

2016

## Crummer SunTrust Portfolio Recommendations: Crummer Investment Management [2016]

David Daubert

Shawn Draheim

Jeremy Gerbauer

Brett Gourlay

Martin Kronberg

*See next page for additional authors*

Follow this and additional works at: <http://scholarship.rollins.edu/suntrust>



Part of the [Finance and Financial Management Commons](#)

---

### Recommended Citation

Daubert, David; Draheim, Shawn; Gerbauer, Jeremy; Gourlay, Brett; Kronberg, Martin; Kumar, David; McCreary, Devin; McMillan V, Hugh; Morgan, Nathan; Schuster, Jerry; and Anduaga-Todd, Jordan, "Crummer SunTrust Portfolio Recommendations: Crummer Investment Management [2016]" (2016). *SunTrust Portfolios*. Paper 30.

<http://scholarship.rollins.edu/suntrust/30>

This Investment Portfolio is brought to you for free and open access by Rollins Scholarship Online. It has been accepted for inclusion in SunTrust Portfolios by an authorized administrator of Rollins Scholarship Online. For more information, please contact [rwalton@rollins.edu](mailto:rwalton@rollins.edu).

---

**Authors**

David Daubert, Shawn Draheim, Jeremy Gerbauer, Brett Gourlay, Martin Kronberg, David Kumar, Devin McCreary, Hugh McMillan V, Nathan Morgan, Jerry Schuster, and Jordan Anduaga-Todd

2016

# Crummer SunTrust Portfolio Recommendations

Crummer Investment Management



## Letter to the Committee

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 benefitted from some outstanding guest speakers who have been generous with their time and expertise: Regina Chi and John Race, DRZ; Professor William Seyfreid, Crummer; Jay Menozzi, Semper Capital Management; Phillip Rich, Seaside Bank; Rick Ahl, Ahl Investment Management.

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 provide \$40,000 in scholarships. We also agree that we have all learned a great deal from the experience and 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.

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. That forecast then drove our allocation among the ten S&P sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Telecommunications, and Utilities. This year we have forecast a continued slow economic recovery and tilted the allocation towards market sectors that do well in a recovering but peaking economy.

Our long-run strategy is embodied in the asset class allocation. The IPS sets asset class ranges from 0 to moderate risk and to keep the portfolio from being whipsawed by transitory market cycles. We are at the top end of the range for fixed income, large-cap growth and value asset classes, in the middle of the range for mid-cap growth and 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 starts on page 12. A major part of our asset allocation decision is the percentage allocated to bonds. This year we are at 18% that is at the highest end of the range. These allocations are at the low level of risk, consistent with our view that the stock market will be volatile but has little upside potential for the year, therefore we look to dividend and coupon yields for portfolio return. We are, also, adding a sector ETF to each sector to ensure diversification and limiting individual stocks to up to three names in each sector.

Last year the portfolio was tilted away from consumer staples, utilities and telecommunications these are sectors that are favored in less robust periods and towards sectors expected to perform well in an expanding economic period such as industrials, energy and consumer discretionary. The notable feature of the market performance during the period was the rapid price decline in energy stocks and both the material and financial sectors, also showed decreasing returns. In fact, the best performing sectors were consumer staples, utilities and telecommunications, which all saw double digit gains and from which the portfolio was tilted away. Our strategy this year is to tilt towards consumer discretionary, consumer staples and telecommunications, as explained in the following pages. We look forward to sharing the results of our analysis with you in person.

## Crummer Investment Management Team

Consumer Discretionary Sector Analyst:	Jeremy Gebauer
Consumer Staples Sector Analyst:	Shawn Draheim & Nathan Morgan
Energy Sector Analyst:	Jordan Anduaga-Todd & Jeremy Gebauer
Financials Sector Analyst:	Jordan Anduaga-Todd & Hugh McMillan V
Fixed Income Analyst:	David Kumar
Healthcare Sector Analyst:	David Daubert & Jerry Shuster
Industrials Sector Analyst:	Shawn Draheim & Nathan Morgan
Technology Sector Analyst:	Martin Kronberg & David Kumar
Materials Sector Analyst:	Brett Gourlay
Telecommunications Sector Analyst:	Devin McCreary
Utilities Sector Analyst:	Devin McCreary



From left to right: Jerry Shuster, Jordan Anduaga-Todd, Martin Kronberg, Hugh McMillan V, Devin McCreary, Philip Rich, Jeremy Gebauer, and David Daubert





From left to right: Brett Gourlay, David Kumar, Shawn Draheim, Kathryn Joseph, and Nathan Morgan

## Table of Contents

Letter to the Committee.....	2
Crummer Investment Management Team .....	4
Table of Contents.....	6
Economic Outlook .....	9
Performance of the Crummer SunTrust Portfolio.....	11
2015 – 2016 Plan Year Performance Highlights.....	13
Portfolio Design.....	15
Sector Analysis .....	19
Consumer Discretionary .....	20
Gamestop Corp. (GME) .....	21
Nike Inc. (NKE).....	22
Nordstrom Inc. (JWN).....	23
Regal Entertainment Group (RGC).....	24
Home Depot (HD).....	25
Thor Industries (THO).....	26
Consumer Staples.....	27
The Andersons Inc. (ANDE).....	28
Kroger Co. (KR) .....	29
Pepsi Co. (PEP).....	30
Tyson Foods Inc. (TSN).....	31
Energy.....	32
Canadian Natural Resources Limited (CNQ) .....	33
Enbridge Inc. (ENB).....	34
Global X MLP & Energy Infrastructure ETF (MLPX).....	35
PBF Energy Inc. (PBF).....	36
Spectra Energy (SE).....	37
U.S. Silica Holdings Inc. (SLCA).....	38
Financials.....	39
American International Group Inc. (AIG).....	40



Discover Financial Services (DFS) .....	41
Paychex Inc. (PAYX) .....	42
JPMorgan Chase & Co. (JPM).....	43
Wells Fargo & Company (WFC).....	44
Healthcare .....	45
Abbott Laboratories (ABT).....	46
Amgen (AMGN) .....	47
Express Scripts Holding Co (ESRX) .....	48
Novartis AG (NVS).....	49
NuVasive Inc (NUVA) .....	50
Roche Holding AG (RHHBY) .....	51
West Pharmaceutical Services (WST) .....	52
Industrials.....	53
FedEx Corporation (FDX) .....	54
Honeywell International Inc. (HON) .....	55
Lockheed Martin Corporation (LMT).....	56
Snap-on Inc. (SNA).....	57
Boeing (BA).....	58
Technology .....	59
Amdocs Ltd. (DOX).....	60
Apple Inc. (AAPL) .....	61
Cadence Design Systems Inc. (CDNS) .....	62
EMC Corporation (EMC) .....	63
Gartner Inc. (IT) .....	64
Insight Enterprises, Inc. (NSIT).....	65
Materials .....	66
Cabot Corporation (CBT) .....	67
E.I. du Pont de Nemours and Company (DD).....	68
POSCO Sponsored ADR (PKX) .....	69
Rio Tinto plc Sponsored ADR (RIO).....	70

Sherwin-Williams Company (SHW) ..... 71

Steel Dynamics, Inc. (STLD) ..... 72

Teck Resources Limited Class B (TCK-US)..... 73

Telecommunications Services..... 74

    BCE Inc. (BCE-US)..... 75

    China Telecom Corp. ADR (CHA)..... 76

    Orange SA ADR (ORAN) ..... 77

    Verizon Communications (VZ) ..... 78

Utilities ..... 79

    Exelon Corp (EXC) ..... 80

    PPL Corp (PPL) ..... 81

    Vanguard Utilities Fund ETF (VPU) ..... 82

Fixed Income Assets ..... 83

Appendix ..... 85

    Crummer SunTrust Portfolio Investment Policy Statement..... 86

    Mean-Variance Efficiency Analysis ..... 92

    Technical Analysis ..... 94

## Economic Outlook

The class maintains a positive outlook with subdued growth. We do not foresee a recession in 2016. In 2015, the S&P 500 was virtually flat with a return of -0.73 percent (a total return of 1.36 percent with dividends). The January drop of 5.1 percent, lays the foundation for a continuous highly volatile year. Domestic GDP will have slow growth of 1.8 percent because of global economic headwinds, devalued commodities, and the strength of the United States dollar (USD). Unemployment will stay level, unlikely to move sharply in either direction. Inflation will remain low. The Fed will keep short-term interest rates low as slow growth and a strong dollar constrains its ability to raise rates. The domestic consumer is benefiting from low unemployment, low interest rates, and low energy prices.

The Crummer SunTrust portfolio's Investment Policy Statement requires the team to base tactical sector allocations on our best estimate of the market's behavior over the next year. We have researched and analyzed as much data as possible to inform our decision on sector allocations. In forming this opinion, we heard from economists, portfolio managers, and financial advisors and researched various economic reports that guided our economic outlook for the coming year.

## Economic Thesis

The domestic and global economies will have modest growth. The United States economy is healthy overall despite the energy price collapse in 2015. In addition, the deceleration of the Chinese economy has caused commodity prices to fall. Our strategy focuses on selecting companies trading at a discount that have a strong dividend yield and limited exposure to foreign currency. This strategy will mitigate market volatility, provide a larger total return, and mitigate currency conversion losses due to a strong USD.

Sector	Weight	Reasoning
Consumer Discretionary	Overweight	Positive consumer economy
Consumer Staples	Overweight	Defensive position
Energy	Overweight	Value position
Financials	Underweight	Rising rates
Health Care	Overweight	Aging population & legislation
Industrials	Underweight	Slow global growth
Information Technology	Marketweight	Positive consumer economy
Materials	Underweight	Slow global growth
Telecommunication Services	Overweight	Strong consumer need & dividends
Utilities	Underweight	Lower dividends than Telecom

## GDP

We expect the U.S. economy to grow at 1.8 percent this year, down from 2.8 percent last year. We anticipate global growth concerns to continue in 2016 as we see China attempt to rebalance their economy away from investment and manufacturing towards consumption and services. With these market conditions, we expect consumer spending to be the primary catalyst for growth in 2016, supported by a rise in personal income and positive job growth numbers. We also anticipate further headwinds in regards to net exports mainly due to a strong dollar and weaker than expected global demand.

## Unemployment

In 2016, we anticipate unemployment to remain below 5 percent and estimate that 2.4 million non-farm jobs will be added to the U.S. economy. We see wage growth and inflation trending upwards throughout the rest of the year as we approach full employment. Participation rates will also increase as we see people return to the labor pool after previously not finding a job or leaving to earn advanced degrees. Over the past few months, we observed average hourly earnings for private employees rise at an annual rate of 2.9 percent; we expect this to continue in 2016 as further job creation takes place.

## Inflation

Inflation (ex food and energy) will range from 1.8 percent to 2 percent this year, very close to the FED's target level for core inflation. We see an upward trend in core inflation as medical care cost increase by 3 percent annually and the consumer price index increased by 0.3 percent in March 2016. This upward trend in inflation will likely cause the FED to raise rates again this year, despite ultralow rates in Europe and Japan. The strong value of the U.S. dollar and stiff price competition will keep cost for imported goods and commodities fairly flat. The steady recovery of the housing market will continue as we see rents rising at a robust pace of 3.5 percent to 4.0 percent in 2016 compared to previous years.

## Interest Rates

The Federal Reserve will keep short-term rates between 50bp and 75bp, through to the spring of 2017. The Fed is unable to raise rates for several reasons. Oil prices will keep the CPI low in the near term as products across almost every industry see lower transportation and import costs. The Fed's balance sheet was around \$4.5 trillion at the end of 2015, and any attempts to shrink the balance sheet quickly would destabilize markets. In addition, interest rate raises could strengthen the appreciating dollar even further. A strong U.S. dollar limits the ability for export companies to sell goods abroad and any earnings exchanged appear understated.

Long-term rates will remain flat over the course of the year, because of international money flows into treasuries to find higher yield than international central banks zero to negative rates. Additionally, we expect the 10-year Treasuries to end the year around 2 percent while the 30-year fixed rate mortgages end flat at about 4 percent. The long-term expectation of low inflation is also contributing to keeping rates low.

## Oil

The price of West Texas Intermediate has bounced back to \$40 after hitting lows of \$25 at the end of 2015. The North American high-cost oil producers are in danger of bankruptcy, and the larger, established oil companies are experiencing pressures. Storage facilities are near all-time highs, and OPEC members have announced production will remain at current levels. Despite Iran and other players producing, overall trends indicate decreased supply and a slowly increasing demand. The U.S. rig count fell to 372 in March, down from a high of 1600 in 2014, contributing to the future reduction in supply. These trends contribute to prices between \$50 to \$65 per barrel heading into spring of 2017, near the high end above CME Group's futures.

## Currency

According to the Trade Weighted U.S. Dollar Index for Major Currencies, the U.S. dollar has appreciated 28 percent over the last 5 years. The USD will remain strong but flat through 2016, as long as foreign central banks keep lowering interest rates, and the Fed continues to keep short-term rates at or near 50bp.

