Crummer SunTrust Portfolio Recommendations: Crummer Investment Management

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Crummer SunTrust Portfolio Recommendations

Crummer Investment Management
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 insight you bring to managing an active portfolio.

We have been fortunate to listen and learn from some outstanding guest speakers who have been generous with their time and expertise: Regina Chi, DRZ; Professor William Seyfreid, Crummer; Rob Roy, Adventist Health Systems; Jay Menozzi, Orange Capital Group; Rick Ahl, Ahl Investment Management; Scott Connor, Doyle Wealth Management; Sean Warrington, Alfred I. DuPont Trust; Philip Rich, Seaside National Bank; 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.

This portfolio trades only once a year, in late April, presenting some unusual portfolio management challenges. Our first challenge is 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.

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 decision to buy, hold, or sell is based on the sector analysts’ valuation. Finally, the report concludes with an overall portfolio assessment given the proposed changes supported by mean variance efficiency 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 School. Professor Philip Rich, who serves as Market Strategist for Seaside National Bank & Trust, also provided the class with weekly economic data points and led discussion to help us arrive at a consensus. This outlook then drove our allocations among the eleven S&P sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Telecommunications, Utilities, and Real Estate. 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 and 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 in our asset allocation decision is the percentage we chose to allocate to bonds. This year we are allocating 15% towards bonds, which is a reduction from our decision of 18% 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 are at a
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
Crummer Investment Management Team

Consumer Discretionary Sector Analyst: Kaiwen Lu
Consumer Staples Sector Analyst: Mara Lugo
Energy Sector Analyst: Kevin Brancheau
Financial Sector Analyst: Keenan Crosby
Fixed Income Analyst: Carlos Perez Ruisanchez & Mark Faas
Health Care Sector Analyst: Alex Lopez Alguacil
Industrial Sector Analyst: Amy Martin
Technology Sector Analyst: James Ferrell
Materials Sector Analyst: Mark Faas
Telecommunications Sector Analyst: Ghadi Mechleb
Real Estate Sector Analyst: Mara Lugo
Utilities Sector Analyst: Brennan Smith
Professors: Dr. Clay Singleton & Philip Rich

From left to right: Mark Faas, Philip Rich, Carlos Perez Ruisanchez, Kevin Brancheau, Mara Lugo, Ghadi Mechleb, Kaiwen Lu, Dr. Clay Singleton, Keenan Crosby, Brennan Smith, James Ferrell, Alex Lopez Alguacil, and Amy Martin
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Economic Outlook

Introduction

Our class maintains a positive outlook for the economy and we foresee promising growth. We have analyzed the potential upside and downside risks to the economy and our anticipation of both have served to shape our economic outlook and our cautiously optimistic approach. On the upside, the labor market is approaching full employment, which has supported consumer spending and an uptick in housing. On the downside, weak corporate profits following 2016 4th quarter earnings, a strong United States dollar (USD), and modest global growth are stunting business investment and exports.

We do not foresee a recession in 2017, rather a time for growth across various markets. In 2016, the S&P 500 showed strong performance throughout the year with a return of 9.54%. This growth is a stark contrast to the dismal performance of -0.73% in 2015.

Monthly S&P 500 returns in January and February of 1.79% and 3.72%, respectively, foreshadows a positive year. Domestic GDP will reflect moderate to ambitious growth of 1.75% to 2.25% due to a rising value of commodities, the strength of the USD, and the promising revival of the housing market with growth in single-family home construction. Given that unemployment is nearing full employment at 4.9%, if the economy continues on its current growth trend, unemployment will stay level and is unlikely to move drastically in either direction.

Inflation will be at the low to moderate level, ranging between 2.0% to 2.5%. The Federal Reserve has begun raising the Federal Funds Rate slightly, with its first increase of 0.25% in March, and we expect two additional rate hikes throughout 2017. These rate hikes stem from strong economic growth, an effort to combat inflation and “reload the gun” in preparation for another recession. The domestic consumer is currently benefitting from a strong USD, low unemployment, and low energy prices.

The Investment Policy Statement governing the Crummer SunTrust Portfolio requires that the team base tactical sector allocations on a best estimate of the market’s behavior throughout the next year. Our team has conducted a thorough and comprehensive analysis, gathering as much data as possible to inform our decisions on sector allocations. As we formulated our decision, we heard from many industry experts including economists, portfolio managers, and financial advisors. The research and analysis conducted in various economic reports sourced from a number of organizations and respected financial institutions was helpful in guiding our economic outlook for the coming year.

Economic Thesis

The domestic economy will have strong growth while the global economy will lag slightly behind in the coming year. The United States economy is healthy overall considering the robust performance of economic indicators such as unemployment rates, GDP, and inflation rates. Our strategy focuses on selecting companies trading at a discount to market values, which have a strong dividend yield and limited exposure to foreign currency. We believe this strategy will mitigate market volatility, provide a larger total return, and manage currency conversion losses due to a strong USD.
GDP

We expect the U.S. economy to grow at a range between 1.75% and 2.5%. This estimate is up from 1.6% in 2016. Based on the 4th quarter growth of 2.1% and a strong 2017 debut within the US economy, we lean towards the optimistic end of the GDP range estimate outlined above.

While there has been volatility in GDP, our team has based its investment recommendations on the overall positive trend given the annual transaction style of the portfolio. The outlook for 2017 appears more optimistic than 2016 with stable consumer spending, more equipment purchases and steady government expenditures.

Our team anticipates that consumer spending will be the primary catalyst for growth in 2017, supported by a rise in personal income and positive job growth numbers as indicated by a strong unemployment rate. We also recognize further headwinds in net exports, which will be due mainly in part to a strong dollar and unpredictable global demand.

Unemployment

In 2017, we foresee unemployment remaining below 5%. Unemployment has stayed below 4.9% in the early months of 2017, equaling a ten-year low. Moreover, this rate was achieved without a significant increase in labor force participation. As of March, the labor force participation reached 63.0%, up slightly 62.7% from December. Our team expects that as the economy continues to strengthen with a strong showing of GDP growth, the labor force participation will continue to grow without increasing unemployment.

We expect the increase in labor force participation to be driven by individuals who left the labor force during the Great Recession, as they return to the job market on the tailwinds of recent economic optimism. With voluntary quit rates dipping slightly in December and January to start the year off, we agree with Janet Yellen that the economy has a bit more “room to run” in terms of maximum potential.

Inflation

We believe that United States Inflation rates will range from 2.0% to 2.5% this year, very close to the Fed's target level for core inflation. As we expect a gradual rise toward the Fed's 2% target, the comfortable state of inflation will strengthen the case for modest monetary policy tightening.

We expect that continued tightening in the labor market will be the most important source contributing to rising inflation in the year ahead, as the U.S. approaches full employment levels. It is important to consider that low inflation has been a critical driving force behind the strength in real disposable income throughout 2016. While we expect the increase to be gradual, higher inflation will have a larger impact on household income in 2017, until the market adjusts and wages increase accordingly.

Speaking to this point, after observing wage growth pick up over the past year, we anticipate employment costs to increase 2.6% in 2017.

Interest Rates

The Federal Reserve will aim to keep short-term rates between 100bp and 125bp. In March of this year, the Fed implemented the third rate hike since the 2007-2009 recession. The 0.25% increase was the first of three rate hikes expected this year. With the short-term rate currently at 0.75 percent, up 25bp from a year ago, the projected range is based on the clear intentions of the Fed to continue to raise rates. The Fed signaled these intentions in a March
statement that said, “The committee expects that economic condition will evolve in a manner that will warrant gradual increases in the federal funds rate.”

Long-term rates will show a slight upward shift with flattening as the search for yield strengthens demand for long-term debt. Additionally, we expect the 10-year Treasuries to end the year between a range of 275bp and 325bp while the 30-year fixed rate mortgages to end flat at just shy of 4%.

The long-term expectation of low inflation is also contributing to keeping rates low. While investor and business confidence has soared since the installation of the Trump administration, which has promised to cut taxes, boost infrastructure spending, and ease regulations, the economic data points do not yet portray an economy that is heating up rapidly. An example of this is unimpressive retail sales growth, with February growth rates at the slowest pace since August, according to a government report.

We maintain a conservatively optimistic outlook of market promises, given that the Atlanta Fed’s model predicts an expansion of 0.9% in the first quarter, less than a third of the pace that Trump is targeting.

**Currency**

According to the Trade Weighted U.S. Dollar Index for Major Currencies, the U.S dollar has appreciated 29% during the last 5 years. Given past performance, as well as our assessment of the likely economic outlook, we anticipate that the USD will remain steady to stronger through 2017. We base this perspective on the assumption that the Fed’s actions will keep short-term rates low, to linger between 100bp and 125bp, even with scheduled moderate rate hikes.

If the Fed’s major currency index continues on the appreciation trend that we expect over the next year, then by late 2017 to early 2018, the long-term up cycle of the USD will have lasted nearly 6 ½ years and appreciated close to 45%, which is consistent in both length and magnitude of a long-term cyclical history of the greenback.

A strong U.S. dollar limits the ability for export companies to sell goods abroad and any earnings exchanges appear understated.

**Market Outlook**

We have observed thus far an optimistic stock market in a moderate growth economy. Following the inauguration of Donald Trump, the market has resembled a bull market, with the Dow Jones, S&P, and other indices soaring to record highs. However, while the U.S. economy has experienced growth, we do not believe its rate of growth aligns with the current acceleration of the market.

Overall, there has been significant increases in earnings growth, indicating a lasting bull market that may maintain dominance throughout the upcoming year. However, a slight dip has occurred near the end of March, which may signal a crack in Trump’s wall – no pun intended.

**Politics**

Following the election of Donald Trump and his inauguration into office, bullish confidence has taken hold of the market. The week after Trump secured the presidency, the market soared to its highest levels since 2011, a trend that has continued through early March. Pro-business, deregulation promises fueled much of the initial growth. Since the inauguration, the market has been propped up by the release of each headline and story concerning
these initiatives. In terms of legislation, the primary driver seems to be the promise of a 25% cut in corporate taxes, which could alleviate the current 35% tax on businesses and have a significant positive impact for many corporations.

While our team does not predict a tax plan to pass during 2017 due to the cumbersome legislative and administrative processes involved, we expect that the S&P 500 will trade with an embedded fiscal option. The value of that option will be dependent on the size of the plan and the market-assessed probabilities.

It is also important to consider that while the political environment influences the markets, the opposite is also true. If weak equity markets begin to persist on policy disappointment, it will likely prompt Republicans to take action and utilize their current (and potentially fragile) control of all three branches of government.

**Sentiment**

We anticipate overall sentiment from the market to be an impactful driving force of performance during the next year. The market outlook has been experiencing what we perceive to be a “headline effect” as news stories and current events information are causing the fluctuation seen in the market and ultimately influencing the positive trend.

CNNMoney conducts a Fear and Greed Index designed to track seven measures of market sentiment (seen in the figure below). These seven measures are: stock price momentum, stock price strength, stock price breadth, put and call options, junk bond demand, market volatility, and safe haven demand. Throughout February, the index was in the “Extreme Greed” category. The latter half of March through the start of April has begun to show the first signs of fear according to the index, reflecting the market’s emotional volatility.

While we believe that volatility will still be present throughout the next year – driven by the market's vulnerability to the "headline" effect – overall, we anticipate that the market's realistic assessment of the probability of Trump's Economic Plan becoming law will drive the S&P 500 throughout the next year.
The Crummer SunTrust Portfolio invested the first $100,000 SunTrust contribution in April 1999. Subsequent contributions brought the total investment to $500,000. Since inception, the portfolio has generated more than $250,000 in scholarships. 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. Between then and April 2017, the portfolio has trailed the all-equity index by a small margin. The portfolio has traditionally held between ten and twenty percent bonds. The chart also shows that the portfolio has returned more than a benchmark 80% equity–20% bond portfolio since early 2002.
2016 – 2017 Plan Year Performance Highlights

From May 2016 through March 2017, the S&P 500 index outgained the portfolio by 1.9%. However, absolute performance without adjusting for risk is incomplete. The portfolio’s since-inception annual return is 13.3% (with a standard deviation of 13.8%) versus the S&P 500 index’s return of 14.1% (with a standard deviation of 14.7%) over the same period. This comparison is provided more as a continuation of past annual reports rather than the best performance measure. Compared to an 80% equity and 20% bond benchmark portfolio over the period since inception, both the portfolio and the S&P 500 have outperformed by 3.1% and 3.8% per year, respectively, with significantly higher standard deviations.

Equity Sector Performance

The portfolio’s tactical equity investments are allocated among the S&P’s eleven sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, Telecommunications, and Utilities. Last year, the portfolio was tilted toward from sectors that were expected to outperform, e.g. Consumer Staples and Consumer Discretionary, Energy and Telecommunications. The Sector Index column of the chart below shows that the sectors performed about as expected with Consumer Discretionary outperforming Consumer Staples (16.8% to -4.8%) and Financials outperforming Industrials (25.4% to 20.5%). The Crummer SunTrust column shows the portfolio’s performance and the column Under/Over Benchmark indicates the performance margin in each sector. The portfolio outperformed the relevant sector index (numbers in black) in only four of the ten sectors: Technology, Consumer Discretionary, Industrial, and Materials sectors. Had it not been for the portfolio’s substantial bet on Technology and superior technology stock selection, the portfolio would have performed poorly.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Crummer SunTrust</th>
<th>Sector Index</th>
<th>Over/Under Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>16.8%</td>
<td>11.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>-4.8%</td>
<td>6.2%</td>
<td>-11.0%</td>
</tr>
<tr>
<td>Energy</td>
<td>0.2%</td>
<td>6.7%</td>
<td>-6.5%</td>
</tr>
<tr>
<td>Financial</td>
<td>25.4%</td>
<td>27.8%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>3.4%</td>
<td>8.1%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Industrial</td>
<td>20.5%</td>
<td>18.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Materials</td>
<td>20.5%</td>
<td>18.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Technology</td>
<td>61.3%</td>
<td>28.3%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>6.7%</td>
<td>26.3%</td>
<td>-19.5%</td>
</tr>
<tr>
<td>Utilities</td>
<td>5.9%</td>
<td>9.1%</td>
<td>-3.2%</td>
</tr>
</tbody>
</table>

Standard & Poors’ carved Real Estate out of the financial sector in September 2016. For this report, Real Estate was added back to Financials.
Bonds and Cash

The portfolio began the year May 2016 with 5.0% allocated to cash (to fund scholarships), 77.0% allocated to equities, and 17.0% allocated to bonds (Vanguard High Yield Corporate and Intermediate-Term Investment Grade Bond funds). The bond investment gained 7.5% over the year. After the proposed trades, the portfolio will hold less than 1.0% in cash and will generate $40,000 in scholarships – an all-time high contribution for the portfolio.
Portfolio Design

The Crummer SunTrust Portfolio Investment Policy Statement (IPS) provides guidelines for a wide range of alternatives for tactical and strategic allocation decisions (refer to page 72 for a copy of the IPS). Strategically, we allocated funds among asset classes to reflect our economic outlook for a strong market over the next year. The management team looked at the past performance and volatility of each asset class 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. After designing the portfolio, we conducted a mean-variance optimization to compare our recommendation to an optimal portfolio (the portfolio with the smallest risk for a desired level of expected return). Our portfolio, while not mathematically optimal, is reasonably efficient (refer to page 77 for more discussion of mean-variance optimization).

The charts included in this section show the proposed strategic and tactical allocations compared to last year’s portfolio. Our overall allocation recommendation for 2017 is 82.4% equity (54% equity, 29% ETFs), 15% bonds, and 2.6% cash. This year, we assigned 35% of the equity allocation to S&P Sector ETF, shown separately in the chart on the following page.

Strategic Allocation

The proposed equity asset allocation is tilted towards large cap stocks and fairly equally allocated between growth, core, and value stocks of all capitalization. The addition of each sector ETF further contributes to balanced diversification. This approach is consistent with our expectation of volatility in the stock market which we expect to show overall positive movement over the course of the coming year. We also look for portfolio growth through dividend income, which is most often found in large cap stock. We also believe larger well-established companies...
are better able to weather market uncertainty and benefit in an upward cycle, consistent with our optimistic economic outlook. The percentages shown are those of the total equity allocation rather than the total portfolio.

