest rates are on the rise. Personal Consumption Expenditures (PCE) rose 4.5% in 2017, marked by strong growth in recreational goods and service spending. Total household debt also increased to over \$13 trillion, an annual growth rate of 4.6%, indicating that stronger economic conditions are leading to an increase in credit backed consumer spending. The growth of consumer spending coupled with rising interest rates, tax reform, and deregulation will lead to the financial sector outperforming other sectors in 2018. We recommend the financial sector represent 17.0% of the Crummer SunTrust Portfolio, overweight the benchmark by 1.8%. After analyzing the economic trends, we performed both top-down and bottom-up analyses of our current holdings and buy recommendations in order to identify a relative price target for each financial sector securities.

Interest Rates

Since the appointment of new FED Chairman, Jerome Powell, markets have seen one interest rate hike for 2018. The FED has forecasted two more rate hikes for the rest of 2018. These rate hikes will have a positive effect on the financial industry as the increasing spread between the interest paid to customers and the yield generated from short-term loans will translate into an increase in net interest income. As the U.S. economy continues its way through the later stages of the business cycle, we predict there will be two to three more rate hikes as the economy continues to grow and inflationary pressures increase.

Tax Reform

In the final months of 2017, President Trump signed the Tax Cuts and Jobs Act of 2017 further indicating his pro-business agenda. The tax cut lowered the corporate tax rate from 35% to 21%. On average, banking institutions have a higher effective tax rate, so a decrease in the corporate tax rate will lead to a significant increase in profit for most banking institutions. Banking institutions with large sums of deferred tax liabilities will incur a one-time loss as the decrease in the tax rate will cause the deferred tax liabilities to lose value. As corporations decide how to allocate the increase in cash flow they are faced with a couple of options, return the cash to shareholders in the form of dividends and share repurchases, use the additional cash to increase the salaries and wages of employees or invest the additional capital into business expansionary projects. Following the signing of the new tax bill, many companies announced that they would provide employees with bonuses and wage increases. These wage increases and bonuses will lead to more disposable income and therefore further increase consumer spending. Continued growth in consumer spending coupled with higher rates translates into higher net interest margins in the financial sector.

Deregulation

The new administration's agenda is focused on stimulating economic growth. Aside from tax reform, policy makers are also looking to stimulate growth through financial sector deregulation. Policy makers are targeting adjustments to the Dodd Frank Act that President Obama signed into law following the recession of 2008. The proposed adjustments to the Dodd Frank Act would increase the current asset threshold from \$50 billion to \$250 billion, relinquishing strict federal regulation on smaller banking institutions. The proposed changes also look to decrease the Supplementary Leverage Ratio (SLR), allowing bigger banks to increase their leverage positions. The amendments to the Dodd Frank Act will allow for a substantial increase in lending capabilities for both small and large banks. The increase in lending capabilities coupled with the growth in consumer spending and increasing interest rates will lead to additional net interest income for financial institutions.

Bank of New York Mellon Corp. (BK)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$50.53	\$51.53	16.3	Large Value	1.5%



Introduction

BNY Mellon is a bank holding company that operates through three main segments of financial services: Investment Management, Investment Services, and Others, which includes a leasing portfolio, corporate treasury, derivatives, and insurance services. It serves a wide-range of clients including individual and institutional investors.

Fundamental Analysis

BNY Mellon reported total Assets Under Administration (AUA) of \$33.3 trillion as of December 31, 2017, up 11.4% from December 31, 2016. In 2016, BNY Mellon also reported 15% growth in Assets Under Management (AUM). While the growth in AUA and AUM can largely be attributed to higher market values, BNY Mellon was able to increase pre-tax profit margins by 180 bps and decrease noninterest expenses by 2% to increase net income by over \$500 million in the 12-month period. Although consumers and institutions are putting pressure on lowering fees, the company is also benefiting from a recurring fee-based revenue model focused on investment services. The company's fee-based model resulted in 80% of total revenue being derived from fees in 2017.

The technological nature of investment servicing requires BNY Mellon to be at the forefront of financial technology advancements. The company's most recent annual report says the development of their NEXEN digital technology ecosystem will provide BNY Mellon with many competitive advantages including increased

internal efficiencies and reduced costs. These cost reductions could help lower fees further and bring in additional clients.

BNY Mellon's technology innovations and service-oriented business model have created a unique niche market within the financial services industry, and this focus has aided in the recent revenue growth. However, their reliance on fee revenues in an environment when interest rates are increasing make us believe they will underperform financial service providers in the year to come.

Financial Statement Analysis

BNY Mellon has seen slow total revenue growth of 5.3% since 2014. However, the company has been able to improve profit margins by 8%, to an impressive 26% over the same time period. The fact that management is increasing AUA and AUM without sacrificing profit margins illustrates that the company can withstand faster growth and still maintain profitability. Unfortunately, market conditions and management's focus on slow, long-term growth indicate that revenue growth will not increase significantly in the near future.

Conclusion & Recommendation

Using a top-down approach we identified BNY Mellon's revenue growth is strongly correlated with the growth rate of GDP over the past 10-year period. This is not surprising seeing how 80% of the company's revenue comes from the fees it receives on assets that are invested in major U.S. stock exchanges. As the value of the stocks increases, so does BNY Mellon's revenue.

Although BNY Mellon has reported impressive profit margins and modest revenue growth over the past few years, our dividend discounted model estimates the company is currently priced slightly overvalued. We recommend our position be sold in 2018.

Citigroup Inc. (C)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$45.20	\$67.50	14.0	Large Value	1.7%



Introduction

Citigroup, Inc. is a global financial service holding company, that delivers a variety of financial products and services including consumer banking and credit, corporate and investment banking, securities brokerage, trade and security services, and wealth management. The company operates through two main business segments: Global Consumer Banking and the Institutional Clients Group.

Fundamental Analysis

Seemingly at the end of a 10-year restructuring period, Citigroup managed to report a modest revenue growth rate of 2.3% in 2017. This revenue growth was primarily fueled by growth and improvements of the Global Consumer Banking (GCB) division in regions outside North America. Loan and deposit volume in Latin America was up 6% YoY and the Asian Market experienced an 8% YoY growth in wealth management and card services. The revenue growth was not attributable to branch growth as the number of international and North American branches decreases from 2016 to 2017. Growth in international markets has improved revenue in the short-term but Net Credit Losses (NCLs) of 4.51% in Latin America could be cause for concern. NCLs in their North American operations was 2.48%.

Citigroup's Institutional Client Group (ICG) performance was another reason for the increase in

revenue. In 2017, ICG increased banking revenue by 11%, with over 50% of the growth stemming from the Treasury & Trade Solution products/services.

Although Citigroup achieved positive performance in both business segments in 2017, the main driver behind the growth appears to be strong global economic conditions. Citigroup has just finished the restructuring of their business model and are beginning to focus on core competencies, but our analysis indicates that they lack a substantial growth catalyst for the near future.

Financial Statement Analysis

Citigroup, Inc. was able to increase revenues by \$9.4 billion in 2017. However, their efficiency ratio remained above 50% after a 100 bps decrease and the company posted a \$6 billion loss for net income, due to the losses associated with the new tax plan. The increase in revenue accompanied with a decrease in the efficiency ratio is a positive sign. But, the fact that these metrics are paired with shrinking profit margins and the closing of almost 198 branches suggests that Citigroup still has some additional rebuilding before they can maintain the financial profitability they are striving towards.

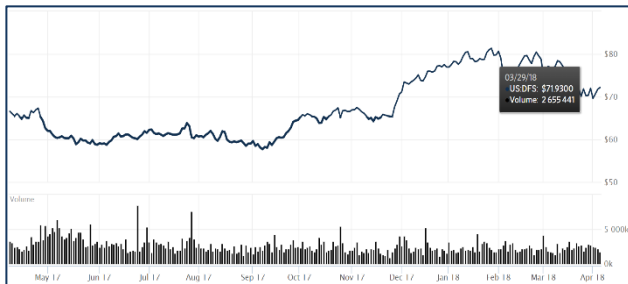
Conclusion & Recommendation

Citigroup's restructuring process is almost complete, and revenues have started to grow again. However, because the newly found revenue growth is most likely attributable to broad economic growth and Citigroup lacks a distinctive growth catalyst, we believe the growth will not outpace industry peers. The growth will also be hindered by Citigroup's high-efficiency ratio.

Using a bottom-up analysis, we project slow revenue growth for Citigroup. By performing a dividend discount model, we estimate the company is currently overvalued by more than 30%. We recommend our position be sold in 2018.

Discover Financial Services (DSF)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$65.58	\$71.93	14.0	Large Value	1.7%



Introduction

Discover Financial Services is a direct banking and payment services provider. The company operates two business segments, Direct Banking and Payment Services. Direct Banking operations include consumer banking and lending products, specifically through Discover credit cards and other consumer banking services like personal, private student, and home loans. The Payment Services operation works with Discover's business network partners to provide credit, debit, and prepaid cards through third parties. Discover works primarily with consumers and small businesses.

Fundamental Analysis

Discover Financial Services performed well in 2017, posting an 11% increase in total revenue and a 9% increase in loan growth. The growth was driven by a \$6 billion dollar increase in credit card debt and a 13% YoY increase in Total Network Volume. At the same time, Discover Card Sales Volume increased by 9% and the Rewards Rate decreased by 3 bps. Total Interest Yield in 2017 increased by 26 bps in 2017, directly benefiting Discover interest income. In the short term, higher interest rates represent higher interest income for Discover and other banking institutions, but signs are starting to appear that credit performance is worsening. Discover's Net Charge-off rate was 2.01% in 2015 and in 2017 it increased to 2.70%, a move of 70 bps in 2 years. According to the St. Louis FED, Discover is not alone. In 2017, Net Charge-off Rates ranged from 3.48% to 3.50%, the highest they have been since 2013. Although credit card and loan growth look strong for Discover and they offer a variety of products to consumers, increasing interest rates are going to put additional pressure on

borrowers and will likely cause net charge-off rates to continue to rise.

Financial Statement Analysis

Discover Financial Services recorded \$2.1 billion in net income for 2017, which was down 12% from 2016. The decrease was primarily due to negative implications from the new tax plan. Even with the decrease in net income, Discover was still able to maintain a profit margin of 21%, down 4% from 2016. Along with solid growth and strong margins, Management was also able to decrease the efficiency ratio by 100 bps to 37.32%. Discover has the financial capability to maintain profitability and will most likely become more profitable as interest rates continue to rise.

Conclusion & Recommendation

With strong revenue growth, consistently high profit margins, and a relatively low efficiency ratio, Discover would seemingly be a potential buy opportunity for the portfolio. Using a top-down approach, our team identified the company's revenue growth is highly correlated with consumer spending. This suggests DFS is positioned to grow modestly over the next couple of years.

After incorporating the modest growth rate and the increasing risk of charge-offs, our discounted cash flow model estimates the company is currently overvalued by 10%. We recommend our position in Discover Financial Services be sold in 2018, but given the stocks financial strength, we also recommend the reconsideration of the stock once the valuation is within the target range.

KKR & Co. L.P. (KKR)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$26.01	\$20.30	8.8	Mid Value	3.10%



Introduction

KKR & Co. LP provides investment and private equity asset management. It manages investments through multiple asset classes, including private equity, energy, infrastructure, real estate, credit and hedge funds. The company operates through four business segments: Private Markets, Public Markets, Capital Markets and Principal Activities. KKR's primary business segment, Private Markets, is a global private equity business that manages and supports a pool of investment funds and vehicles that invest capital for long-term appreciation. The invested capital is accompanied with either controlling ownership of the company or a strategic minority position. KKR's other business segments involve more liquid credit strategies, including high-yield bonds and leveraged loans.

Fundamental Analysis

KKR & Co. LP reported strong growth in regards to Assets Under Management (AUM) in 2017. AUM totaled \$73.7 billion as of December 31, 2016. In 2017, AUM totaled \$97.5 billion, an increase of 32%. While the increase in AUM is impressive, the fact that Fee Paying AUM accounted for \$61.7 billion of AUM in 2017 is an even more optimistic sign because fee-generating AUM requires very little capital and a high degree of operating leverage. Therefore, KKR can increase AUM significantly without incurring hefty overhead and investment costs.

KKR's growth in private equity assets is not unique, according to the SEC Division of Investment Management, Net Asset Value in Private Funds has grown from \$6.76 billion in 2015Q3 to \$7.6 billion in 2017Q2, an increase of nearly \$1 billion in less than 2 years. The increase in investment in private equity is due

to the ability of private equity funds to outperform public markets.

As investors continue to flow into the private equity market, differentiation among fund managers will be crucial for continued capital generation. KKR's investment approach differentiates them from other private equity funds by focusing on global markets and infrastructure investments. In Q3 of 2017, global and infrastructure asset deployment represented 59% of KKR's investments. Along with a diverse deployment strategy, KKR also provides stable management fees due to a 22% YoY growth rate of Fee Paying AUM.

Financial Statement Analysis

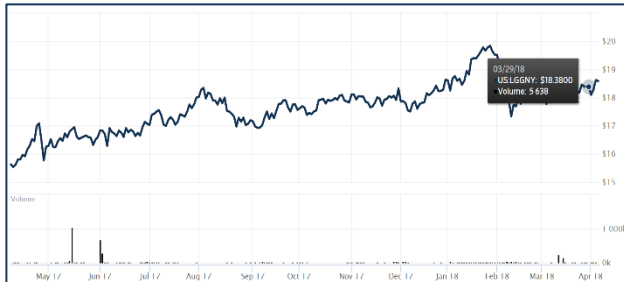
KKR & Co. LP management has achieved a net IRR of 18.8% and a 2.1x multiple of invested capital since the fund's inception. Through Q3 of 2017, the company reported \$3.1 billion in revenue, compared to \$1.2 billion in revenue through Q3 in 2016. The 158% increase in revenue can be attributed to the increase in Fee Paying AUM and strong portfolio performance. Management was also able to turn the increase in revenue into improved profit figures. Profit through Q3 off 2016 was \$413 million and profit through Q3 of 2017 was \$1.89 billion.