## Market Outlook

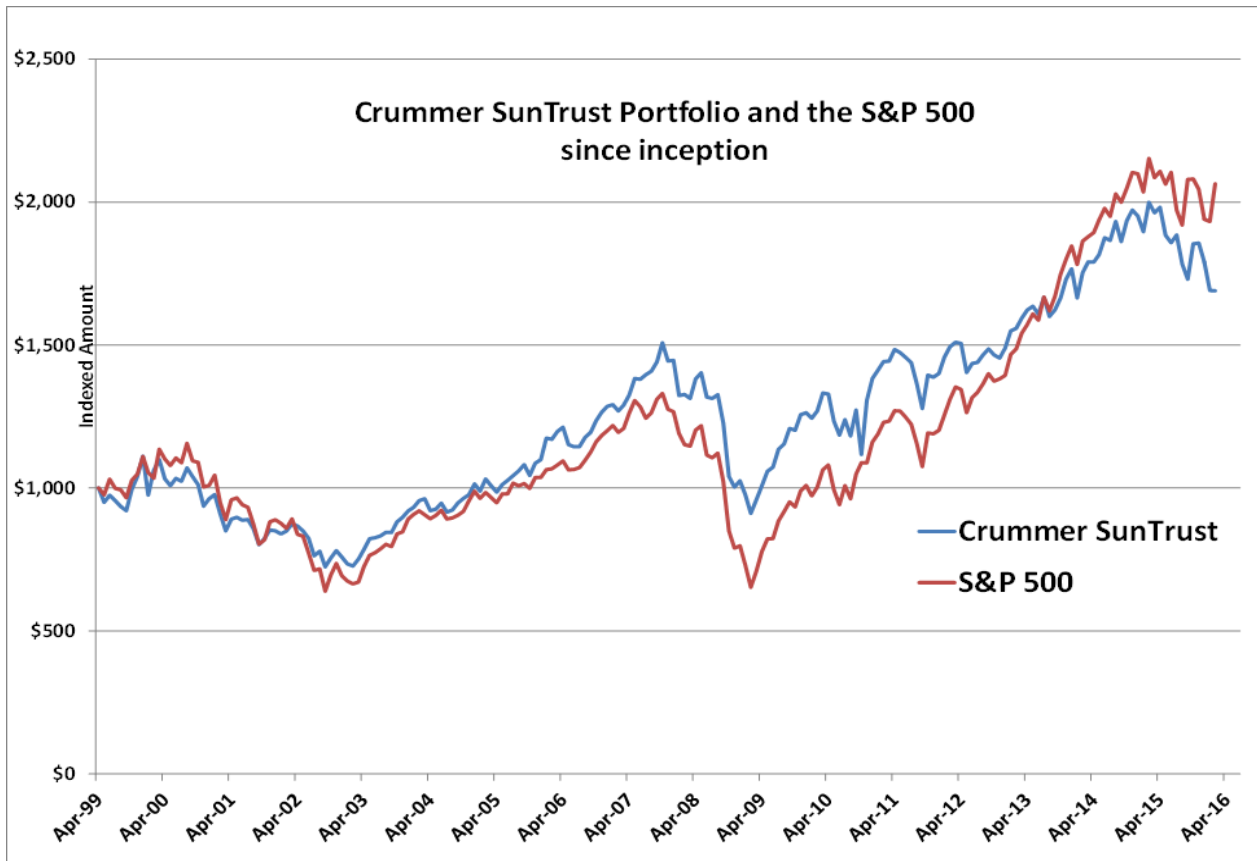
There is a contradiction between the stock market and consumer driven economy. High volatility will continue because of reduced global growth and geo-political issues that affect oil prices and increase the risk of regional conflict. In addition, overall earnings growth has been decreasing potentially indicating a slowdown of the long-term bull market. In contrast, the U.S. consumer is experiencing a stable and strong economy, benefiting from low unemployment, low inflation, low energy prices, and rising wages. As a result, auto sales and housing prices have been doing well.

The Fed will keep short-term interest rates low as slow growth and a strong dollar constrains its ability to raise rates. We are underweighting sectors affected by slow global growth, international central bank policies resulting in zero to negative interest rates, a strong USD, and the Chinese economic deceleration. The contrast between international and domestic economic health creates the need for portfolio tactical and strategic evaluation. Our selections will focus on companies that perform well in current economic conditions, provide a total return, and reduce the effect of volatility.

## Performance of the Crummer SunTrust Portfolio

Since the initial contribution of \$100,000 in April 1999, and the subsequent additional \$400,000 contributed over time, the Crummer SunTrust Portfolio has enjoyed significant growth. It has been able to fulfill the portfolio mandate of providing scholarships for Crummer students, to date to the tune of \$210,000 and, today it has investments of over \$750,000. The chart below compares the portfolio's performance with that of the S&P 500. It can be seen that the portfolio outperformed the index even during the difficult period of the Great Recession and subsequently until 2013. For the last three years, the index has outperformed the portfolio. Stock market volatility combined with the fact that the portfolio trades only once a year hampers the portfolio's ability to adjust the positions to the market changing condition. The portfolio contains fixed income which dampens growth when compared to a purely stock index like the S&P 500. The total returns since portfolio inception is 10% compared

with the S&P's of 12.8%, with similar standard deviations of 14.2% and 14.7% respectively. Therefore, the portfolio is lagging the index based risk/return measures.





## 2015 – 2016 Plan Year Performance Highlights

For the period May 2015 through February 2016, the performance of the portfolio was erratic but declining, as was that of the S&P 500 index. Performance for the ten month period showed an annual total return decline of 16% as compared with that of the index of -8.5% for the same period. Fortunately the market recovered in March 2016 and the portfolio gained 7.79% as compared with the S&P 500's gain of 6.6% resulting in the total return since May 2015 of -9%. Neither the equity nor the bond portions of the portfolio performed well, each contributing to the loss for the period.

### Equity Sector Performance

The portfolio's tactical equity investments are allocated among the S&P's ten sectors: Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Telecommunications, and Utilities. Last year the portfolio was tilted away from sectors that were expected to underperform in an expanding economy, e.g. Consumer Staples, Utilities and Telecom, and tilted toward sectors expected to outperform such as Consumer Discretionary and Industrials. The results were mixed and disappointing. The portfolio only outperformed the index in three sectors: Consumer Staples, Energy and Financials. In the other sectors (numbers in red), Consumer Discretionary, Healthcare, Industrials, Materials, Technology, Telecommunications and Utilities the portfolio did not perform as well as the index. These differences are largely due to the portfolio's security selection. Consumer Staples performed exceptionally well with a performance of 20% better than the index, whereas Telecommunications fared worst with a negative 25% due to the international stock selection which suffered from the strengthening dollar and decline in the Chinese markets.

May 2014 to February 2015 Performance			
Sector	Sector Index	Crummer SunTrust	Over/Under Benchmark
Consumer Discretionary	7.51%	-4.76%	-12.27%
Consumer Staples	13.82%	34.10%	20.28%
Energy	-22.25%	17.18%	5.07%
Financial	-4.90%	0.00%	4.90%
Healthcare	0.00%	-6.51%	-6.51%
Industrial	3.93%	1.57%	-2.36%
Materials	-8.66%	-32.19%	-23.53%
Technology	6.27%	5.96%	-12.21%
Telecommunications	13.54%	-11.47%	-25.01%
Utilities	17.34%	12.27%	-5.07%

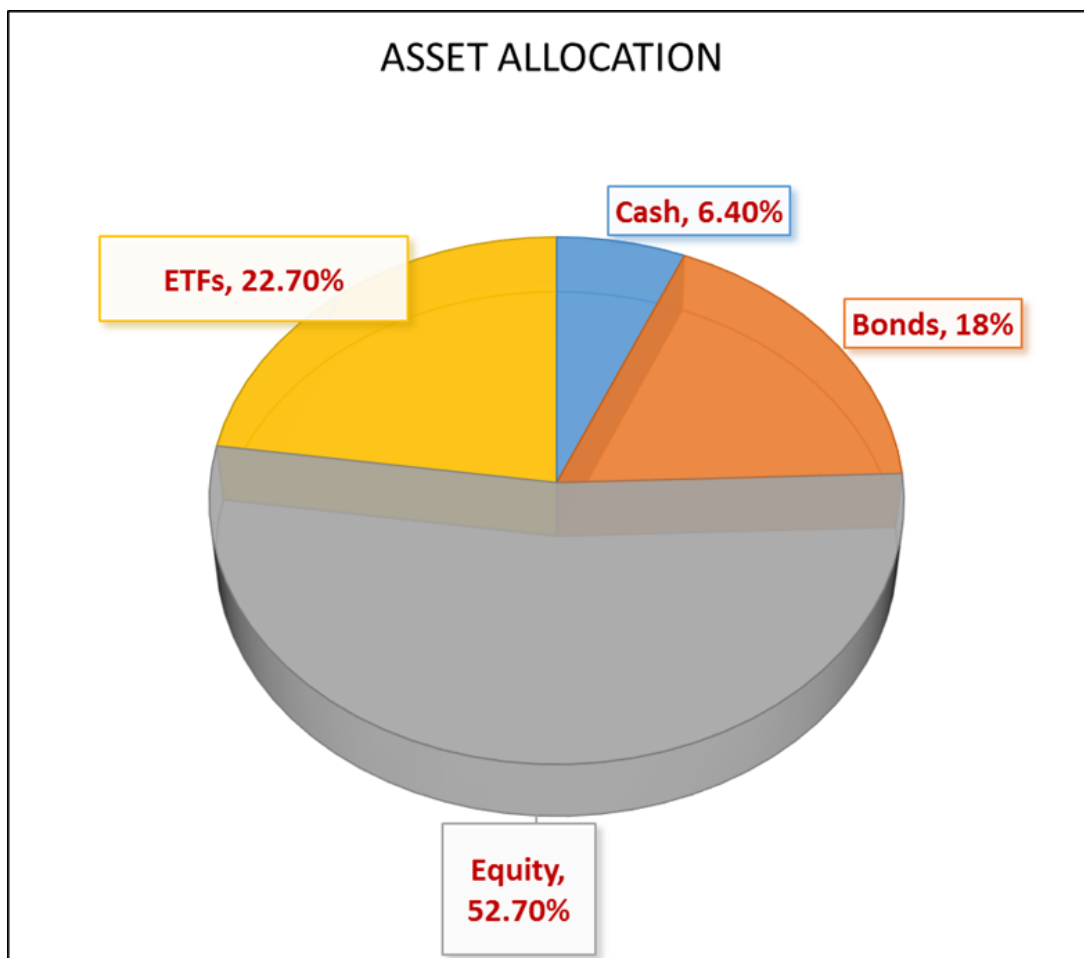
### **Bonds and Cash**

The portfolio began the year beginning May 2015 with 4.1% allocated to cash (to fund scholarships), 84.4.0% allocated to equities, and 11.5% allocated to bonds. The bond investment lost 15.82% over the period May 2015 to February 2016 year. After the proposed trades, the portfolio will hold less than 1.5% in cash and will generate \$40,000 in scholarships and the bond allocation is at a maximum 18%. Our economic view calls for the Fed to raise interest rates one or possibly two times in the coming year which would affect the low end of the yield curve. Our proposed bond investment is in the mid and upper end of the curve, taking advantage of the expected flattening of the curve.

### Portfolio Design

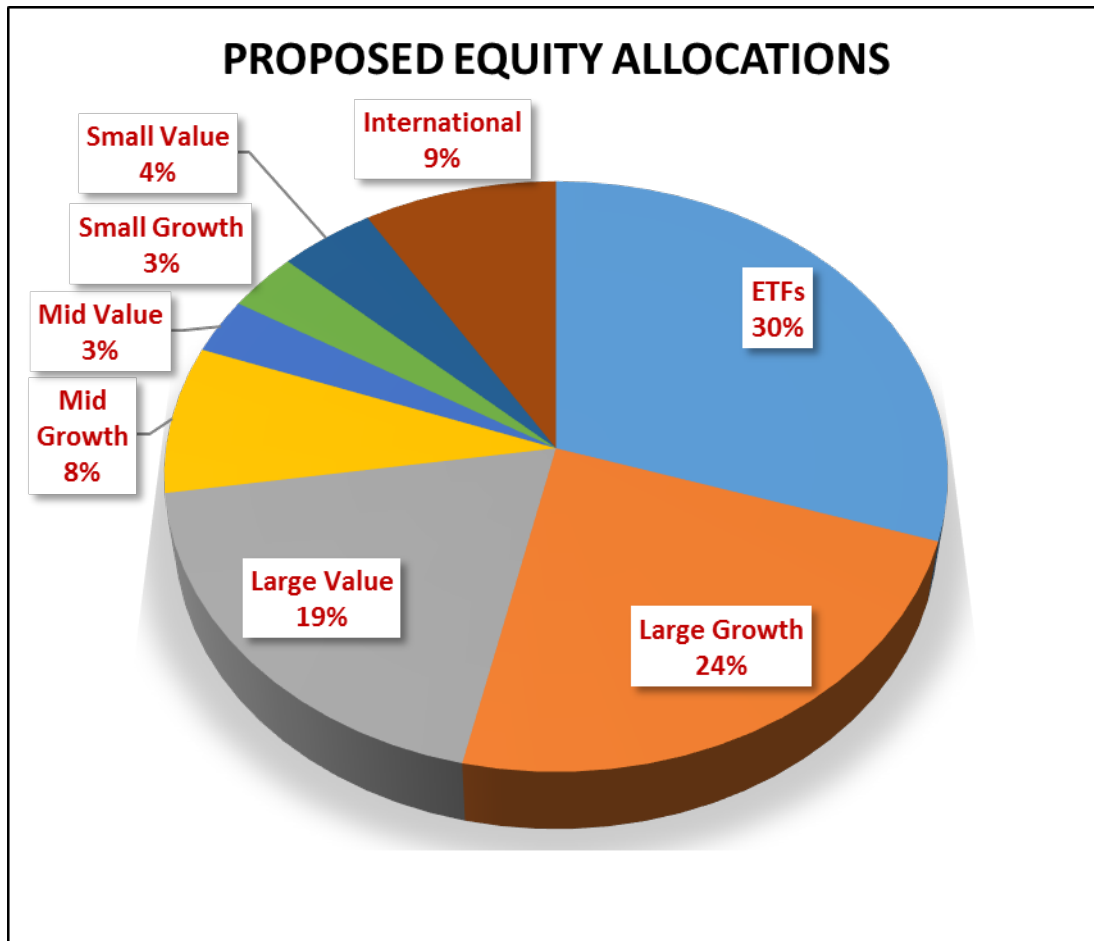
The Crummer SunTrust Portfolio Investment Policy Statement (IPS) provides guidelines for a wide range of alternatives for tactical and strategic allocation decisions (refer to page 93 for a copy of the IPS). Strategically, we allocated funds among asset classes to reflect our economic outlook for a return to more normal markets. The management team looked at the past performance and volatility of each asset class, in order 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 strategy. 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 99 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 2016 is 75.6% equity, 18% bonds, and 6.4% cash. This year, 30% the equity allocation is assigned to S&P Sector ETFs and shown separately in the chart below.