When comparing the proposed allocations between last year, 2016, and the upcoming 2017 proposals the notable difference is in the significantly greater ETF allocation. This year’s proposed equity allocation also includes the addition of Small Core and Large Core. These equity style categories were determined by the ratings designated by Morningstar.

Comparison between Proposed Equity Allocations
2016 vs. 2017
Tactical Allocation

On a tactical level, we predict a period of moderate economic growth, low unemployment and low but rising interest rates in the near-term. Consequently, we have over-weighted those S&P sectors that have typically done well in a strong economy (technology and energy) as well as adding weight to those sectors that are poised for growth in an expanding economy (healthcare, financial, materials, and industrials).

Our lowered allocation to fixed income has a tactical component in that we propose trades out of the low end of the yield curve, which we believe may benefit from interest rate rises at the low end. We plan to allocate 80% to investment-grade bonds and 20% to short-term bank loans. This will assist the portfolio in reacting to the two expected interest rate hikes in 2017.

The following chart displays our sector allocations, which we believe is the best portfolio design to ensure growth in returns throughout the next year. 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 (energy, healthcare, technology, financial). The sectors that we have chosen to underweight were those that did not show indication of strong growth according to the expected economic cycle. The degree to which we underweighted these sectors was based on our confidence in their performance. We believe certain sectors (consumer staples, materials, industrials) are positioned for a late stage recovery, which is why we have chosen to increase their weight from the previous year but still maintain their underweight status.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Portfolio Weight</th>
<th>S&amp;P 500 Weight</th>
<th>Tilt</th>
<th>Degree of Tilt vs. S&amp;P 500</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>11.3%</td>
<td>12.3%</td>
<td>Underweight</td>
<td>92%</td>
<td>Sector has run its course</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>8.8%</td>
<td>9.4%</td>
<td>Underweight</td>
<td>94%</td>
<td>Late stage recovery</td>
</tr>
<tr>
<td>Energy</td>
<td>7.3%</td>
<td>6.6%</td>
<td>Overweight</td>
<td>112%</td>
<td>Poised for growth</td>
</tr>
<tr>
<td>Financials</td>
<td>15.8%</td>
<td>14.4%</td>
<td>Overweight</td>
<td>109%</td>
<td>Rising rates with room to run</td>
</tr>
<tr>
<td>Health Care</td>
<td>15.4%</td>
<td>14.0%</td>
<td>Overweight</td>
<td>110%</td>
<td>Uncertainty is opportunity</td>
</tr>
<tr>
<td>Industrials</td>
<td>9.3%</td>
<td>10.1%</td>
<td>Underweight</td>
<td>94%</td>
<td>Late stage recovery</td>
</tr>
<tr>
<td>Technology</td>
<td>24.2%</td>
<td>21.9%</td>
<td>Overweight</td>
<td>110%</td>
<td>Drives world economy</td>
</tr>
<tr>
<td>Materials</td>
<td>2.6%</td>
<td>2.8%</td>
<td>Underweight</td>
<td>93%</td>
<td>Late stage recovery</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.7%</td>
<td>2.8%</td>
<td>Underweight</td>
<td>26%</td>
<td>Difficult equity position</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>2.2%</td>
<td>2.4%</td>
<td>Underweight</td>
<td>90%</td>
<td>Competition</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.7%</td>
<td>3.1%</td>
<td>Underweight</td>
<td>85%</td>
<td>Rising rates</td>
</tr>
</tbody>
</table>

We are confident that our proposed allocations will position the portfolio to maximize returns in a time of market uncertainty and an improving overall strong economy.
Sector Analysis
Consumer Discretionary

Introduction
The Consumer Discretionary Sector includes the following 12 industries: Auto Components, Automobiles, Household Durables, Leisure Products, Textiles, Apparel & Luxury Goods, Hotels, Restaurants & Leisure, Diversified Consumer Services, Media, Distributors, Internet & Direct Marketing Retail, Multiline Retail, and Specialty Retail. This sector consists of goods and services seen as non-essential by consumers, but are desired if consumers have sufficient disposable income to spend.

Consequently, this sector comprises the industries that tend to be the most sensitive to economic situations, and it is challenged by the demographic shifts.

Macroeconomic Environment
We believe that the economy is entering into the late phase of the recovery cycle after the Great Recession. It is evident by Federal Reserve’s interest rate hikes in the recent two consecutive quarters, with expected increases of at least another 25 basis points over the next couple of quarters. The Consumer Discretionary Sector tends to outperform the market in the early phase of the recovery cycle, and slows down in the later phase when the economy gets tightened up and consumers are inclined to spend less on discretionary purchases, which would hurt the performance of the sector.

The economy recovery has lowered the unemployment rate and brought back the wage growth. Additionally, the housing market is also improving. However, partially due to the historically low rates for a relatively long period of time post the Great Recession, the Federal Reserve’s move to raise interest rates are projected to be somewhat aggressive. As a result, consumer confidence might be hurt, which would also negatively impact this sector.

Demographic Shifts
According to U.S. Census Bureau’s estimates released on June 25, 2015, Millennials reached the number of 83.1 million, representing more than one quarter of US population and exceeding that of 75.4 million Baby Boomers. In the meantime, millennials are overall more diverse than the generations that preceded them, with 44.2 percent being part of a minority race or ethnic group. With most Millennials entering their purchasing power ages, due to their unique purchasing habits and technology innovations, online and mobile shopping are spreading out widely, leading to decreased brick-and-mortar traffic, as well as price transparency and profit-margin pressure. Moreover, Millennials tend to hold less disposable income in comparison to their earlier generations, and are less likely to make major purchases for discretionary needs.

In addition, the U.S. Census Bureau also released data showing that the 65-and-older population grew from 44.7 million in 2013 to 46.2 million in 2014. With more population enjoys their retirement, however, there is a growing number of retiring people choose to rely on financial advisory rather than traditional company and government benefits such as 401-k plans, pension funds, or social security benefits. As a result, it is less likely that the retirement population would be expected to experience a growth of disposable income in the near future.

Conclusion and Recommendation
In conclusion, we believe the Consumer Discretionary Sector will slow down due to the late phase of economy recovery, and the shifting of demographics. Therefore, we are underweighting the Consumer Discretionary Sector.
The Home Depot, Inc. (HD)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Valuation</th>
<th>Last Price</th>
<th>Adjusted P/E</th>
<th>Style</th>
<th>Dividend Yield</th>
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<tr>
<td>SELL</td>
<td>$84.29</td>
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<td>22.69</td>
<td>Large Growth</td>
<td>2.43%</td>
</tr>
</tbody>
</table>

Introduction

The Home Depot, Inc. (Home Depot) was founded on June 29, 1978 and is headquartered at Atlanta, GA. Home Depot is a home improvement retailer that sells building materials and home improvement products. It operates The Home Depot stores, which provides full-service, warehouse-style stores that sells a wide assortment of building materials, home improvement products and lawn and garden products and provide a number of services. Home Depot also offers national installation services through pre-screened independent contractors for products ranging from floors to roofs, windows to water heaters, and kitchen cabinets to vinyl siding. Its retail stores also offer professional customers, including repair and remodel contractors, special services and support to make them more successful on the job site.

Fundamental Analysis

Home Depot reported $94,595 million in revenue in FY 2016, a 6.86% increase from $88,519 million in FY 2015, which remains fairly steady compared to the 6.42% increase from FY 2014 to FY 2015. Additionally, the latest quarterly reported revenue is $22,207 million, which drops to a 5.85% increase from $20,980 million in the same quarter last fiscal year.

Historically in the past 10 years, Home Depot's sales are highly correlated to Building Permits (0.88), Consumer Confidence Index (0.90) and House Price Index (0.85). As a result, we use these three indices as Home Depot's major short-term growth drivers. Over the course of next 5 years, our multi-factor regression analysis returns a result of 4.80% for Home Depot's short-term growth rate. However, with the interest rate hikes by the Federal Reserve in the past quarters, as well as very likely in the foreseeing quarters, the demand of housing will most likely to fall, which will negatively impact Home Depot's performance.

Home Depot has been constantly involved with share repurchase program. Home Depot just announced a new share repurchase program with a $15 billion authorization beginning from the first quarter of FY 2017. The share repurchase program would dramatically influence the shareholder's returns and has been taken into consideration for our valuation.

Financial Statement Analysis

Home Depot's operating income in FY 2016 is $13,427 million, a 14.04% increase compared to $11,774 million in FY 2015, remaining steady from the 12.47% increase from FY 2014 to FY 2015. Moreover, Home Depot's net income in FY 2016 is $7,957 million, a 13.53% growth from $7,099 million in FY 2015, which is increasing in comparison to the 10.46% from FY 2014 to FY 2015. In summary, Home Depot is experiencing a higher growth in terms of earnings in FY 2016 than previous years, despite the slowing down pace of sales.

The industry average P/E ratio is 24.00, while Home Depot's current P/E ratio is 22.69, which is fairly close to the industry average.

Conclusion & Recommendation

With our growth forecasts, our discounted cash flow model estimates that Home Depot is currently overvalued by approximately 80%. Thus we recommend selling Home Depot from our portfolio.
Nike, Inc. (NIKE)

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<td>$55.04</td>
<td>22.93</td>
<td>Large Growth</td>
<td>1.31%</td>
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</tbody>
</table>

Introduction

Nike, Inc. was founded in 1964 and is headquartered in Beaverton, OR. Nike engages in the design, development, and worldwide marketing and selling of sports and lifestyle footwear, apparel, equipment, accessories and services. NIKE is the largest seller of athletic footwear and apparel in the world. Its reportable operating segments for the NIKE Brand are: North America, Western Europe, Central & Eastern Europe, Greater China, Japan, and Emerging Markets. NIKE's wholly-owned subsidiaries include Converse Inc., Hurley International LLC, and NIKE IHM, Inc.

Fundamental Analysis

NIKE reported $32,376 million in revenue in FY 2016, a 5.8% increase from $30,601 million in FY 2015, which accounts for the 6th consecutive fiscal year of sales growth since FY 2010.

Historically in the past 10 years, NIKE's sales are highly correlated (0.99) to the Consumer Price Index for all Urban Consumers (CPI-U). As a result, we use CPI-U as Nike's major short-term growth driver. Over the course of next 5 years, the CPI-U is projected to grow around 2.3%, and our regression analysis returns a result of 7.21% for NIKE's short-term growth rate in the next 5 years.

In longer term, NIKE's consistent strengths in product lines diversification, core technology and patents especially in footwear industry, and economies of scales because of its global operations, are expected to lead to a continued growth.

NIKE has been constantly involved with share repurchase programs. Currently, NIKE is under a 4-year, $12 billion program beginning from the fourth quarter of FY 2016. The share repurchase program would dramatically influence the shareholder's returns and has been taken into consideration for our valuation.

Financial Statement Analysis

NIKE's operating income in FY 2016 was $4,502 million, a 7.83% increase compared to $4,175 million in FY 2015, slowing down from the 13.45% increase from FY 2014 to FY 2015. Moreover, NIKE's net income in FY 2016 was $3,760 million, a 14.88% growth from $3,273 million in FY 2015, also a cut-off from the 21.54% from FY 2014 to FY 2015. Although NIKE is still experiencing a better-than-industry growth in FY 2016, it seems that it was less promising from FY 2015's standing point. However, since Nike's fiscal year ends in May 31st each year, the most recent data has demonstrated a different pattern.

Latest reporting in the third quarter of FY 2017, NIKE hit $1,254 million and $1,141 million in operating income and net income, which contributes to respective increases of 11.67% and 20.11% in comparison to the third quarter of FY 2016. This more up-to-date optimistic trend is supportive of NIKE's growth potential.

The industry average P/E ratio is 22.50, while NIKE's current P/E ratio is 22.93, which is slightly higher (less than 2%) than the industry average, but it is fairly close to the extent.

Conclusion & Recommendation

With our growth forecasts, our discounted cash flow model estimates that NIKE is currently undervalued by approximately 20%. Thus we recommend our position be held for at least another year.
Thor Industries, Inc. (THO)

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<th>Style</th>
<th>Dividend Yield</th>
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<tr>
<td>HOLD</td>
<td>$100.37</td>
<td>$92.46</td>
<td>16.00</td>
<td>Small Core</td>
<td>1.43%</td>
</tr>
</tbody>
</table>

Introduction

Thor Industries, Inc. (Thor) was founded in 1980 and is headquartered in Elkhart, IN. Thor engages in the manufacture and sale of recreational vehicles (“RVs”) in the United States and Canada. It operates through two reportable segments: Towable RVs and Motorized RVs. The former segment includes operating entities such as Airstream, Heartland, Jayco, Keystone and KZ. The latter segment comprises of operating entities such as Airstream, Jayco, and Thor Motor Coach. Another segment, consists of operations of Postle subsidiary.

Fundamental Analysis

Thor reported $4,582 million in revenue in FY 2016, a 14.35% increase from $4,007 million in FY 2015, which remains relatively steady compared to the 13.67% increase from FY 2014 to FY 2015. Additionally, latest reported revenue in the second quarter of FY 2017 is $1,589 million, which yields an incredible 62.97% increase from $975 million in the second quarter of FY 2016.

Historically in the past 10 years, Thor's sales are highly correlated to the Consumer Price Index for all Urban Consumers (CPI-U, 0.77) as well as the Consumer Confidence Index (CCI, 0.77). As a result, we use these two indices as Thor's major short-term growth drivers. Over the course of next 5 years, both CPI-U and CCI are projected to steadily grow around 2%, and our multi-factor regression analysis returns a result of 29.22% for Thor's short-term growth rate in the next 5 years.

In addition, Thor has been consistently involved with acquisitions of its competitors in the last few years, and so far, all acquisitions have been working fairly well for Thor. The newly added brands have not only provided diversification for Thor, the marketing efforts have also been reduced as a result of less fierce competitions.

Financial Statement Analysis

Thor’s operating income in FY 2016 is $392 million, an amazingly 34.71% increase compared to $291 million in FY 2015, a bit over twice as much compared to the 16.87% increase from FY 2014 to FY 2015. In addition, Thor's net income in FY 2016 is $257 million, a 29.15% growth from $199 million in FY 2015, almost three times leap from the 11.17% from FY 2014 to FY 2015. As the market leader, Thor is experiencing a rapid growth in FY 2016. Moreover, since Thor's fiscal year ends on July 31 each year, the most recent data has demonstrated an even more promising pattern.

Latest reporting in the second quarter of FY 2017, Thor has hit $99 million and $65 million in operating income and net income; which contributes to respectively a 30.26% (from $76 million) and a 44.44% (from $45 million) increase in comparison with the same quarter of FY 2016. This most up-to-date trend is really impressive.

The industry average P/E ratio is 20.50, while Thor's current P/E ratio is 16.00, which is well below the industry average and clearly indicates an undervalue position.

Conclusion & Recommendation

With our growth forecasts, our discounted cash flow model estimates that Thor is currently undervalued by approximately 10%. Thus we recommend our position be held for at least another year.
Consumer Staples

Overview
The Consumer Staples sector includes manufacturers and distributors of food, beverages, and tobacco, and producers of household goods and personal products. Consumer Staples are considered a defensive sector because these industries are less sensitive to economic cycles. Moreover, this sector provides a decent 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 2017, the S&P 500 Consumer Staples Index was up 3.5% over a one-year period, compared to a 4.4% rise of the overall S&P 500 Index.

Outlook
Although we expect a satisfactory increase in GDP 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. The sector also appears to be generally overvalued at this time and investments are trading at expensive prices.

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.

Changing consumer preferences are extremely influential for companies in the Consumer Staples sector. In the United States, consumers have been increasingly favoring more natural, organic food choices. Shoppers are moving away from processed foods, which could hurt producers and retailers of packaged-foods, while demand for healthier options is growing.

Emerging markets may present opportunities for faster growth than can be achieved domestically, particularly as disposable income levels are increasing abroad. However, a strengthening US dollar could make such efforts relatively futile.
The Kroger Co. (KR)

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<tr>
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<td>$33.89</td>
<td>$29.50</td>
<td>13.1</td>
<td>Large Core</td>
<td>1.63%</td>
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</table>

Kroger has also been able to successfully snag store traffic away from Whole Foods, particularly with its expanded offerings of organic and natural foods. Many analysts suggest that such attrition is difficult to reverse, which is a great thing for Kroger.

To remain competitive in the face of threats from e-commerce options like Amazon’s Prime Pantry, Kroger has initiated an online ordering platform.