Conclusion & Recommendation

With a diverse portfolio of investments, strong revenue growth, consistently high profit margins and IRR, KKR & Co. LP is a potential buying opportunity for the portfolio. After incorporating a top-down approach to identify a revenue growth rate and considering the increasing demand for private equity investments, our discounted cash flow model estimates the company is currently undervalued by 28%. We recommend the purchase of KKR.

Legal & General Group Plc ADR (LGGNY)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$26.67	\$18.38	10.29	Large Value	1.5%



Introduction

Legal & General Group plc provides risk, savings, and investment management products and services. The company operates through five business segments: Legal & General Retirement (LGR); Legal & General Investment Management (LGIM); Legal & General Insurance (LGI); Savings and General Insurance (GI); Legal & General Capital (LGC). Legal & General's largest business segment, LGR, provides worldwide pension risk transfer services including longevity insurance, individual retirement, and lifetime mortgages. The company was founded in 1836 and is headquartered in London, the United Kingdom.

Fundamental Analysis

In 2017, Legal & General recorded a before-tax operating profit of £2.1 billion, 57% (or £1.2 billion) of which can be attributed to their LGR business segment. The LGR business segment increased by 54% from 2016 to 2017. Legal & General's LGR business can be broken down into three primary products and services: Pension Risk Transfers (PRT), Lifetime Mortgages (LTM), and Individual Annuities. The company is ranked as the #1 provider of both PRTs and LTMs in the UK market with 30% market share in both categories. Total LGR transactions were £1.2 billion in 2017, and this included 15 U.S. pension de-risking transactions. The UK has led the PRT market in previous years, with nearly \$180 billion liabilities transferred between 2007 and 2015. Recently, the U.S. has begun to follow a similar trend, with US PRT reaching \$14 billion in 2016. According to MetLife's 2017 Pension Risk Transfer Poll, 87% of plan

sponsors believe PRT activity will stay the same or increase in 2018. The poll also revealed that when selecting an issuer, the plan sponsor's main priority was the financial strength of the issuer.

Legal & General currently has 303 U.S. clients with \$175.9 billion assets and works with four of the top five U.S. DB pension funds. The company's long-standing track record in the PRT industry, accompanied with their expansion into the growing U.S. market makes them well suited for substantial growth as the PRT market continues to get bigger in the U.S.

Financial Statement Analysis

Legal & General reported total income of £40.5 billion in 2017, a significant decrease from the £73.5 billion reported in 2016. The cause for the decrease in income came from the disposal of two business segments, Cofunds for £141 million and Legal & General Netherland (LGN) for £137 million. These disposals were done as an effort by management to focus on more profitable growth businesses, like LGR and LGIM. Despite the significant decrease in income, management was still able to maintain a profit after tax of £2.1 billion, up 35% from 2016. Management's ability to maintain strong profit margins paired with an impressive solvency surplus of £6.9 billion is exactly what U.S. plan sponsors are looking for in the financial strength of an issuer.

Conclusion & Recommendation

Legal & General's proven PRT track record in the UK and expanding operations in the U.S.—paired with the increasing trend of PRTs in the U.S.—supports our bottom-up short-term growth rate of 7.8%. The dividend discount model indicates that LGGNY is currently undervalued by 40%. Based on the current discount, we recommend the purchase of Legal & General.

Synchrony Financial (SYF)

Recommendation **BUY** Valuation **\$44.88** Last Price **\$33.53**

Adjusted P/E **10.6** Style **Large Blend** Dividend Yield **1.62%**



Introduction

Founded in 2003, Synchrony Financial operates as a holding company, which participates in the delivery of consumer financial services. The company conducts business operations through three platforms: Retail Card, Payment Solutions, and CareCredit. The Retail Card Platform provides private label credit cards and small to medium-sized business credit products. The Payment Solutions platform provides promotional financing for major consumer purchases. The CareCredit platform provides promotional financing to consumers for elective healthcare procedures and services.

Fundamental Analysis

As indicated in the 2017 annual report, Synchrony was named the largest Private Label Credit Card (PLCC) provider in the U.S. With partners like Walmart, Lowes, Amazon.com, PayPal, GAP and TJX companies, it is not surprising that Synchrony was named the largest PLCC provider. Synchrony reported \$82 billion in loan receivables in 2017 and collected \$16.2 billion in interest and fees on loans. Business partners are continuously satisfied by their relationship with Synchrony due to the company's customizable credit products and robust data collection. Business partner satisfaction is illustrated by the length of contracts with Synchrony, the shortest contract currently held by Synchrony is 10 years. In 2017, Synchrony significantly expanded their credit relationship with PayPal to become the exclusive issuer of the US PayPal Credit financing program.

Synchrony has also developed innovative digital capabilities for the Retail Card and Payment Solutions segments of their business. They continue to invest in the enhancement of user experience and have developed SyPi, a mobile platform that can be rapidly integrated

across retailers and wallets. Synchrony's digital capabilities have also allowed them to develop a strong online banking presence, with direct deposits reaching \$42.7 billion in 2017. Synchrony intends to develop its current online banking options to provide a broad suite of full-scale online banking services.

Financial Statement Analysis

Synchrony reported \$3.9 million in Net Interest Income in 2017, up 8% from 2016. Even with the increase in interest income, management was not able to achieve net earnings growth for the 12-month period. Adjusted net earnings fell by 4% in 2017, the drop was due to an increase in net charge-offs. The increase in charge-offs can be associated with the addition of PayPal's loan receivables and the normalization of credit. Adjusting for the increase in charge-offs, management has significantly improved their underwriting procedures. Looking at purchase volume by FICO stratification, accounts with a FICO score greater than 721 increased by 10% in 2017, while purchase volume for accounts below 660 decreased by 13% in the same time period. Along with improving underwriting quality, management was also able to improve the efficiency ratio to 30.3% by increasing productivity of operations.

Conclusion & Recommendation

Using a top-down approach, we were able to identify that Synchrony's revenue growth is highly correlated with consumer spending. As the economy continues to strengthen in 2018, consumer spending will increase. The increase in consumer spending, coupled with improved underwriting procedures will lead to an increase Synchrony's revenue. Also, Synchrony's focus on digital capabilities and enhancing user experience distinguishes them as an innovative banking solution. Our discounted cash flow model suggests the company is currently undervalued by 30%. Based on the current discount, we recommend the purchase of SYF.

Healthcare

Introduction

In line with the macroeconomic outlook of moderate to strong growth in the U.S. economy, the healthcare sector is slated for a year of profitable returns. The existence of regulatory uncertainty in the healthcare industry provides a watchful caution overshadowing many of the decisions made in the sector. Given the current political landscape and potentially higher returns to be made elsewhere, it is recommended to underweight the healthcare sector.

Macro Overview

This sector's past direction has been defined by a solid annual growth rate of 5% to 6% that has largely been influenced by government spending in this sector. The forecasted spending is projected to remain consistent, growing at an average of 5.6% through 2025. As a share of the nation's GDP, health spending accounted for 17.8%, with projections to increase due to Medicaid and supplies costs. Through 2026, the total spend on healthcare to GDP ratio is predicted to rise to 19.7%. Returns reflect the defensive nature of the healthcare sector where patients continue to consume treatment regardless of the phase of the business cycle. Noteworthy is the projected reduction of the uninsured rate: there was a drop of nearly 2% through 2021, an impact of President Trump's repeal of the Affordable Care Act (ACA's) individual mandate.

Another powerful indicator that will drive demand of this industry over the next few years is the demographic landscape, particularly U.S. baby boomers who started turning age 65 in 2011 and will continue to do so at a rate of almost half million per year. As of December 2015, the total amount of demographic aged 65 and over stood at 14.7%. By 2020, the aforementioned population will be 16.87% of the total population in the United States, according to the U.S. Census Bureau. This is an important consideration when forecasting industry growth because baby boomers currently account for the purchase of 77% of all prescription medications, 61% of over-the-counter drugs, and 80% of all leisure travel. Given the statistics discussed above, this number is expected to grow as more baby boomers begin to retire and reach an older age. The financial analysis conducted consisted of a two-stage dividend discount model, with the exception of Johnson and Johnson, which utilizes a three-stage DDM to mimic its high initial growth phase.

The volatility of the political landscape, further spurred on by the federal administration, is a concern for the sector. The ACA insured 17.6 million Americans since 2010, which boosted market expenditures in this sector both directly and indirectly. The administration is still seeking a replacement for ACA, although its initial efforts have been largely dismantled by Congress. Due to the hardship in Washington, it is believed that the administration will not be able to remove the coverage as promised in the 2016 campaign, casting a public policy pall over the sector.

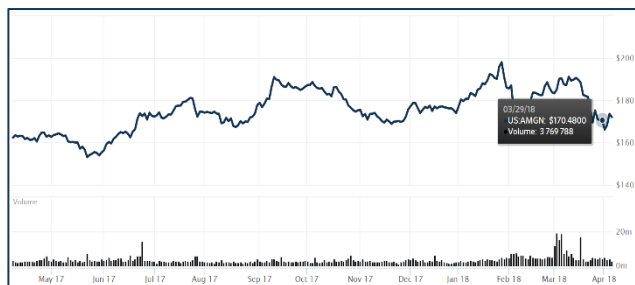
In addition, the lower unemployment rate increases the disposable income for the healthcare sector, aiding its growth forecasts. An additional consideration is the belief that innovation, improvement, and effectiveness of the product tends to drive stock prices for healthcare companies. New products have made an impact by decreasing cancer-related deaths by 22% over the past two decades. On the other hand, regulations and patent rejections can limit the activity of these companies. Moreover, the economic outlook supports the continued growth of the already strong U.S. dollar, which makes the exportation of medical devices and medications more difficult. However, Europe has lower regulatory barriers than the U.S., making it easier to test products.

Summary

Considering the assessments discussed above, the volatility which can be caused by deregulation in the U.S. can be a cause for concern. Although an aging population and continued late cycle economic growth will result in a thriving environment for healthcare companies over the next year, higher growth and return rates are present in other sectors. Even given this optimistic outlook, our portfolio and its primary objective would best be served in underweighting the sector to capitalize on potential future returns elsewhere.

Amgen, Inc. (AMGN)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$188.00	\$170.48	14.0	Large Value	2.6%



Introduction

Amgen, Inc. is a biotechnology medicines company, which focuses on human therapeutics and concentrates on innovating novel medicines based on advances in cellular and molecular biology. Amgen is one of the first companies to recognize the potential of modern biotechnology in developing valuable medicines for patients. Today's biologic medicines have made a significant difference to the lives of patients with serious illnesses, including cancer, blood conditions, autoimmune disorders such as rheumatoid arthritis (RA) and psoriasis, and neurological disorders like multiple sclerosis.

Fundamental Analysis

Amgen's success has been from expanding horizontally, particularly its reach into other countries to innovate with new technologies and improve current products. Investment in research and development is crucial to building a long-term sustainable organization. Most recently, Amgen received FDA approval for Myasi, a cancer-treating drug, as well as extensions of several other drug lines. Furthermore, they have other pipelined drugs slated for approval. Despite the exuberance in their forecasts, the blockbuster drug Enbrel is expected to slow in 2019. One of the main macro factors that affect the company's performance is the regulatory restrictions imposed by the FDA. Meanwhile, international markets do not require regulations as strict as the U.S., which makes product testing easier and expands the company's

reach. These projects secure Amgen as a reliable long-term investment. As an industry leader, Amgen's net income increased by 34.53% since 2014, which is significantly higher than sales growth (6.49%). Last year, the company experienced its largest net margin of the past ten years likely due to the decrease in operating expenses, savings from transformation and process improvement efforts, higher restructuring changes in the previous year, and favorable changes in foreign currency exchange rates, offset partially by increased support for launch products.

Financial Statement Analysis

In addition to Amgen's cost-cutting approaches and sales growth, driving an increase in net income, Amgen raised its quarterly dividend by 14% from 2017 and is expected to increase it another 10.5% in 2018. Free cash flow grew 9.6% in 2017 to \$10.5 billion driven by higher profitability. The company announced plans to add \$10 billion to buy back shares, totaling the repurchase program worth \$14.4 billion in 2018. The company has a lower adjusted PE ratio (13.9) compared to its peers in the industry. By implementing a three-stage DDM model, this exemplifies the higher short-term growth rate of 27% AMGN will experience followed by a more sustainable long-term growth percentage.

Conclusion & Recommendation

Amgen continues to be undervalued and it is recommended that the portfolio hold this stock, for the following reasons: Amgen, Inc. is one of the main leaders of the industry and is expected to continue to be so in the long-term; AMGN is undervalued per the current P/E; the company keeps expanding its products by innovating and through mergers and acquisitions that expand its portfolio line to compensate for patent expirations. Management's cost-cutting approaches are making the company attractive financially. Amgen is recommended as a hold.

Celgene Corporation (CELG)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$161.00	\$89.21	24.0	Large Growth	5.7%



Introduction

Celgene, headquartered in New Jersey, is a biopharmaceutical company focused on the discovery, development, and commercialization of drugs. These drugs target cancer and inflammatory diseases through next-generation solutions in protein homeostasis, immuno-oncology, epigenetic, immunology, and neuro-inflammation. Celgene also has a diverse pipeline targeting: hematology, oncology, immunology, and inflammation. The company is actively looking to complement its products through partnerships and acquisitions.