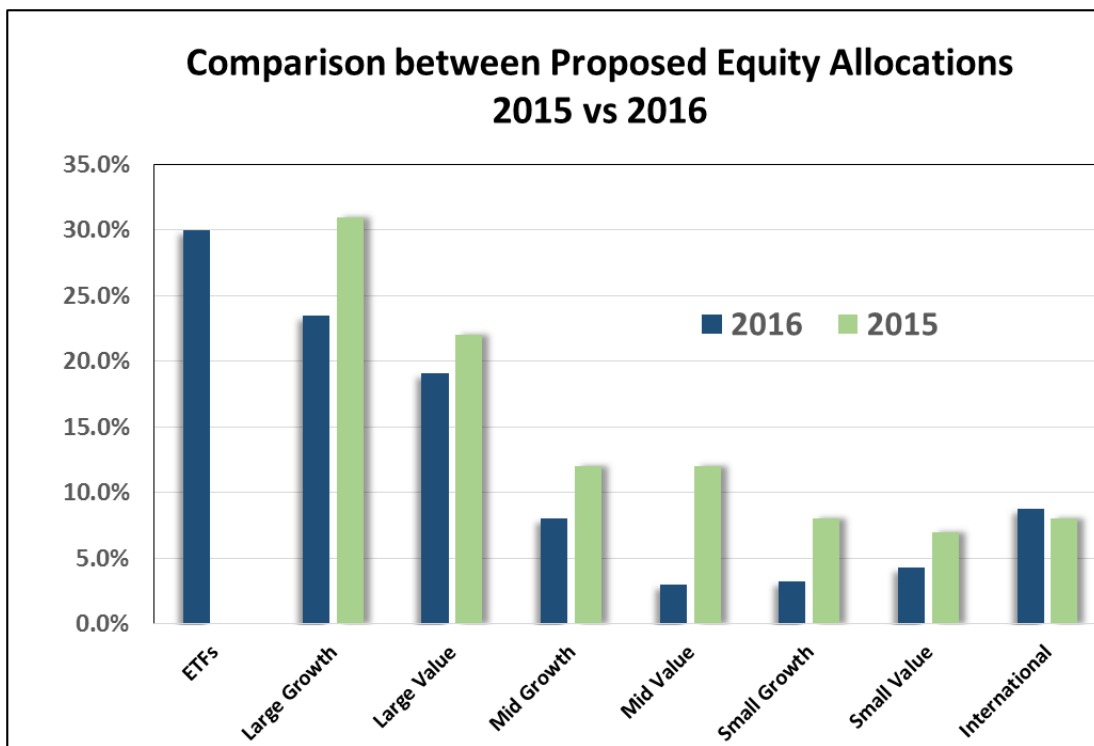


**Strategic Allocation**

The proposed equity asset allocation is tilted towards large cap stocks and fairly equally allocated between growth and value stocks of all capitalization. The addition of each sector ETF further contributes to balanced diversification. This is consistent with our expectation of volatility in the stock market which ultimately shows little net movement over the course of the coming year. We 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. The percentages shown are those of the total equity allocation rather than the total portfolio.



When comparing the proposed allocations between last year, 2015, and this year’s proposals the notable differences are in the addition of the ETFs and in the move away from smaller and mid cap companies. The international allocation remains more or less constant.

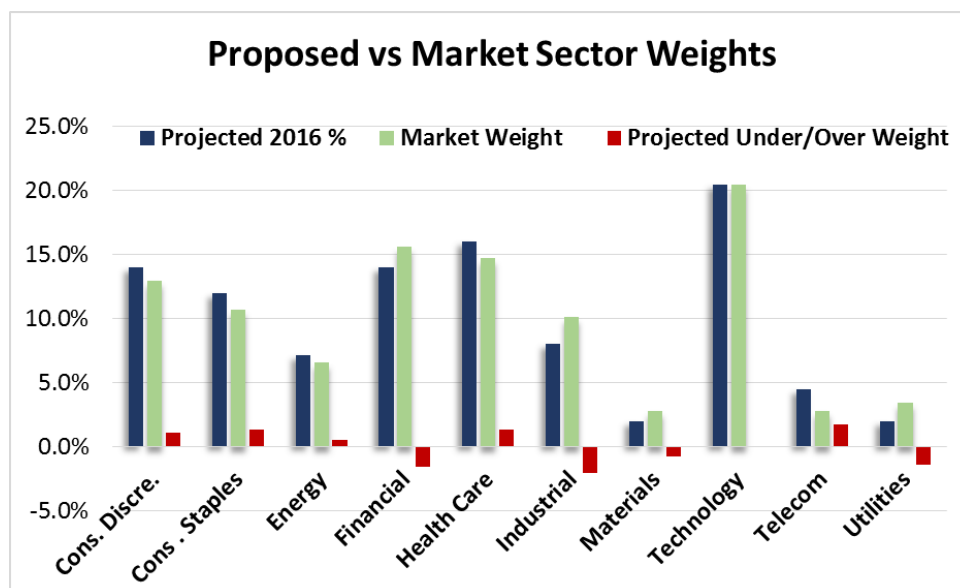


The next table shows the proposed market weights in comparison to the IPS target range. For the purposes of this comparison the ETF allocation is distributed across the range of large, mid and small cap stocks. The resulting portfolio is mid-range for all asset classes except mid-cap growth and fixed income which are both at the upper ends of their limits. The mid cap growth allocation reflects specific opportunities and overall these balanced stock allocations reflect our view of muted economic growth.

Asset Class	Proposed Market Weight	IPS Target Range
Large Cap - Growth	22%	10-30%
Large Cap – Value	18%	10-30%
Mid Cap – Growth	10%	5-10%
Mid Cap – Value	6%	5-10%
Small Cap - Growth	7%	5-15%
Small Cap – Value	7%	5-15%
International Equity	9%	5-15%
Fixed Income	18%	12-18%
Cash	6%	As needed

**Tactical Allocation**

On a tactical level, we predict a sluggish and mixed economic period with low but consistent growth, low unemployment and low interest rates in the near-term. Consequently, we have over-weighted both, those S&P sectors that have traditionally done well when the economy is approaching a turning point (consumer staples, healthcare and telecommunications) and some which have done well in an expanding economy (consumer discretionary and energy). Our high allocation to fixed income has a tactical component in that we propose trades in the mid to high end of the yield curve which we believe may benefit from interest rate rises at the low end. If the Fed does not increase rates the coupon income will, in any case, contribute to the portfolio.



The table below shows the numerical values of our proposed over and under sector weightings.

Sector	Proposed	Market	Tilt
Consumer Discretionary	14%	13%	2%
Consumer Staples	12%	11%	1%
Energy	7%	6%	1%
Financials	14%	16%	-2%
Healthcare	16%	15%	1%
Industrial	8%	10%	-2%
Information Technology	20%	20%	0%
Materials	2%	3%	-1%
Telecommunications	5%	3%	2%
Utilities	2%	3%	-2%

We believe our proposed allocations will position the portfolio to grow in a time of market uncertainty and a slowly improving economic environment.



## Sector Analysis

## Consumer Discretionary

### Outperforming the S&P in 2015

The Consumer Discretionary sector consists of businesses that sell nonessential goods and services and is heavily influenced by economic performance. Consumers tend to cut discretionary spending in economic downturns. Companies in this sector include retailers, media companies, consumer services companies, apparel companies, and automobile and component companies. In 2015, the consumer discretionary index rose 10.1%, outperforming the S&P 500, which recorded a 0.7% loss, but total return of 1.2%. Consumer confidence is the primary growth driver in this sector. The sector performed well last year because of consumer's positive sentiment. In addition to an economic environment that favored consumers, the job market continues to look healthy and the housing market continues to improve.

### Sector Outlook: Consumer Confidence

---

Consumer confidence will remain relatively stable in 2016. Average hourly earnings have risen 2.2% over the past 12 months, according to the Bureau of Labor Statistics, in the midst of decreasing unemployment, leading consumers to feel more confident. The Conference Board Consumer Confidence Index has declined from January to February, falling from 97.8 to 92.2, mostly due to the stock market decline in January. We expect market volatility to cause the Consumer Confidence Index to remain relatively flat throughout the year. Despite stock market volatility, the overall consumer sentiment is positive because of low unemployment, rising wages, low energy and commodity prices, and the strong dollar. The unemployment rate at the beginning of this year was below 5% and with a positive outlook, we believe it will remain steady around that level. Continuing a trend from last year, consumers are deleveraging and the total Debt-to-Income ratio has been gradually decreasing, showing that consumers are regaining confidence to take on more credit and increase spending.

### Demographic Trends

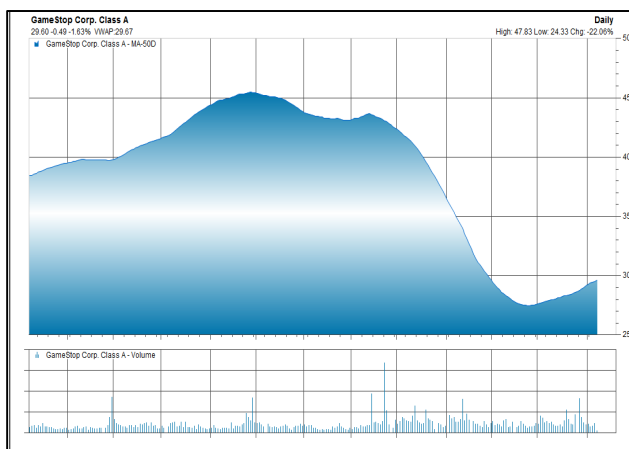
"Baby Boomers" are the largest demographic in the United States. According to the U.S. Census Bureau, the population 65+ numbered 46.2 million in 2014 and is expected to grow to 56 million by 2020. While the Employee Benefits Research Institute states that consumers with employment-based retirement plans are more confident now than they have been in recent years, many live on a fixed income and we do not expect a significant growth in disposable income for this demographic in the near future. At 74.8 million people, the 18-34 cohort is the fastest growing segment of the population and accounts for approximately \$200 billion in spending power, a number that is expected to double by 2020. "Millennial" customers are discerning buyers – according to a 2013 Columbia Business School survey, more than 50.0% of millennials use smartphones to research products as they are shopping. The new shopper negatively affects traditional retail companies with limited digital presence. We are avoiding traditional retailers that rely heavily on brick and mortar store sales. In addition, the low percentage of debt to disposable income is an indication that consumers, especially millennials, have different spending habits now than the general consumer did before the Great Recession. We believe low unemployment, low energy and commodity prices, low inflation, and the start of rising wages will drive consumer consumption. As a result, we are overweighting consumer discretionary.

## Gamestop Corp. (GME)

Recommendation <b>SELL</b>	Valuation <b>\$31.88</b>	Last Price <b>\$31.77</b>	Adjusted P/E <b>8.7</b>	Style <b>Small Value</b>	Dividend Yield <b>4.6%</b>
-------------------------------	-----------------------------	------------------------------	----------------------------	-----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Negative
Relative Strength	Neutral



### Introduction

GameStop is a retailer of video game products and PC entertainment software and has recently delved into its new mobile business. It publishes the Game Informer magazine, which has 7.9 million subscribers, and operates the video gaming website *kongregate*. The company operates 6,457 stores in North America, Europe, and Australia.

### Fundamental Analysis

GameStop commands an 80% share of the used video game market, differentiating it from competitors that sell mostly new content. Historically, used games have generated roughly 50% of the company's gross profits due to used games high gross profit margins, which is nearly double margins of new games. The video game industry has experienced a shift into digital content with the strongest growth in mobile gaming. Digital sales have increased from 25% of 2010 total sales to 50% in 2015, and this trend is expected to continue. Console game sales are expected to decline to \$18B in 2020 from \$20B in 2015.

The digital trend is reducing the need for physical exchange of video games. GameStop has responded, by acquiring companies to capture economies of scale and diversify its in-store product lines, however, the physical store layout is small, limiting product variation capabilities. Direct selling through consoles and internet retailers have increased industry competition. Sales growth correlations are weak to consumer confidence and discretionary income. The strongest correlation, to the number of cable subscribers, projects negative growth of 1% per year.

### Financial Statement Analysis

GameStop revenues have been increasing since 2013, topping at \$9.3B in October of 2015, short of 2012 highs. Seventy percent of its revenues are from the United States and the remaining revenues are spread amongst developed nations. Management has utilized economies of scale to reduce costs, driving increases in gross income and net income. GameStop's net income of \$399B is at the highest levels since 2011. Top line growth, however, reduced 2% from October 2014. To fund acquisitions, the company has raised capital substantial amounts of debt. To finance acquisitions, the company has increased debt substantially. Share repurchases, dividends, and increasing interest expense caused negative cash flows. The increase in EPS is driven by share repurchases and cost reductions.