Financial Statement Analysis

Over the past decade, Kroger has paid increasing dividends to its shareholders at an impressive compounded growth rate of about 12% annually during this timeframe. Since 2000, the company has repurchased a generous $12.9 billion in shares. Last month, Kroger announced that its board approved another $500 million increase to its share repurchase program as it did in 2015 and 2016.

As of the latest fiscal year ending January 2017, the company’s income statement showed a decline in net income and earnings per share compared to the year prior. The company has also taken on more debt in the past two years, albeit to fund acquisition activity.

Conclusion & Recommendation

Although the fundamental outlook appears to be neutral across the sector, Kroger should be able to sustain its history of solid earnings growth in the long run, particularly as the company recognizes synergies and expands diversification from its recent string of acquisitions. Food deflation seems to be the major factor impeding profitable growth and subsequently driving down the stock price. However, this movement is likely to be temporary and should revert back to normal operating conditions as inflation swings upward in the year ahead. We recommend holding our position for at least another year.
PepsiCo, Inc. (PEP)

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<td>HOLD</td>
<td>$113.51</td>
<td>$111.58</td>
<td>21.7</td>
<td>Large Growth</td>
<td>2.69%</td>
</tr>
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</table>

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

With waning demand for traditional soda drinks and growth in the carbonated beverage industry expected to head in a negative direction, PepsiCo should be able to rely more on its diversification into snack items. Sales from Frito-Lay North America provide about half of Pepsi’s operating profit. Health-conscious trends may threaten the industry for packaged foods, but Pepsi management appears to be well aware of this and has acted accordingly by adapting its product mix. For instance, PepsiCo recently acquired KeVita, a probiotic drink company based in California.

In February 15, 2017, PepsiCo announced a 7.0% increase in its annualized dividend. It also has a generous share repurchase program, with plans to return approximately $2 billion back to shareholders this year alone.

Financial Statement Analysis

PepsiCo’s income and balance sheet statements reflect extraordinarily solid financial health and extremely low downside risk. The company maintained positive net margins and consistent free cash flow yields throughout the Great Recession. In the last five years, PepsiCo has averaged a payout ratio of about 60%.

Conclusion & Recommendation

The near-term future for PepsiCo is likely to be unexciting. Even though our discounted cash flow model indicates that the stock is trading close to its fair value, we suggest a hold. We see PepsiCo as being a resilient, long-term investment position that is hard to walk away from, particularly in the absence of more attractive alternatives currently available in the market.
Tyson Foods Inc. (TSN)

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<td>$62.62</td>
<td>13.2</td>
<td>Large Core</td>
<td>1.46%</td>
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</table>

Introduction

Tyson Foods, Inc. is a multinational food production company headquartered in Springdale, AR. Tyson is one of the world's largest suppliers of beef, chicken, pork, and prepared foods. The company is also the parent of several subsidiary brands, including Jimmy Dean, Sara Lee, Hillshire Farm, and Aidells.

Fundamental Analysis

Tyson is a dominate player in the industry for meat, beef, and poultry, and has a significant market share. The business is largely at the mercy of underlying commodity prices, but Tyson hedges against these fluctuations using derivatives. While domestic meat consumption habits are expected to remain stagnant, there are opportunities in emerging markets. Tyson's international scale could put the company at an advantage to achieve growth abroad, but a great deal of uncertainty remains around trade conditions in the wake of the new Trump administration. At the same time, optimistic forecasts for consumer confidence and disposable income levels are good news for the company.

Since 1977, Tyson has paid uninterrupted quarterly dividends every quarter. Management has stated that the company intends to increase dividends by at least $0.10 per share annually.

Last October, headlines revealed that Tyson is subject to a federal investigation concerning price fixing, which could be a major problem as the probe continues to unfold. To add to these troubles, Tyson has also been subject to public allegations concerning poor treatment of its employees and inhumane working conditions at its poultry plants. In mid-March, a second case of avian flu this year was reported at a Tyson-contracted chicken farm.

According to Tyson’s most recent annual report, its top customer Wal-Mart accounted for 17.5% of consolidated sales in the 2016 fiscal year. We see this as a negative factor, particularly for a company that already lacks much product differentiation among its offerings.

Financial Statement Analysis

During the past five years, Tyson has consistently reduced its COGS relative to sales and posted strong EPS growth over this same period. Income statements reflect very low net margins, averaging less than 3% over the last five fiscal years. This is not atypical for the industry, and by managing costs, Tyson has been able to convert its sales into consistent profits. The purchase of Hillshire Brands in 2014 was the likely cause of a boost to Tyson's free cash flows, as prepared foods have wider margins.

Conclusion & Recommendation

Despite Tyson's financial disciple and appealing dividend hikes, we recommend a sell. The ongoing internal issues that company is facing can easily erode expected synergies from the Hillshire acquisitions. Our quantitative analysis also indicates that TSN stock is already trading around its fair value price.
2017 Outlook
Our outlook for the oil and gas equipment and services sub-industry for the next 12 months is positive. As of April 4, oil was trading at $50.24 per barrel. The U.S. Energy Information Administration projects crude oil to be $53.49 by the end of 2017 and $56.18 by the end of 2018. This rise in price will help the overall sector as rig count and production increases from 2016 cutbacks. Through April 4, the S&P Composite 1500 Oil & Gas Equipment and Services was down 6.59% year to date, while the S&P Composite 1500 Index was up 5.54%. Look for Energy to outpace the S&P 1500 by the end of 2017 as prices rise and inventory decreases.

OPEC Cuts and Inventory
OPEC announced in late 2016 that it would cut oil productions to support current oil prices. U.S. oil inventories are higher than expected but should decrease as the OPEC oil cuts catch up to the market and demand picks ups as companies come back online from winter shutdowns. As inventory decreases, the industry should rebound to a profitable year in 2017. There are concerns that the North America might be able to produce so much that the OPEC cuts might not be enough to bring the price up as much as the industry expects. Shale oil producers will be able to remain profitable while producing low cost oil as long as prices stay around $50 per barrel.

Focus on Productivity
During 2016, many oil & gas companies cut back on production and focused on only producing oil that was from their most productive wells and higher margin oil production. This strategy will help companies lower their cost of goods sold. Companies that successfully cut operating costs to be profitable in 2015 and 2016 should be well equipped if oil prices drop again. As technology improves well, productivity should increase also.

Long-Term Growth
Exxon Mobile expects global energy demand to increase by 25%, natural gas to increase by 45% and renewable energies (wind, solar, biofuels) to increases by 200% worldwide by 2040. The United States projects to transform from a net energy importer to a net energy exporter by 2026. Emerging markets will continue to develop and increase demand for energy. These trends should help long-term growth for North American oil companies.
Canadian Natural Resources Limited (CNQ)

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<tr>
<td>BUY</td>
<td>$37.65</td>
<td>$33.26</td>
<td>N.A.</td>
<td>International</td>
<td>2.5%</td>
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**Introduction**

Canadian Natural Resources Limited 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. Its Horizon Oil Sands Mining and Upgrading project will begin the last phase in early 2017.

**Fundamental Analysis**

Canadian Natural Resources produces 82% crude oil and 18% natural gas. CNQ announced at the end of 2016 that they expect oil productions to increase by 6% in 2017. In March, Canadian Natural Resources announced the acquisition of the Athabasca Oil Sands Project, which includes Shell and Marathon Oil’s 70% share of the project for $12.7 billion. The book value of the assets were approximately $20 billion, meaning the acquisition was at a 40% discount, will add 17% to 2018’s cash flow and is a strong strategic fit for the company. This should allow CNQ to continue to reduce their costs for producing oil sands. The acquisition should complement the Horizon Oil Sands project as it begins Phase 3 that will add another 80,000 barrels a day to production by the end of 2017. This should help continue the reduction in operating costs. CNQ has been able to achieve a record low cost of $22.53 per barrel and is hoping to get below $22.50 by the end of the year.

**Financial Statement Analysis**

Canadian Natural Resources' sales continued to fall from $9.6 billion in 2015 to $7.9 billion in 2016. The decrease in sales was a result of the low oil prices. Even with sales decreasing, the company was able to increase their dividend to $0.207 per share for the quarter ($0.828 per year) up 11% from last year. CNQ is one of the few companies that has been able to increase dividends each year for oil during the current down turn. The dividend increase comes from the company cutting operating costs by 15% from 2015. The company also used much of the $990 million in cash flow in the last quarter of 2016 to pay off the company’s debt position to help free them up for high growth over the next few years.

**Conclusion & Recommendation**

We recommend buying Canadian Natural Resources Limited. When oil prices dropped in 2015 and 2016, the company was able to make large budget cuts to get their operating costs low enough to be profitable if oil stayed at $30 per barrel. Canadian Natural Resources stock price has a strong correlation (0.72) with crude oil prices. Now that oil prices are projected to increase to $56.18 by 2018, CNQ’s cash flow should increase rapidly to allow them to pay even more dividends. Coupled with the increase in production and completion of large projects and acquisitions, Canadian Natural Resources should be in a prime position to rally as the oil industry recovers from a tough past few years. The consistent dividend growth should help provide steady cash flows that aligns with the mission of the portfolio. Finally, we found this company should be valued at $37.65 making it undervalued at its current price of $33.26.
Introduction

Global X MLP & Energy Infrastructure ETF is a fund that tracks an index of Master Limited Partnerships (MLP) and companies that participate in energy infrastructure. This fund is a passive fund and is the second year this portfolio has held this fund. MLP funds are attractive to investors because of their high yields.

Fundamental Analysis

This ETF’s seeks to replicate the performance of its underlying index, Solactive MLP Infrastructure Index. The fund will have at least 80% invested in similar assets to the underlying index. The companies this ETF is tracking are companies that engage in moving, storing and processing natural resources. To qualify as a MLP this fund must receive 90% of its income from interest, dividends and other operations in the oil and gas industry like pipelines, processing natural gas and oil products. Global X MLP & Energy Infrastructure ETF’s sector breaks down into: Oil & Gas Related Equipment and Services 86.45% (BM 85.39%), Oil & Gas 6.85% (BM 13.62%), Natural Gas Utilities 6.71% (BM 0%). The ETF’s geographic exposure is 74.36% in the United States, 25.27% in Canada and 0.10% in cash. This ETF’s expense ratio of 0.45% is significantly lower than the category average of 0.96%. Global X MLP & Energy Infrastructure ETF’s returns over the last three years have been on par with its underlying fund and has beaten the category benchmark Alerian MLP Index.

Conclusion & Recommendation

We recommend buying Global X MLP & Energy Infrastructure ETF. The ETF has performed near their underlying index with high dividend yield returns and low expenses for the category. The current US administration has expressed interest in expanding pipelines that will help funds like these grow revenues to be able to pay more dividends. This fund is not immune to oil prices, if oil prices get too low and production drops, the companies managing the pipelines have less oil to move. This fund will continue to complement the energy portfolio for years to come with consistent dividend payments that will support the energy sector. This consistency will be a benefit to the portfolio as it complements its mission to provide a stream of cash flows to fund scholarships. Finally, we have found this fund should be valued at $20.46 making it undervalued at its current price of $14.78.
# PBF Energy Inc. (PBF)

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<tr>
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<td>$21.93</td>
<td>12.60</td>
<td>Small Core</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Introduction

PBF Energy Inc. is an independent petroleum refiner and supplier of unbranded transportation fuels, heating oil, petrochemical feedstocks, lubricants and other petroleum products. The company was founded in 2008 and is headquartered in Parsippany, New Jersey.

Fundamental Analysis

PBF has recently completed the acquisition of the Torrance refinery from ExxonMobil in July of 2016. They are rumored to be pursing the Royal Dutch Shell's Martinez, California refinery. The Torrance refinery has had its struggles while PBF spends to make improvements. Their plants across the country have lagged behind the competition in efficiency, they are known for buying distressed assets at a discount and investing heavily to make improvements. PBF expects capital spending to increase to update their refineries gambling on long-term success. Their long-term debt has increased from $1,840.4 million in 2015 to $2,108.6 in 2016. Expect PBF to spend much of their additional cash flow for the next few years on paying off debt and not increased dividends.

Financial Statement Analysis

They were able to increase their sales by 21.31% last year. PBF’s debt to equity climbed from 54.39% to 67.25% and their dividend payout ratio dropped as well from 72.73% to 68.97%. Expect the dividend payout ratio to continue to drop and dividends to stay stagnate at $1.20 over the next three years as they work to pay off long term debts. They have consistently paid a dividend of $1.20 and have the resources to continue to pay this dividend while they gain control of their balance sheet.

Conclusion & Recommendation

We recommend selling this stock. PBF Energy should be successful as oil prices tick up over the next few years, providing them with higher free cash flows. The lack of dividend growth over the next few years makes this stock unattractive to the portfolio. The stock is currently trading at $21.93 per share. Using our models, this stock is valued at $23.14, meaning it is undervalued by 5.5%. The threshold for the portfolio to recommend a hold is 10%.
Enbridge Inc. (ENB)

**Recommendation**
BUY

**Valuation**
$56.33

**Last Price**
$41.67

**Adjusted P/E**
17.50

**Style**
Large Growth

**Dividend Yield**
4.2%

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**Introduction**

Enbridge Inc., headquartered in Calgary, is one of the world’s largest crude oil and liquid transportation companies. They specialize in liquid pipelines, gas distribution, gas pipeline processing, and energy services. Most of their revenues come from long-term gas pipeline deals that help create a consistent revenue flow immune to oil price volatility. They completed the acquisition of Spectra Energy on February 27, 2017. Industry regulations and the size of the new company will take years and billions of dollars for the competition to catch up with their infrastructure.

**Fundamental Analysis**

The acquisition of Spectra Energy significantly increased the size of Enbridge and improved the balance sheet to better distribute assets between oil and gas production. Enbridge has also made a push to be a leader in wind energy. In February 2017, the company acquired a 50% interest in the 497-MW Hohe See Offshore Wind Project for $1.7 billion. This is the largest wind project in Europe and Enbridge expects to receive long-term fixed pricing for years to come as this and their other European wind projects come on line. They also acquired a 27.6% stake in the Bakken Pipeline System for $1.5 billion. This project connects North Dakota to the Gulf Coast for 1,172 miles. The system will move 470,000 barrels per day. Enbridge targeted these assets as part of their strategy to produce energy with long-term deals to help create a steady cash flow for the company.

**Financial Statement Analysis**

Enbridge’s sales dropped 4.78% from $27,416 million in 2015 to $26,106 million in 2016, but were able to cut their cost of goods sold by 2.58% relative to sales during the same period. The company was able to increase their dividend from $1.45 in 2015 to $1.60 in 2016. They announced on February 13, 2017 that they would pay a quarterly dividend of $0.447, creating a projected annual dividend of $1.78. This falls in line with Enbridge’s plan to have at least 10% dividend growth from 2017 to 2024.

**Conclusion & Recommendation**

We recommend buying Enbridge Inc. The recent acquisition of Spectra Energy has grown the company to be significantly larger than the competition to be able to have an advantage with economies of scale when controlling costs. Enbridge’s long-term contracts on pipelines have created a steady stream of cash flows to pay handsome dividends to investors each year. Their ability to be steady in a volatile industry makes them a perfect candidate for this portfolio. They are heavily investing in wind power to be a large competitor in renewable energy.

Renewable energies are expected to grow by 200% by 2040 and should provide a consistent revenue stream for Enbridge. The dividend yield of 4.2% exceeds the industry average of 2.5%. Finally, we found this company should be valued at $56.33 making it undervalued at its current price of $41.67.
2017 Outlook
During the turbulence of the recent elections, many were left wondering what the future of the financial sector, and indeed the economy as a whole, would be. Since taking office in January, President Trump has worked toward creating a friendlier environment for business in an effort to stimulate economic growth. As the U.S. pulls itself out of a long recession, the economy is picking back up and interest rates are once again rising. This will foster a favorable banking climate as easy credit becomes available and the housing market recovers. The Leading Economic Index (LEI) increased by 0.6% in January and another 0.6% in February, bringing the index to its highest level in a decade, buoyed by increases in building permits and the interest rate spread. New home starts in February also rose by 3.0%, coming from single-family starts, an indication that people finally feel safe investing in real estate once again after a long period of distrust of fiscal frugality.

Interest Rates
Already this year, we have seen one interest rate hike of one quarter point, with another two projected hikes. These 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 note investment means that more income will go straight into earnings. As the U.S. economy continues its way through the later stages of the business cycle, we predict that there will be 2 or 3 more rate hikes from the FED by the end of the year as the U.S. economy continues to grow.