Fundamental Analysis

Celgene's key growth driver was Revlimid, which is an oral immunomodulatory drug approved to treat multiple myeloma (MM), myelodysplastic syndromes (MDS), and mantle cell lymphoma (MCL). In 2016, the drug's sales increased 20% worldwide to \$7 billion and contributed almost 62% to the company's total revenue. In late 2017, it was determined that a phase II study of the drug revealed that it failed to meet its goal of stunting follicular lymphoma growth. Despite this setback, Celgene plans to expand its Revlimid label even more. It received approval from the FDA and the EU for use of maintenance in NDMM patients after they receive an autologous stem-cell transplant. Currently, the drug is also in development phases for different treatments, the most intriguing one is for various lymphoma treatment, expected to be a major growth driver by 2020 and beyond. Celgene's expansion and pipeline development efforts are encouraging for the future; drugs like Pomalyst/Imnovid, Abraxane, and Otezla, among others, are under FDA review with responses expected by early 2018. As the deepest pipeline in the biotech industry, these should act

as growth drivers, leading to share and duration gains in the future. Meanwhile, the company is keen to expand its oncology franchise beyond Abraxane. Label and geographical expansion of approved drugs and additional indications will increase their commercial potential further. Celgene's management has been striking prudent acquisitions and inking strategic deals to bolster its pipeline. In January 2018, Celgene acquired all the assets to a cellular immunotherapy company, Juno Therapeutics. Also, in January 2018, Celgene acquired Impact Biomedicines, to increase its pipeline in hematological malignancies. The January 9th, 2018 Anokion acquisition added antigen specific immune tolerance exposure to Celgene's pipeline, which is expected to form a partnership based on the development of multiple autoimmune indications. There are also other joint ventures and deals with companies such as Pharmion, QuanticeL Pharmaceuticals, Gloucester Pharmaceuticals, and Signal Pharmaceuticals.

Financial Statement Analysis

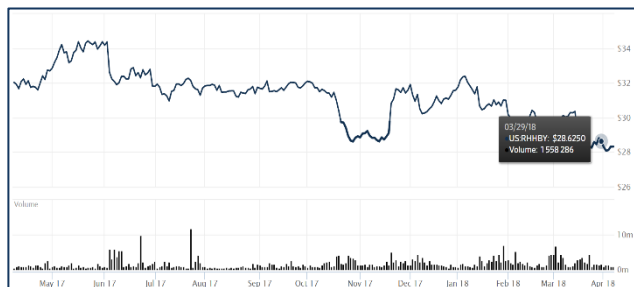
The company does not pay out any dividends due to the high investments in M&As. Celgene reported fourth-quarter 2017 earnings of \$2.00 per share, up from \$1.91 per share in the year-ago quarter. In 2017, Celgene generated revenues of \$12.8 billion, reflecting 17.4% growth. Utilizing a free cash flow model to derive at the target price of \$161 required use of the \$5.04 FCF per share coupled with a bottom-up approach of historical returns of 18%.

Conclusion & Recommendation

Celgene's main growth driver product (Revlimid) is expected to maintain momentum, doubling sales through 2022, despite setbacks in 2017. The company's progress with its label expansion efforts and pipeline of development and management M&A philosophy is looking towards long-term growth. We recommend Celgene as a hold.

Roche Holding AG Ltd. (RHHBY)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$54.00	\$28.63	22.0	Large Blend	3.5%



Introduction

Switzerland-based Roche Holding Ltd. is a leading healthcare company focused on developing and commercializing innovative diagnostic and therapeutic products and services, which enable early detection and prevention of diseases as well as their treatment and monitoring. The company conducts its operations through two segments: Pharmaceuticals and Diagnostics.

Fundamental Analysis

Roche is the leader in the breast cancer space with strong demand for its HER2 franchise drugs. Inside the HER2 franchise, demand for Herceptin and its subcutaneous formulation is growing in the US and Europe due to longer treatment durations. Apart from dominating the market in the breast cancer area, Roche has a strong presence in oncology treatment. Drugs like Avastin and Tarceva are recommended for lung cancer treatments. As Roche is already established in the oncology market, the company keeps developing its portfolio line and moving into immunology. Roche is well diversified with already established drugs in rheumatoid arthritis, asthma, cystic fibrosis and idiopathic pulmonary fibrosis. Actemra has proven to be a strong growth driver for the company, while Xolair continues to gain market share. The most significant of the added drugs in 2017 is Ocrevus; it was approved March 28, 2017 for multiple sclerosis treatments. It has assisted in lead Roche to exceed sales revenue forecasts by 10%. Other drugs are under main priority review in the U.S. Management is maximizing its opportunities and taking advantage of its core competencies. The company is complementing its various products and is currently putting tremendous emphasis in immuno-oncology, with multiple candidates under development. Apart from providing therapeutic

products and services, Roche also focuses on innovative diagnostic solutions for early detection and treatment of diseases, which is a trend that customers are becoming more aware of recently.

Financial Statement Analysis

The stock decreased 12% during the last 6 months, compared with a gain of 2.0% for the industry. The company correlated with the U.S. healthcare spending as a percentage of GDP, with a growth forecast of 1.3% per the World Bank. The company's price as of April 6 was \$29.75 a share; we believe the stock is undervalued with an intrinsic value of \$54.57. Further, the company has a strong (3.1%) dividend yield and its adjusted P/E ratio decreased to 13.4 compared to last years' (24.9).

Conclusion & Recommendation

Roche has a strong presence in the oncology market. The company dominates the breast cancer space with strong demand for its HER2 franchise drugs and with drugs like Herceptin, Perjeta, and Kadcyca. We are also impressed by the company's efforts to develop its portfolio beyond oncology into immunology. New drug launches, such as Tecentriq, Cotellic, and Alecensa boosts sales and should continue to do so in the upcoming quarters. In addition, immuno-oncology is a key focus area for Roche and the continued growth of Ocrevus and Tecentriq are both major boosts for the company. Roche has outperformed the Large Cap Pharmaceuticals industry in the last six months. The company has momentum and opportunity to grow. For these reasons, we believe in a strong year for Roche and recommend holding.

Johnson & Johnson, Ltd. (JNJ)

Recommendation **BUY** Valuation **\$156.00** Last Price **\$128.15**

Adjusted P/E **16.0** Style **Large Blend** Dividend Yield **2.6%**



Introduction

New Jersey-based Johnson & Johnson Ltd. is a leading healthcare company focused on research and development, manufacturing pharmaceutical and medical device products, and consumer healthcare products. The company conducts its operations through three segments: pharmaceuticals, medical devices, and consumer manufacturing.

Fundamental Analysis

Johnson & Johnson is focused on five sub-segments: immunology, infectious diseases and vaccinations, neuroscience, oncology, and cardiovascular/metabolic diseases. Apart from their market dominance in pharmacology, Johnson & Johnson's second largest operation is the medical device business. They manufacture products used in the orthopedic, surgical, cardiovascular, diabetic, and vision care fields. In turn, they are sold directly to wholesalers, hospitals, and retailers.

Johnson & Johnson is established in the medical device market, yet the company revamped their medical device business last year. The quarters following this featured growth due to the increase in product innovation, the introduction of the new business model, and expanded partnerships and collaborations. An example of their new model is the divestiture of their insulin pump business due to increased competition, industry consolidation, regulatory issues, pricing pressure, and, in turn, reduced profit margins. Further investments in the minimally invasive surgical discectomy device space have been

undertaken in the European, Middle Eastern, and African markets.

Management is leveraging their market position, regaining acquisition and divestitures, re-building core businesses, and putting emphasis on the slated growth of all three of their business segments. By launching, for example, their new neurological portfolio in September and Viper Prime Systems for their spine device segment they are attempting to possess first-mover advantages. Other plans for growth in this new direction include investments in surgical robotics, digital surgery solutions, and value-based care systems.

Financial Statement Analysis

The three segments Johnson & Johnson operates gained 8% combined during the last year. Pharmaceuticals contributed 47% (\$36.2 billion) to the total revenue in 2017, while the medical device division comprised 35% (\$26.5 billion), and the consumer segment represented 18.5% (\$13.6). Medical device sale forecasts of 5.6% through 2022 and Average Annual Healthcare Expenditures were utilized as the drivers to derive the target price. The company's price, as of April 6, was \$132.02 a share; it is believed the stock is undervalued with an intrinsic value of \$156.47. The company has a strong (2.5%) dividend yield and its ROE ratio is expected to grow to over 31% in 2018, compared to industry average of 17%.

Conclusion & Recommendation

Johnson & Johnson has plans to begin reaping the benefits of their restructuring. The company dominates the pharmaceutical, medical device, and consumer healthcare space with ongoing demand for its future vision, cardiovascular, stroke, neurovascular, and robotics/technology driven investments. Johnson & Johnson has outperformed the Large Cap Pharmaceuticals industry in the last six months. For these reasons, we believe in a strong, profitable year for JNJ and recommend buying.

Industrials

Overview

The industrials sector deals with firms in several disciplines, including manufacturing/distribution, construction, aerospace, employment services, engineering, waste management, and other facets of manufacturing.

The sector has seen tremendous growth in 2017, with all segments reaping the rewards of market sentiment and shifting government priorities in light of the change in administration. The sector yielded one of the highest overall growth rates (23.8%), trailing behind only technology (34.3%) and materials (23.9%). With the anticipated continued expansion of the economy, industrials are placed well to succeed, so long as companies are effective in meeting labor needs and harnessing the advantages of new technologies such as AI, automation, and green energy where possible.

Fundamental Analysis

The industrials sector has outperformed the market in both 2016 and 2017 and appears to be continuing the trend into 2018. We are optimistic about the performance of the sector given market sentiment and statements made concerning political policy but have been left with little room to take advantage of undervalued stocks given the drastic increases firms have seen in the past year. That said, we have identified stocks using a top-down approach and dividend discount method of valuation, which we are confident will add value to our portfolio.

Though allocations of the additional funding have not yet been determined in full, increased investment in infrastructure and defense promises to add value to the sector. The administration has also engaged in efforts to encourage competition between companies providing military/defense products and services, and companies could see margins tighten as a result. Many of the key players in the industrials sector hold the advantage that breaking into the sector and specific facets therein is fairly difficult and capital-heavy. With those considerations in mind, companies are shielded to some extent from unanticipated risk and new players as a result.

Another major factor set to impact the industrials and the market is the drastic tax cut implemented by the current administration. Though the cut is expected to have a much higher effective impact on industries like the financial sector, with the impact on the average effective tax rate cut in manufacturing toward or below 7%, these impacts cannot be ignored.

Conclusion and Recommendation

With the above points in mind, our team recommends a shift in emphasis on the industrials sector of our portfolio. With an ambitious anticipated GDP growth of 2.8-3%, we are confident that the sector will be positively impacted by the factors mentioned. Given the combination of advantages and concerns mentioned, we plan to shift the portfolio away from a defense-heavy perspective, into one with more variability and the ability to take a long-term perspective. We plan to accomplish this by following companies that can increase efficiencies, take advantage of new technologies, and sustain competitive advantages. We are optimistic about the sector given our current position in the business cycles and recommend an increase in weight to an overweight status for the sector. Specifically, we recommend a 7.96% overweighting of 11.08%, as compared to the 10.27% benchmark.

The Boeing Co. (BA)

Recommendation SELL	Valuation \$326.96	Last Price \$327.88	Adjusted P/E 26.52	Style Large Growth	Dividend Yield 1.9%
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Introduction

The Boeing Company is an aerospace company specializing in the manufacturing of both commercial jetliners and defense, space, and security systems. Boeing’s services and products include commercial and military aircraft, defense systems, weapons, satellites, information/communication systems, launch systems, and logistics training. Boeing Company’s business is divided into three distinct units: Boeing Commercial Airplanes, Boeing Defense, Space, and Security, and the Boeing Capital Division. These units are further subdivided into subsidiaries within the realm of Boeing’s business functions.

Fundamental Analysis

Boeing reported sales of \$93.39 billion in 2017, a 1.2% fall from its 2016 earnings. The company maintained a segment breakdown of sales similar to that of 2016, with Commercial Airplanes at 69% of sales, Military Aircraft at 13%, Global Services and Support at 10%, and “other” encompassing the remaining 8%.

The market has responded positively to sentiment regarding Boeing’s position as a government defense contractor in the current political climate; however, our team is not confident that future earnings and sales will be enough to substantiate the inflated price Boeing boasts.

Though Boeing has certainly seen impressive growth in stock price in the past year, competitors have beaten the company in key sales, and over the past four quarters, Boeing has lagged behind industry growth trends. Despite the positive outlook for the industrial sector, our team finds Boeing’s current price to be overvalued. With concerns about Boeing’s production cost deferment, little

sign of the company’s shift toward higher-margin global services, and hyperinflation because of policy statements and market sentiment more so than financial statement improvements, we are not confident in the continued growth of the stock.

Financial Statement Analysis

As mentioned, Boeing has seen a decrease in sales over the past two years. Yet, it continues to trend upward with promises of military contracts and the development of its higher-margin business functions.

The top-down analysis did not come close to approaching Boeing’s current stated price, despite high correlations and explanatory variables. Even utilizing a bottom-up approach (shown in valuation), the intrinsic value of the stock fell 8.33% below the current price.

Additionally, Boeing’s P/E of 21.96, and the company’s jump in P/S from 1.06 to 1.93 has caused our team to be skeptical of market valuation. While we see positive trends and signs from Boeing, we cannot, with its overvaluation, justify carrying the stock in our portfolio on top of its 6.91% inclusion in the ETF.

Conclusion & Recommendation

With the uncertainty surrounding scenarios responsible for Boeing’s tremendous price growth and with inflated pricing through the aerospace and defense specialization, our team is recommending that we take the opportunity to sell at its current, attractive, price and reinvest in stocks with more potential for growth in the next year. It is also worth noting that Boeing comprises 6.91% of our Industrial sector ETF, so the company will be represented despite the sell recommendation as a substantial portion of our ETF. With this in mind, we recommend selling and investing in a company with an upside and alignment catered more closely to our investment policy.

Lockheed Martin (LMT)

Recommendation HOLD	Valuation \$385.07	Last Price \$337.93	Adjusted P/E 26.66	Style Large Blend	Dividend Yield 2.32%
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Introduction

Lockheed Martin Corp. is involved in the research, design, development, manufacturing, integrating, and sustainment of products, services, and systems of technology. These functions are carried out in the following segments: Missiles and Fire Control, Aeronautics, Space Systems, and Rotary and Mission Systems. Of these segments, Aeronautics is the most substantial – with 38% of 2017 sales. This segment is primarily engaged in military contracts to develop and maintain aircraft, including combat and air mobility aircraft, unmanned air vehicles, and the technologies therein. In fact, the United States Government is Lockheed’s most substantial revenue source.

Fundamental Analysis

Lockheed Martin achieved sales of \$51.05 billion in 2017, up over 8% from the year before. In February 2018 alone, Lockheed released several new technologies it had been working on and boasts plans to release more.