### Conclusion & Recommendation

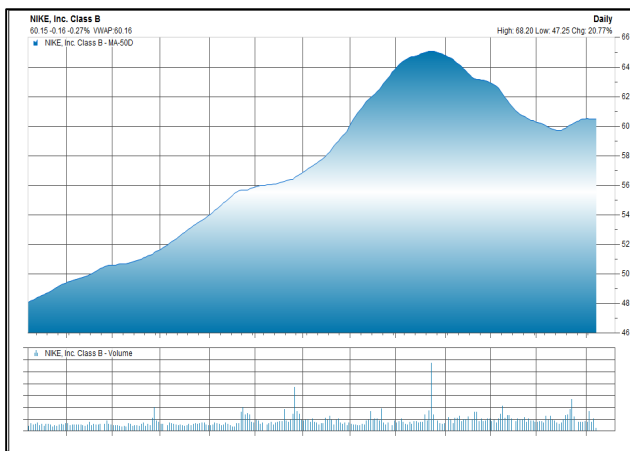
The used games market of the video game industry is shrinking. Despite management's ability to manage expenses, focus on product diversification, and buy back shares, the stock price fell 23%. GameStop competes in a highly competitive, saturated market and sales correlations indicate limited future growth. We recommend SELL due to a shrinking market and poor top-line growth.

## Nike Inc. (NKE)

Recommendation **HOLD** Valuation **\$65.76** Last Price **\$62.04**

Adjusted P/E **30.8** Style **Large Growth** Dividend Yield **1.0%**

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

The used games market of the video game industry is shrinking. Despite management’s ability to manage expenses, focus on product diversification, and buy back shares, the stock price fell 23%. GameStop competes in a highly competitive, saturated market and sales correlations indicate limited future growth. The drivers for increased EPS have been share repurchases and cost reductions. Share repurchases have not helped the price over the last year and reducing costs will become more difficult. We recommend SELL due to a shrinking market and poor top-line growth.

### Fundamental Analysis

Nike reported \$30 billion in sales in 2015. The company has been experiencing sales growth since 2010. Nike’s footwear segment accounts for 60% of its total revenue. The company’s net income margin has been steadily positive since 2009, ranging from 9.0 to 10.0%. Sales and comparable-store sales have both been increasing due to incremental growth in its brand direct to consumer, which are driven by e-commerce sales that are projected to grow

to \$7 billion in the next 5 years. Although more than 50% of Nike’s revenue is from outside the United States, high volume sales and higher disposable income have provided a positive growth outlook for a continued increase in Nike’s revenue. Emerging markets continue to be a huge growth driver for Nike, whose products represent an attainable status symbol for the middle class populations.

### Financial Statement Analysis

In 2015, Nike, Inc. reported a net income of \$3.3 billion, a 21.5% increase from 2014. Total sales increased 10.5%, a considerable comparison in sales growth, which was just 5% in 2013. In 2015, Nike, Inc. reported a net income of \$3.3 billion, a 21.5% increase from 2014. Total sales increased 10.5%, a considerable comparison in sales growth, which was just 5% in 2013.

### Conclusion & Recommendation

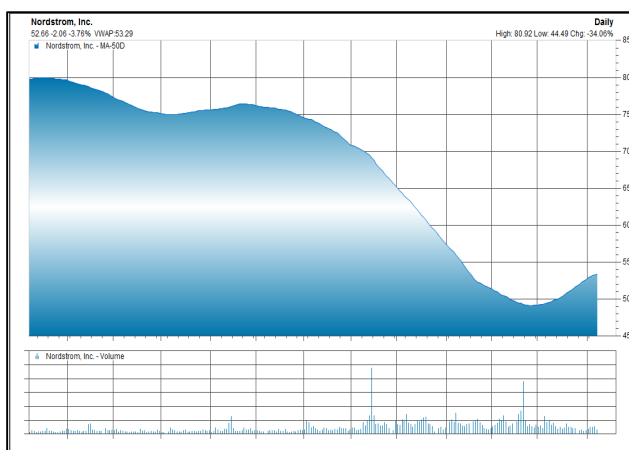
Nike operates in a very competitive environment with pressure from international, off-price, and e-commerce retailers. However, Nike’s diverse product set and global scale set it apart from its competitors. Therefore, we recommend a HOLD.

## Nordstrom Inc. (JWN)

Recommendation <b>SELL</b>	Valuation <b>\$67.34</b>	Last Price <b>\$57.49</b>	Adjusted P/E <b>18.4</b>	Style <b>Mid Core</b>	Dividend Yield <b>2.5%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	--------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Nordstrom is a retailer of national and exclusive branded apparel, shoes, accessories and cosmetics. The company operates through two segments: Retail and Credit. Currently, the Retail segment operates 121 full-line stores and 194 off-price stores. The Credit provides a private label credit card, two Nordstrom VISA credit cards, and a debit card for customer purchasers through its wholly owned federal savings bank, Nordstrom FSB.

### Fundamental Analysis

Nordstrom has continually increased its number of off-price stores, Nordstrom Rack, which now outnumber the 121 full-line Nordstrom stores. As consumer habits have continued to turn to online shopping, the online segment of Nordstrom now exceeds 20% of its sales. As the company continues to build out its online infrastructure, Nordstrom has seen its expenses grow faster than sales. The shift from in-store to e-commerce sales, which carries a higher variable cost and competitive pressures from online retailers like Amazon, will continue to impact Nordstrom's margins. Through this shift of increasing its

off-price retail stores and consumers making more on-line purchases, Nordstrom's brand image is declining. The steady decline of malls domestically and in-store sales have damaged Nordstrom's revenues. In-store sales are only expected to grow between 1.5% and 2%, which is below the 4% growth expected growth of the U.S. retail industry overall.

### Financial Statement Analysis

Nordstrom's profits have decreased 2% from 2014 to 2015 as increased markdowns in response to elevated discounting weighed heavily on profits. The impact of the Truck Club acquisition, an online personal styling service for men, will be felt on its bottom line as Nordstrom had an estimated loss of \$30 million. The company's return on assets has declined steadily since 2013 and return on equity fell by 4.9% from 2014 to 2015. Gross margin has weakened over the last year because of a 4.6% increase in cost of goods sold and a declining revenue. Furthermore, Nordstrom experienced a 12% growth in inventory even through it offered discounts and promotional activities.

### Conclusion & Recommendation

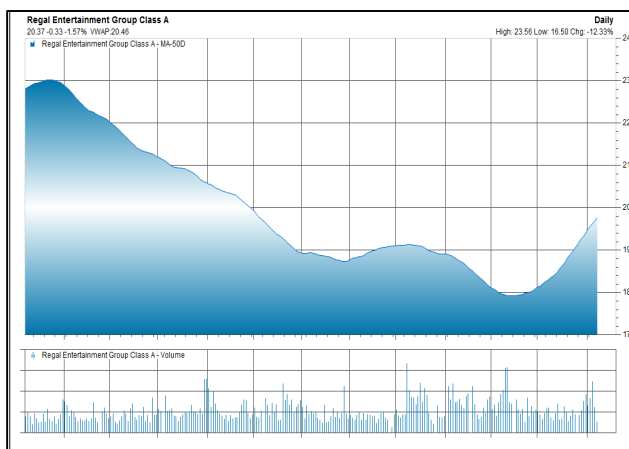
Although Nordstrom does not have any global exposure, the company is struggling with declining traffic and it is using deep discounts to boost sales, which has largely been unsuccessful. While Nordstrom has gained market share in both its full-line and off-line businesses, its earnings outlook is not positive. Nordstrom's shares have fallen over 37% in the past 12 months. Increased competition from retailers such as Macy's and Kohl's has reduced earnings expectations from \$3.8 to \$3.9 to \$3.3 to \$3.4. We expect the price to rise to a high \$60 range due to momentum and an overselling about six to twelve month ago. Once in this range, it will stay flat or decrease. With a flat trend in consumer confidence, Nordstrom is positioned to witness a decline in growth over the next year. Therefore, we recommend a SELL of this company.

## Regal Entertainment Group (RGC)

Recommendation <b>SELL</b>	Valuation <b>\$19.04</b>	Last Price <b>\$21.12</b>	Adjusted P/E <b>21.6</b>	Style <b>Small Core</b>	Dividend Yield <b>4.1%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Negative



### Introduction

Regal Entertainment Group operates the largest and most geographically diverse theatre circuit in the United States, with 100% of the \$3B revenue from the U.S. and territories. It develops, acquires and operates multi-screen theatres primarily in large demographic markets and suburban growth areas. The company holds the largest market share in its industry, manages 7,394 screens with an average 12.7 screens per theater, and employs 24,201 people.

### Fundamental Analysis

The movie theater industry has become highly competitive due to the internet. People now have the freedom to watch entertainment wherever they choose. Despite record box offices due to increases in ticket prices, movie theater attendance has been decreasing. Theaters receive the majority of sales from concession, with a small amount from distributors. The historical growth drivers, according to S&P Capital, of per capita disposable income, the number of broadband connections, and number of

kids between K-12, have weak correlations to sales. The strongest driver, kids between the ages of 10-19, has subdued expected growth of 40bp. The main driver is the quality of content shown in the theaters. Although blockbusters will be in theaters, some industry experts believe consumers are tiring of the same repeated content, as seen in the increased viewership of television and independent films. Furthermore, theaters have large capital expenditures to update equipment capable of releasing blockbusters on new video formats (IMAX and 3-D).

### Financial Statement Analysis

The company bounced back in 2015 from 2014 lows. Despite growth in sales, gross income, EBITDA, and net income, the values are back to 2013 levels. From 2012 to 2015, CAGR for gross income, EBITDA, and net income are -35.3%, 1.4%, and 1.9%. The company used debt financing to pay for acquisitions in 2013 and 2014, which has caused inconsistent dividend payments. Although EPS still increased it is still below the 2013 value. EPS CAGR is 4.5%. EPS growth is a result of reductions in SGA being down from \$1.1B in 2012 to \$79m in 2015, a CAGR of -59.5%. However, COGS has increased from \$1.2B in 2012 to \$2.7B in 2015, a CAGR of 28.2%. It will be difficult for the company to continue SG&A reductions as those costs are now at 3% of sales, down from 42% in 2012. Sales are above 2013 levels but have a CAGR of 3.5%.

### Conclusion & Recommendation

Regal Entertainment Group has subdued top-line growth and will have further difficulty reducing costs. Technology provides consumers with the choice of watching content elsewhere. Increased debt levels have contributed to inconsistent dividend payments and there is no mention of a share repurchase program from management. Therefore, we recommend a SELL.



## Home Depot (HD)

Recommendation  
**BUY**

Valuation  
**\$132.18**

Last Price  
**\$133.35**

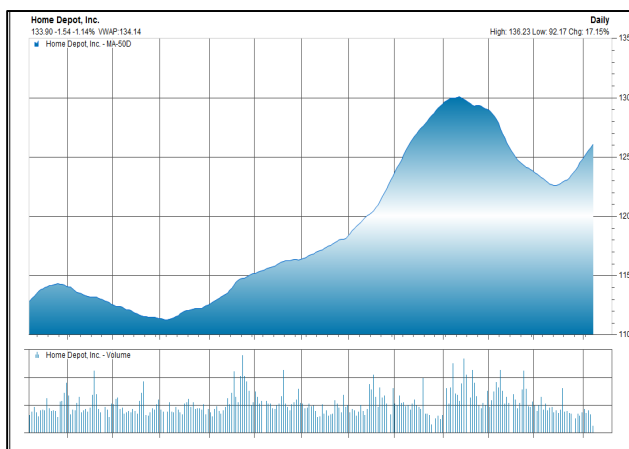
Adjusted P/E  
**23.8**

Style  
**Large Growth**

Dividend Yield  
**2.1%**

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Positive
Relative Strength	Negative



### Introduction

The Home Depot, Inc. operates as a home improvement physical and online retailer that sells various building materials, home improvement products, and lawn and garden products, as well as provides installation, home maintenance, and professional service programs to do-it-yourself, and professional customers. Products vary from flooring and cabinets to roofing, windows, and central air systems. It primarily serves professional remodelers, general contractors, and small business owners. As of the September 2015, the company had 2,270 stores located in 50 states in the United States, the District of Columbia, Puerto Rico, U.S. Virgin Islands, Guam, Canada, and Mexico.

### Fundamental Analysis

Home Depot is the leader in the home improvement retail industry. Recent acquisitions and management initiatives have focused on revenue growth and cost reductions. To reduce costs, the company has invested to integrate technology that will enhance customer service, optimize the

supply-chain, and increase cyber-security. Sales generating initiatives strengthen the product portfolio and partnerships. Despite recent stock market volatility, the consumer-centric economy is favorable. Low energy and commodity prices act as a stimulant for the home improvement industry. A strong correlation between consumer spending and Home Depot sales suggest an 8% growth rate in 2016.

### Financial Statement Analysis

Sales grew 6.4% to \$88.5 billion in 2015, the largest increase since 2013. However, COGS increased at 7.3%, resulting in gross income increase of 4.6%, which is smaller growth compared to the past 5 years. Selling and general expenses did not grow resulting in net income and EBITDA increases of 10% and 11%. Overall margins are growing at the lowest rates compared to the last 5 years. However, sales growth looks strong, with overall sales expected to reach 2007 highs by the end of 2016. The company can improve margins by implementing direct cost initiatives and realizing cost synergies through past acquisitions. The balance sheet is healthy as debt levels are similar to previous years and cash increased 27% in 2015. Free cash flow has increased over the past five years along with dividends and share repurchases. The increased dividend yield is due to both earnings growth and a cash dividend increase. The company has \$11B remaining for share repurchases, buying back \$7B and \$6B over the past two years.

### Conclusion & Recommendation

Favorable consumer-centric economic factors, with low energy and commodity prices expected to continue, result in an expected growth in sales. Despite an increase in cost of goods sold, management has the opportunity to improve margins through effective initiatives and acquisition synergies. Because of strong projected earnings growth, strong dividend yield, and a large, \$5B-\$7B, share repurchase program, we recommend BUY.