Decreased Regulation
President Trump has already promised to decrease regulation on businesses in the U.S. and will likely work to repeal some of the more restrictive legislation that was levied on banks during the recession, namely Dodd-Frank, which increased federal oversight and transparency in the financial industry. With decreased regulation, banks will be able to offer easier capital and more products to consumer, which will have a positive impact on lending and, therefore, interest income. As the economy strengthens, consumers will likely have a higher tolerance for debt and will therefore be more likely to take out loans, especially as the housing market once again heats up. As consumers become more liquid and purchase more assets, they become more attractive for lenders which increases the likelihood of a significant increase in lending.
Bank of New York Mellon Corp. (BK)

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<tr>
<th>Recommendation</th>
<th>Valuation</th>
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<th>Adjusted P/E</th>
<th>Style</th>
<th>Dividend Yield</th>
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<tbody>
<tr>
<td>BUY</td>
<td>$53.26</td>
<td>$46.97</td>
<td>14.3</td>
<td>Large Core</td>
<td>1.57%</td>
</tr>
</tbody>
</table>

BNY Mellon was also able to cut total nonperforming assets by 1/3 from 2015 to 2016 as the company looks to make its operations leaner in an effort to cut costs in order to pass savings onto clients.

Financial Statement Analysis

BNY Mellon has grown total assets under management by 4% in the last 2 years and has seen a net income growth of 12.2% in the last year. 2016 was a strong year for the company, as net interest income grew by 3.7% and earnings per share increased by 16%. Margins have also been increasing for the last 5 years and this trend does not look like it will change as long as BNY Mellon continues along its current path. If margins continue to grow, or even remain consistent, then the company will have more than enough capital to allocate to future loans.

Conclusion & Recommendation

In an increasingly business-centric climate, we expect that consumers and institutions will likely look to the most trustworthy financial institutions for their business, and will possibly even pay a premium for this service. Because of the obvious benefits to the company’s image if BNY Mellon does pass on savings to clients, we predict that the business could experience significant growth in the coming years.

Along with increased customer loyalty, the favorable climate for financial institutions that is being created by the FED will prove to a real benefit for BNY Mellon.

At a 14% discount, we believe that BNY Mellon is a clear buy candidate for the portfolio.

Introduction

BNY Mellon is a holding company, engaging in 3 main segments of financial services: Investment Management, Investment Services, and Others, which includes credit servicing and leasing. It provides financial services for institutions and individuals alike.

Fundamental Analysis

BNY Mellon has seen some fantastic growth over the last 3 years. BNY Mellon’s Investment Services business grew with fees up 4% across all business lines, an indicator that the company’s main driver of operating leverage growth continues to perform very well and is likely to remain the company’s cash cow. In the 4th quarter earnings call, representatives from BNY Mellon stated that, if interest rate hikes were put into place by the FED, they would pass that benefit on to clients, which is likely to increase the consumer base as clients rush in for BNY Mellon’s service.

From a customer-facing standpoint, BNY appears to be a superior financial services provider. Given that its Financial Services segment makes up 73% of total revenue, it is imperative that BNY Mellon continues its commitment to clients, which will prove important in the near future. More specifically, if the Trump administration does roll back Obama-era legislation like Dodd-Frank, consumers will be looking for more reputable and trustworthy financial services institutions if the industry becomes less transparent.
Citigroup Inc. (C)

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<td>$59.68</td>
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<td>Large Value</td>
<td>0.89%</td>
</tr>
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</table>

Introduction

Citigroup is a bank that also specializes in banking and financial solutions. It operates in 3 main business segments: Global Consumer Banking, Institutional Clients Group, and Corporate/Other. Its Consumer Banking segment offers banking services to its clients while the Institutional Clients Group provides banking services to institutions, governments, and high-net worth individuals. Its Corporate segment deals with internal administrative functions of the bank.

Fundamental Analysis

Following its failure and subsequent bailout during the 2009 financial crisis, Citigroup has worked to shrug off the remnants of its bad business practices. Under the management of Mike Corbat, the bank has changed its internal policy on risk and lending so as not to end up in the same position as it did once before. While some have argued that the bank has actually taken a step backward because of these changes, we believe it has undergone a significant rollback in its policies and is now ready to take on more risk. In this more favorable climate of 2017, we can reasonably assume that the bank will again begin making more high-yield loans, albeit in a more responsible way than it did during the credit crisis.

The need for growth is more important now than ever for Citigroup, as stagnant growth has left them struggling behind competitors. However, there are signs that significant growth can be expected in the future, as total deposits and total assets have grown by 2.37% and 3.49%, respectively, in the past year.

What has been cause for concern for some analysts recently is Citigroup’s divestiture from its Global Consumer business, which had been a revenue driver in the past. In a conference call last month, CFO John Gerspach said that this was because the company wanted to shift from small customer banking into targeting more affluent clients with its personal banking segment. This is likely because of a fear of making small, risky loans that may prove to be the kind of losers that lead to Citigroup’s collapse in 2009. Given these fears, however, it is important to note that the company has realized its faults from the past and is working toward shifting its business to pave the way to future growth.

Financial Statement Analysis

While Citigroup has experienced losses in many of the major indicators in the past year, it is important to note that these losses are the result of the bank’s continued restructuring effort. As the bank continues to pivot, it may experience some growing pains but there is growth in the bank’s core business. We believe that sound, responsible banking will be a real asset in this coming year. While lower regulations will favor the financial industry, there is a concern that consumers may still feel the pains of the credit crisis, which could lead them to safer, more trustworthy banks.

Conclusion & Recommendation

Much like BNY Mellon, Citigroup has spent significant time and resources on changing its image to become one of the more trustworthy banks in the industry. We believe that this, coupled with its strong growth potential and fundamental business plan, will lead to long term success. Along with its commitment to responsible banking, the favorable climate for financial institutions that is being created by the FED will prove to a benefit for Citigroup, and 16% discount, we believe that Citigroup is a buy candidate for the portfolio.
Discover Financial Services (DSF)

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<td>$67.66</td>
<td>11.4</td>
<td>Large Value</td>
<td>1.76%</td>
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Because of its more disciplined, methodic approach to lending, Discover’s growth has somewhat lagged behind its largest competitors, but, much like Citigroup and BNY Mellon, this approach will serve the bank well in the long term.

Financial Statement Analysis

In the past 3 years, total deposits have grown by 12.8% and total loans have grown up by 10.6%. This kind of growth is very good for such a mature company, but we believe that there is even more growth within the bank. Net interest spread and average interest-earning assets both increase from 2015 to 2016 by 2.67% and 3.22%, respectively. If this kind of growth can be achieved in such an uncertain regulatory climate, then the incoming pro-business climate will serve the bank well.

Conclusion & Recommendation

Much like BNY Mellon and Citigroup, Discover has dedicated itself to becoming one of the more responsible banks in the industry. As more millennials look to buy homes and take out loans, the responsibility of a bank may certainly become a factor, as our generation grew up through the financial crisis and understand the need for responsible lending. Much like the other two banks, Discover has been somewhat lagging, but a more favorable regulatory environment will create a climate where more people will be looking to access credit.

At an 11% discount, we believe that Discover is a buy candidate for the portfolio.

Introduction

Discover Financial Services is a company that specializes in direct banking and payment services. Its operates in 2 main business segments: Direct Banking and Payment Services. Its Direct Banking segment offers consumer banking services and lending products, mainly its Discover-brand credit cards, to its clients. The Payment Services segment operates PULSE, Diners Club, and third party-distributed credit, debit, and pre-paid cards.

Fundamental Analysis

Discover has been growing its loans business for the past 8 years and is poised to continue this trend. Beating estimates 7 of the last 8 quarters, Discover looks to be a well-oiled machine. Discover delivered 21% ROE in 2016, up 0.6% from 2015, and experienced its largest organic loan balance growth in 15 years. With the coming deregulation, this can only get larger, and we should see loan balances once again increase this year.

Personal loan origination also experienced a significant increase from 2015 to 2016, growing by 31%. Student loans also increased by 9%, a number which looked very risky going into the 2016 election with proposed legislation to change the current student loan structure, but now these fears have been assuaged.
Introduction

JPMorgan Chase & Co. is a financial holding company that provides financial and investment banking services to both individuals and large institutional clients. It operates in four segments: Consumer and Community Banking, Corporate and Investment Bank, Commercial Banking, and Asset Management.

Fundamental Analysis

JPMorgan is a favorite among securities analysts for a number of reasons. JPMorgan Chase & Co. has built itself back up to the financial powerhouse it was before the recession. With a strong core business and a well-diversified book of business, JPMorgan touches every corner of the financial industry. With increasing optimism in the market and proposed deregulation throughout the industry, the growth prospects for the company look to be numerous and promising.

Over the past 3 years, loans are up 18.8% and up 6.86% in the last year alone. If this trend continues, then JPMorgan could experience some real short term growth across its financial statements. Because the company does a better job of growing deposits than it does loans, it has cash reserves to meet the loan demand that is likely to come this year as the economy continues to heat up.

Financial Statement Analysis

Assets under supervision have risen by just 0.16% in the last 3 years and interest income is up by 8.5% in that same time period. In fact, JPMorgan has grown almost every line item of its income statement and balance sheet, as well as a good portion of its cash flow statement. We believe, however, that these growth projections have already been built into the company’s current stock value and therefore we do not predict significant growth in stock price over the next year.

Conclusion & Recommendation

Because of the number of analysts monitoring this stock and the sheer scope of the company, that JPMorgan Chase & Co. does not have much room to grow in terms of stock price over the next year. While it is trading at a discount of 7%, it is not undervalued enough to justify keeping it in the portfolio for another year.

While long-term growth prospects do look good for the company's core business, we cannot reasonably assume anything greater than 5% growth this year. It is because of the current attention being paid the stock, therefore, that the portfolio’s position in the company should be sold.
**Wells Fargo & Co. (WFC)**

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<th>Recommendation</th>
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<tr>
<td>SELL</td>
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<td>$55.79</td>
<td>13.6</td>
<td>Large Value</td>
<td>2.75%</td>
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While Wells Fargo executives argue that customer loyalty scores have steadily improved, it could be a long time before those scores are anywhere near pre-settlement levels.

Wells Fargo’s core businesses, especially its mortgage servicing business, have been doing poorly recently. This is likely due to the fact that its Community Banking segment makes up about 55% of its revenue and is, as was previously stated, still reeling from the recent scandal.

In an effort to see some growth in the credit card business, Wells Fargo is targeting new customer bases to see if it can get some inorganic growth. By going for a larger market than just existing customers, Wells Fargo is hoping to show the market that it is a brand that can be trusted.

### Financial Statement Analysis

While Wells Fargo’s total assets under supervision grew by 3.9% from 2015 to 2016, the 4th quarter saw $89.7 billion in outflows. Although there were more inflows than outflows, these outflows are the largest in the last 3 years. While the total cost of the settlement will come out only $295 million and a refund for 2.5 million customers for fees on fake accounts, it is the bad publicity that will have the greatest impact on the bank.

### Conclusion & Recommendation

Because of its recent scandal, we do not predict any more than a short-term growth rate of 2.5% for Wells Fargo, and therefore the stock is overvalued by 0.1%. A number of factors, namely its poor mortgaging servicing business and low customer satisfaction and loyalty, have compounded to pressure the financial giant, compromising this security and making it an easy recommendation for the chopping block this year.

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**Introduction**

Wells Fargo & Co. is a bank holding company that participates in banking, insurance, investments, mortgage, and both consumer and commercial financial activities. It has 3 main segments: Community Banking, Wholesale Banking, and Wealth and Investment Management. The Community Banking and Wealth Management segments offer client-facing business to both individual customers and small business while its Wholesale Banking segment offers financial solutions and banking services to businesses.

**Fundamental Analysis**

Wells Fargo has gone through a turbulent year after its late 2016 scandal lost it both customers and market value. A recent survey from cg42 found that, although only 3% of respondents were affected, 30% were actively looking to switch to a new bank and 14% said that they have already decided to switch banks. The recent scandal was even more surprising given Wells Fargo’s limited role in the 2008 recession. Because consumers will have access to easy credit in the near future, consumer sentiment is likely going to be one of the deciding factors as people look for loans. Moreover, because of this scandal, we expect many people to take their business to other financial institutions unless Wells Fargo can offer very competitive rates.
Healthcare

Introduction
Consistent with our economic outlook of moderate to strong growth is the notion that the healthcare sector will be poised for a year of profitable returns. We are confident that the existence of uncertainty in the healthcare industry provides an opportunity to capitalize on its long-term market potential. Given the current demographic and political landscape, we have chosen to overweight this sector.

Macro Overview
A strong indicator of the sector’s future success is the solid annual growth rate of 5% to 6% that the healthcare industry has enjoyed in recent years. The forecasted spending is projected to remain consistent, growing at an average of 5.6% through year 2025. As a share of the nation's GDP, health spending accounted for 17.8%. These returns reflect the defensive nature of the healthcare sector where patients continue to consume treatment regardless of the phase of the business cycle.

Another powerful indicator that will drive demand of this industry over the next couple of years is the demographic landscape, particularly of the U.S. Baby Boomers who started turning age 65 in 2011 and are continuing to do so at a rate of almost half million per year. As of December 2015, the total amount stood at 14.7%. By 2020, this 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 older age.

The volatility of the political landscape accelerated by a new federal administration that changed power from Democrat to Republican. The Affordable Care Act (ACA) insured 17.6 million Americans since 2010, which boosted market expenditures in this sector. As the new administration is seeking a replacement for ACA, efforts have been dismissed by Congress. For this reason, we believe that this new administration will not be able to take this insurance away from them, unless is to improve it. In addition, the lower unemployment rate increases the disposable income for healthcare sector, considered a primary necessity.

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, our 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
Assessing the considerations discussed above, we are confident that the presence of deregulation in the U.S., an aging population, and economic growth will result in an optimist environment for healthcare companies over the next year. Given this optimistic outlook, we have decided to overweight the sector in order to capitalize on potential future returns.
Amgen, Inc. (AMGN)

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Introduction

Amgen, Inc. (AMGN) 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, auto-immune 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 in order to innovate with new technologies and improve current products. Investment in research and development is crucial to building a long-term sustainable organization. As recent news indicates Amgen is set to invest in Israel-based eHealth Ventures (October 25, 2016). Additionally, Amgen is buying off competitors and businesses that will complement its core mission and values, e.g. Amgen, Inc. acquires Dezima Pharma BV for $1.5B (September 16, 2015).

One of the main macro factors that affect the company’s performance is the political restrictions imposed by the FDA. Meanwhile, international markets do not require as strict of regulations as the U.S., which makes product testing easier and expands the company’s reach. These projects secure AMGN as a reliable long-term investment. As an industry leader, AMGN’s net income increased by 34.53% from 2014, which is significantly higher than sales growth (6.49%). Last year, the company experienced its largest net margin in past 10 years likely due to the decrease in operating expenses, savings from transformation and process improvement efforts, higher restructuring changes in the prior 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 27% for 2016 and 15% for 2017. Free cash flow grew from 5.5% in 2015 to $9.6 billion in 2016 driven by higher profitability. The company plans to buy back shares worth $2.5 billion-$3.5 billion in 2017. The company has a high adjusted PE ratio compared to its peers in the industry.

Conclusion & Recommendation

We find Amgen to be undervalued and recommend that the portfolio hold this stock. We consider 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 according to the current P/E; the company keeps expanding its product by innovating and through mergers and acquisitions to expand its portfolio line to compensate for patent expirations. Management cost cutting approaches is making the company attractive financially. We recommend Amgen as a hold.
Celgene Corporation (CELG)

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<td>Large Growth</td>
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Introduction

Celgene, headquartered in New Jersey, is a biopharmaceutical company focused on the discovery, development and commercialization of drugs targeting 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 is Revlimid, which is an oral immunomodulatory drug approved to treat MM, myelodysplastic syndromes (MDS) and mantle cell lymphoma (MCL). In 2016, the drug’s sales increased 20% worldwide to $7 billion and contributed almost 62.1%. For 2017, we believe this momentum will continue and expect sales in the range of $8 billion to $8.3 billion. Furthermore, Celgene is expanding 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 the one for lymphoma, 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 June 2017 and early 2018. 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 in 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 November 2016, Celgene acquired all the assets to a brain-penetrant proteasome inhibitor from Triphase Accelerator Corporation. In September 2016, Celgene acquired a privately-held biotechnology company, EngMab AG. The August 2015 Receptos acquisition added its lead candidate, ozanimod, to Celgene’s pipeline, which expects to generate annual sales between $4 and $6 billion upon approval. There are also other joint ventures and deals with companies such as Acceleron Pharma, Agios, Sutro Biopharma, OncoMed and others.