Lockheed has also issued a statement with plans to utilize additional funds from the tax break to “support the growth of our company and deliver value to [their] employees and shareholders. They anticipate they will be able to implement these plans in early 2018, and in combination with our positive economic outlook, these actions could substantially impact Lockheed’s future potential for the better.

Moreover, increased emphasis on defense spending has increased current Lockheed defense projects by up to over half a billion dollars apiece and brought on additional multi-billion-dollar projects. This said, the current administration has taken action to encourage competition among Lockheed and its primary competitors – namely, Boeing – to attempt to force

pricing down. This has not, however, seemed to have a substantial impact on margins or contract losses to date, as Lockheed remains the government’s primary choice for defense technology and equipment.

Despite the emphasis in the sector on defense in aeronautics and mission systems, there have also been signs of increased potential in Lockheed’s Space Systems segment – its highest margin segment. All things considered, the current political climate and Lockheed’s historically impressive growth give reason to believe the stock price will continue to grow.

Financial Statement Analysis

Lockheed’s sales growth has surpassed that of the industry, despite the overall positive trend for the industry in the past year (at an impressive 8.04%, as compared to 3.4% industrywide).

Lockheed’s net income has dropped dramatically as compared to sales (falling 48.60% from 2016 to 2017), primarily a result of backlog changes and strategic plans to foster future growth. Using a bottom-up analysis based on historical trends, Lockheed appears to be undervalued by over 7%. The growth estimates for our modeling of Lockheed’s future growth (13.65% short-term, as compared to Lockheed’s internal estimates of 16%), are well within reason, especially considering the current political climate and Lockheed’s historically consistent growth in sales and dividend payments.

Conclusion & Recommendation

Our team is confident that Lockheed Martin is a hold throughout the next year, as our undervaluation of the company exceeds 7% - where industry valuations have been otherwise consistently overvalued. Lockheed has seen, comparatively, less inflated increases in price, and holds the potential to continue to find growth opportunities and outperform peers in the next year, particularly with its position as a provider of defense systems and equipment.

Snap-On Inc. (SNA)

Recommendation SELL	Valuation \$84.94	Last Price \$147.54	Adjusted P/E 15.3	Style Mid Blend	Dividend Yield 2.0%
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Introduction

Snap-On Inc. is involved in the development, manufacture, and marketing of tools, equipment, diagnostics, repair information and system solutions for professionals. Snap-on operates in the following segments: Snap-On Tools, Commercial and Industrial, Repair Systems and Information, and Financial Services. The company originated as a small-scale tool distribution system but has grown to encompass a large number of channels in over 130 countries.

Fundamental Analysis

Snap-On's sales grew to 4 billion in 2017, up 6.3% from 2016. However, the company's net income growth during the same period was only 2.1% - yielding an increasing gap between sales and net income. Additionally, our team has not seen indicators that would drive the tool manufacturing space within industrials to see growth above that of the average for the sector.

At a time of rising costs, Snap-On has also been receiving a great deal of negative spotlight, as the company has come under fire from various news sources in the past year for unethical franchiser-franchisee relationships and practices. Snap-On has also received widespread negative sentiment toward its CEO, and complaints of unethical and discriminatory practices from within.

When stock prices dropped in February 2018, Snap-On responded with more than twice the percentage drop as compared to average S&P trends – another sign of the market's response to negative signs on the company as sentiment wavers.

Financial Statement Analysis

Taking a closer look at Snap-On's performance in the past 12 months, it appears as though roughly half the company's growth was non-organic. That is, growth in EPS appeared to source largely from unusually low corporate expenditures and share counts. Additionally, Snap-On's sales resulting from tool manufacturing dropped by .5%, while its financial services sales rose by 11%. This does not bode well for Snap-On's future potential, as these financial services merited a great deal of speculation, scrutiny, and legal action in 2017. In fact, legal charges of 30.9 million largely made up the gap between GAAP and non-GAAP earnings.

Utilizing a bottom-up analysis of Snap-On's growth potential, we found the price to be substantially overvalued even if 2017 growth trends could be expected to continue. That said, a large percentage of 2017 growth would not be considered sustainable by traditional analysis methods.

Conclusion & Recommendation

In combination with the overvaluation of Snap-On, our team sees no reason why the company's space within the industrials sector will yield greater benefits than other industrial stock types. With Snap-On's high vulnerability to the effects of border taxes and increases in material costs, our team recommends a sell on Snap-On Inc., and we are confident that our investment would be better served elsewhere in the industrial sector.

Particularly, in keeping with the portfolio's emphasis on stocks with both short and long-term potential, while Snap-On may very well continue to benefit from the overall upward trend in industrials in the short term – negative indicators place our team in a position of speculation for the medium- and long-terms. For these reasons, we recommend a sell on Snap-On Inc.

Waste Management (WM)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$89.90	\$84.12	19.57	Large Blend	2.2%



Introduction

Waste Management Incorporated is involved in the provision of waste management environmental services. The company operates in three tiers (geographical business segments). Tier 1 is comprised of areas within the southern United States, Tier 2 encompasses the Midwest and Northeast, and Tier 3 expands into the Northwest, Mid-Atlantic, and surrounding areas in Canada. The breakdowns in percentage of sales for each tier is 38%, 32%, and 15% respectively, with 16% reserved for “other” revenues.

Waste Management is known for its recent creative environmental services, including developing landfill gas-to-energy systems and providing green consulting to small- and mid-sized businesses. Waste Management’s primary functions remain in the realm of hazardous and nonhazardous waste, as well as recycling services.

Fundamental Analysis

Waste Management reported sales of \$14.5 billion, up 6.4% from 2016. During the same timeframe, net income grew at a rate of 64% from 2016 to 2017. Waste Management has historically done an impressive job of yielding high returns on investments and has exhibited increasing operational efficiency ratios across the board in the past year. Additionally, new green-centric processes have yielded desirable results – most notably initiatives to develop gas-to-energy systems, a process that has been in progress for the past several years.

Waste Management has also been a leader in the industry in setting sustainability goals and expectations. The company has been filing sustainability reports for nearly 10 years and has built consulting and corporate social responsibility efforts to develop and increase sustainability awareness.

Financial Statement Analysis

Waste Management touts Return on Invested Capital of 13.46 in 2017, with Cash Flow Return on Invested Capital at a sizeable 21.96 for the same year. Net income growth for Waste Management has far exceeded the industry in recent years, and in valuing the stock using a two-stage dividend discount model, the stock appears to be undervalued by at least 4.3%. Waste Management has been exceeding market performance since 2016, and despite some variation, we anticipate a continued upward trend for the company’s valuation. Despite a slightly lower level of liquidity and cash flow, Waste Management is otherwise the best positioned in its industry to succeed in both the short- and long-term according to our analysis.

Conclusion & Recommendation

In looking at the industry, the waste management function seemed to be the least overinflated as a result of the past year’s market response and stock growth.

Though not necessarily a glamorous stock, prone to drastic increases, Waste Management has proven to be reliable and consistent and is poised to reap the benefits of a market favoring industrials. The outlook of upcoming generations is favorable as it continues to apply forward-thinking, environmentally-conscious processes, and initiatives and makes consistent efforts to increase transparency as well as sustainability. We recommend a buy for Waste Management and see potential for the company in both the short and long-term.

Information Technology

Business Transformation

Long-awaited technologies such as virtual reality (VR), smart homes, wearables, and artificial intelligence (AI) have finally hit the mainstream, as companies like Apple and Samsung have been able to incorporate them into our everyday devices. This event has triggered a rapid increase of trackable data that a wide range of firms can utilize. With this comes a myriad of effects; an increased need for cloud and native memory security, more storage space in hardware and software, more data analytics tools, and more computing power. However, current limitations on 4G networks have limited the proliferation and transfer of these enormous amounts of data, resulting in two new factors that are set to change this industry. One, there will be a large shift from centralized cloud computing to computing on the “edge” of networks. The other is a much-needed network upgrade from our two largest providers: AT&T and Verizon. They are currently testing and implementing 5G networks, which are ten times faster than our current speeds, and will enable data heavy technology like VR to transfer seamlessly. New technologies on the horizon that will dictate who the future industry leaders are include autonomous vehicles, augmented AI, and alternative energy.

Cash Trends

Last year’s analyst predicted the new tax code to be passed in a matter of months, only to find it pass right at the turn of the new year. Their prediction was early but correct, and now it is time for many technology companies to realize its benefits. Currently, there is over \$600 Billion in cash overseas from just eight players alone in the tech space. We believe at least \$300 Billion of this cash is to be repatriated, with Apple already announcing the movement of their holdings, investing in new internal projects such as a second headquarters. Apple’s reinvestment in the U.S. economy is expected to generate at least 20,000 new jobs and involve around \$350 Billion in total investment by 2023. Tech titans such as Microsoft, Alphabet, CISCO, and Oracle have yet to explicitly announce plans on how or if they will use their holdings for investment, but we expect employee bonuses and smaller scale M&A activity to be the minimum. Besides the outstanding cash, most firms will reduce their annual tax burden by at least 5%, helping bottom line growth substantially. Not only that, but innovative startups will now be able to grow more easily, with a business-friendly corporate tax rate, and a lower rate for many venture capital investors.

Automation/Machine Learning

An existing trend in all sectors is the incorporation of automation into business practices. Firms from McDonald’s with their self-ordering kiosks to JP Morgan & Chase’s credit analysis platform have all reduced the time and cost of many services. What used to take hundreds of man-hours, can now take just seconds with machine learning software. The power and capability of these tools across all business segments lead us to believe that automation and artificial intelligence are here to stay, and many firms will heavily invest in these technologies, as well as invest in developing them to a new level.

The prices for the securities in this sector were derived from the top-down valuation method, where key macroeconomic factors were analyzed and applied through either a dividend growth model if applicable, and free cash flow models for firms not currently offering dividends.

Apple Inc. (AAPL)

Recommendation
HOLD

Valuation
\$182.42

Last Price
\$167.78

Adjusted P/E
16.0

Style
Large Blend

Dividend Yield
1.56%



Introduction

Apple Inc. is a multinational company that designs, manufactures, and sells mobile communication devices, personal computers, music players and multi-media devices. They also have an extensive product offering of software and services that include items such as Apple pay, IOS software, and the iTunes application store. Their products are sold through a mix of retail stores, online stores, and wholesale to distributors worldwide. Apple generated over \$225 billion in sales for the fiscal year 2017. They were founded in 1976 by Steve Jobs and Paul Wozniak and is headquartered in Cupertino, CA.

Fundamental Analysis

Apple reported earnings of \$48 billion in the fiscal year 2017, attributable to its 13% rise in iPhone revenue. Despite a rise in total iPhone revenue, unit sales in their December quarter were down 1%, and their gain was thanks to a 15% rise in average selling price.

As a result of heaving marketing, branding and a history of quality products, Apple possesses a strong loyal base of customers that allows them to sell iPhones and other products at premium prices. Not only that, but Apple has created a strong ecosystem of devices that increases switching costs for users, augmenting customer retention. Although they saw a decrease in overall iPhone unit sales, we don't believe these customers have switched to other competing smartphone devices like Android. We believe they have pent up demand for future iPhone iterations that are more closely aligned with their needs or price-point. Apple is a major leader in autonomous vehicle

technology and artificial intelligence with partnerships with major firms like IBM. We see these long-term plays, bolstered with its current stable product lines to be a killer combination for investors years to come.

Apple is expected to benefit considerably from the new tax code, operating at a predicted tax-rate of 15%. In addition, Apple is expected to repatriate the majority of their overseas cash and use this to pay out dividends and perform sizeable stock buybacks. The biggest announcement from Apple recently was the disclosure of its intentions to run on a net cash-neutral basis, a significant change to its historically conservative approach to capital allocation. This will be done through a sizeable stock buyback program and a higher dividend payout. How much remains to be seen.

Financial Statement Analysis

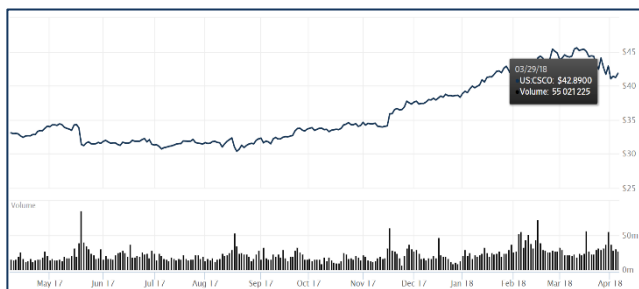
Apple has remained as one of the most stable performing companies in recent history and has even rebounded sales in what was considered a down year of revenue in fiscal 2016. This demonstrates an incredible ability to manage and control costs while increasing revenue. We anticipate Apple to double its dividend in the next five years, as well as implement much of its \$300 billion buyback program, offering considerable wealth to investors.

Conclusion & Recommendation

Recent drawbacks in iPhone production have worried tepid investors about the device's future demand prospects, but as mentioned earlier, we see this as a temporary issue and not lost demand to competitors. We believe upgrades to the IOS platform will continue to increase switching costs and attract Android customers over time. Our growth forecasts demonstrate an approximate undervaluation of Apple's stock by 8%, but we are confident of both their short-term and long-term growth potential. As a result, we recommend holding our investment for 2018 and reassess our position in 2019.

Cisco Systems, Inc. (CSCO)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$28.61	\$42.89	16.0	Large Value	2.6%



Introduction

Cisco operates as an internet protocol designer and manufacturer of networking products and services in the communications and information technology sectors. They offer a series of products in both hardware and software, which include: Switches, Routers, Wireless, Network Management Interfaces and Modules, Optical Networking, Access Points, Outdoor and Industrial Access Points, Next-Generation Firewalls, Advanced Malware Protection, VPN Security Clients, Email and Web Security. They generated \$48 billion in sales for the fiscal year 2017.

Fundamental Analysis

Cisco reported earnings in 2017 of \$9.6 billion, even as they have incorporated a major overhaul of its product offering, switching from a hardware-based business to a software derived company. What drove momentous sales for Cisco was the introduction of its new cloud-based secured internet gateways in February 2017. The CEO Chuck Robbins considered it to be “the most significant product launch in a decade”.