## Thor Industries (THO)

Recommendation  
**BUY**

Valuation  
**\$63.50**

Last Price  
**\$63.71**

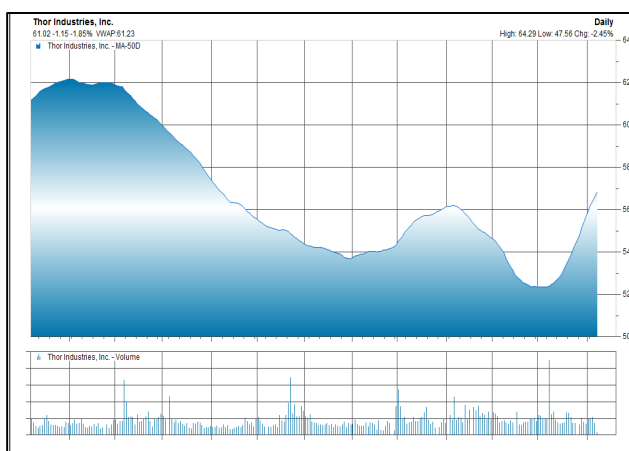
Adjusted P/E  
**15**

Style  
**Small Core**

Dividend Yield  
**2.0%**

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Negative



### Introduction

Thor manufactures and sells a wide range of recreation vehicles and small and mid-sized busses throughout the U.S. and Canada. It operates through two segments: Motorized and Towable. The Motorized segment produces and operates Airstream and Thor Motor Coach. The company offers travel trailers under the names Classic Limited, Flying Cloud, Land Yacht, and Eddie Bauer. Thor also manufactures and sells luxury fifth wheels, private label equestrian recreational vehicles, and aluminum extrusions and specialized component products to recreational vehicles and other manufacturers.

### Fundamental Analysis

Thor has no foreign exposure as it only operates and sells its vehicles in U.S. and Canada. North American RV retail sales have surged 11% since 2014 and account for a \$16B industry. The popularity of inexpensive RV's has attracted younger buyers and even as the U.S. population continues to age, the average age of RV owners has declined 2.1%. The company's gross margins continue to expand rapidly as Thor benefits from operating efficiency, lower input

prices, scale and leverage. The company expects to expand its business in the coming years through acquisitions, new capacity, product innovation, and continued dividend payments. The towable RV sales have increased 3% since last year. Improvements made to warranty costs also contributed to Thor's bottom line growth. The Motorized RV segment had even healthier growth as it saw sales climb 37% from a year ago. Strong dealer responses to new products offered by Thor and its leading spot in the industry have produced better results compared to Thor's competitors.

### Financial Statement Analysis

Sales grew 13.7% to \$4.2 billion in 2015, the largest increase since 2012. Thor has showed consistent growth and its ROA, has steadily increased since 2011. The company's ROE is 2.86% above the 5-year average, thus depicting Thor's ability to generate profit. Overall margins continue to grow modestly and overall sales are expected to increase through 2016. Although cash decreased in 2015, Thor's acquisition strategy of obtaining more RV's in the towable segment continues to bolster the company as a market leader. In 2015, Thor announced a share repurchase, buying back \$60 million. There is no expectation of this to continue.

### Conclusion & Recommendation

As Thor remains the market leader, continues to seek out acquisitions, and has continued limited international exposure, it is expected to see growth in the upcoming year. Furthermore, as the outlook for the price of oil remains low Thor can benefit greatly. We recommend a BUY.

## Consumer Staples

### Consistent Outperformance

Consumer Staples is a defensive sector that includes companies whose businesses are less sensitive to economic cycles. It includes manufacturers and distributors of food, beverages, and tobacco, and producers of household goods and personal products. This sector is a good hedge as it outperforms during recessions and maintains steady performance during economic upturns.

Historically the Consumer Staples sector has had the second highest annual return after Healthcare and the second lowest volatility after Utilities. Consumer staples tend to have stronger dividend yields and dividend growth than other equity sectors, and their yields are often competitive with those of non-equity investments,

In 2015, the S&P 500 Consumer Staples sector increased by 7.00% while the total S&P 500 increased only 1.38%. The sector will likely continue to rise in the coming year due to a strengthening economy, low fossil fuel costs in the immediate future, an improving labor market, and higher disposable income. Lower commodity costs should help bolster the sectors traditionally narrow profit margins.

Given the recent volatility in the stock market and the continued Federal Reserve uncertainty, We have decided to overweight our position in the staples sector in order to hedge against our forecasted high volatile times and create stability to our investment portfolio. We have positioned Consumer Staples at 12.00% of the portfolio, 12.15% above its current market weight of 10.70%.

### Innovation and “Good” Products Key to Create Differentiated Value

In a saturated market, consumer product companies must continuously innovate to create differentiated value and remain successful. Innovation has been a key driver for companies like P&G and General Mills for delivering strong, long-term results. Companies are also increasingly shifting their focus to more sustainable and healthier products to meet changing consumer demand. With increasing health consciousness, rising environmental concerns, and growing regulatory pressures, it is essential for companies to adapt to the changing demand conditions to remain relevant in the market.

### Emerging Markets

In the U.S., the opportunity for consumer staples is fairly mature—Americans tend to buy the same amount of toothpaste and laundry detergent every year, so volumes across the sector grow roughly in line with the annual population growth of about 1%. However, there is ample opportunity for large growth in emerging markets. As income rises in countries like China and India, consumers are purchasing more and better-quality staples items. An increase in discretionary income enables emerging-market consumers to buy more discretionary items, such as washing machines, which in turn further boosts spending on consumer staples such as laundry detergent. As incomes continue to increase in emerging market, so does the growth potential Consumer Staples companies.

## The Andersons Inc. (ANDE)

Recommendation  
**SELL**

Valuation  
**\$33.17**

Last Price  
**\$31.09**

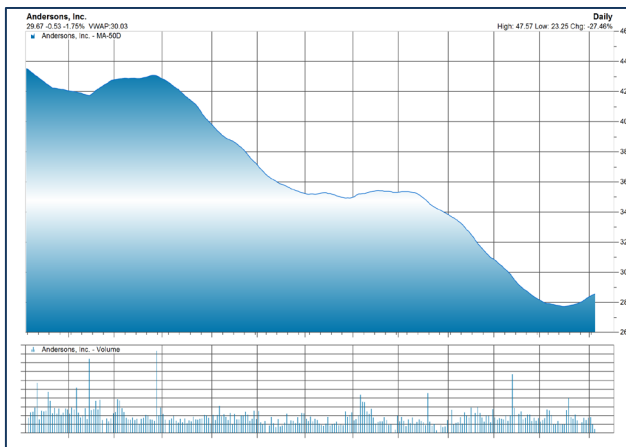
Adjusted P/E  
**14.6**

Style  
**Small Value**

Dividend Yield  
**2.1%**

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

The Andersons, Inc. (ANDE) is a diversified agribusiness that engages in railcar leasing and repair, turf products production, and consumer retailing. The company operates in six segments: Grain, Ethanol, Rail, Plant Nutrient, Turf, and Specialty & Retail. This small value company has a market capitalization of \$1.1billion and generated \$4.13billion in revenue last year.

### Fundamental Analysis

The Andersons is a well-diversified company with operations across a wide range of categories that offer solid growth prospects in the coming years. In 2015, ANDE hit its second consecutive year of declining revenues. Key macroeconomic indicators are driving business growth for Andersons. An expanding world population, growing demand for protein, and strong preference for North American crops continue to drive growth for the company. The Company is currently undergoing a management change, which we believe creates uncertainty in its performance.

Other investments across the company's operations indicate a holistic approach to growth. The company diversified its rail business with the addition of barges to its portfolio. An increase in planted acres will expand the soybean business. The turf group strategically built inventories while the retail group reduced costs to boost profitability. Investments in risk management and grain marketing will complement the company-wide expansion and long-term investments.

### Financial Statement Analysis

ANDE has experienced a negative revenue growth over the past three years with Total revenue declining by 14.4% from \$5.47billion in 2013 to \$4.13billion in 2015. At the same time SG&A expenses have increased by 30% from \$272.5million in 2013 to \$389.6million in 2015.

### Conclusion & Recommendation

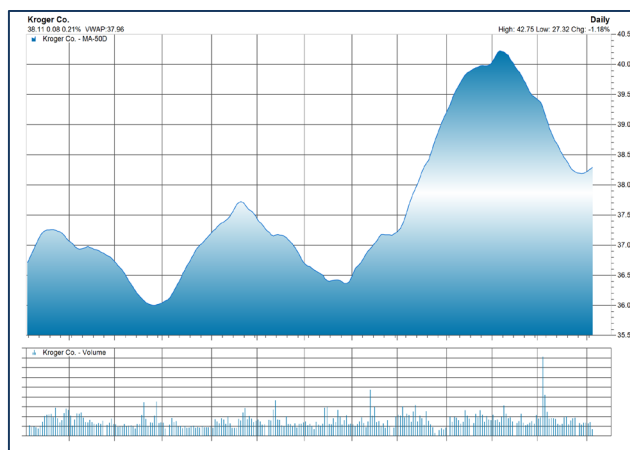
Even though the company is organically diversified, with one business unit performing well during years that others do not, the company has been experiencing poor financial performance over the past two years. Poor financial performance and the uncertainty of new management heavily influence our decision to recommend a SELL.

## Kroger Co. (KR)

Recommendation <b>BUY</b>	Valuation <b>\$43</b>	Last Price <b>\$38.09</b>	Adjusted P/E <b>18.25</b>	Style <b>Large Growth</b>	Dividend Yield <b>1.05%</b>
------------------------------	--------------------------	------------------------------	------------------------------	------------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Negative



### Introduction

The Kroger Co. operates retail food and drug stores, multi-department stores, jewelry stores, and convenience stores throughout the United States. It also manufactures and processes some of the food for sale in its supermarkets. Kroger was founded by Barney Kroger in 1883 and is headquartered in Cincinnati, OH.

### Fundamental Analysis

Kroger operates exclusively in the US and 100% of its revenue is domestic. Therefore, no negative impact from a strong dollar. Kroger's Sales are very strongly correlated to the following economic indicators:

#### Consumer Confidence

Kroger's Sales have a positive correlation to US Consumer Confidence of 0.91 over the past 5 years. As we expect small growth in this metric we believe this will be reflected in an increase in sales figures for fiscal year ending January 2016.

#### Unemployment Rate

Kroger's Sales have a negative correlation to the US Unemployment Rate of -0.98 over the past 5 years. As we

expect small decrease in this metric we believe this will be reflected in an increase in sales figures for fiscal year ending January 2016.

#### Inflation

Kroger's Sales have a negative correlation to US Consumer Price Index of -0.88 over the past 5 years. As we expect small decrease in this metric we believe this will be reflected in an increase in sales figures for fiscal year ending January 2016.

#### Consumer Credit

Kroger's Sales have a positive correlation to US Consumer Credit of 0.98 over the past 5 years. As we expect small growth in this metric we believe this will be reflected in an increase in sales figures for fiscal year ending January 2016.

Kroger finalized its friendly acquisition of Roundy's Inc. December 2015. The addition of 151 retail grocery stores should contribute to an additional \$4 billion in sales and an increase in EBITDA of \$102 million for the Kroger Co. without accounting for synergies.

### Financial Statement Analysis

Green Kroger's Sales have increased steadily over the past 10 years by 39.8% from \$66.11 billion in 2006 to \$109.83 billion in 2015. The company has increased dividends gradually by 400% from \$0.10 to \$0.40 over the same time period. After a spike to Free Cash Flow in 2011 due to a sell off of Hilander Foods to Schnuck Markets Inc., Kroger's free cash flow has increased steadily by 46% from \$0.76 billion in 2011 to \$1.4 billion in 2015.

### Conclusion & Recommendation

Kroger has a solid financials and is well positioned in the domestic market to witness steady long-term growth. The additional stores and synergies from the acquisition of Roundy's Inc. will increase sales in the short-run and favorable economic trends should sustain growth in the longer-run. We recommend a BUY.

## Pepsi Co. (PEP)

Recommendation  
**HOLD**

Valuation  
**\$106.21**

Last Price  
**\$102.72**

Adjusted P/E  
**21.9**

Style  
**Large Core**

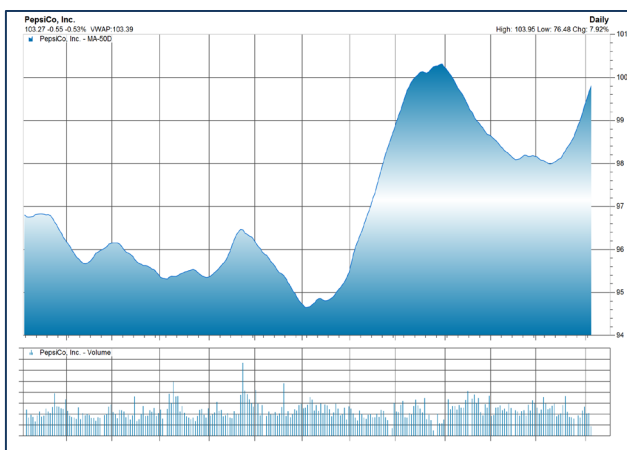
Dividend Yield  
**2.79%**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Positive

Relative Strength Negative



### Introduction

PepsiCo manufactures, markets, and sells a variety of salty, convenient, sweet and grain-based snacks, carbonated and non-carbonated beverages, and foods throughout the Americas, Europe, Asia, the Middle East and Africa. PepsiCo products include Fritos, Lay's, Doritos, Tostitos, Cheetos, Quaker Chewy granola bars, Cap'n Crunch, Rice-A-Roni, Mountain Dew, Gatorade, Aquafina and Tropicana, among others.