Financial Statement Analysis

The company does not pay out any dividends due to the high investments in M&As. Celgene reported fourth-quarter 2016 earnings of $1.41 per share, up from $1.02 per share in the year-ago quarter. In 2016, Celgene generated revenues of $11.3 billion, reflecting 21.3% growth. Celgene’s stock is undervalued 12%.

Conclusion & Recommendation

Celgene’s main growth driver product (Revlimid) is expected to maintain momentum. The company’s progress with its label expansion efforts and pipeline development and management M&A philosophy is looking towards long-term growth. We recommend Celgene as a buy.
Introduction

Based in Switzerland, Novartis is one of the leaders in healthcare solutions with a wide array of drugs and services. Given its broad and diverse portfolio, Novartis has a presence in the field of oncology, neuroscience, ophthalmology and generics. Following a reorganization of its portfolio in 2014, currently, Novartis has three operating segments, Pharmaceuticals, Alcon and Sandoz.

Fundamental Analysis

Novartis share price have underperformed the Large Cap Pharma industry in the last year. NVS stock price fell 5.2% in the last six months against a 1.5% decline for the industry. Alcon segment is expected to continue in the same line as the last year, not looking very promising for the company due to low sales of surgical equipment and competition faced by intraocular lens. Dominant products such as Diovan, Exforge and Oncology drugs are experiencing competition in the form of generic drugs or immune-oncology therapies not only in the EU but also in the US. Moreover, patents covering Afinitor and Gilenya will expire in the upcoming years.

In addition, Novartis have been experiencing pipeline setbacks. Afinitor failed to meet its primary objective of progression-free survival. Gilenya targets sclerosis and have not shown significant differences than competitors already established.

On the other hand, Novartis has a strong generic business, where Sandoz segment operates. Novartis recently acquired Fougera Pharmaceuticals, which is diversifying the generic and biosimilar market. The company is also planning to launch five biosimilar of major oncology and immunology biologics by 2020. Oncology portfolio is adequately performing and the company keeps making acquisitions to strengthen this segment have received approval from the FDA and EU to market Afinitor and have received encouraging pipeline progress.

Financial Statement Analysis

Pharmaceuticals division recorded sales of $8.3 billion, down 1% compared to last year. Sandoz’s sales division were $2.6 billion, up 3% compared to last year and biopharmaceuticals sales surged 28% to $277 million. Sales for the Alcon division were $1.4 billion, flat compared to the previous years. The company has strong financial statements, but have not experienced encouraging change from previous years. The P/E ratio increased from last year’s of 14.8, but is still below the industry average and the S&P. Its dividend yield has decreased compared to last year’s (3.8%), but it is still strong (3.6%). Novartis stock is valued at a price of $78 per share and with a current price of $73.82, the stock is undervalued by 5%.

Conclusion & Recommendation

Novartis management is indecisive about its strategic options for Alcon, which includes retaining business or separation via IPO. Given its dismal performance, Alcon seems to be laggard for quite some time now. The company’s shares have decline with respect of its Large Cap peers in the pharmaceutical industry. The company’s strong generic segment, oncology portfolio, and early stage approvals on its pipeline are encouraging news that make the company attractive in the long-term. However, we believe that for the next year, it will not have a significant upside. For these reasons, we recommend selling half of our Novartis shares.
Roche Holdings AG (RHHBY)

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Management is maximizing its opportunities and taking advantage of its core competencies, the company is complementing its different products and its currently, putting tremendous emphasis in immuno-oncology, with multiple candidates under development. Tecentriq became the first and only anti-PDL1 cancer immunotherapy approved by the FDA for the treatment of metastatic。

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 aware of.

Financial Statement Analysis

The stock gained 3.6% during the last 6 months, compared with a gain of 2.0% for the industry. Pharmaceuticals contributed 77.3% ($39.1 billion) to the total revenue in 2016 and diagnostics division comprised 22.3% ($11.5 billion). The company’s price as of April 6 was $32.02 a share; we believe the stock is undervalued with an intrinsic value of $37.08. The company has a strong (3.2%) dividend yield and its adjusted P/E ratio decreased 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 Kadcyla. 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 boosted sales and should continue to do so in the upcoming quarters. In addition, immuno-oncology is a key focus area for Roche and approval of Tecentriq in 2016 was a major boost 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 RHHBY and recommend holding.
Industrials

Overview
The industrials sector consist of firms that deal with the manufacture and distribution of goods and are involved in construction, aerospace, employment services, technology conglomerates engineering products and other related activities.

Since the end of the financial crisis and worldwide recession, industrial indicators have reacted positively to the improving outlook of the worldwide economy. While the employment market has seen continued improvement since the recession officially ended, measures such as labor participation rate and productivity rates continue to worry some analysts. With over 2 million manufacturing jobs left unfilled, economists look toward the education system to meet the labor needs that exist in an expanding economy.

Fundamental Analysis
After trailing the overall market in 2015, the industrials sector has outperformed in 2016 and has continued this upward trend through the start of the new year. Two overarching trends, which are dependent on economic growth, political policy, and market sentiment, we believe will have the greatest impact on the sector over the next year.

The first trend is the increased investment in infrastructure, in both the U.S. and China. This uptick in spending will likely benefit companies exposed to non-residential construction, machinery companies in particular. With the Trump Administration categorizing infrastructure investment as a priority in their budget spending plan, the headlines and media coverage surrounding the increase has already driven the overall sector up. As the saying goes a “rising tide to lift all boats” has impacted the industrials sector and is a trend that we are confident will continue throughout the next year.

The second major factor tied to the performance of the industrials sector is the emphasis on a rising budget in U.S defense spending and potential further funding on the horizon. The new administration has promised to cut funding on various government programs in order to enhance the military budget. However, while budget spending may lead to a greater influx of contracts and a more robust backlog for government contractors, they may see their margins tighten as the administration puts pressure on these military producers to cut costs on their units.

While the budget boost is small as a percentage of the total government budget, the absolute dollars are so large (nearly $530 billion in 2016) that even small incremental allocations can greatly influence the revenue of U.S. defense companies.

Conclusion and Recommendation
In a comprehensive analysis of the sector outlook, the fundamentals for the industrial sector remains positive as the economy continues to pick up steam aligning with our domestic GDP projection of moderate to ambitious growth of 1.75- 2.25 throughout the next year. We are confident that as key economic indicators continue to rise, these benefits as well as market sentiment will have a persistent positive impact on business and consumer confidence, which will provide a boost to sector performance.

We believe that, given our current position in the overall business cycle, the industrials sector should perform well as it trends with the overall positive market return over the next twelve months. While we are optimistic about the sector’s growth, we believe that the sector is positioned for a late stage recovery and will not be able to outperform the overall market. As a result, we recommend increasing the weight from the previous year but still maintaining the sector’s underweight status.
**The Boeing Co. (BA)**

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Introductions

The Boeing Co. is an aerospace company that specializes in the manufacturing of commercial jetliners as well as space, defense, and security systems. The company provides tailored products and services that range from satellites, weapons, commercial and military aircraft, and electronics. Boeing also offers a variety of systems that include defense systems, launch systems, advanced information and communication systems, as well as their performance-based logistics and training unit. Boeing Co. is organized into three distinct business units: Boeing Commercial Airplanes, Boeing Defense, Space & Security, as well as the Boeing Capital division. In 2016, the company employed over 150,000 people and gathered $94.6 Billion in revenues.

Fundamental Analysis

Boeing Co. reported $94.6 Billion in earnings in 2016, experiencing a -1.2% drop versus prior year. The Commercial Airplane Segment of the business accounted for 69% of sales in 2016. Boeing Military & Aircraft contributed to 13% of total sales, while Global Services and Support and “Other” made up 10% and 8% respectively.

The Global Services and Support sector, which launched new initiatives in November 2016 is expected to eventually capture a $2.5 Trillion market. The increase in 2016 revenue from this sector was able to offset the sales decline in the commercial airlines and aerospace and defense sectors. The growth of this sector will allow Boeing to further diversify their revenue stream and enable them to alleviate dependence on the commercial airline industry and volatile nature of government contracts.

The commercial airline industry, while expected to continue capturing growth through the upcoming year supported by growing domestic and national GDP, is adamant on increasing cost efficiency and will continue to pressure Boeing and other manufacturers to compete on price. This trend may chip away at margins unless manufacturers can further streamline operations and adapt to changing airline needs, particularly in terms of fuel efficiency standards.

Moreover, the Boeing stock price will continue to grow supported by steady growth combined with supportive market sentiment of the industrials sector and its prominent position as a government defense contractor given the current political climate.

Financial Statement Analysis

Boeing has long-term revenue growth, boasting a 6.6% CAGR over the past 5 years. While sales dipped slightly in the past year, the retention of a strong gross income and net income margin signals a strong ability from management to contain costs and ensure profitable growth in the long-term.

Conclusion & Recommendation

Our team is confident that Boeing is a hold throughout the next year because it is positioned to benefit from a reduction in corporate tax rate, potential to increase U.S. government contracts, and expected growth of the Global Services and Support sector will elevate sales. In the longer term, we expect Boeing’s diversification strategy to help it outperform its peers in this competitive industry, leading to continued growth. Even with these modest growth forecasts, our discounted cash flow model estimates the company is currently undervalued by at least 10%. We recommend holding our position for at least another year in order to capture the expected growth as supported by our economic outlook.
Lockheed Martin (LMT)

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Introduction

Lockheed Martin Corp. is involved in the process of researching, designing, developing, manufacturing, integrating, and sustaining of technology products, services, and systems. The company’s core business units include the following: Missiles & Fire Control, Aeronautics, Space Systems, and Rotary & Mission Systems. The Aeronautics segment contributes the largest percentage of the business, engages primarily in the process of developing and maintaining military aircraft, which include combat and air mobility aircraft, unmanned air vehicles and related technologies.

Fundamental Analysis

Lockheed Martin reported sales of $47.2 Billion in 2016, up a staggering 17% versus 2015. The Company maintains a robust backlog, ending the year with $96.2 Billion as well as an influx of new orders valued at $46.9 Billion.

Important aspect to consider when analyzing the equity is the proportion of Debt/Equity, which is very high compared to industry. This proportion is likely due to a decline in assets and stockholder’s equity with a slight increase in liabilities.

This holding is sensitive to political policy and market sentiment that will unfold over the next 12 months.

Recent information, to the tune of multi-billion-dollar government contracts and renewals, gives our team a positive outlook of growth as the current administration looks toward growth in military spending. However, while military spending is likely to accelerate, the contracts awarded may be more spread out than in the past as the Trump administration attempts to decimate spending on certain units. A recent example of this is the administration’s statements targeting the Navy’s F-35C and pointing to the Boeing F-18 as a potential substitute. This indicates that either Lockheed will lose out on future contracts or receive pressure to renegotiate pricing which will lead to tighter profit margins for the company.

The Lockheed stock price will continue to grow supported by steady growth combined with supportive market sentiment of the industrials sector and its prominent position as a government defense contractor given the current political climate.

Financial Statement Analysis

Lockheed boasts impressive net income growth compared to the industry; an industry that is notorious for tight margins. The company maintains strong operating margins and revenue growth while its category peers fail to equivalent numbers in recent years.

An additional consideration is the company’s adjusted P/E of 19.96 which is slightly overinflated compared to industry average of 19.61. However, it is a leader in the industry with large government contracts and a strong 5-year backlog—particularly in defense.

Conclusion & Recommendation

Our team is confident that Lockheed Martin is a buy throughout the next year given our undervaluation exceeding 10%. LMT has the potential to capture new U.S. government contracts as military spending comes to the forefront of the domestic government’s fiscal policy is positioned to benefit from positive politically charged market sentiment and. In the longer term, we believe that Lockheed Martin’s ability to contain costs, grow revenue, and increase net income growth will lead them to continue to outperform their peers.
Introduction

Snap-On Incorporated engages in the development, manufacture, and marketing activities of tools, equipment, diagnostics, repair information and systems solutions for users in the professional space. The company operates through several different business segments which include the Snap-On Tools Group, Commercial and Industrial Group, Repair Systems and Information Group, and Financial Services. Snap-On markets its brands and products on a global scale through various distribution channels in more than 130 countries. The company originated the mobile tool distribution channel in the automotive repair market. Snap-On services its customer base through the company’s franchisee, company-direct, distributor and internet channels.

Fundamental Analysis

Snap-On reported sales of $3.43 Billion in 2016, a significant increase from the reported $3.35 Billion in 2015. The increase in sales was also associated with growth in the Operating Margin, which ended the year at 19.1% and was up from the prior year at a 17.7% margin. This company has been a profitable addition to the portfolio given the increase in dividends per share over a short period. Dividend per share increased to $2.54 from $2.20. With a steady 5-yr stream of increases, we are confident that the Dividends paid out to shareholders will continue to see growth in the years to come.

Financial Statement Analysis

Snap-On has experienced impressive EBITDA growth over the past couple of years. The company has displayed an impressive cost containment ability, allowing them to garner extraordinary margin growth. While 2015 performance dipped slightly, Snap-On rebounded significantly in fiscal year 2016.

With revenue growth across all segments reflected in the financial statements, Snap-On is positioned to maintain their trend of swift sales growth and growing margins over the next few years.

An additional consideration is Snap-On’s adjusted P/E of 17.99, which is underinflated compared to industry average of 23.23. This indicates that Snap-On is a value compared to the average of industry competitors.

Conclusion & Recommendation

We believe that the Snap-On equity is undervalued because of our confidence in its ability to achieve 9% growth over the next year. This confidence is rooted in their past performance of increasing sales while containing costs.

Our team has ranked this equity as a hold versus a buy because of the risk that the company will not be able to contain costs due to rising materials costs. Snap-On is particularly vulnerable to rate increases in steel. The company also manufactures a significant amount of their products overseas and the potential of a border tax may negatively impact their bottom line. However, we choose to hold because we believe that our prediction of steady to increasing strength of the U.S. dollar will have a positive impact due to the enhanced buying power of Snap-On for their manufactured goods and operations.
Information Technology

Business Transformation
The Internet of Things (IoT) is an emerging trend that seeks to provide intelligence and Internet connectivity to consumer and industrial devices that were previously not connected. Examples include self-driving vehicles, mobile payments, wearable devices, and robotics. Many companies have begun partnering to leverage their individual capabilities to produce end to end solutions for individuals. An example of this is IBM combining its Watson business analytics with Cisco’s hyper distributed network to optimize business data. With the increased amount of connectivity and transferring of data, security has become just as popular as many of these new exciting technologies. We believe that businesses, small and large, will all need to increase the amount and type of security they have in order to combat cyber-attacks and to protect their data.

Cash Trends
Apple, Microsoft, Alphabet, Cisco Systems, and Oracle have $464 billion in cash and cash equivalents on their balance sheets. That makes up nearly one-third of all the cash held by U.S. non-financial companies. It goes without mentioning that these five companies are titans in the technology industry. This number does not include the hordes of cash that these companies are holding overseas as they wait for more conducive tax laws in the United States. We believe that tax reform proposed by the new administration will go through in the coming months, and entice many of these companies to repatriate large amounts of cash. The tech bubble of 2001 might explain why many technology companies have been sitting on so much cash, as they learned from their predecessors when it comes to managing money. In recent years, more tech companies have been paying dividends and repurchasing stock with their cash, but we believe going forward there will be a plethora of reinvestment opportunities. We expect these giant tech companies to begin to identify the newest technologies and invest internally or use their cash to acquire growing companies.