What is concerning is the fact that they have not returned to their 2014 sales level and have posted 4

straight years of stagnant sales and earnings growth. CSCO is a cash cow and many investors anticipate this sleeping giant to return to its growth stage after considerable reinvestment by the firm.

The computer communications industry it operates in is competitive, but full of many small firms, while CSCO dominates with over 50% market share. It is important to note that 43% of their revenue came from software and 30% were from recurring offers. This shows signs of future profitability due to the lower nature of selling software versus hardware. However, Cisco still has a long road ahead and the turnaround may not be in the near term.

Financial Statement Analysis

Cisco has seen shaky earnings growth the past five years. In fiscal 2017 Cisco saw -10.52% earnings growth, to contrast its 19.57% earnings growth in 2016. Coinciding this trend is sales, which also posted a negative fiscal 2017 at a -2.52% clip. Although we like their efforts and reinvestment into transitioning their product offering, we see this as a long-term play.

Conclusion & Recommendation

Due to the size, maturity, and its diverse product offerings, we anticipate Cisco’s growth will be driven by economic factors such as consumer confidence.

Even with modest growth forecasts and added growth benefit from tax benefits and repatriated cash, our dividend growth model estimates the company is currently overvalued by at least 100%. We recommend our position be liquidated for the upcoming year.

Cadence Design Systems (CDNS)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$38.44	\$36.77	27.9	Mid Growth	N/A



Introduction

Cadence Design Systems (CDNS) operates as an integrated circuit and electronic device company. They provide hardware, software, and maintenance solutions for their products that focus on electronic automation, emulation hardware, and internet protocol. Their customers include semiconductor suppliers, internet service companies, and a range of electronic products. The company derives over half its revenue from the U.S. but has a sizeable presence in Asia and Europe. Cadence generated revenues of \$1.94 billion in 2017.

Fundamental Analysis

Cadence reported earnings of \$204 million, which is only .5% growth year-over-year. This is troubling to find especially when considering they were coming off the fiscal year 2016 where they reported nearly -20% year-over-year earnings growth.

The market Cadence operates in is a high growth industry and investors anticipate them to grow in-line with the market moving forward. Cadence projects revenue growth of 4%, which is a big jump from the previous years' performance. They anticipate benefiting substantially from the new tax code, where their income tax rate will be further reduced from 23% to 16%, assisting in improved bottom-line growth.

Tensilica, a recent acquisition that is now an incorporated product line of digital service processors

(DSPs) for Cadence, has found one of its first major customers in the self-driving automobile space. GEO semi-conductor recently announced the use of the Cadence device in their camera video processor, a critical component of self-driving vehicles. Despite this promising development, we believe Cadence growth prospects are in the long term, and technology like this is years away from hitting the mass market.

Financial Statement Analysis

Despite positive revenue growth in the past five years, Cadence management has shown difficulty in managing costs and has shown stagnant earnings. We expect this trend to continue as R&D investment is only anticipated to rise to help pave the way for future technological advancement and iterations. On the positive side, these short-term investments will benefit Cadence in the long-run, but not in the next fiscal year.

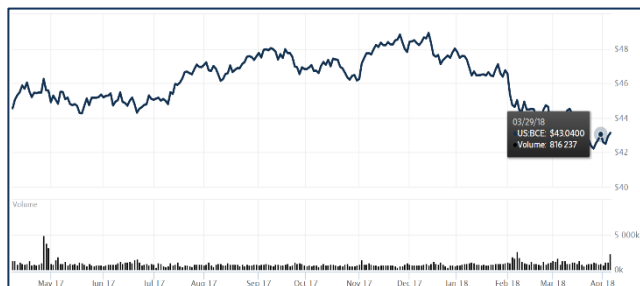
Conclusion & Recommendation

The product portfolio Cadence offers is largely dependent on the production and sale of semiconductors, which shows a strong positive growth trend in the coming years. As a result, global semiconductor production is a major growth driver but will be offset from major competitors Samsung and Applied materials who dominate this market segment.

Even with these modest growth forecasts, our free cash flow model estimates the company is currently trading close to its intrinsic value. To reach our return requirement for the portfolio, Cadence would have to have a historic year, and no product line currently can drive this required growth. Therefore, we recommend our position be liquidated for the coming year.

BCE Inc. (BCE-US)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$51.74	\$43.04	17.5	Large Value	5.06%



Introduction

BCE is a Canadian telecommunications company servicing the business, consumer, residential and government sectors. It operates through the following segments: Bell Wireless, Bell Wireline, and Bell Media. They boast to have the largest communications network and associated mass media holdings in Canada, with large stakes in the Montreal Canadiens and Maple Leaf Sports & Entertainment (18% and 37.5% respectively). BCE reported \$21.72 billion in revenues for the fiscal year 2016.

Fundamental Analysis

BCE generated \$3.031 billion in earnings for the fiscal year 2016, including a \$3.9 billion acquisition of Manitoba Telecom Services (MTS). Following the acquisition, BCE announced a \$1 billion investment in advanced broadband networks and services throughout the Manitoba region. At the same time, BCE has benefited substantially from diversification efforts into higher growth industries such as home security & monitoring, and general media entertainment. This has allowed BCE the opportunity to reduce telecom's negative effects such as reductions in landline services, while capitalizing on their highest postpaid customer growth in 15 years.

In the fiscal year 2016, BCE reduced its wireline operating cost by 2.7% and expect to deliver significant

cost savings in 2017 through workforce cutbacks. They anticipate further synergies from their acquisition and higher customer retention from continued deployment of 4G LTE services.

Financial Statement Analysis

BCE has seen steady revenue growth of 2-5% for the previous five years. Meanwhile, they have maintained EBITDA margins above 2% for the same period. Fiscal 2016 was a notable year wherein they increased net income by over 13% and a three-year average earnings growth rate of 13%. BCE added 175,000 postpaid customers in 2017, well ahead of leading competitor Telus at 121,000. BCE also offers an attractive dividend yield over 5%, the highest in its industry.

Conclusion & Recommendation

BCE's sales growth is driven by three key drivers: mobile cellular subscriptions, fixed broadband subscribers, and telephone lines. The mobile and fixed broadband drivers are both forecasted to grow at a 3% annual rate, while telephone lines are projected at a -1% growth rate. In the longer term, we expect BCE's diversification strategy to help it outperform its peers in this competitive industry, leading to continued growth. BCE from a portfolio perspective is also a more defensive investment compared to our other high flyers. We believe it serves as a nice counter-balance to our other recommendations.

Even with these modest growth forecasts, our two-stage dividend growth model estimates the company is currently undervalued by at least 15%. We recommend our position be held for at least another year.

Verizon Communications (VZ)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$44.90	\$47.82	6.6	Large Value	4.84%



Introduction

Verizon is a U.S. telecommunications company that operates through two main business segments: Wireless and wireline. The Wireless segment targets consumer, business, and government sectors by providing voice and data services. The Wireline segment offers broadband video and data; corporate networking solutions; data center and cloud services; security and managed network services; and local and long-distance voice services. Through acquisitions and a rebranding initiative of subsidiary Oath, Verizon operates more than 50 media and technology brands such as Yahoo and AOL, engaging more than a billion people globally.

Fundamental Analysis

Verizon reported \$30 billion in earnings in 2017, which included sales from their acquisition of Yahoo at \$4.5 billion. Advertising sales saw a 10% increase in quarter four of 2017, but we see this a temporary phenomenon from the purchase of Yahoo moving forward. Much of Verizon's growth will rely on the execution of rolling out its new 5G technology in 2019 and maintaining the reliability of its best in class networks. On the flip side, rival AT&T has already announced three major cities to receive the upgrade for 2018 even though there are no compatible smartphones on the market to benefit from the 10x faster internet and data.

Verizon faces an extremely competitive telecom market in the U.S. with smaller firms T-Mobile and Sprint eating away its market share. Verizon's competitive advantage of best in class networks has dwindled, and revenue has suffered as T-Mobile, Sprint, and AT&T have all offered

unlimited data plans while engaging in competitive pricing.

Verizon suffers from a lack of diversification and approximately 95% of its business is exposed to the telecommunications industry. This amplifies the effects of a hyper-competitive market where firms such as AT&T continue to diversify revenue streams away from their legacy brand. We believe that Verizon will struggle to grow as competitors continue to eat away at margins.

Financial Statement Analysis

Verizon posted year-over-year revenue growth of 5% thanks to a series of acquisitions, beating the mark of many analysts. However, on an organic basis, revenue fell by approximately 2% year-over-year. Management controlled costs well in 2017 and reported an EBITDA margin of 35.2%, beating consensus projections. We do believe Verizon will benefit significantly from new regulations such as net neutrality and tax cuts.

Conclusion & Recommendation

There are three main drivers of growth for Verizon: mobile cellular subscriptions, fixed broadband subscribers, and telephone lines. Unlike the Canadian market, the U.S. mobile phone market is completely saturated with a 98% penetration rate. Much of the growth moving forward will rely on increased use and market penetration of the secondary data market, with consumers purchasing subscriptions for their watches and tablets. We believe the adoption rate of these devices will be much lower than that of smartphones and increasing productivity of these devices will limit the need for users to purchase secondary devices. This, paired with increasing competition, creates a tough road to growth for Verizon in both the short and long term. Even with adding short-term growth adjustments to take into account special factors, our two-stage dividend growth model estimates the company is currently overvalued by at least 6%. We recommend our position be sold for this upcoming year.

Micron Technology (MU)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$57.61	\$52.14	7.23	Large Blend	N/A



Introduction

Micron Technology is a memory solutions business targeting the cloud memory and solid-state storage markets through the design and building of semiconductors. Their product portfolio consists of three main devices: dynamic random-access memory (DRAM), flash memory, and solid-state drives. It operates through the following segments: Computer and Networking Business Unit, Storage Business Unit, Mobile Business Unit, and Embedded Business Unit. These units target many devices such as smartphones, tablets, computers, automobiles, IOT devices and industrial equipment. The company generated \$20.2 billion in 2017 and has 31,400 employees.

Fundamental Analysis

Micron Technology reported \$5.8 billion in earnings in 2017 and retired \$2.4 billion in debt to de-leverage and strengthen their balance sheet. The company is also benefiting from overall industry trends such as robust demand from cloud and enterprise customers, as well as growing demand for graphics products that extend beyond gaming. In Q1 of 2018, Micron reported a 50% increase in SSD revenue from cloud/enterprise customers, driven by rapid adoption of memory solutions at data centers.

Constant innovation has allowed Micron to stay ahead of competitors. The recently announced high-density 32 GB NVDIMM-N is the industry's fastest server memory module, and currently the only compatible device for Intel's flagship Skylake CPU and processor. This trend of servicing future innovative technologies is expected to

continue with Micron's 3D NAND architecture as industries increase use of augmented reality and autonomous computing.

Micron technology's bottom-line growth is also steadily increasing with its top-line growth thanks to the strong management and operational efficiencies. In Q4 of 2016, management increased the re-use rate of equipment and revised useful life estimates in their wafer fabrication facilities from five to seven years. This resulted in reduced depreciation cost of approximately \$100 million per quarter in 2017. Thanks to their acquisition of Inotera in 2016, Micron was able to sell their work in process goods \$107 million higher than originally estimated prior to the transaction and are still experiencing significant synergies in their DRAM product line.

Financial Statement Analysis

Micron Technology has seen five straight quarters of double-digit revenue growth, and over 60% for fiscal 2017. This was a stark contrast to its strong decline of 23% in revenue for 2016. Meanwhile, EBITDA growth stayed well over 20% during those five consecutive quarters of positive growth. The fact that management is growing the company without sacrificing margins makes Micron willing and able to meet its current financial obligations and fund its intended projects, providing profitable growth for the next few years.

Conclusion & Recommendation

Micron technology's major short-term growth driver across all product lines is global semiconductor sales. More than half of Micron's sales come from China, who has a projected GDP growth rate four times that of the U.S. We believe disruptive technologies such as autonomous computing in the automobile industry will provide short-term and long-term demand for semiconductors. This security will offer nice diversification to our portfolio and high upside potential. We recommend purchasing a stake in Micron Technologies.

Materials

Overview

A growing economy, performance in construction, and demand for consumer discretionary products should lead to favorable outcomes in the materials sector. The materials sector is comprised of a wide range of companies involved in business ranging from mining, processing of chemicals, timber, paper and the production of metals. Performance of the sector can be heavily influenced by the cost of inputs and changes in the business cycle.

Outlook

Interest rates are expected to rise through the year 2018. Even with the increase, the rates remain in the range of historically low levels. Within the materials sector, we do not anticipate the rise in rates to seriously affect the United States based companies. An increase in inflation is predicted by CIM between 2% and 3%, there may exist the possibility that some firms need to increase prices to account for increases in raw material cost.

Governmental policies may influence the performance of materials companies in a number of ways in 2018. At the federal level, tax cuts passed late in 2017 could free additional resources for companies' efforts to generate growth. Companies dealing in international trade with the United States may encounter challenges. A strong dollar and government policies, such as the recently enacted steel production tariffs, could create additional uncertainty, costs, and declines in demand.

Mining of materials used in the construction of steel is not anticipated to see significant growth in the next three years. A driver of this stagnation is the slow demand for industrial expansion in China and India. Iron ore revenues are estimated to fall 9.4% for 2018, in conjunction with falling ore prices. The outlook for global trade of coking coal is also expected to suffer from similar causes. The global coal mining industry is expected to see total revenues fall 13% in 2018, 6.5% in 2019 before leveling off in 2020.

Crude oil prices are expected to rise during the year. The Organization of the Petroleum Exporting Countries has maintained oil production cuts in place from 2016. In an effort to drive up prices by limiting demand, these limitations may continue to be in place through 2019. Through the expansion of horizontal drilling and hydraulic fracturing within the United States, an expanded supply of natural gas and byproducts exist. Companies based in the United States, or with processing facilities in the United States, utilizing the sources should benefit from this additional supply and lower costs.

Demand for products from chemical manufacturers is expected to increase as manufacturing increases. Higher disposable incomes should translate into higher purchases of manufactured products. An increase in construction is expected to drive the need for chemically based products. In residential construction alone, each new home created requires approximately \$15,000 worth of chemicals.