### Fundamental Analysis

PepsiCo's Frito-Lay division is the world's largest snack food company. It controls almost 40.0% of the world's snack market. While soft drink demand is slightly decreasing throughout North America and Europe, snack consumption volume increased three percent in the Americas and two percent in Europe last year. PepsiCo has done a good job of addressing changing customer demand by expanding its portfolio of products to include health conscious ingredients like fruit, vegetables and whole grains, as well as offerings "that provide a functional benefit, such as addressing the performance needs of

athletes." PepsiCo will continue to invest in developing and emerging markets. Over the last five years, revenue from emerging markets has tripled. The company plans to invest \$5.0 billion in Mexico by 2019. Mexico has the world's largest per capita consumption of soft drinks and bottled water. In addition, Sabritas, PepsiCo's Mexican subsidiary, has roughly an 80.0% market share in the country. Last year, PepsiCo announced a new multi-year partnership with Live Nation as the music company's official carbonated soft drink and bottled water partner, replacing previous partner Coca-Cola, who had secured this partnership in 2009. The company will have exclusive pouring rights at 75 of Live Nation's U.S. amphitheaters, clubs and theaters, and will also provide exclusive "Out of the Blue" experiences with Live Nation artists on tour. In 2015 PepsiCo outperformed its Direct Competitor Coca-Cola with 30% higher revenues and 9% higher EBITDA.

### Financial Statement Analysis

PepsiCo's revenue growth has turned negative from 2014 to 2015 with total revenues decreasing by 5.44% and EBITDA decreasing 1.96% in 2015. However, PepsiCo did outperform Coca-Cola in both total revenue and EBITDA for 2015. Additionally, PepsiCo's Free Cash Flow per share has increased steadily over the past 10 years from 2.38 in 2006 to 5.27 in 2015.

### Conclusion & Recommendation

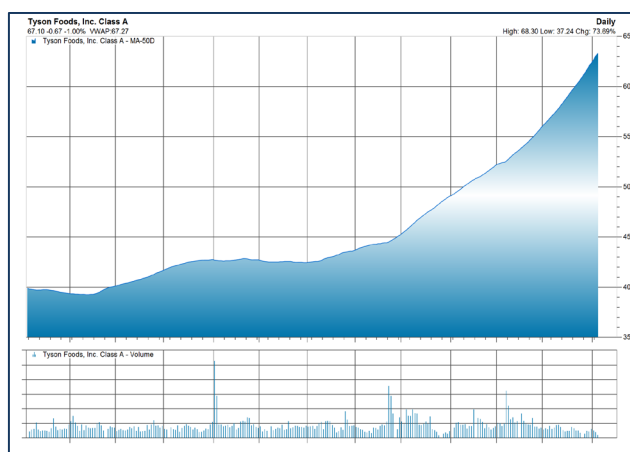
PepsiCo is well positioned in the domestic and global market to witness steady long-term growth. Domestic cost cutting programs should drive up margins in the short-run and recent partnerships combined with infrastructure investments in key emerging markets should sustain growth in the longer-run. Even though our updated discounted cash flow model has brought our estimated value down by 10.3%, we still see that PepsiCo is currently undervalued at \$102.69 a share. We recommend a HOLD.

## Tyson Foods Inc. (TSN)

Recommendation <b>HOLD</b>	Valuation <b>\$70.10</b>	Last Price <b>\$67.55</b>	Adjusted P/E <b>19.82</b>	Style <b>Mid Value</b>	Dividend Yield <b>0.89%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	---------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Tyson Foods, Inc. is a multinational food production company headquartered in Springdale, AR that sells fresh, frozen, and refrigerated products. The company has five operating segments: Chicken, Beef, Pork, Prepared Foods, and International. Tyson is the largest meat producer in the world and second largest food production company.

### Fundamental Analysis

Weak Tyson's operations are heavily concentrated in the U.S., with domestic sales accounting for 87.4% of 2015 revenue. The company's single largest customer is Wal-Mart, which represented 16.8% of sales last year. Tyson's primary competitive advantage is its diverse product portfolio and scale of operations. Tyson has a strong management team that after was able to increase gross income by reducing costs despite a decline in sales for 2015. The 2014 acquisition of Hillshire Brands fits well with the company's effort to expand the wider-margin

prepared-foods business, and it presents long-term benefits including growth acceleration. In total Tyson is expected to achieve more than \$300m in synergies from the acquisition. Strong chicken demand and lower than average feed costs contributed to the strong financial performance of the company. Additionally, increasing health consciousness from consumers is driving demand for high-margin, protein-based meals. Tyson Foods' sales are heavily correlated to U.S. Consumer Confidence with a positive correlation of 0.88 over the past three years. We attribute 2014's record year of sales in part to a large upswing in consumer confidence during that period. Consumer confidence has since started to decline in 2015 and is estimated to slowly decline over the next 3 years. We believe that such a decline will lead to reduced sales for Tyson Foods.

### Financial Statement Analysis

In absolute terms, sales have grown steadily since 2006, reaching \$41.4b in 2015 (10.48% YoY growth). Net income growth soared growing by 41.2% to \$1.2b. Tyson has maintained a high gross margin, largely due to well-managed costs; SG&A/sales has remained less than 3.35x over the last 8 years. EPS improved 25.87% YoY in 2015, backed by strong sales performance and higher operating margins.

### Conclusion & Recommendation

Even though we see declining consumer confidence as a potential threat to sales figures for the next three years we are optimistic about long term growth, due to strategic direction, expected synergies from the Hillshire Brands acquisition and the ability of management in cost cutting operations to increase margins. For these reasons we issue a HOLD.



## Energy

### 2016 Outlook

Our fundamental outlook for the oil and gas equipment and services sub-industry for the next 12 months is positive. We expect for the year going forward that the price of oil will rise to or just below \$50 per barrel, which will help the overall sector. Year to date through January 15, the S&P Oil & Gas Equipment & Services Index was down 10.8%, versus an 8.1% decline for the S&P 1500 Composite Index. In 2015, the S&P Oil & Gas Equipment & Services Index was down 23.3%, versus a 1.0% decline for the S&P 1500 Composite Index. As of December 2015, Bentek Energy, a unit of Platts, forecasts WTI crude oil averaging approximately \$46/barrel in 2016, and just \$50/barrel in 2017, which closely reflects our outlook.

After a significant decline in crude oil prices over the past year, we think upstream customers are likely to decrease capital spending in 2016, which should adversely affect interest in oilfield services in the near term. While we still view the longer-term growth rate in upstream capital spending as a secular positive, we believe that it will continue to decrease in the near future. With this new environment where prices declined significantly, we expect for the upstream participants in this sector to continue to focus on growing profitable production rather than to continue to expand production. If this happens it would be a change from past practice in our view, as we find that most upstream producers routinely generated modest free cash flow deficits, with some exceptions.

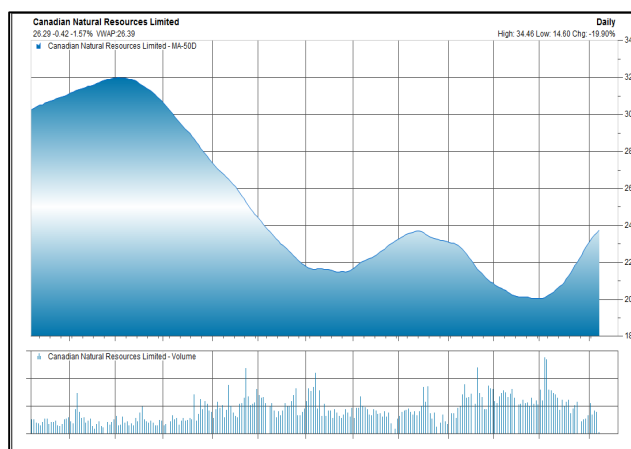


## Canadian Natural Resources Limited (CNQ)

Recommendation	Valuation	Last Price	Adjusted P/E	Style	Dividend Yield
<b>HOLD</b>	<b>\$28.05</b>	<b>\$26.72</b>	<b>N.A.</b>	<b>Large Growth</b>	<b>2.78%</b>

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Positive



### Introduction

Canadian Natural Resources Ltd. is a senior independent crude oil and natural gas exploration, development and production company. The company's exploration and production operations are focused in North America, largely in Western Canada; the United Kingdom portion of the North Sea; and Côte d'Ivoire, Gabon, and South Africa in Offshore Africa. The Horizon Oil Sands Mining and Upgrading segment produces synthetic crude oil through bitumen mining and upgrading operations. The company within Western Canada maintains certain midstream activities that include pipeline operations and an electricity cogeneration system. Canadian Natural Resources was founded on November 7, 1973 and is headquartered in Calgary, Canada.

### Fundamental Analysis

Canadian Natural Resources Ltd. produces primarily 65% crude oil and 35% natural gases. In 2015 CNQ experienced an increase in production of crude oil by 13.42% from 164 billion barrels in 2014 to 186 billion barrels in 2015. natural gas and natural gas liquids (NGLs) increased 16.67% and

15.38% respectively. CNQ has been involved in excessive capital spending on long-term projects which has negatively impacted the stock performance. The Horizon oil sands project is expected to finish phase 2B start-up by the end of the year, which will add an additional 45,000 barrels a day to CNQ's production. Phase 3B start-up is expected to be completed by the end of next year adding 80,000 barrels a day. These additions will put downward pressure on horizons operating costs to drop below \$25 per barrel by 2018.

### Financial Statement Analysis

Canadian Natural Resources' sales took a dive last year by 43.42% from \$17.08 billion in 2014 to \$9.66 billion in 2015. This is strongly attributable to the steep fall in oil prices over the past year. The company's dividend per share has slid from \$0.81 in 2014 to \$0.72 in 2015. However, this is entirely due to the strengthening of the dollar and does not reflect the performance of the company. The actual dividend issued by the Canadian company was increased by 2.2% from C\$0.90 in 2014 to C\$0.92 in 2015. CNQ has doubled its current ratio over the past 3 years from 0.42 in 2013 to 0.88 in 2015.

### Conclusion & Recommendation

Canadian Natural Resources Ltd. is financially stable despite taking a hard hit to revenues in 2015 due to the steep fall in oil prices. With a pessimistic outlook on the economy, the company will remain profitable at oil prices as low as \$30 per barrel. We do however have a favorable outlook and expect an increase in the price of oil over the next year of up to \$50 a barrel which will increase revenues for the company. Realization of the additional production volume over the next two years and an increase in oil prices will result in strong cash flow and deleveraging. We see large upside and strong staying power for the company to provide favorable long-term yield to our investors. We recommend a HOLD.

## Enbridge Inc. (ENB)

Recommendation  
**SELL**

Valuation  
**\$42.10**

Last Price  
**\$38.68**

Adjusted P/E  
**N.A.**

Style  
**Large Growth**

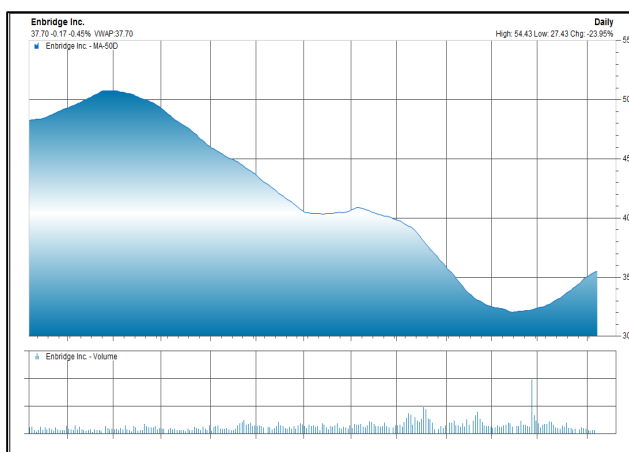
Dividend Yield  
**4.13%**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Positive

Relative Strength Neutral



### Introduction

Enbridge Inc. transports, generates, and distributes energy in Canada and the U.S. The company is involved in natural gas transmission and midstream businesses and operates through liquids pipelines, gas distribution, gas pipelines, processing and energy services, and sponsored investments. Most revenues come from gas pipelines and energy services. It operates one of the largest liquids pipeline networks in North America. Enbridge operates in a highly regulated market with strong barriers to entry.

### Fundamental Analysis

Enbridge aims to be the industry leader in safe, environmentally-conscious, and reliable energy delivery. Environmental issues are frequently raised in planning and decision-making. This will improve the already strong organizational structure. In November, Enbridge Inc. acquired the assets related to wind power generation from EverPower Wind Holdings Inc. for \$200 million. The acquisition was expected to increase the production capacity of Enbridge. The assets acquired comprise of the 103MW New Creek Wind Project with 49 Gamesa

G97/G90 turbines in West Virginia and is targeted to be in service in December 2016. Enbridge Inc. also agreed to acquire a minority 24.9 stake in E.ON Climate & Renewables UK Rampion Offshore Wind Ltd from E.ON SE for an undisclosed amount. Located in Coventry, Warwickshire, United Kingdom, E.ON Climate & Renewables UK Rampion Offshore Wind Ltd engages in wind-powered electricity generation. Enbridge Inc. investment in the project is expected to be \$570.8 million inclusive of all interest during construction, transaction costs and a development fee. Construction of the wind farm began in September 2015 and is expected to be fully operational in 2018.

### Financial Statement Analysis

Enbridge' sales took a dive last year by 19.03% from \$33.86 billion in 2014 to \$27.42 billion in 2015. But was able to cut costs of goods sold including depreciation and amortization by 24.80% from \$28.40 billion to \$21.36 over the same time period. Though still negative, the company experienced an increase in free cash flow by 70.80% over last year. Even against a strong dollar, the company was able to increase their dividend per share by 14.69% from \$1.27 in 2014 to \$1.45 in 2015. The company increased EBITDA by 13.38% from \$3.84 billion in 2014 to \$4.35 billion in 2015 but suffered an 84.06% drop in net income due to a mammoth unusual expense on \$1.97 billion.