Cognitive Technology
The technology sector is beginning to produce technologies that have the ability to grow exponentially. Some of these “exponentials” are improving in power and speed and lowering production costs. Examples are artificial intelligence (AI), virtual reality (VR), speech recognition, computer vision, and other cognitive technologies. Since 2012, there have been over 100 mergers and acquisitions in the technology sector that center around cognitive technology companies. These technologies are not only improving the operation of companies, but they are also creating entirely new markets. We believe that many of these technologies will continue to develop and growth will come from more M&A activity as companies are able to identify the most promise.
Apple Inc. (AAPL)

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Introduction

Apple, Inc. designs, manufactures and markets a number of products including mobile communication and media devices, personal computers, and portable digital music players. Apple utilizes not only retail and online stores, but also wholesalers and direct sales force to sell its products worldwide. Through the use of online applications, such as the iTunes and iBook stores, the App store and Mac App store, the company sells a variety of related software, services, peripherals, networking solutions, and third-party digital content and applications. The company was founded by Steven Paul Jobs, Steve Wozniak and Ronald Gerald Wayne on April 1, 1976 and is headquartered in Cupertino, CA.

Fundamental Analysis

Apple’s 2016 fiscal year, which ended in September, was the first time since 2001 that the company reported an annual drop in sales and profits. Sales were down 8% and profits were down 14%. The iPhone, which makes up about 63% of Apple’s revenue, led this decline as sales dropped by nearly 12%. The drop off in iPhone sales was largely due to the minimal differences between the 6 and 6s. This led to fewer upgrades from current customers. Competition also increased as Samsung released its Galaxy S7 a few months after the iPhone 6s was released.

The release of the iPhone 7 and increased focus on services by Apple drives our outlook. The first fiscal quarter of 2017 saw sales at an all-time high for Apple led by a 5% increase in the iPhone and an 18% increase in services. With orders continuing to be higher for the iPhone 7 and the optimistic outlook for the iPhone 8 we expect a strong iPhone cycle over the next 12 months. On Apple’s earnings call at the beginning of this year, CEO Tim Cook was not shy about his plans for the services segment. He said, “We feel great about this momentum, and our goal is to double the size of the services business in the next four years”. These services produce the highest margins for Apple and include the App Store, Apple Music, and Apple Pay. All of these services have shown strong performance in the last year.

Financial Statement Analysis

Apple has proven to be one of the most stable and best performing companies in recent history. The company’s Gross, Net, and Free Cash Flow margins all have had less than 8% variation in the last 8 years. This highlights how well the managers are running Apple’s business and controlling costs. Apple has also increased its dividend each of the last four years, and we expect the company to continue to do so over the foreseeable future.

Conclusion & Recommendation

The ability to integrate across multiple products and create an ecosystem that is seamless to navigate for its users drives the potential for Apple’s stock. As the company continues to improve their flagship product, the iPhone, as well as develop the services it provides we believe Apple is poised to continue as a dominant player in the technology industry.

Samsung’s brand recognition has taken a hit after the exploding phones cause the company to recall many of its products. Potential tax reform could lead to repatriation of a large amount of cash that Apple is holding overseas. This could lead to higher reinvestment and possibly more dividends for shareholders.
Cadence Design Systems Inc. (CDNS)

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Introduction

Cadence Design Systems, Inc. designs and develops integrated circuits and electronic devices. It also provides maintenance and engineering services for the software, hardware and IP product offerings. The company is headquartered in San Jose, California.

Fundamental Analysis

Much of the demand for Cadence Design System’s products and services comes from the need for semiconductors and increased technology in everyday life. With the advances of IoT, technology in cars, and smart homes the need for semiconductors is expected to increase this year. This trend has already begun and is proven by Cadence’s revenues increasing each of the last seven years at an average growth rate of 11%. While worldwide semiconductor revenue saw only a 1.5% increase in 2016, Gartner’s annual outlook on the industry calls for a 7% increase in revenue due to higher selling prices and more traditional industries becoming more tech savvy.

The potential consolidation in the chip industry could pose a threat to Cadence’s business. There were 21 mergers and acquisitions in 2015 and 7 in 2016. This would point difficulty for Cadence to price its products as its customers would likely have more buying power, but over the last few years revenues and cash flow have been up for the company. With proven financial performance through the worst of the consolidation wave, management sees the company positioned well to continue growth into the future as it looks to attract new customers and renew current contracts.

Financial Statement Analysis

With a growing top line growth and improving market conditions, Cadence is presented with opportunity to be very profitable in the next few years. Operating and FCF margins have both increased steadily over the last three years, 14% and 23% growth respectively, highlighting management’s ability to control costs as more products and services are being sold.

FCFE/share has grown recently including 17% growth last year. We expect this growth to slow over the next few years as the headwinds of consolidation playout in the semiconductor industry.

Conclusion & Recommendation

Currently Cadence comprises over 9% of our total portfolio. Based on our analysis we still view the company as slightly undervalued, but would like to reduce the size of our holding in order to diversify into other areas of the technology sector.
Introduction

Cisco Systems, Inc. designs, manufactures, and sells Internet Protocol (IP) based networking products and services related to the communications and information technology industry. It provides a broad line of products for transporting data, voice, and video within buildings and across campuses. The company reported total revenue of $12.63 billion in FY2016. The firm has three geographic segments: Americas (60%), EMEA (25%), and APJC (15%). The company was founded by Sandra Lerner and Leonard Bosack on December 10, 1984 and is headquartered in San Jose, CA.

Fundamental Analysis

Cisco is the largest player in the networking space, which is the company’s largest revenue stream comprising of routers and switches. While Cisco remains the market leader, competition from smaller firms with aggressive pricing strategies has hurt revenues recently. Cisco has been able to offset this by focusing on its faster growing and higher margin segments.

The recent acquisition of AppDynamics will help the company gain traction in its wireless segment, which has the second highest margins of all Cisco segments. Cisco has begun to invest in the IoT market by partnering with IBM on multiple new projects.

Possibly Cisco’s most promising move was to increase investments in the security segment of its business. Security within the technological world is rapidly becoming the top priority as many traditional industries become more tech savvy. Cisco saw revenues in the security segment grow 14% in the recent quarter and the segment grew to the third largest in share of total revenue.

Financial Statement Analysis

Cisco has a very strong balance sheet that will serve the company well as it looks to increase growth into its smaller segments. The $71.8 billion in cash makes up nearly 56% of assets, and as the firm looks to put more capital to work they will be able to do so.

FCFE/share has grown consistently over the last 4 years, and despite a dip in revenue in the most recent quarter the company was able to maintain growth in cash flow and increase margins by focusing more on growing segments.

Conclusion & Recommendation

The company set out a restructuring plan at the beginning of last year to be completed by the end of 2017. This plan is focused on making the company more ‘lean’ in the sense that it targets growth in the higher margin products and services as it begins to move away from hardware segments. We believe that this pivot in the company’s business model is well aligned with market transformation and positions Cisco very well for years to come.

Cisco also has strong history of share buybacks and dividend increases that we view as positive signs for a relatively mature company.
Dell Technologies Inc Class V

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Introduction

Dell Technologies, Inc. develops, sells, repairs and supports computers and related products and services. The firm offers IT infrastructure services including hardware, software, cloud storage and virtual reality. The company was founded by Michael Saul Dell in 1984 and is headquartered in Round Rock, TX.

Analysis

Last year we held shares of EMC Corporation. During the year Dell, a private company, acquired a majority position in EMC and began trading tracking stock that is meant to represent the public’s interest in VMware (EMC largest division).

Due to the complications with valuing a private company, we have decided to sell our interest in these unique shares.
Materials

Overview
The Materials sector includes companies that manufacture chemicals, construction materials, glass, paper, forest products and related packaging products as well as metals, minerals and mining companies, including producers of steel. The sector is very dependent on external factors such as interest rates, employment, housing markets, weather conditions, and automobile manufacturing.

Outlook
In accordance with our economic and political outlook and the optimism surrounding the market, we anticipate the basic materials sector to perform well.

In 2016, materials were the fourth best performing S&P sector, returning 16.66%, outperforming the S&P itself.

The team views politics as one of the main factors driving the markets in 2017. Plans put forth by the current administration heavily favor the materials sector. A strong dollar sways us in favor of companies generating a majority of their revenues from the U.S.

In 2016, the mining sector, including base and precious metals, rebounded following increased demand, political uncertainty and support from government imposed tariffs. Government actions seeking to push out cheap Chinese steel imports, favored those domestic and international producers developing high quality products. This trend should continue into the following year and producers with operations based in the U.S. will benefit the most from proposed federal spending.

Outlook for the construction and housing markets in 2017 remains positive after strong Q1 housing starts and GDP data. Companies providing basic building materials, furnishings, paints and coatings to the US market should do well provided they can sidestep currency issues.

Growth in the economy brings the stock market along. Value can found be in companies that faced continued setbacks in 2016, regrouped and remain unnoticed by the market. Materials is just one example of our search for undervalued investments.
E.I. du Pont de Nemours & Co (DD)

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Introduction

DuPont is a diversified chemical company operating in more than 80 countries. Its massive portfolio includes agriculture, feed and nutrition, electronics and communication, construction and transportation, and safety and protection. The company is known for being an innovator and inventor of products such as Kevlar, Tyvek and Teflon. DuPont had 2016 revenues of 24.5 billion.

Fundamental Analysis

DuPont's advanced materials business has produced some noteworthy products over the years. The company invented products such as Lycra and Kevlar, which have wide applications in textiles and safety equipment. Teflon, which is used in nonstick cookware, and Tyvek, broadly used in construction materials, also demonstrates DuPont's successful product development and innovation. However, Du Pont's history of innovation is a poor predictor of its future. The company has drifted away from their innovative materials dominance and the agriculture business now makes up more than 40% of DuPont's operating profit following the Chemours spin-off in 2015. The company brings new genetically modified seed and crop chemical offerings to market in a similar way to a pharmaceutical company researching and developing new drugs. DuPont competes directly with agribusiness giant Monsanto who was recently acquired by Bayer. Monsanto is the most dominant player in the space controlling 26% of the market compared to Du Pont's 18%. The firm is fighting an uphill battle.

DuPont's merger with Dow is set to close in the second half of 2017 pending regulatory approval. The combined entity will split into three companies 18 to 24 months later--one company each in agriculture, material science, and specialty products. The Dow DuPont merger is likely to be value accretive to shareholders of both companies and has proposed synergies of $280 million annually. While the merger will further diversify product offerings, geographic revenues will remain almost unchanged and the new company will still see currency pressures of a strong dollar.

Financial Statement Analysis

The company has faced challenges in returning to positive revenue growth. DuPont has seen revenues fall 31% in the previous three years. Revenues have declined in five of the last eight years overall. Management has done an outstanding job at controlling operating expenditures and boosting margins during this time. SG&A has fallen 16% and EBITDA margins have grown 2% over the three years. However, these cost-cutting techniques cannot be used in perpetuity. While cost cutting is beneficial in the short run, top line growth must turn around if the organization is to remain healthy. Du Pont's dividends have come under pressure recently with two back-to-back cuts leaving shareholders disappointed.

Conclusion & Recommendation

Du Pont has a solid record of innovation and growth; however, declining revenues, a strong U.S. dollar and a pending merger that will surely occupy management in the short run puts tremendous pressure on the company. We believe these pressures all lead to Du Pont's dividend taking another hit leaving shareholders more than unhappy. Our model values DuPont at $57, 27% lower than its current price. We recommend selling.
Lyondell Basell Industries (LYB)

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Lyondell’s most attractive attribute may be its generosity to shareholders. In 2016, the company returned $4.3 billion in cash through dividends and share repurchases. The company raised its 2016 dividend by 9% and we expect this to increase as the company continues to grow profitably.

Financial Statement Analysis

In 2016, revenues declined for a second straight year, falling 11%. Net income fell as well declining 15% year over year. However, Property Plant and Equipment increased by 3 billion showing the firm’s positive outlook and commitment to long-term growth. Our estimates for 2017 see a 13% increase in revenues. The company recently beat Q4 ’16 analysts’ EPS expectations by a nickel. This shows us analysts have undervalued the company in the past and we suspect they still are. With revenues increasing, we expect LYB to generate healthy cash flows and continue to reward shareholders.

Conclusion & Recommendation

Considering the growth in LYB’s segments, a strong shareholder payment program and the troubles that the company has faced recently, our estimates show the market is undervaluing the firm considerably and see a strong 16% upside.

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

The company’s Olefin and Polyolefin segment is its largest by revenues, accounting for nearly 62%. Lyondell is the leader in this segment and expects to see growth of 40% in the Olefin and Polyolefin markets by 2021 as consumers increase their demand for packaged goods.

In 2015 and 2016, the company was plagued with challenges. Scheduled maintenance caused the firm to reduce output at several locations and an April 2016 plant fire reduced its Houston refinery’s capacity by 18%. An earnings reduction of $430 million has been attributed to these events, but no further maintenance is scheduled for the year.

Investors have shied away from LYB in the short term due to its many problems and have underestimated management’s ability. The company has made key investments in its U.S. including increasing ethylene capacity at its Corpus Christ plant by 50% ultimately driving revenues.
POSCO Sponsored ADR (PKX)

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<th>Last Price</th>
<th>Adjusted P/E</th>
<th>Style</th>
<th>Dividend Yield</th>
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<td>17.1</td>
<td>International</td>
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</tr>
</tbody>
</table>

The firm generates nearly 65% of revenues domestically and operates in major market such as the U.S., China and India.

**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 has been beaten down as of late due to the multi-year collapse in steel prices. POSCO, a manufacturer of steel products, is highly dependent on the market price for steel as its main revenue source. With several years of slow global growth, a slowdown in construction and a large drop in commodity prices overall, the company has fallen on tough times.

In 2016, the organization found a breath of fresh air as steel prices rallied nearly 300%. Management proactively cut non-profitable operations and non-core assets to reduce expenditures and improve free cash flows. While revenues have not rebounded fully just yet, the cost reductions have led to the company growing its profit for the first time in seven years. As a new sense of optimism surrounds the markets, construction and economic growth will pick up bringing the demand for steel with them. Policy changes in the U.S. could lead to a substantial increase in infrastructure spending and POSCO is an ideal candidate for the workflow through its U.S. subsidiaries.

**Financial Statement Analysis**

In 2016 while revenues were down 11% and growth was negative for the fourth time in five years, the company turned in an outstanding profit, growing net income by 780%. Earnings per share came in at 5.29 a share compared to 2015 earnings of 1.93 per share. Management’s ability to control costs were shown in the near 23% gain in operating income. The company’s supervisors have plans to use the additional cash generated by operations to pay down debt and improve their balance sheet. POSCO also pays a healthy semi-annual dividend.

**Conclusion & Recommendation**

POSCO is a premier steel producing company with incredible potential. The company has been beaten down and overlooked, but we believe will return to its prime in due time. Steel price outlook is positive and POSCO’s revenues will see growth again. This company is significantly undervalued and lacks the market’s full faith. We recommend that we increase our holdings in POSCO as its price still has considerable room to appreciate.
Scotts Miracle-Gro Company (SMG)

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<tr>
<th>Recommendation</th>
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<th>Last Price</th>
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<th>Style</th>
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<tr>
<td>BUY</td>
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<td>$92.05</td>
<td>17.32</td>
<td>Large Core</td>
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</table>

industry to be a goldmine. The organization is not only supplying fertilizer, but also making key investments in the hydroponic space mainly through its subsidiary Hawthorne Gardening which sells hydroponic equipment.

Scott’s is a leader in its industry and has a strong brand portfolio full of household names. With the renewed faith of the American consumer discretionary spending on products such as those sold by Scotts’ will increase.

The organization also fairs well in the current currency exchange turmoil facing companies that export large amounts of goods. Scotts generates nearly 85% of its revenues from the U.S.

Lastly, but almost most importantly, the company is commitment to returning cash to its shareholders. The program has seen nine consecutive years of increased payouts growing at an average of 6.5% over the last five years.

Financial Statement Analysis

The company has faced back-to-back years of declining sales, but management has done a spectacular job of managing operating expenses, reducing SG&A by 20% and leading the company to record profits. Operating and net margins improved by 1.75% and 2.5% respectively. In 2016, the company posted GAAP earnings per share of $4.09 compared to $2.23 in 2015. Net PP&E increased for the fourth straight year showing management’s reinvestment into the company.

Conclusion & Recommendation

SMG is capitalizing on key trends in the market, while management is doing a fantastic job on divesting non-core assets and containing costs. The market is overlooking this stock most likely due to its most recent two years, but the strong growth in its segments and its commitment to shareholders will make this company a winner. We value the stock 16% over its current market price and recommend buying.
The Sherwin Williams Company (SHW)

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<th>Recommendation</th>
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<td>Large Growth</td>
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**Introduction**

Founded in 1866 and headquartered in Cleveland, Ohio, The Sherwin-Williams Company conducts business in manufacturing and sales of paints, coatings and related products, primarily in the North and South America. The company also has operations in the Caribbean region, Europe and Asia. Sherwin runs its business under four divisions: Paint Stores Group, Consumer Group, Global Finishes Group and Latin America Coatings Group. In 2016, the company generated revenues of 11.8 billion.