Summary

The outlook on materials sector is expected to remain positive as the economy grows. Previous and new selections were evaluated using two- and three-stage dividend discount models for valuations. Both bottom-up and top-down approaches were used to determine growth rates in review. The areas of the materials sector anticipated to perform well are those benefiting from low interest rates, increases in construction and discretionary spending. With the United States production of natural gas increasing over 40% in the last ten years, materials derived from this domestic growth exist as an opportunity for investment.

Lyondell Basell Industries (LYB)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
HOLD	\$121.91	\$105.68	10.8	Large Value	2.6%



Introduction

Lyondell Basell Industries engages in the refinery and production of chemicals and plastics, operating through the following segments: Olefins and Polyolefins-Americas (O&P-Americas), Olefins and Polyolefins-Europe, Asia, International (O&P-EAI), Intermediates and Derivatives (I&D), Refining, and Technology. The company is headquartered in Rotterdam, Netherlands.

Fundamental Analysis

Global demand for Ethylene is strong and continues to grow. In 2016 and 2017, LYB experienced setbacks with production levels due to a combination of unexpected events. The effects of Hurricane Harvey at the La Porte cracker created a financial impact of approximately \$100 million. Even with these setbacks, production levels reached a record level. Leveraging existing infrastructure should benefit the company while other competitors attempt to create and bring new production facilities online.

Tax reform efforts in the United States are expected to benefit Lyondell. The effective tax rate for the company is expected to decline to approximately 5% in 2018.

In 2018 FQ1, Lyondell Basell has agreed to purchase A. Schulman for \$2.25 billion. The addition of this company will assist in expanding Lyondell Basell's ability to provide polymer compounds for electronics,

construction, appliances, and packaging. This acquisition should provide growth in areas outside of core business segments.

Raw material acquired through shale oil extraction processes are used in the production of ethylene. As oil prices have risen, gas prices have remained low. There exists a strong correlation (0.89) between the price of petroleum and sales for Lyondell. The correlation exists with a one-year lead on Crude Oil Brent. This correlation has shown to be a forward indicator of Lyondell sales. Our regression analysis returns a result of 9.12% for Lyondell Basell's short-term growth rate in the next 5 years. The use of this growth rate in a two-stage dividend discount model has produced a favorable valuation.

Financial Statement Analysis

Lyondell Basell has seen operating income increased \$459 million, up 9% from FY16, and a net income growth of \$1,050, a 27% increase. Net income margin declined from 2015 to 2016, but they have grown from 2016 to 2017. Operating expenses have risen slightly. EPS has grown from 9.12 to 12.22. EPS for the next 12 months is lower than Lyondell Basell's competitors average.

Conclusion & Recommendation

Strong demand for Lyondell Basell products provides a positive outlook for the company. Companies in the industry are moving towards building new production facilities. It will take some time before those new locations come online. Macro factors, if remaining true to the correlation, show that a growth in sales will occur throughout the remainder of the year. Without the complications of production seen in the last two years, Lyondell should be poised to see strong growth. We recommend holding LYB for an additional year.

POSCO Sponsored ADR (PKX)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$87.34	\$78.85	10.2	Large Value	1.0%



Introduction

POSCO (formerly Pohang Iron and Steel Company) is a multinational steel-making company headquartered in Pohang, South Korea. The company operates through three divisions: Steel, Engineering and Construction, and Trading.

Fundamental Analysis

POSCO sales are primarily generated in Asia, specifically South Korea and China. Only 3.1% of its revenue comes from the United States. This position makes recent American protectionism policies a minor concern for the company. Global steel demand is predicted to increase through the year by 1.3%. China and Korean steel demands, however, are expected to decline by 2% and 1.8% respectively. Expiring policies in China are expected to affect construction in the region.

Restructuring activities have been occurring throughout the company and its subsidiaries for the past four years. These have provided a 15% reduction in net debt. Although, in 2017 a 638 thousand ton decrease in crude steel production occurred. Restructuring cases in subsidiaries have decreased dramatically over the past year. Further financial benefits from these activities are expected to stabilize. Prices of raw materials have increased during the past year. Average iron ore prices increased from \$58/ton to \$71/ton. The average cost of coking coal increased from \$115/ton to \$217/ton.

Total debt to equity for the company has decreased over the past five years.

Stiff competition exists from other steel manufacturers. These competing manufacturers are increasing global production capacity. It does not appear that POSCO's growth primary growth in the upcoming years will be tied to their core competency. POSCO now generates nearly half of its revenue from areas other than steel. These areas include energy, materials, and infrastructure. Uncertainty exists whether continued efforts to diversify products will provide continued growth necessary to satisfy debt requirements and returns to investors.

Financial Statement Analysis

Net income has jumped 114% to \$1,306 million. Sales during the same timeframe increased 17.8% to \$8,172 million. Operating expenses increased \$94 million or 2.8%. Dividends from the company were increasing from 2012 through 2015, but during the past two years, the dividends have declined. Dividends for 2018 decreased to 0.82. NTM P/E at 9.37 is slightly higher than average and median competitors.

Conclusion & Recommendation

POSCO is positioned to continue as a strong presence in the international steel business. The quality of their products is highly regarded. While sales and income have been increasing over the past year, the decrease of shareholder dividends and returns to shareholders is a concern. This coupled with the anticipated decline in demand for steel in the company's two major revenue generating locations could spell a lack of growth in business. The company's valuation, based on a two-stage dividend discount model, borders on the level of returns required for the portfolio. The recommendation for POSCO is to sell.

Scotts Miracle-Gro Company (SMG)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$85.40	\$85.75	30.15	Mid Blend	2.49%



Introduction

The Scotts Miracle-Gro Company is a leading maker and marketer of branded consumer lawn and garden products. It operates in three segments: U.S. consumer, European consumer and other. The company's brand names include Scotts, Turf Builder, Ortho, and Miracle-Gro.

Fundamental Analysis

Scotts Miracle-Gro has continued its effort to consolidate its focus on the United States market through a strategy it has dubbed Project Focus. Foreign revenues for the business now account for less than 10% of total revenues.

Revenues for the company are cyclical throughout the year. For example, figures during the middle of year (i.e. the growing season) are typically higher than figures for the first and fourth quarters.

A considerable amount of growth is expected to be achieved through the company's Hawthorne division, which is centered around the sales of equipment used in indoor hydroponic gardening. Currently, this division generates approximately 11% of the company's revenues. However, concerns over marijuana policy issues, both in the state of California and over the federal government, have created logjams for the business in the past calendar year. In its most recent earnings call, the company indicated that growth in the Hawthorne

division would be lower than expected, with delays and potential issues moving forward for this division.

Still, changing marijuana legalization policies and product adoption for use in small urban vegetable farming is likely to lead to continued expansion for the growth of this market. A fundamental concern may exist, though, regarding the association of the company's established consumer brands with the marijuana grow subset of the hydroponic business. Scotts Miracle-Gro will need to ensure that any negative perception of involvement with the legally-challenged marijuana industry does not affect the reputation of its household brand names.

Financial Statement Analysis

Sales between FY16 and FY17 have declined \$194 million, the equivalent of a 7.34% decrease. Over the last three years, operating income has been consistently declining, and net income has shrunk \$56 million, a decrease of over 22%.

As in the previous year, the company has managed to control operating expenses during the past fiscal year. Operating expenses decreased from \$580 million in FY16 to \$529 million in FY17. This was a decrease of \$51.6 million, or nearly 9%.

Net PP&E has decreased for the first time in four years. This appears to be due to the company's consolidation efforts.

Conclusion & Recommendation

Concerns exist over declining sales and the focus on growth through a small segment of the organization. With the recent delays in policy issues at state and federal levels, growth has been less than expected. The overall valuation of the company indicates that stepping away from Scotts Miracle-Gro is the best option at this time. Therefore, we recommend selling this security.

Celanese Corporation Class A (CE)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$119.82	\$100.21	25.50	Mid Value	1.8%



Introduction

Celanese is a chemical company headquartered in Dallas, TX. The company is focused on producing materials that lead to products used in everyday life. The company is divided into six different business segments: Engineered Materials, Cellulose Derivatives, Intermediate Chemistry, Food Ingredients, EVA Polymers, and Emulsion Polymers. The company has two primary cores consisting of Acetyl Chain and Materials Solutions.

Fundamental Analysis

The American Chemical Society anticipated 2018 to be a year for strong growth of chemical output, with expectations of an 3.7% increase. Within the chemical industry, there is strong demand for the production of acetic acid (ultimately used in the textile and packaging industries), and 41% of Celanese revenue is generated from Acetyl intermediaries. The CAGR of the global acetic acid market is expected to be 8.5% through 2022.

In the past two years, Celanese has continued its growth efforts through acquisitions. In December of 2016, Celanese acquired the SO.FTER. Group, an Italian-based company recognized as one of the world's largest independent thermoplastics compounders. The acquisition of this company doubled the product platforms within the Engineered Materials section, and added plants in Mexico, Brazil, and Italy. In May of 2017,

Celanese acquired the nylon components division of Nilit Plastics. This added a producer of high-performance nylon polymers with facilities in Germany and China. Most recently was the acquisition of Omni Plastics and its subsidiaries in late 2017. Omni is a custom compounder of nylon and thermoplastics. This acquisition provides a pipeline for materials used in a wide variety of markets including automotive, electronics, and consumer goods.

We valued Celanese using a dividend discount model. We expect the company to experience extraordinary growth in the short term (22%) before falling off in the long-term (5%), and these rates were used accordingly in the model. The company repurchased \$500 million of stock in 2017, and it is authorized to repurchase an additional \$1.5 billion.

Financial Statement Analysis

The company experienced increases in sales, operating income, and EBITDA between FY16 and FY17. Net sales growth was \$751 million, an increase of 14%. However, net income declined from \$902 million to \$856 million. In 2017, free cash flow of \$825 million was available. A record adjusted EPS of \$7.51 was achieved. The forward-looking P/E (12.02x) is significantly lower than industry competitors.

Conclusion & Recommendation

Celanese is operating in an industry that enjoys strong demand. The company has been able to offset material costs with higher pricing. A focus on growth is seen through acquisitions and efforts toward joint ventures. If acquisitions prove successful, the company will continue to strengthen its position in the market. With growth and an effort to return cash to shareholders, through share repurchases and increasing dividends, we recommend a buy position for Celanese.

H.B. Fuller Company (FUL)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$64.07	\$49.73	28.6	Small Blend	1.2%



Introduction

H.B. Fuller is an adhesives company bringing solutions to a broad range of applications. It was founded by Harvey Benjamin Fuller in 1887 and is headquartered in St. Paul, MN. The company currently enjoys a worldwide presence with business locations throughout the Americas, Pacific Asia, India, Africa, Europe and more recently in the Middle East. They are a major competitor in the global adhesives market, which is expected to achieve a value of over \$60 billion by 2021, with constant annual growth rates over 5%. The company's products are divided among 17 categories including agriculture equipment, building construction, electronics, medical, textiles, and more. H.B. Fuller has implemented technology centers in the United States, Germany, India, and China to bring together experts for R&D and product testing.

Fundamental Analysis

H.B. Fuller has established a 2020 strategic plan, part of which involves pursuing acquisitions to drive growth. In the 2017 calendar year, H.B. Fuller acquired three different companies. The largest and most relevant of these companies was Royal Adhesives and Sealants, one of the top ten adhesive companies in the world. This acquisition provided additional products to be used in construction from glass, roofing, solar attachments, and

flooring. The acquired company generates 68% of its sales in the United States and Canada, and another 29% in Europe. This will complement H.B. Fuller's current revenue streams, of which 58% are generated outside of the United States.

Estimates regarding construction and housing starts suggest positive growth for H.B. Fuller in the coming fiscal year. Combined with a lower core tax rate, this growth should help to offset rising costs.

Financial Statement Analysis

H.B. Fuller's sales have increased for eight out of the last ten years, and have increased consistently over the last three years. Last year, the company's sales increased 8.1%. However, in the past fiscal year, raw material costs have increased nearly 15%, presenting a significant challenge for the company. EPS is expected to rebound in 2018 from a level of \$1.13 to \$3.10. The company has enjoyed dividend growth every year for the last ten years. The forward P/E is 15.24 compared to an industry average of more than 22, and median of 17.20x.

Conclusion & Recommendation

H.B. Fuller provides a wide variety of products in the adhesives market, and additional acquisitions have provided even more diversity to their products. Expected economic growth combined with expected increases in housing and construction will benefit H.B. Fuller. Continual revenue growth is anticipated for the next few years, and the benefit from these revenues will be enhanced if raw material costs are favorable in the upcoming year. We believe the company to be currently undervalued amongst its peers, and thus we recommend a buy position for H.B. Fuller.

Real Estate

Overview

The Real Estate sector holds the S&P ETF XLRE which covers a variety of large-cap equities in real estate — REITs (real estate investment trusts) – that are comprised of: commercial (43%), specialized (38%), residential (14%), and corporate finance services (5%). XLRE US-based REITs generate 83.4% of their revenues from the US with the remainder from UK, Canada, China, India, Japan, Brazil, and Germany.

The sector has experienced a history of consistent dividends. By design, REITs pay 90% of their income as cash dividends to their shareholders. XLRE has a TTM (Trailing Twelve Month) dividend yield of 3.48%. However, valuations in the sector vary across the board due to the limited interest in this sector post-recession. XLRE has seen a value decline of 9.47% since August 2016 compared to the S&P 500's 24.9% increase during the same time. In the February 2018 market correction, the real estate sector went down 6.44% relative to the larger decline in the S&P500 of 8.82%.