### Conclusion & Recommendation

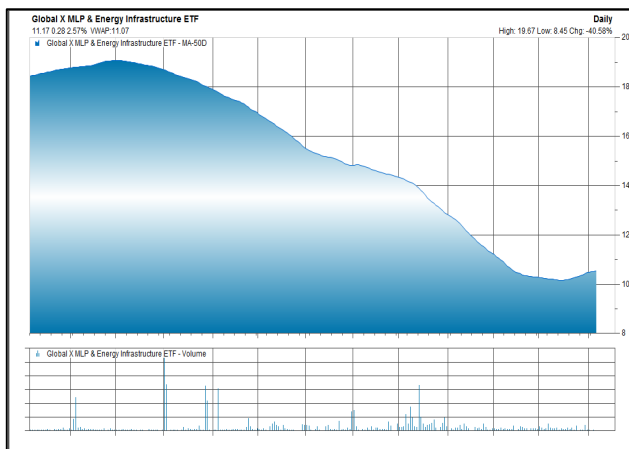
Enbridge's dividend is not strong enough to outweigh its poor recent sales performance. However, we expect an increase in the price of oil over the next year of up to \$50 a barrel which will slowly increase revenues for the company's customers. We believe the company is still positioned within a volatile energy market. We recommend a SELL.

## Global X MLP & Energy Infrastructure ETF (MLPX)

Recommendation <b>HOLD</b>	Valuation <b>\$18.33</b>	Last Price <b>\$11.32</b>	Adjusted P/E <b>40.97</b>	Style <b>Mid Value</b>	Dividend Yield <b>6.09%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	---------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	N.A.
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Global X MLP Energy Infrastructure ETF is a fund that tracks an index of MLPs and companies engaged in energy infrastructure. The ETF is structured as an open-ended fund. The ETF is structured as a classic 1940 Act fund as opposed to a C-corporation or ETN.

### Fundamental Analysis

This ETF uses a replication strategy for part of its portfolio and provides results that correspond to the price and yield performance of the Solactive MLP & Energy Infrastructure Index. This underlying index tracks the performance of MLPs and energy infrastructure corporations. These corporations operate assets used in energy logistics, such as pipelines, storage, gathering, and processing natural gas, natural gas liquids, crude oil or refined products. The current holdings of Global X MLP Energy Infrastructure ETF are divided among: oil & gas related equipment and services (65.98%), oil & gas (21.45%), and natural gas utilities (12.57%). The ETF allocates its assets with 82.81% in US stocks, 16.98% in non-US stocks, and 0.22% in cash.

This ETF also has a lower net expense ratio (0.45%) than average net expense ratio of its category (0.72%). As for the ETF's return, it has also produced greater returns for the past two years, for both the price of the ETF and the net asset value of its holdings, than the average in its category.

### Financial Statement Analysis

Despite Global X MLP has been improving its margins at all levels down the income statement. It has a dividend yield of 6.09%, and the dividend per share has been consistently growing, 44.86% growth over the past year. The book value per share has also been increasing every year, despite the fall in the share price. The ETF's return on equity is 7.29%, which is about the industry average.

### Conclusion & Recommendation

We recommend to HOLD Global X MLP for various reasons. They have been performing better than many of their peers, which is significant in this environment where the energy sector has not been doing well. This ETF also has lower fees and expenses than its competitors, which is a great advantage for our return. Its price to earnings ratio is also higher than average, indicating that investors are more willing to pay more for Global X MLP's earnings than comparable funds. Given the recent volatility and uncertainty in oil and the energy sector as a whole it will be very important to choose the company that will combat the environment the best. By investing in Global X MLP we are able to diversify in this area, in addition to utilizing the expertise at this fund, and therefore we will have a much better chance at realizing the gains in this sector. Finally, after using our financial model, we have found that this fund should be valued at \$18.33, making it undervalued at its current price of \$11.32.

## PBF Energy Inc. (PBF)

Recommendation  
**BUY**

Valuation  
**\$42.20**

Last Price  
**\$31.94**

Adjusted P/E  
**19.41**

Style  
**Small Value**

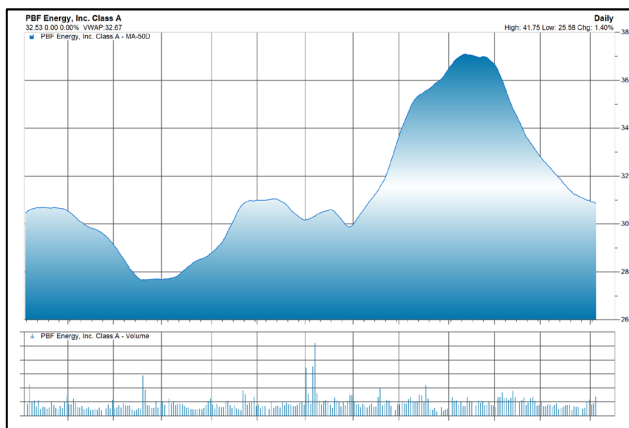
Dividend Yield  
**3.6%**

### Technical Analysis

Bollinger Bands      Oversold

Money Flow            Positive

Relative Strength      Neutral



### Introduction

PBF Energy, Inc. operates as a petroleum refiner and supplier of unbranded transportation fuels, heating oil, petrochemical feedstocks, lubricants and other petroleum products in the United States.

### Fundamental Analysis

The average target price estimated by analysts is \$39.25. The company's return on invested capital is greater than its cost of capital, indicating that the company is generating good economic value for their shareholders. Demand from gasoline and petroleum bulk stations is expected to rise in 2016, which will translate into greater revenue. We expect the price of oil to increase only slightly in the near future, which would raise the cost of goods sold for oil refiners like PBF Energy, however this increase cost can be translated into higher prices down the supply chain. The company's return on assets has averaged 2.43 over the past five years, and was 2.59 in 2015. The return on equity has averaged 15.48 over the

past five years, and was 10.22 in 2015, but has increased since falling in 2012. The company is has also announced two separate acquisitions recently which are expected to increase the company's refining capacity by sixty percent.

### Financial Statement Analysis

PBF Energy had lower revenue in 2015 than the years prior, however their cost of goods sold were also lower, leaving them with an EBITDA of \$529.9 Million; which was higher than 2014, but slightly lower than 2013 and 2012. Their dividend per share has been stable at \$1.20 for the past three years, up from \$0 the years before and are expected to rise going forward. The company's current ratio, is also very attractive as current assets are almost double of current liabilities, indicating that it is in a very good position to pay upcoming expenses.

### Conclusion & Recommendation

The price of crude oil is one of the major driver of PBF's short-term growth. We are anticipating that the oil prices will only rise slightly over the next year, and while that means that costs will rise slightly, those costs can be mitigated by increasing the price to customers. In addition to this, with the firm's refining capacity expected to increase by sixty percent and a high dividend payout ratio of 72.73% and a dividend yield of 3.8%, we are expecting for dividends to generously increase in the short term. With these modest growth forecasts, our dividend discount model estimates the company is currently undervalued. Therefore, we recommend our position be HELD for at least another year.

## Spectra Energy (SE)

Recommendation  
**SELL**

Valuation  
**\$16.26**

Last Price  
**\$30.56**

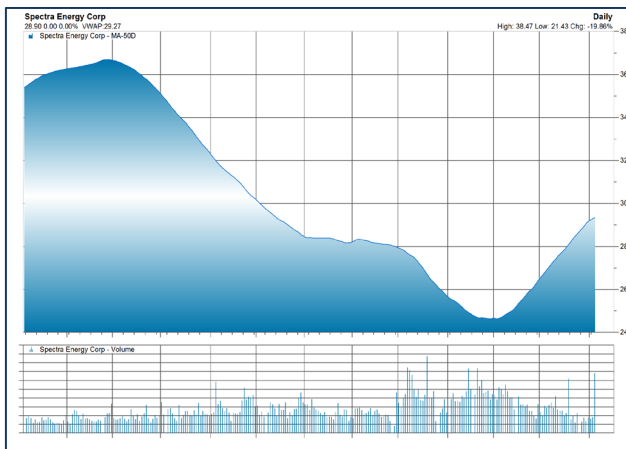
Adjusted P/E  
**101.41**

Style  
**Large Core**

Dividend Yield  
**5.5%**

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Spectra Energy is a natural gas infrastructure company. The Company owns and operates natural gas-related energy assets and a crude oil pipeline system connecting Canadian and the United States producers to refineries in the United States Rocky Mountain and Midwest regions.

### Fundamental Analysis

The average target price estimated by analysts is \$32.85. The company's return on invested capital dropped to 0.96 in 2015 from 5.10 in 2014, which indicates that its return on invested capital is less than its cost of capital, therefore it has not been generating good economic value for its shareholders. Upstream customers are expected to reduce capital spending due to persistent weak crude oil prices,

which will negatively affect Spectra Energy. Spectra Energy has a dividend yield of 5.5% which is below the industry average of 7.2%. However, its payout ratio in 2015 was 510.3%, significantly higher than the 2014 payout ratio of 85.4%. These high payout ratios are extremely unlikely to be sustainable given the macro environment and the company's financial health.

### Financial Statement Analysis

Spectra Energy's financial statements are very worrisome. Its current ratio is 0.49, which indicates that it is going to have hard time paying its upcoming liabilities without incurring more debt or issuing new shares. Its cash ratio alone is 0.09, therefore it will need to hope that it can liquidate much of its current assets plus finance the rest, and still hope that it can satisfy shareholders. Their long term debt to total equity ratio is 187.8, meaning that they are heavily levered in debt as it is and this issue won't be going away for long.

### Conclusion & Recommendation

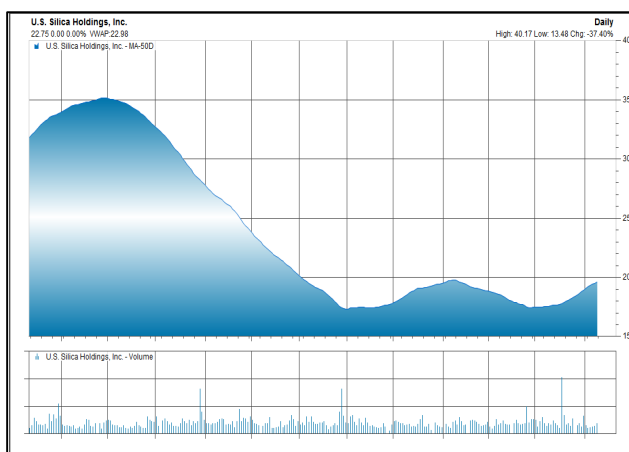
We are strongly recommending to SELL Spectra Energy. The macro environment is not going to be favorable. The company is not providing good value for the capital invested in it. It has been paying a level of dividends that cannot be sustainable. Finally, the company could very well become insolvent in the near future because it will have had to incur more debt than it can afford, and it doesn't even have the current capital to pay its upcoming expense.

## U.S. Silica Holdings Inc. (SLCA)

Recommendation <b>SELL</b>	Valuation <b>\$22.69</b>	Last Price <b>\$22.62</b>	Adjusted P/E <b>104.83</b>	Style <b>Large Growth</b>	Dividend Yield <b>1.10%</b>
-------------------------------	-----------------------------	------------------------------	-------------------------------	------------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



### Introduction

U.S. Silica Holdings, Inc. is a producer of a specialized mineral called commercial silica, which is a critical input in the oil and gas proppants end market. The company operates in the business segments of oil and gas proppants and industrial and specialty products. For the former, it provides fracturing sand used to stimulate the flow of hydrocarbons in oil and natural gas wells. This fracturing sand is also an irreplaceable material for the latter. It is used in glass-making and chemical manufacturing. The company provides fracturing sand for industries producing container glass, fiberglass, specialty glass, flat glass, building products, fillers and extenders, chemicals, recreation products and filtration products.

### Fundamental Analysis

U.S. Silica's core competencies are mining, processing, logistics and material science. These attributes allow cost-effective production and delivery of a wide range of over 260 products. This diversity is important, as the change in supply and demand in oil leads to current demand and price fluctuations.

The company receives stable cash flows from industrial products, which are influenced by housing starts, vehicle sales and industrial production. We believe these drivers provide growth opportunities, since it currently only accounts for 33.1% of revenue. This decreases the company's dependency on the oil price. U.S. Silica operates exclusively in the US and 100% of its revenue is domestic.

### Financial Statement Analysis

U.S. Silica's sales took a dive last year by 26.66% from \$876.7 million in 2014 to \$643.0 million in 2015. However, SLCA was only able to cut Costs of goods sold including depreciation and amortization by 9.49% from \$611.6 million to \$553.5 million over the same time period. Though still positive, the company experienced a decrease in free cash flow by 90.00% over last year. U.S. Silica was able to maintain positive cash flows by selling assets and reducing their dividend per share by 12.50% from \$0.50 in 2014 to \$0.44 in 2015. Days of inventory on hand rose from 39.07 days to 43.43 days. While the company was able to pay off some of their debt, they experienced an increase in net debt by 17.49% leaving the company still highly leveraged at a debt-to-total capital ratio of 56.14%.

### Conclusion & Recommendation

Financially, U.S. Silica will not be able to maintain a current status quo. However, we do expect an increase in the price of oil over the next year towards up to \$50 a barrel which will increase revenues for the company's customers. These customers may then eventually reinstate their capital spending on production and discovery which would lead to an increased demand for Silica's products in the long term. Even though we see a potential growth catalyst in the demand for frac sand, it is strongly correlated with the volatility of the energy market and pays a dividend only a fraction to that of other less volatile picks in the energy sector. In the interest of a low risk portfolio we recommend a SELL.