**Fundamental Analysis**

Sherwin-Williams’ philosophy is to diversify its customer base and expand its operations into various geographies. The company has a successful history of growing through acquisitions. They recently announced a strategic acquisition of Valspar. The combined entity will be the largest in the paint and coatings space, ahead of rival PPG. This acquisition falls in line with SHW’s plan to expand geographically and will provide a wider consumer base among its consumer paint segment as well as increase overall product offerings. However, the merger’s success will face headwinds of a stronger dollar. By further increasing their geographic footprint, the company will face exchange rate challenges in the short run. However, proposed policy changes leading to an increase in infrastructure spending could be accretive to the company’s revenues if gridlock in Washington is alleviated.

**Financial Statement Analysis**

Sherwin-Williams has seen continued revenue and net income growth due to its operational excellence. The company has seen revenues and net income increase by 25% and 81% respectively over the previous five years. Sherwin-Williams’ earnings per share have grown nearly $6 in the past 5 years, a 97% increase. Dividends have seen a substantial increase year over year with the exception of its most recent increase. Over the previous 15 years, management has increased at an average rate of 12%, but the 2015 3.36 dividend saw just a minuscule increase of .01 per share. In 2016, the company also canceled the remainder of its share repurchase plan. High dividend growth rates are baked into this company’s price and are expected by the market. Is management too worried about merger complications and looking to keep excess cash on the balance sheet?

**Conclusion & Recommendation**

While Sherwin-Williams is a staple American company with a strong history and bright future and our valuation is almost in line with the markets. However, our measurement is heavily dependent on the company returning cash to its shareholders and its most recent year’s decisions have dampened our outlook. We recommend selling Sherwin Williams.
Real Estate

Real Estate is a new sector to our portfolio this year. Previously categorized as a sub-industry of Financials, the S&P 500 introduced Real Estate as its eleventh sector last year. The change was officially made on August 31, 2016. As a result, we acquired shares in the Real Estate Select Selector SPDR exchange-traded fund that trades under the ticker XLRE. The fund is up by approximately 4.6% since its inception.

As its own sector, Real Estate has a 3% weight of the S&P 500’s total market capitalization. The sector is primarily bifurcated into equity REITs (real estate investment trusts) that vary by property types and real estate services. Real estate is generally regarded as a defensive category given its nature, and investors are typically attracted by the high yields, tax advantages, and capital preservation that real estate offers.

Continued interest rate increases should slow the pace of growth in this sector. Some analysts have suggested that the sector is trading at a premium to its fair value because index-tracking managers have pumped cash into the index once it started trading as a standalone sector.

Along these lines, we have decided to underweight Real Estate to emphasize sectors with more immediate promise.
**Introduction**

PraireSky Royalty LTD is engaged in the business of leasing and acquiring oil and gas Fee Lands and related interests in order to generate royalties. The company was founded on November 27, 2013 and is headquartered in Calgary, Canada. Shares of PraireSky Royalty trade on the Toronto Stock Exchange under the ticker PSK.

**Fundamental Analysis**

We acquired an extremely small stake in the company last June because we have held shares in Canadian Natural Resources, which sold off its real estate assets in a cash and stock deal.

**Financial Analysis**

The deal increased PrairieSky portfolio by 14.7 acres of land. From the limited historical financial data available given the company’s recent inception, net income growth has declined by 69.6% YoY in Dec. 2016, and 60.1% YoY in Dec. 2015. Sales grew less than 1% during this same time horizon.

**Conclusion & Recommendation**

In light of a lack of reliable financial information available to analyze, and the extremely small value of our holdings, we recommend selling.
Telecommunications Services

Sector Overview
The telecommunication industry is divided into two main sub-sectors: the wireline sub-sector providing communication services through wired networks, and the wireless sub-sector that uses wireless networks to provide cellular phone services, wireless internet access, and video services. This sector still offers some growth opportunities in 2017, especially in the wireless services. Nevertheless, increasing competition is putting downward pressure on many companies operating in this maturing industry.

The wireline sub-sector has been subject to consolidation into three dominant companies: Verizon, AT&T, and CenturyLink. In this sub-sector, companies focus on offering a wide array of services and bundles, and becoming a one-stop-shop providing fixed line broadband internet services, hosted cloud services, and cable TV. In particular, high quality and speed are the main differentiators for consumer retention. Looking towards the future, revenues are expected to decline in the wireline sub-sector due to shifting preference towards wireless services offering similar quality and services to consumers.

Verizon and AT&T mainly dominate the wireless sub-sector. In the last few years, increasing competition was observed from T-Mobile that gained additional market share through low-price offerings. Further consolidation in the industry is unlikely in the near future due to regulatory concerns, although talks about a T-Mobile merger with Sprint have been circulating the market. Despite a slight year-over-year increase in the number of subscribers, the wireless services are becoming increasingly saturated. As a result, firms have shifted their strategy towards customer retention by offering higher quality LTE speed and boosting revenue by encouraging higher data consumption. In the same context, companies have entered in a race to dominate the 5G network, which is expected to emerge within the next 5 years.

Conclusion and Recommendation
In this mature industry, companies are seeking to remain competitive through heavy reinvestments in infrastructure and research and development. Searching for revenue, some companies have turned to leveraging their property holdings through the issuance of REITS. Additional low-revenue streams such as prepaid sim cards and no contract plans have also been making some headway, but these low margin services are not a significant bottom-line contributor for larger companies.

Although the telecommunication sector is a small part of our portfolio, well-targeted investments in this industry can provide us with some diversification advantages. We believe that investing in companies that are well positioned for providing high quality and fast services can positively contribute to our overall return. However, the slowing growth of the industry as well as the changing nature of the U.S. economy post-presidential election reinforced other sectors in the market. Consequently, we have chosen to underweight this sector, in comparison to the S&P 500, allowing for additional investments in more lucrative industries with higher forecasted growth. As a result, we are recommending selling our entire holdings of China Telecom stocks. In addition, we will sell a portion of our other holdings to achieve our underweighted target for the Telecommunication sector.
**BCE Inc. (BCE-US)**

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<th>Adjusted P/E</th>
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</tr>
</tbody>
</table>

**Introduction**

BCE, Inc. provides communication services to residential and business customers in Canada. The company’s products and services can be subdivided into three main segments: Bell wireless providing wireless voice and data communication services, Bell wireline providing internet access, local telephone, and long distance services, and Bell media which creates content and derives revenues from advertising and subscriber fees.

**Fundamental Analysis**

BCE reported $16.39 billion in revenue and $2.29 billion in earnings in 2016. When viewed in CAD, BCE was able to increase its sales by about 1% and its earnings by about 13.1%. Although the sales stagnated in 2016, BCE’s management was able to implement cost-cutting procedures, especially in the wireline segment, to improve their operating profit.

Benefiting from its large and reliable 4G network, BCE was able to build a strong brand name in the wireless subsector. In addition, the firm is continuously expanding its market share. Recently, BCE closed a deal with MTS, which will increase BCE’s presence in Manitoba province and add about 700,000 customers in its wireless segment.

BCE offers an attractive dividend to investors with a 5.06% average dividend yield in the last 5 years. With expected improvements in sales and earnings mainly from its wireless segment, the firm will be able to maintain its strong cash flow position and healthy dividends payment. For 2017, management announced a 5.1% increase in annualized dividends. Incorporating this information in a dividend discount model valuation with 5% growth over the next 3 years and 2% growth in perpetuity, the intrinsic value of BCE is around $51.07. The market is therefore clearly undervaluing this stock by about 15%, even when modest growth expectations are considered.

**Financial Statement Analysis**

BCE’s net revenues increased by 13.1% and adjusted EBITDA increased by 2.8%, as a result of higher operating revenues and lower operating costs. In addition, free cash flow available to common shareholder’s increased by 7.6% compared to 2015.

**Conclusion & Recommendation**

Based on our fundamental analysis of BCE, we believe that the firm is poised for growth in the future, as the management efficiently reduces costs while benefiting from the growing wireless segment and synergies from the MTS acquisition. The company’s long-term growth is promising as BCE is continuously pushing to improve the coverage and quality of its network. Finally, we believe that the market is undervaluing BCE’s value and we are recommending holding the stock in our portfolio.
China Telecom Corp. ADR (CHA)

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<td>$48.97</td>
<td>14.8</td>
<td>Large Core</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Introduction

China Telecom Corp Ltd is an integrated communications company, backed by the Chinese government. The firm provides a range of services including wire line and mobile voice services, Internet and add on services in the Peoples’ Republic of China. It is the largest wireline service and third largest mobile telecommunication provider in China.

Fundamental Analysis

Since 2008, China Telecom benefited from the Chinese telecommunication restructuring and significantly grew its customer base. However, in recent years, the firm faced intense competition in the wireless sub-sector. Trailing behind China Mobile and China United Network Communication, China Telecom struggles to maintain its subscribers and reduce operating costs. Furthermore, China Mobile is aggressively investing in its 4G network with a concentrated marketing campaign that will increase the pressure on China Telecom. Finally, there is an increased uncertainty in the Chinese government policy, which can pose threats on the Chinese firms' profitability, should the government implement additional mandates for tariff reduction.

China Telecom has been offering modest dividend yield with a 2.66% year-to-end yield for 2016. A dividend discount model with a 5% short-term growth rate for the next 5 years and 3% long-term growth rate indicates that the intrinsic value of the stock is around $50.80, representing a modest 3.7% undervaluation compared to the current market price.

Financial Statement Analysis

China Telecom reported a total sales of CNY 352.29 billion in 2016, up 6.4% from 2015. Net income decreased by 10.2%, but was justified by the management due to an abnormal one-time gain in 2015. Excluding the impact of the one-time gain, net income would have increased by around 11%. On the other hand, the firm still suffers from a negative free cash flow, despite some improvement compared to 2015.

Conclusion & Recommendation

China Telecom is considered a moderately growing company in a highly competitive market. The firm is still expected to grow despite increasing pressures in the wireless segment. A stand-alone analysis indicates that the stock is currently slightly undervalued. However, considering our decision to underweight the Telecommunications sector in our portfolio, and having determined that other holdings are expected to produce better returns with less uncertainties, we are issuing a sell recommendation for this stock.
Verizon Communications (VZ)

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<th>Style</th>
<th>Dividend Yield</th>
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<td>$49.31</td>
<td>15.4</td>
<td>Large Value</td>
<td>4.6%</td>
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</table>

is expected to be the first company to deploy the 5G commercial network in 2018.

Verizon’s revenues are expected to remain stagnant in 2017. However, the company is expected to maintain its high dividend payout. The acquisition of Yahoo will also help Verizon supporting its dividend payout. A dividend discount model with conservative 3% short-term growth rate and 2% long-term growth rate indicate that the stock is about 11% undervalued with an intrinsic value of $54.55.

Financial Statement Analysis

Verizon’s revenues decreased by 4.29% in 2016. Revenues are expected to remain under pressure in 2017. Operating margins, on the other hand, remained high compared to industry standards, as management continues to reduce operating costs and improved productivity. In addition, the firm’s return on equity and return on invested capital remain well above the industry averages, despite a slight decrease last year.

Conclusion & Recommendation

Based on our analysis of Verizon, we recommend that the stock be maintained in the portfolio. The company, which is already positioned as a high quality and reliable wireless provider, is currently taking necessary measures to counteract the increasing low-cost competitions. Its strong brand and positive reputation is another advantage in face of increasing competition. In addition, fundamental analysis indicates that the market currently undervalues the stock by about 11%. Therefore, we are issuing a HOLD recommendation for Verizon.

We are also recommending selling 105 shares of Verizon as we have decided to underweight the telecommunications sector.
Utilities

Environmental Challenge
In the past, Electric utilities have heavily depended on coal for a large part of power generation, which has become a big challenge for the group in these times of improved environmental awareness. To control/to reduce pollution, utilities are installing smart meters, attaching scrubbers to lower emissions and launching energy efficiency programs to reduce customers' energy use. To stick to the Clean Power Plan, some utilities have taken steps to reduce emission levels, which included shutting down old coal-based power plants, investing in emission control equipment, and increasing the share of natural gas and alternate energy sources in electricity generation.

President Trump and Coal
President Trump campaigned on a pledge to restore the hurting American coal industry, vowing to bring jobs and production back to a sector that has been on a steady decline for over a decade. On March 28, the president signed an executive order to roll back regulations on coal-fired power plants. However, President Trump missed the reason that coal fell out of favor in the first place, which is that coal is not economically viable. Natural gas has proven to be a cheaper and more environmentally friendly alternative to coal. Even with President Trump’s most recent actions, the long-term view among the majority of utility companies is to invest in the electricity system of the future. Given this, our view is that Utilities will continue to invest in renewable resources projects while relying on natural gas in the near term.

Rising Interest Rates, Rising Costs
The utilities sector is a capital-intensive industry and thus very sensitive to rising interest rates. Historically, there has been an inverse correlation between utility stocks and interest rates. This is due to the increased costs that utilities now face to fund investment projects and maintain infrastructure. Since interest rates bottomed in mid-2016, utility stocks have been relatively flat compared to the broader S&P 500, which is up 15%, both including dividends. Another trend to monitor is the closing spread between average utility dividend yield 3.5% and the yield on 10-year treasury 2.6%. Our team believes as this spread continues to narrow conservative investors will sell their utility stocks and buy bonds.

Investment Objective and Strategy
Based on the outlook of 2107 economic growth and stock market forecasts, the team sets the objective for the Utilities sector as seeking income through the regular payment of dividend and as providing diversification through lower Beta. However, the team believes the headwinds facing the Utility sector will hinder performance and believe better returns can be found in other sectors.

As such, we have chosen to underweight the sector and concentrate our investment on diversified market leaders.
Exelon Corp (EXC)

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<tr>
<td>HOLD</td>
<td>$54.55</td>
<td>$49.31</td>
<td>15.4</td>
<td>Large Value</td>
<td>4.6%</td>
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</table>

Introduction

Exelon Corp. operates as a utility services holding company that is engaged in the energy generation business. It is the largest nuclear power plant owner in the U.S. and has been an industry leader in value creation for years. EXC published revenues of $32.182 billion in 2016 an 13.62% increase from the previous year. Not an odd number given that the year-over-year average sales growth has been 11.29% per year for the past 5 years.

Fundamental Analysis

Currently, EXC is trading at $33.01 However, our projections value these shares at $41.42. Our valuation is based on three core reasons: growth in Exelon’s utilities, planned dividend increases and debt reduction, and management’s ability to generate shareholder value.

Exelon’s utilities are projected to grow 7% to 9% annually through 2020. Growth in this segment will come from Rate Base growth and through the use of Trackers. Trackers are rate-adjusted mechanisms which allows for rapid recovery of an expenditure without waiting for the outcome of a rate case. Trackers will increase Exelon’s revenue by allowing for the quicker recovery of capital expenditures.

Exelon management has committed to increasing the firm’s dividend 2.5% annually through 2020. In addition to the dividend increase, Exelon plans to reduce debt by $3 billion.

Management has shown an ability to lobby state governments to seek fair compensation for its fleet, and shut down uneconomic plants if legislation fails. Recently, Exelon announced it would close three economically challenged nuclear plants in Illinois. The retirement of these plants will positively impact Exelon’s bottom line resulting in savings of up to $0.07 of EPS and $75 million in pre-tax cash flow. Additionally, Exelon has also shown its ability to seek fair compensation for the zero-carbon attributes of its fleet. New York’s Public Service Commission recently adopted a Clean Energy Standard, which includes a new emission credit, the Zero Emission Credit.

Financial Statement Analysis

Exelon has seen revenue growth of 13.62% in the last year and 11.29% per year over the past five years. Currently, Exelon has $7.8 billion in cash and is projected to generate $4.5 billion in cash this year. After factoring in net debt, capital expenditures, and dividend payments, cash flow is negative, ending the year with $1.5 billion. However, this model includes Exelon’s cash acquisition of PHI for $6.9 billion. Adjusting the model to exclude this one-time payment, Exelon is projected to generate positive cash flow ($650 million), increasing the firm’s cash balance to $8.45 billion.