Fundamental Analysis

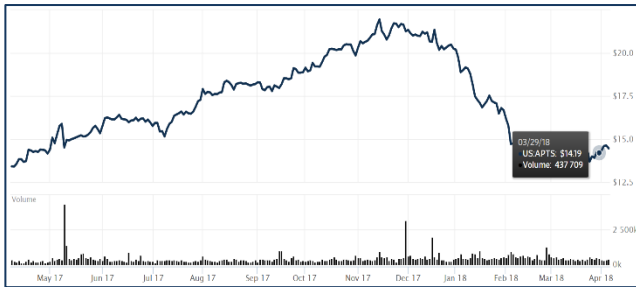
Based on growth forecasts for the National Median Home Price Index (NMHPI), the real estate sector is expected to see healthy growth in sales. The top ten REITs by revenues within the XLRE EFT are forecasted to experience a sales growth between 2.69% and 18.35%, with an average of 9.65%, in 2018. These REITs are projected to have a five-year sales CAGR between 3.39% and 11.57%, with an average of 9.27%. We believe a growing market for residential and commercial real estate will support higher prices and above-trend returns for the sector's REITs.

Summary

In October 2015, S&P decided to separate the real estate sector from the Financials sector. As a stand-alone sector, Real Estate has a 2.58% market weight within the S&P 500's total market capitalization. We are projecting a promising return for the sector as the market looks for less-volatile equity positions. Therefore, we recommend an overweight position for the sector at 3.75% as compared to its 2.58% S&P 500 benchmark weight. By purchasing fundamentally undervalued stocks, we can leverage the defensive position of the REITs.

Preferred Apartment Communities, INC (APTS)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$21.93	\$14.19	16.0	Small Blend	6.8%



Introduction

Preferred Apartment Communities, Inc. (APTS) was established September 18, 2009, and is headquartered in Atlanta, GA. As of Dec 31, 2017, APTS manages 34 multifamily communities, 39 grocery-anchored shopping centers, four student housing portfolios, and four office portfolios. APTS' main revenue is generated by operating and acquiring multifamily properties targeting high demand US markets. The company's revenue breakdown from operations is 60.2% from multifamily communities, 20.8% from financing, 17.2% from new market properties, and 1.2% from office buildings. The company portfolio also holds student housing communities and the Lenox Portfolio. The company offers real estate bridge loans to partially finance the development, construction, and pre-stabilization carrying costs of new multifamily communities and other real estate and related assets. The new market properties segment covers a portfolio of grocery-anchored shopping centers (primarily Publix and Kroger) as well as retail real estate loans. The office buildings sector owns four office buildings located in Georgia, Alabama, and Texas.

Fundamental Analysis

APTS has demonstrated a strong correlation with the National Home Median Price Index (NHMPI). Based on current NHMPI forecasts, APTS' sales growth for 2018 is expected to be 13.90% with a CAGR to 2020 of 19.23%. APTS' dividend per share in 2017 was \$0.93, a 13.4% increase compared to 2016, and an 11% five-year

CAGR. The cost of equity based on current market price and dividend growth rate was 17.97%. The market cost of equity-based dividend growth rates for five other REITS varied: APLE – 6.53, AVB – 8.88%, SNR – 14.67%, MAA – 9.79%, and VTR – 11.45%. Using the next highest cost of equity of 14.67%, a one-stage dividend model with a 10% dividend growth-rate, values APTS at \$21.93.

Financial Statement Analysis

APTS saw sales growth of 294.0% YOY in 2017 and 88.1% for five-year CAGR. APTS FFO (Funds From Operations) grew 46.7% in 2017, compared to 21.6% in 2016. This trend will likely continue as the organization has acquired ten multifamily communities and three student housing communities. The fourth quarter of 2017 reported 94.5% of the overall portfolio as leased with 17 of the 39 centers 100% leased.

APTS' dividend grew 15% in 2017 as compared to 2016, exceeding the company's 2017 dividend growth target of 10%. APTS forecasts a minimum dividend growth target of 10% in 2018 based on revenue projections. The company has seen a five-year CAGR of FFO per share of 30%. The FCF grew 33.3% YOY in 2017, and 77.9% for five-year CAGR. Five large mutual funds represent 29% of APTS' ownership, which should ensure stabilization of the stock as the market invests in real estate as a defensive move for any future market volatility.

Conclusion & Recommendation

APTS has seen strong sales and dividend growth in 2017 and the previous five years. The company holds assets in high demand areas and has strong forecasts for future growth. A 2018 investment in APTS should represent a strong buy for a horizon of one to three years. If the company can maintain dividend rates above its 10% target, then the value forecasts should also increase significantly.

Ventas Inc. (VTR)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$62.91	\$49.53	16.0	Large Value	6.05%



Introduction

Ventas, Inc. (VTR), founded in 1983 and headquartered in Chicago, IL, is the leading provider of capital for the acquisition and ownership of senior living, healthcare operators, and research institutions. Its revenue breakdown from operations is 52% from senior living operations, 24% from triple net leased properties, and 21% from office operations. VTR also owns Life Science and Innovations Centers, Long Term Acute Care Centers, International Hospitals and Skilled Nursing Facilities. The properties are in the US, Canada, and the United Kingdom.

Fundamental Analysis

VTR's sales have demonstrated correlation with the National Home Median Price Index. Therefore, based on current NHMPI forecasts, VTR's forecasted growth in sales for 2018 is 20.70% with a CAGR to 2020 of 10.99%. VTR's dividend per share in 2017 was \$3.12 with a 5.05% increase over 2016 and a 6.2% five-year CAGR. The market cost of equity for VTR based on 5.05% dividend growth rates for a single stage discount model was 11.45% with their current dividend of \$3.12 per share. The market cost of equity-based dividend

growth rates for five other REITs varied: APLE – 6.53%, AVB – 8.88%, SNR – 14.67%, MAA – 9.79%, VTR – 11.45%, with an average of 10.26%. Using the 10.26% cost of equity leads to a valuation of VTR at \$62.91.

Financial Statement Analysis

VTR saw sales growth of 3.79% YOY in 2017 compared to 4.78% YOY in 2016. Operating income grew 9.01% YOY in 2017 compared to 13.67% YOY in 2016. The company has seen a five-year CAGR of FFO per share of 12.8%. Five large mutual funds control 51% of the ownership of this company, which should ensure stabilization of the stock as the market invests in real estate as a defensive move against negative market volatility.

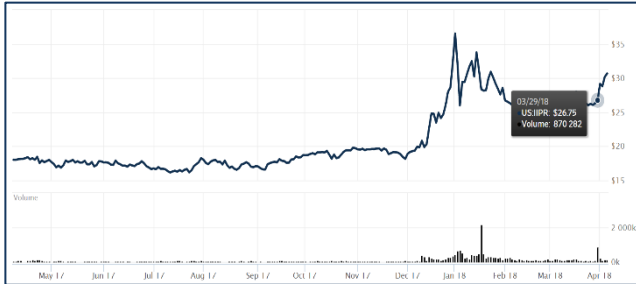
The company's senior living centers are expected to be profitable by 2019. Today, only 11% of seniors live in senior living facilities. The future market demand is expected to increase with more baby boomers entering the 80+ age bracket. VTR will benefit from promoting the benefits of its facilities to the changing demographics along with offering competitive pricing.

Conclusion & Recommendation

VTR has a proven track record of relative sales growth and dividends. The company will likely see continued sales growth from its vertical business model of senior living, and healthcare will benefit from the aging baby boomer population. We believe investing in VTR will represent a strong buy over the next three to five-year horizon.

Innovative Industrial Properties, Inc. (IIPR)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
BUY	\$33.78	\$26.75	20.7	Small Growth	2.8%



Introduction

Innovative Industrial Properties, Inc. started June 15, 2016, and is headquartered in San Diego, CA. IIPR operates in acquiring, ownership, and management of medical marijuana facilities by leasing to experienced,

Fundamental Analysis

IIPR is new, so their equity history is limited. The company started paying dividends in Q2 2017. The dividend per share in 2017 was \$2.20 (\$1.00 for Q4, which represents a 66.67% increase over the previous Q2 and Q3 quarters, or \$0.60 each). IIPR should see significant dividend growth over the next few years. Based on the company's maintaining a 33% dividend growth rate with a 17.47% cost of equity with a two-stage dividend discount model results in a valuation of the company at \$33.78.

Financial Statement Analysis

IIPR's 10K shows an existing lease rent increase of 3% each year, but the company's sales forecasts are targeted to grow even faster. The sales forecast for 2018 is \$11.9 billion – versus \$6.3 billion in 2017, and \$321 million in 2016 – with a gross margin of 64.5% in 2016.

state-licensed operators for regulated medical-use cannabis.

It acquires properties through sale-leaseback transactions and third-party purchases. IIPR purchases land and commercial properties for established, licensed medical marijuana companies. It then leases the property back to the company. The product is essentially a pawn type transaction for companies to acquire additional funds to grow their expansion and business with IIPR.

Marijuana is now legalized in nine states and Washington DC, decriminalized in 13 states, and legalized in 29 states for medical purposes. This trend is expected to continue to expand. In 2016, Americans favored legalizing marijuana (57% versus 37%). Those ratios were inverse only 10-15 years ago.

Conclusion & Recommendation

Marijuana is a product that is accepted by a growing portion of the nation for various uses. This industry is still in the growth stage. The industry has capital limitations and thus has significant potential for investors gains. The financial products that IIPR offers are something new for the industry.

The sales within the medical marijuana industry are still in the early years. Licensed operators will need access to funds to expand their territories and operations. The lease buyback is a great way to help established companies achieve growth. More states are legalizing or approving marijuana for medical purposes.

We recommend purchasing IIPR.

Utilities

Overview

The utilities sector is a mature industry with reliable sources of revenue that is presently challenged to become more innovative, sustainable and consumer-driven. Given our economic outlook, and because utilities offer limited growth opportunities relative to other industries, we have chosen to underweight this sector in our portfolio with respect to its representation in the S&P 500 by altogether eliminating this sector from our portfolio. A bottom-up valuation approach was used to evaluate the companies in this sector.

Technology & Consumer Demands

The world is becoming more dependent on electricity. It is also becoming more dependent on technology for greater efficiency and effectiveness. From smart appliances to smart home thermostats, smart city concepts help consumers, regulators, and companies garner data to understand and regulate costs, consumption, and change. Shorter power outages, clean and efficient energy options, and affordable reliable electricity are possible because of grid innovations. In ten years (see *Figure 1*), the electricity generation mix went from about 50% coal to less than 30%, and the rest comes from clean energy alternatives. While the Clean Power Plan regulation forced utility companies to convert their resources from coal to natural gas, today, natural gas costs less to generate and distribute.

This shift may be because consumers have more choices today over how they get their power and how they manage their power consumption. More than 80% of U.S. consumers care about the use of renewable energy. Customers are more demanding, so to ensure greater satisfaction and retention, utility companies must modernize their experience and communicate in real-time. If consumers are not satisfied, they will look for other options, including solar panels, which are costly to implement in homes but promise clean, sustainable, and reliable electricity.

Electricity consumption is anticipated to grow at a slow to moderate pace due to technology and consumer perspectives and consumption control. Housing starts have bounced back up by 8% in the past year, the population is growing, and industrial growth has recovered. Yet, similar growth for the utility sector is not reflected. Technology has changed the industry—monitoring energy consumption and finding ways to use less energy is the new demand.

While innovation is imperative and ought to help drive costs down for greater profits in the future, the movement is slow. No more than 1% of its revenue is invested into R&D as evidenced in several 10Ks. This may be due to high capital investment for such changes.

Policy

States in the U.S. are making goals that match consumer demands. Arizona Corporation Commission's clean energy proposal includes an 80% clean energy target by 2050 and 3,000 megawatts of energy storage—reducing prices and increasing grid reliability. Hawaii Electric Companies will begin to power multiple islands with 100% green energy by 2045. California's pilot programs will replace aging power plants with distributed energy resources that utilize fossil fuels that will help facilitate the transition to a smarter grid. As state regulators experiment and support changes in the sector, the pressure for innovation will continue to rise and the sector as we know it today will be vastly different – not any time soon, but soon enough. In conclusion, we have opted for higher returns in other sectors by underweighting this slow-growth sector that is currently challenged to be more innovative, sustainable, and consumer-driven.

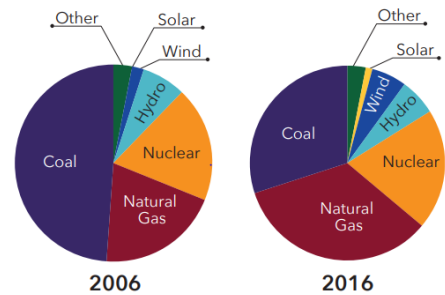


Figure 1 From the Institute for Electric Innovation

PPL Corp (PPL)

Recommendation
SELL

Valuation
\$31.88

Last Price
\$28.29

Adjusted P/E
12.2

Style
Large Value

Dividend Yield
4.46%



Introduction

PPL Corporation (PPL) is one of the largest regulated utility companies in the United States, serving Kentucky, Pennsylvania, and the U.K. Headquartered in Allentown, PA, PPL provides electricity to over 10.5 million customers, with 7.8 million of its customers residing in central and southwest England and south Wales. PPL engages in generation, transmission, and distribution of electricity and the sale of gas. The company has committed to investing more than \$16 billion, through 2021, in new infrastructure and technology for smarter energy grids.

Fundamental Analysis

PPL reported \$7.52 million in revenue for 2016 with total assets equal to \$38.315 million. They have maintained strong dividends per share at \$1.52 in 2016. While U.S. electric utilities offer an average dividend yield of 3.54%, PPL delivered a 4.46% yield in 2016, and 5.11% last year. Committed to dividend growth, PPL announced in their quarterly earnings report an increase in their dividends from \$1.58 to \$1.64 per share.

PPL's power supply includes coal, oil/gas, and hydro, with 85.56% of their power generation coming from coal. As natural gas is now a more cost-efficient option, and alternative energy continues to be more favorable to consumers, PPL will need to consider a shift in how they deliver their energy.

PPL seeks to expand their customer base through Project Compass. Sales growth for PPL is driven by increased

energy consumption, population growth, and rate increases. Through Project Compass, PPL will add a 95-mile transmission line into New York. Looking at PPL's return on invested capital, the company has seen a growth from 4.8% to 6.75%, serving as an indicator of what this kind of investment can do for PPL.

Additionally, the investment of \$16 billion through 2021, in new infrastructure and technology for smarter energy grids, is positive for the company and the industry trends. It will position the company for continued strong growth and allow them to use important data to improve customer satisfaction and control costs.