Conclusion & Recommendation

Exelon’s shares have returned higher than the broader utility industry over the past 12 months. Exelon is poised to gain from rate hikes, favorable weather, and the positive impact of investments to improve their load-to-match strategy. The company is also benefiting from the merger with Pepco holdings. Exelon is growing its customer base and volume of electricity sold each year. Exelon is currently undervalued as its shares are trading at a forward P/E ratio of 13.56 compared to the industry average of 23.85. Additionally, our dividend discount model valuation shows plenty of upside and with that in mind, we recommend the stock as a buy.
Introduction

PPL Corporation or PPL is a diversified utility holding company. Currently the company serves 10.4 million utility customers in the U.S. and the U.K. The company primarily generates electricity from power plants in the northeast, northwest and southeast regions of the United States. After PPL’s spin off of their energy supply segment in 2015, PPL’s strategy has been to focus solely on its regulated utility business - Kentucky regulated, UK regulated and Pennsylvania regulated.

Fundamental Analysis

PPL reported net income of $1.89 billion in 2016, growing 18.43% year over year. The growth in PPL’s net income is primarily attributable to PPL’s strong asset portfolio and business model, which has proven to be adaptable to various market scenarios. Unlike PPL’s competitors who have recently been growing through acquisition, PPL is committed to growing their regulated utility business organically. PPL projects total capital expenditure of $15.9 billion through 2021. The investments will be used to strengthen their existing infrastructure through the implementation of smart meters and new reliability initiatives. These improvements will allow PPL to expand its customer base efficiently. Taking into account these improvements, we expect PPL to grow 5% to 6% annually from 2017 through 2020.

Financial Statement Analysis

PPL had revenues drop by 2% in 2016 due to the retirement of coal-fired generation plants in Kentucky. While this may seem disconcerting, they actually raised net income by 18.43% at the same time. This tells us that the retirement helped PPL come back in line with its core business. It is also worth noting that in the prior two years PPL has been reducing their financial leverage. This reduction can be seen by examining their current ratio, which has averaged .80 over the past five years but is currently .54. All signs point to sustainable growth in profits in the coming years.

Conclusion & Recommendation

PPL operates in a capital-intensive business that is sensitive to rising interest rates. However, the company’s commitment to reduce debt levels the past two years has placed PPL in a position to navigate the challenging environment ahead. In addition to reducing debt levels PPL’s diverse asset portfolio and business model will allow it to adapt to different market conditions that tend to arise from volatile commodity prices and regulatory environment. PPL’s disciplined capital investment plan, stable financial position and commitment to core regulated utility strategy will help to achieve our projected 5 to 6 percent growth through 2020. Using a dividend discount model with the implied growth rate we valued PPL’s shares to be worth $45.16. These shares are currently trading at $37.41 making them 22% undervalued. Therefore, we recommend holding PPL.
Southern Company (SO)

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<tr>
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<td>16.82</td>
<td>Large Value</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Introduction

Southern Company (SO) based in Atlanta, Georgia is one of the largest utilities in the United States. Following its merger with AGL resources on July 1, 2016, Southern Company serves roughly nine million customers through its eleven electric and natural gas distribution units in nine states. Southern Company boasts a generating capacity of 44,000 megawatts, 200,000 miles of electric transmission and distribution lines and more than 80,000 miles of natural gas pipelines.

Fundamental Analysis

We recommend Exelon (EXC) as a BUY. Currently, Southern Company has positioned themselves well to navigate the challenging environment facing the capital-intensive utility industry of slowing electricity usage and rising interest rates. Recently, Southern Company has made two key acquisitions to solidify their ability to serve a nationwide base of customers on both sides of the meter.

The addition of AGL Resources in 2016 makes Southern Company now the second largest utility company in the United States by customer base. This acquisition bolsters Southern Company’s already robust natural gas platform and allows Southern Company to offer customers a variety of services under one umbrella. Additionally, AGL Resources increases the company’s supply of cheap natural gas it can provide to their power plants. Focusing on natural gas will allow Southern to reduce their operating cost while increasing shareholder value.

Recently, Southern Company finalized their acquisition of PowerSecure, a utility management technology firm. PowerSecure’s business is based on custom-engineered, backup generators and on-site energy controls that are built to provide power needs and keep the site running during times of grid disruption. The acquisition allows Southern Company to better serve their customers offering a full portfolio of energy services. Our team believes these acquisitions will support Southern Company’s growth potential allowing the company to earn returns that are among the highest in the industry.

Financial Statement Analysis

Southern Company pays an annual dividend of $2.24 per share, yielding an attractive return. In April, the utility increased their dividend payout by 3.2% making it 15 consecutive years of dividend increases. After analyzing Southern Company’s free cash flows, we believe this dividend to be safe and reliable. The company has paid dividends in each of the last 277 quarters for more than 60 years.

Conclusion & Recommendation

Our team believes Southern Company to be a good buy for the Crummer portfolio due to the company’s attractive dividend, commitment to growing its full-service energy portfolio, and strong FCF. Southern Company’s shares are currently trading at $50.03. However, our dividend discount model values these shares at $66.56, making them 33% undervalued. Our team recommends a buy.
Fixed Income Assets

2017-2018 Outlook

In the coming year, politics will play a significant role in how our country moves forward. President Trump has a large and diverse agenda, with some of the most important points tied to proposed tax cuts and infrastructure spending increases. There are concerns that with the rise of energy prices and spending associated with Trump’s policies, there will likely be a rise in inflation past the Fed’s goal of 2%; we see inflation between 2% and 2.25%.

The Fed at their March 15th meeting raised interest rates by 25-basis points and we project two or three more 25-basis point hikes for the remainder of 2017. How soon we see these hikes take place is based on three primary factors. We first look at the state of the economy, with an emphasis on the employment rate, which is one of the gauges that the Fed closely monitors. The unemployment rate is currently at 4.7%, which is a healthy number and on par with what the Fed wants to see. The labor participation rate has picked up and is currently at its highest level in 11 months, which speaks to many individuals coming back into the labor force, with primary ties into their outlook and confidence in the economy. The second factor is inflation. Currently, Core PCE is around 1.8%, which is near the Fed’s target of 2% and is used as the primary inflation gauge. The level has been rising at a moderate pace and is expected to reach its target in the medium term. The third factor revolves around the campaign promises by President Trump, primarily corporate tax cuts and heavy spending on infrastructure. If his proposed policies do come to fruition in the near future, inflation could rise substantially faster than normal predictions, and will likely require stronger Fed intervention to keep inflation in check. We do not see these policies go into effect right away, but it is certainly an area to keep a close eye on.

The outlook on emerging markets for 2017 shows great promise for continued growth following a positive 2016. China, which was of great concern prior, has leveled off and GDP growth is expected. Countries like Brazil and Russia continue to dig themselves out of their respective recessions, but a positive course is anticipated. In Latin America, there has been a strong growth in policy fundamentals and we see countries like Argentina continue to grow. Yields in various developed countries are near zero or negative, therefore emerging countries are a great opportunity to earn a positive yield.

We continue to observe the yield curve, as it has flattened recently after the first Fed rate hike of 2017. Short-term yields have risen, and long-term yields, 10-year, have seen a decline pre-hike. There are growing concerns that this flattening could signal negative economic growth in the near future, but we see this flattening due to the proposed President Trump agenda, which raised skepticism on its future due to the defeat of the AHCA. In addition, the growing possibility that the Fed will begin to shrink their balance sheet is of importance, as it could undermine the economic expansion by causing long-term rates to rise.

One of the main duties of the fixed income portion of the portfolio is to protect it from negative, unforeseen downturns in the market. Due to this, our in-depth analysis of the current state of the economy and its projected state for the next year, we have decided to diversify this portion of the portfolio. We selected two different funds: DoubleLine Low Duration Bond (DBLSX) and Hartford Floating Rate High Income (HFHIX). Our proposed allocation is as follows:
Fixed Income

Crummer Investment Management

DoubleLine Low Duration Bond (DBLSX) 80%

Due to the projected rate hikes for this year, we aimed to position ourselves at the lower end of the yield curve. A primary aim on low duration was placed and this fund serves that goal very well. The fund invests in fixed income including U.S. Government, Agency Mortgage-Backed Securities, Corporate Credits, Bank Loans and International Fixed Income. It seeks for instruments of investment grade quality and unrated securities that are of equal quality. An emphasis was placed on expense ratio, to which this fund places below its peers of similar quality with no load is associated with it. The fund has ranked as one of the top performers in its category since its creation and has continuously topped its benchmark, the Bank of America 1-3 Year Treasury Index, since inception. The management of this fund has remained together from the beginning stages and put a great emphasis on economic outlook, sector fundamentals and relative value when making their decisions. The fund provides a yield of 2.32%, with an average duration of 1.1 years and a 2.29% return since inception.

Hartford Floating Rate High Income (HFHIX) 20%

The floating rate spectrum provides us an opportunity during a rising interest rate environment. Due to our continued position on diversification and selection funds with low duration, we selected this fund. The fund asset class exposure is primarily tied to bank loans, with a minimal emphasis on high-yield credit. It has been one of the top performers in its category since inception and continues to outperform its benchmark. The management of this fund has been led since its inception by the same manager, whose diligent work in locating domestic bank loans, international bank loans, and high-yield bonds have put the fund in position to maximize potential yield. Its holdings average a B credit quality and provide a 3.84% yield. Its effective duration of .65 years meets our selection goals. Since inception, the fund has had a 5.77% return.
Conclusion

The fixed income world in the coming year will be dealing with various changes, which will impact its returns. We predict the Fed to raise rates two to potentially three times during 2017. President Trump’s various proposals, primarily his infrastructure spending plan, could drive up inflation at a significantly quicker pace than expected and reach the Feds target inflation rate of 2% earlier than anticipated.

We believe that by diversifying and staying at the lower end of the yield curve will protect the portfolio during a rising interest rate environment, as well as provide a yield that excess our expected level of inflation.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Weight</th>
<th>Duration</th>
<th>WA Duration</th>
<th>Yield</th>
<th>WA Yeild</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBLSX</td>
<td>80%</td>
<td>1.10</td>
<td>0.88</td>
<td>2.32</td>
<td>1.86</td>
</tr>
<tr>
<td>HFHIX</td>
<td>20%</td>
<td>0.65</td>
<td>0.065</td>
<td>3.84</td>
<td>0.77</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td>0.95</td>
<td>2.63</td>
<td></td>
</tr>
</tbody>
</table>

Yield Curve at April 4, 2017
Appendix
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—4½ 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 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 is managed by allocating among asset classes and investment styles within asset classes as a long-term strategic policy. 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.

**Rate of Return**

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

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

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

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

**Portfolio Transactions**

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

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

**Cash Requirements**

7.1 Scholarship Funding Because the date of the scholarship draw varies around the end of the College’s fiscal year (May 31), as of May 1 the Portfolio will hold a cash reserve large enough to cover the annual scholarship funding rather than requiring security liquidation.
7.2 **Transactions Costs and Fees** Trading costs and fees will be funded in cash and incorporated into the annual transactions to avoid forced security liquidation and will usually be covered by normal sell recommendations.

**Volatility**

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

**Income, Appreciation and Taxes**

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

**Sector and Asset Allocation**

10.1 **Short-term Sector Allocation** To achieve its short-term tactical investment objective the Crummer/SunTrust 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.

10.2 **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 should 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.

10.4 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.

10.3.5 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.

10.3.6 Derivatives The Crummer/SunTrust 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**

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

### Table B

**Crummer/SunTrust Portfolio Equity Portfolio Sectors**

<table>
<thead>
<tr>
<th>S&amp;P 500 Sector</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>S&amp;P Consumer Discretionary Index</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>S&amp;P Consumer Staples Index</td>
</tr>
<tr>
<td>Energy</td>
<td>S&amp;P Energy Index</td>
</tr>
<tr>
<td>Financials</td>
<td>S&amp;P Financials Index</td>
</tr>
<tr>
<td>Health Care</td>
<td>S&amp;P Health Care Index</td>
</tr>
<tr>
<td>Industrials</td>
<td>S&amp;P Industrials Index</td>
</tr>
<tr>
<td>Information Technology</td>
<td>S&amp;P Information Technology Index</td>
</tr>
<tr>
<td>Materials</td>
<td>S&amp;P Materials Index</td>
</tr>
<tr>
<td>Real Estate</td>
<td>S&amp;P Real Estate</td>
</tr>
<tr>
<td>Telecom</td>
<td>S&amp;P Telecom Index</td>
</tr>
<tr>
<td>Utilities</td>
<td>S&amp;P Utilities Index</td>
</tr>
</tbody>
</table>

Target Deviation for any sector is +/- 20% of its S&P 500 market weight

### Table C

**Crummer/SunTrust Portfolio Asset Allocation Guidelines**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Low</th>
<th>Mid</th>
<th>High</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Equity</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>International Equity</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
<td>MSCI - EAFE</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
<td>Barclays US Float Adjusted Index (Vanguard Total Bond Market Index Fund)</td>
</tr>
<tr>
<td>Cash</td>
<td>As Needed</td>
<td></td>
<td>90 day T bill rate</td>
<td></td>
</tr>
</tbody>
</table>

Minimum weight for any asset class is 5%;
Small and Mid Cap Stocks shall not exceed 30% of total equity exposure.
Mean-Variance Efficiency Analysis

Introduction

Mean-variance efficiency analysis is part of modern portfolio theory (MPT). It is a mathematical context for constructing a portfolio by weighting risk (variance/standard deviation) against expected return. Either the expected return is maximized for a given level of risk, or the risk is minimized for a given level of expected return. Its key insight is that an asset's risk and return should not be assessed by itself, but by how it contributes to a portfolio's overall risk and return. (Markowitz, H.M, March 1952. "Portfolio Selection." The Journal of Finance. 7(1): 77–91).

Although mean-variance optimization is not a widely used guide to constructing portfolios, this analysis can identify where the proposed portfolio might be improved.

Results

To conduct this analysis, we assembled historical data for the ten equity sectors (not including real estate because not enough data is available) and constructed the efficient frontier shown in the chart below.
The efficient frontier identifies those portfolios with various amounts of the ten sectors that have the lowest risk (standard deviation). The chart also plots the individual sectors and the proposed portfolio.

**Discussion**

The proposed portfolio offers an expected annual return of 13.75% with a risk (standard deviation) of 12.76%. The corresponding MVO efficient portfolio with the same expected return (13.75%) yields a lower risk (standard deviation) of 8.83%. Unfortunately, this increase in return requires our sector allocation to place 0% in the Energy Sector and Materials Sector. The allocation is shown in the following chart.

**Efficient Portfolio with the Same Expected Return**

This portfolio, while more efficient and promising a lower risk, is inconsistent with our short-term economic expectations strategy and undesirable from a diversification perspective. We only use the mean-variance efficient portfolio as a check on our allocations because most MVO portfolios are poorly diversified and would not be acceptable under the IPS. We do observe, however, that the proposed portfolio is nearly as efficient in providing a reasonable return for the risk assumed.
Value at Risk

Introduction

Value at Risk (VaR) measures the worst expected loss under normal market conditions over a specific time interval at a given confidence level. Another way of expressing this is that VaR is the lowest quantile of the potential losses that can occur within a given portfolio during a specified time period (Simon Benninga, *Financial Modeling*). VaR is widely used in investment banking and is another technical tool that helps us to evaluate the changes we propose.

Parameters

The basic time period and the confidence level (the quantile) are the two major parameters that should be chosen in a way appropriate to the overall goal of risk measurement. For the Crummer SunTrust Portfolio, assuming no trading during the next year, we chose the time period over the course of one year; because we are analyzing the internal risk management model to control our risk exposure, we decide to use the typical confidence level (the quantile) of 5%.

In our case, VaR answers the question of how much would the Crummer SunTrust Portfolio lose with 5% probability over the time horizon of one year.

Philosophy

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, in order to determine whether we are risking more money by carrying out our proposed allocations.

Conclusion

Our findings are summarized as follows:

- VaR with our proposed sector weights at 5% confidence level: $68,4142.79
- VaR with current portfolio sector weights at 5% confidence level: $68,5413.04

Our VaR analysis indicates that the difference between our proposed sector allocations and our current sector allocations is $1,270. This slight change suggests that our proposal has not significantly changed the risk carried by the portfolio.