Financial Statement Analysis

While PPL has maintained a strong dividend yield, free cash flow has been negative for the past six out of ten years, with significant negative growth in 2017. This pattern raises a red flag and indicates that PPL may need to decrease their dividend payouts to support the company, although this does not seem to be management's desire. Their debt to equity ratio is higher than the industry's with a five-year average of 65%. Free cash flow has been lower than dividends nine out of ten years.

The internal growth rate using return on invested capital and return on equity shows a growth ranging from 0.35% to 1.51% over the past ten years. The company will continue to see this low and slow growth as rates for consumers decrease due to fuel price decreases, continued need for high-cost capital projects, and as a result of being a regulated company.

Conclusion & Recommendation

To opt for higher returns in other sectors, our recommendation is to sell. However, PPL likely has a promising future as demonstrated through its diverse portfolio, commitment to organic and strategic growth, and forward-thinking investment in smart grids.

Southern Company (SO)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$54.50	\$44.66	19.25	Large Value	4.52%



Introduction

Southern Company is the third largest electric utilities company, based on market value. Headquartered in Atlanta, GA, Southern Company serves 9.18 million electric and gas utility customers in 11 states through electric utilities, natural gas distributions, and wholesale delivery. It has the capacity to generate 46,000 megawatts of electricity and 1,500 billion cubic feet of combined natural gas consumption and throughput volume showcasing its reliability. Southern Company continues to demonstrate its commitment to innovation by investing \$2.3 billion in R&D.

Fundamental Analysis

Southern Company reported \$19.9 billion in revenue in 2016 with total assets equaling \$109.7 billion. They have maintained strong dividends per share at \$2.22 in 2016, and \$2.30 in 2017; offering a dividend yield of 4.52% in 2016, and 4.78% in 2017. The company has provided 68 consecutive years of dividends equal to or greater than the previous year and 15 years of consecutive dividend increases, and paid shareholder dividends every quarter since 1948. The historical ability for Southern Company to deliver regular, predictable, and sustainable growth is important for the Utilities sector.

Southern Company has drastically changed their energy mix over the years. They went from 71% coal-dependent to 28%. Today, the energy mix includes 48% natural gas, 9% hydro/other renewables, and 15% nuclear. In fact, Southern Company Gas is the largest natural gas distribution operator in the U.S.

In 2016, the company saw significant milestones through two major construction projects: Mississippi Power's Kemper County Energy Facility and Georgia's Power's Plant Vogtle units 3 and 4. The Kemper plant is a combined-cycle power plant and coal-gasification plan to ensure a cleaner coal plant. If successful, this will be the second TRIG facility in the U.S. The Vogtle units are the first new nuclear units built in the U.S. in the last three decades.

Financial Statement Analysis

While Southern Company has maintained a strong dividend yield, free cash flow has been negative for the past eight out of ten years. In the past three years, Southern Company has also increased their total cash and invested in mergers and acquisitions while engaging in other capital projects to stay in the forefront of innovation. The company has promised and delivered dividends, however, it is concerning how they will continue this. One promising factor is Southern Company Gas has started to contribute in greater ways to the total sales.

The internal growth rate using return on invested capital and return on equity shows growth ranging from 0.37% to 0.9% over the past ten years. The company will continue to see this low and slow growth as rates for consumers decrease due to the tax reform, fuel price decreases, continued need for high-cost capital projects, and as a result of being a regulated company.

Conclusion & Recommendation

To opt for higher returns in other sectors, our recommendation is to sell this stock. Southern Company may be a company to consider again in the future because it is an impressive forward-thinking utility with a commitment to customer service, high reliability.

Exelon Corp (EXC)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
SELL	\$24.66	\$39.01	29.09	Large Value	3.56%



Introduction

Exelon is the only utility company listed in the Fortune 500. Headquartered in Chicago, Exelon is a holistic utility company that offers power generation, energy sales, transmission, and delivery. The company is made up of six utilities that service 10 million customers with 35,500 megawatts of power. Exelon closed a merger with Pepco Holdings in 2016, establishing Exelon as the largest utility company in the nation by customer count. Exelon invested \$5.3 billion in technology and infrastructure across all utilities to update its grid system and plans to invest \$25 billion through 2020.

Fundamental Analysis

Exelon Corporation reported \$34.5 billion in annual operating revenue in 2015. Through its six utilities, Exelon has a service territory of over 24,200 square miles and boasts 11,000 miles of electric transmission. Exelon's energy mix includes nuclear, fossil fuel, hydro, solar, landfill gas, and wind. Interestingly, coal is not a part of their energy mix. Through one of their business arms, Constellation, Exelon provides competitive energy sales in deregulated markets including business, residential, and government customers across the United States, including two-thirds of Fortune 100 companies.

Exelon has maintained moderate dividends per share at \$1.26 in 2016 and \$1.31 in 2017. The U.S. electric utilities offer an average dividend yield of 3.54%; Exelon delivered a 3.56% yield in 2016 and 3.32% yield in 2017 – right in line with the sector's average. This is lower than other securities in the Crummer Utilities portfolio.

Exelon has worked collaboratively with regulators and filed a total of nine distribution rate cases and added approximately \$315 million of incremental revenue. Additionally, it filed five transmission rate cases with the Federal Energy Regulatory Commission (FERC) in 2016 to increase annual revenue by \$65 million in the coming years.

Exelon works to constantly innovate. Most notably, in 2016, Exelon formed the Corporate Strategy, Innovation and Sustainability (CSIS) group to identify, evaluate, and execute innovative projects. Through this group, Exelon took a more hands-on approach by partnering with venture capital arms.

Financial Statement Analysis

Free cash flow has been negative for the past four out of ten years, though at moderate levels compared to others in this portfolio. EPS has suddenly seen a significant increase from 2016 to 2017 – \$1.22 per share to \$3.97 per share.

The internal growth rate using return on invested capital and return on equity shows growth ranging from 0.23% to 3.36% over the past ten years. Over the past five years, its growth has averaged at 0.28%. The company is favorably innovative; however, it must still invest significantly to make the company technologically forward in a regulated industry. The EIA also projects an optimistic long-term growth rate of 2.2%. While Exelon's growth may exponentially grow in the future, it is not the case in the short-term.

Conclusion & Recommendation

To opt for higher returns in other sectors, Exelon is recommended to sell. Exelon's energy mix model, innovation-forward initiatives, and non-traditional approach, including offering below-average dividends as one of the largest utility companies, make it one to keep a close eye on in the future.

Appendix

Crummer SunTrust Portfolio Investment Policy Statement

(Revised January 2018)

Crummer SunTrust Portfolio

1.1 History The SunTrust Banks of Central Florida Foundation contributed all of the Crummer SunTrust 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 SunTrust Scholars SunTrust Scholarships are funded by an annual amount established by the Crummer School that generally follows the endowment distribution policy of Rollins College—4 1/2 percent of the three-year moving average of the Portfolio's market value at calendar year-end.

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 2 1/2%.

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 CrummerSunTrust 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. Each asset class will have a minimum of 5% of the portfolio value. 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. Exposure to Small and Mid Cap equities shall not exceed 30% of the total equity allocation.

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 3.5 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.

10.3.8 Strategic and Tactical Balance The managers must balance short and long-run objectives and, therefore, navigate between sector and asset allocations. There is no set formula and the best judgment of the class and the Committee must be used to accommodate both tactical sector weights and strategic asset class allocation.

10.3.9 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.

10.3.10 Derivatives The CrummerSunTrust 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 SunTrust Bank is the custodian for the assets of the Crummer SunTrust Portfolio.

Table A

Target Rates of Return, Components, and Spending Policy

	<u>Long Term</u>	<u>Short Term</u>
Administrative and Trading Expenses	½ - 1%	½ - 1%
Allowance for Inflation	2 - 3%	Consumer Price Index
Distribution from Portfolio	3½ - 5½%	Approximately \$40,000
Portfolio Real Growth	2 - 2½%	> 0%
Target Total Return	8 - 11½%	Dependent on Above

Table B	
Crummer SunTrust Portfolio Equity Portfolio Sectors	
<u>S&P 500 Sector</u>	<u>Benchmark</u>
Consumer Discretionary	S&P Consumer Discretionary Index
Consumer Staples	S&P Consumer Staples Index
Energy	S&P Energy Index
Financials	S&P Financials Index
Health Care	S&P Health Care Index
Industrials	S&P Industrials Index
Information Technology	S&P Information Technology Index
Materials	S&P Materials Index
Real Estate	S&P Real Estate
Telecom	S&P Telecom Index
Utilities	S&P Utilities Index
Target Deviation for any sector is +/- 50% of its S&P 500 market weight	

Table C				
Crummer SunTrust 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%; Small and Mid-Cap Stocks shall not exceed 30% of total equity exposure.				

Black-Litterman

Introduction

Fisher Black and Robert Litterman developed a technique to discover the market's expectations. We have applied this technique at the equity sector level, comparing the market's expectations with our analysts' opinions. While we recognize this technique's restrictive assumptions mean its results may be unrealistic, we have used it to get a general picture of how our proposed sector positions compare to the market's expected returns. The results suggest our opinions do not agree with the market's – which supports our sector allocations pointing to profit opportunities.

Assumptions

The model assumes that the portfolio of S&P's ten sectors is mean-variance optimal, that relative market capitalizations among the sectors reflect all investors preference for the sectors and that investors used the sectors' historical covariances to price the securities within each sector. Where the mean-variance optimization technique solves for optimal portfolio weights, given expected returns and covariances, Black-Litterman takes the sector market capitalizations as the optimal weights and solves for the expected returns that are consistent with the relative sector allocations. These expected returns tell us about the market's consensus expectations.

The assumptions necessary to support the Black-Litterman model are not realistic. There is little evidence to support mean-variance optimality and historical covariances are automatically suspect. Nevertheless, we use this technique because it is potentially interesting not because it is accurate. Black-Litterman went further than uncovering the market's expectations to demonstrate portfolio adjustments when expectations disagree with the market. We have chosen not to use that extension because we already have our sector portfolio allocations.

Results and Conclusion

The table summarizes our results.

Sector	Market		CIM		Difference
	Expected Return	Rank	Rank		
Consumer Discretionary	7.96%	7	3		Over
Consumer Staples	5.21%	9	6		Over
Energy	8.73%	5	9		Under
Financials	9.50%	2	2		Same
Health Care	9.20%	4	5		Under
Industrials	8.23%	6	4		Over
Info Tech	6.36%	8	1		Over
Materials	9.25%	3	7		Under
Real Estate	9.78%	1	8		Under
Utilities	3.43%	10	10		Same

This table shows the Black-Litterman market expected returns for each sector in the *Expected Return* column. For example, the technique calculated that the Consumer Discretionary sector has an expected return of 7.96%, compared to the Consumer Staples' expected return of 5.21%. Because we expressed our opinion in our proposed relative sector weighting, we ranked the market's expectations from first (1) to last (10). The table shows our relative ranking in the *Crummer Investment Management* column. The *Difference* column shows *Over* when we rank the sector higher than the market and *Under* for the reverse.

The sector rotation theory of equity markets says that when the market expects a downturn in the economy, sectors like Consumer Staples, Health Care and Utilities should do well. When the market expects a continued recovery, sectors like Consumer Discretionary, Energy, and Materials and should do well. Whether the theory no longer holds or the market is undecided about the economy, the picture painted by the Black-Litterman results is inconsistent with classic sector rotation. The market's highest ranked sector is Real Estate and the lowest is Utilities – both regarded as doing poorly under higher interest rates associated with a better performing economy. Financials and Materials also rank high, consistent with a view that the recovery will continue while Consumer Staples and Consumer Discretionary are both near the bottom of the ranking, which should not happen if the market expects a strong economy.

Our rankings point to a continued recovery. Information Technology, Financials, and Consumer Discretionary are our top three sectors while Utilities, Energy and Real Estate are at the bottom. Both the market's expectations and our rankings are consistent with a myriad of plausible economic stories. Stories, however, are beside the point. Our goal is to demonstrate that, within the confines of the Black-Litterman assumptions, our expectations differ from the market's expectations. We believe the best way to make money in a market is to disagree with the market – and be right. We have satisfied the first condition and time will tell how well we have fulfilled the second.

Value at Risk

Introduction

Value at Risk (VaR) quantifies the amount of risk exposure for a portfolio under normal market conditions over a specific time interval at a given confidence level. In practice, VaR is used to measure the likelihood of high loss, low probability events. VaR is sometimes referred to as measuring worst-case scenarios, given VaR's usual focus on the downside. We use VaR as a comparative statistic to compare the risk exposure of our proposed sector allocation with last year's sector allocation.

Parameters

The time period and confidence level (the quantile) are the two major parameters. For the Crummer SunTrust Portfolio, assuming no trading during the next year, we chose one year and a confidence level (the quantile) of 5%. We used a Monte Carlo simulation to answer the question: How much would the proposed and current Crummer SunTrust Portfolio sector allocations lose with 5% probability over a one-year horizon?

Philosophy

The whole point of VaR is to take risk sensibly because you need to take *some* risk. The idea is not to drive the VaR to zero because riskless portfolios earn the risk-free rate of return. Rather, we want to compare the VaR between alternative portfolios, using the historical returns for each sector and assuming no trading during the next year. We calculate VaR for the portfolio with current sector weights, as well as the proposed sector weights, to determine whether we are taking more risk by carrying out our proposed allocations. We do not present VaR as an omnibus risk measure – rather it is one of our risk management indicators.

Conclusion

With an assumed initial value of \$914,000, our findings are summarized as follows:

- VaR with our proposed sector weights at 5% confidence level: \$10,311.88
- VaR with current portfolio sector weights at 5% confidence level: \$29,602.62

Our VaR analysis indicates that the difference between our proposed sector allocations and our current sector allocations is \$19,290.74 or a value at risk reduction from 3.2% of the initial value to 1.1%. This change suggests that our sector allocation proposal has significantly lowered the value at risk carried by the portfolio. At the same time, the simulation suggests our proposed allocation increases our expected return from 14.6% to 15.7%.