## Financials

### 2016 Outlook

Opinions on the short-term state of the economy remain divergent. Economic growth may accelerate, remain steady, or decelerate given certain forecasts. The financials sector offers opportunities including housing recovery, interest rate increases, and a stronger consumer. However, disinflationary measures globally and general economic volatility pose significant risks. The U.S. housing market has recovered steadily, albeit slowly, since the recession given limited access to credit. In turn, household debt is also expected to increase about 2% over the next five years. Some banks have also begun increasing deposit rates for their wealthy and large institutional customers. As economic conditions improve, the economy will become more conducive to increased lending, which will be an important source of revenue for banks.

### Interest Rates

Companies with exposure to the U.S. economy will be better positioned than their global peers. The U.S. economy is beginning to enter a later stage of the business cycle, with speculation beginning to turn toward further increases in U.S. interest rates. Conversely, economies in Europe and Japan are employing negative interest rates to combat fears of deflation. Banks and financial companies with U.S.-focused businesses should outperform global peers given interest rates and the strong U.S. dollar. Speculation among rate hikes continues with the Federal Reserve considering another increase in June. We believe that interest rates will increase at least once, but no more than twice, in the next year given continued economic uncertainty.

### Increased Regulation

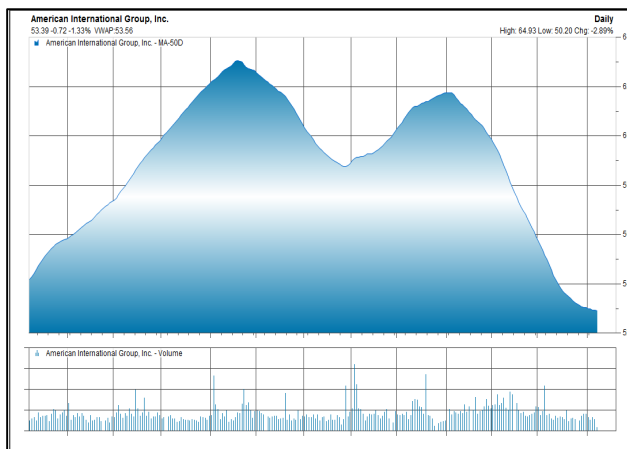
The balance sheet of the U.S. consumer has improved substantially over the past year thanks to low oil prices and increased employment. Consequently, the U.S. consumer should be well positioned to deal with any short-term economic scenario. In addition to interest rate hikes, U.S. banks and lenders should benefit from a healthy consumer. With more economic strength and a higher tolerance for debt payments, consumers look poised to raise interest income among financial institutions. For lenders, consumers are less risky than the corporate sector, especially in the industrial and energy sectors where debt levels have increased. If interest rates increase once this year, the debt payments to the financials sector should remain consistent.



## American International Group Inc. (AIG)

Recommendation <b>SELL</b>	Valuation <b>\$51.76</b>	Last Price <b>\$54.54</b>	Adjusted P/E <b>32.0</b>	Style <b>Large Value</b>	Dividend Yield <b>3.3%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	-----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Positive
Money Flow	Positive
Relative Strength	Negative



### Introduction

American International Group, Inc. operates as a global insurance company, which provides property casualty insurance, life insurance, retirement products, mortgage insurance and other financial services. Its offerings include products and services that help businesses and individuals protect their assets, manage risks and provide for retirement security.

### Fundamental Analysis

AIG reported \$58 Billion in earnings in 2011 before \$35 Billion in losses, claims & reserves expenses. At the same time, lower sales have reduced revenue by 50% since pre-recession levels. The company is currently restructuring in an effort to increase transparency, reduce costs, and return at least \$25 billion to shareholders. Save for a few key areas such as mortgage insurance, the company is stopping short of a complete breakup. AIG President and CEO Peter Hancock claims the restructuring is “another major step in simplifying our organization to be a leaner,

more profitable insurer.” The five- year net margin is 13.32, on par with pre-recession levels. Activist investor Carl Icahn has pressured AIG’s management to increase shareholder returns and shake up the leadership team. After a third quarter 2015 loss, the company planned on dismissing 23 percent of the top 1,400 members of senior management. Recent higher- than-expected claims costs in the property and casualty operations have threatened the company’s core business.

### Financial Statement Analysis

AIG has seen net income decline of 72% from \$7.5 Billion in 2014 to \$2.1 Billion in 2015. Average return on equity for the five-year period is 8.62, in line with higher post-recession values. The company’s restructuring plans combined with relatively poor financial performance over the past two years weaken the argument for investing in AIG.

### Conclusion & Recommendation

AIG’s major short-term growth drivers are the U.S. homeownership rate and yield on the 10-year Treasury note. The homeownership rate over the next five years is expected to grow 0.9 percentage points while the 10-year Treasury note should rise 0.85 points for the same period. In the longer term, AIG’s restructuring may prove beneficial to both the company and its shareholders. However, as a catalyst, the firm’s restructuring is not enough to assuage short-term concerns about the company’s earning potential. Still, our dividend discount and PE & EPS models estimate the company is currently reasonably valued at \$53. We recommend SELLING our position in AIG.

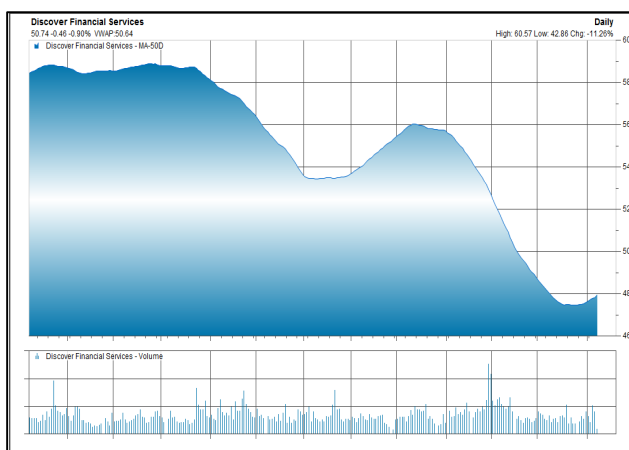


## Discover Financial Services (DFS)

Recommendation <b>HOLD</b>	Valuation <b>\$53.61</b>	Last Price <b>\$50.27</b>	Adjusted P/E <b>10.45</b>	Style <b>Large Value</b>	Dividend Yield <b>2.3%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	-----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Positive
Money Flow	Positive
Relative Strength	Negative



### Introduction

Discover Financial Services is a direct banking and payment services company. It operates through its subsidiaries, Discover Bank and Discover Home Loans, Inc. The company operates through two segments: Direct Banking and Payment Services.

### Fundamental Analysis

In 2016, Discover was awarded the Digital Edge 25 award for the development of the Freeze It(SM) technology, which allows customers to freeze or unfreeze their accounts via a mobile app, which could provide a great competitive advantage to Discover. On average, analysts are predicting that the target price for the stock is \$60.20. The company's return on invested capital is greater than their cost of capital, indicating that they are generating good economic value for their shareholders. The firm has consistently had positively increasing cash flow, and its free cash flow per share is greater than the dividend per share

has been, which means that they have been using cash to reinvest back into the business while continuing to grow dividends. The company also has consistently repurchased shares over the past five years and its return on equity has averaged 24.19. The company's price-to-earnings is 10.45, indicating that investors are willing to pay \$10.45 for every dollar of earnings, indicating that there is investor confidence in this company. With interest rates slightly higher, the company is also expected to see an increase in their interest revenue.

### Financial Statement Analysis

Discover's revenue has been consistently growing over the past ten years. However, their operating income has decreased the past two years, translating into slightly lower net income than the two years prior. Yet, dividends have continued to grow. The company's total assets have also been increasing every year for the past ten years, and at the end of 2015 was 87.336 Billion. In turn, both their liabilities and stockholders' equity have also been increasing.

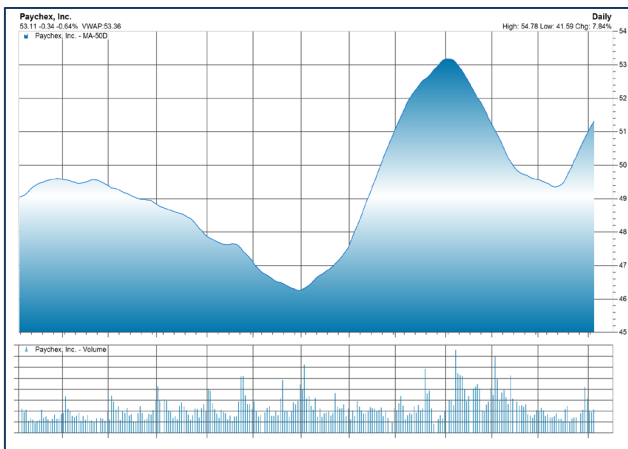
### Conclusion & Recommendation

Discover's major short-term growth drivers are increasing interest rates, increased aggregate household debt which is expected to rise, and the benefit of their Freeze It(SM) technology. National corporate profit is projected to increase between 0 % and 2% over the next five years. Investor uncertainty is expected to decrease 2 percentage points over the same period. In the long term, we expect Discover's management and shareholder strategy to perform strongly. With these modest growth forecasts, our dividend discount model and PE & EPS model estimates the company is currently undervalued. Still, we recommend HOLDING our position for at least another year.

## Paychex Inc. (PAYX)

Recommendation <b>SELL</b>	Valuation <b>\$53.61</b>	Last Price <b>\$53.29</b>	Adjusted P/E <b>26.02</b>	Style <b>Large Value</b>	Dividend Yield <b>3.16%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	-----------------------------	--------------------------------

Technical Analysis	
Bollinger Bands	Positive
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Paychex Inc. provides payroll, benefits, insurance management and other human resource services to small to medium sized business willing to outsource. The company was founded in 1971 and is currently headquartered in Rochester, NY.

### Fundamental Analysis

Paychex generates over 60% of its revenue from offering payroll management services to small to medium sized business. As a result, we expect the company to continue benefiting from an improving and healthier job market, as businesses continue to expand. The company is constantly introducing new products and services to respond to new market trends. Specifically, the passing and implementation of the Affordable Care Act continues to create new revenue streams for the company, as small to medium sized businesses elect to outsource compliance and insurance functions. As Congress continues to modify parts of the law, we expect more businesses to outsource insurance functions to Paychex and similar companies. Finally, the company continues to significantly expand

both its mobile and software services, activities that should help boost revenues and businesses look for simpler way to manage HR functions without completely outsourcing.

### Financial Statement Analysis

Paychex’s revenues increased more than 11.0% through 2014. Furthermore, net margin remained stable at a better than average 24.0%. The board of directors approved a second round of share repurchases to follow the first one implemented in 2007-08. Announced in May of 2014, the company expects to buy back \$350.0 million of its own stock. Finally, a higher than average dividend yield of more than 3.0% makes the company stock look more favorable than most of its close competitors.

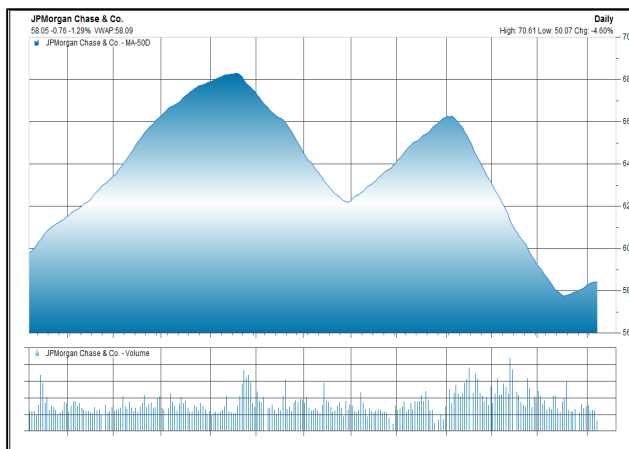
### Conclusion & Recommendation

Paychex’s financial performance over the last few years is impressive but the stock’s current price does not signal a buying opportunity. Based on our analysis and comparisons with other stocks within the financials sector, we recommend SELLING Paychex.

## JPMorgan Chase & Co. (JPM)

Recommendation <b>HOLD</b>	Valuation <b>\$58.80</b>	Last Price <b>\$59.71</b>	Adjusted P/E <b>9.8</b>	Style <b>Large Value</b>	Dividend Yield <b>3.0%</b>
-------------------------------	-----------------------------	------------------------------	----------------------------	-----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Positive
Money Flow	Positive
Relative Strength	Neutral



### Introduction

JPMorgan Chase & Co. is a financial holding company that provides financial and investment banking services. It offers a range of investment banking products and services in all major capital markets as well as financial services for consumers, small business and commercial banking, financial transaction processing, asset management, and private equity.

### Fundamental Analysis

JPMorgan reported \$93.5 Billion in earnings in 2015. At the same time, a 30% decline in mortgage fees and related income limited net revenue growth to about 2% year over year. The company is beginning to benefit from an increase in U.S. interest rates. In December, JPMorgan was among the first U.S. banks to increase deposit rates for large clients. The company’s most recent annual report says that “future uncertainty regarding legal and regulatory costs have hurt our company.” The company is determined to reduce legal exposure and reveal the quality of the underlying business. Net margins are higher than pre-recession levels of 3.69 with a five-year average of

20.19. Among the bulge bracket, JPMorgan is considered one of the best-managed banks. Since his appointment in 2006, shareholder return has totaled 119.5%. We expect that as the overall financial sector improves with higher interest rates and a strong U.S. dollar, JPMorgan will benefit from strong, long-term management.

### Financial Statement Analysis

JPMorgan has seen net income growth of over 8% for the last five years while it has maintained a return on equity of 9.73 for the same period. The fact that management is growing the company without sacrificing shareholder equity makes JPMorgan willing and able to meet its financial obligations while remaining attractive to investors.

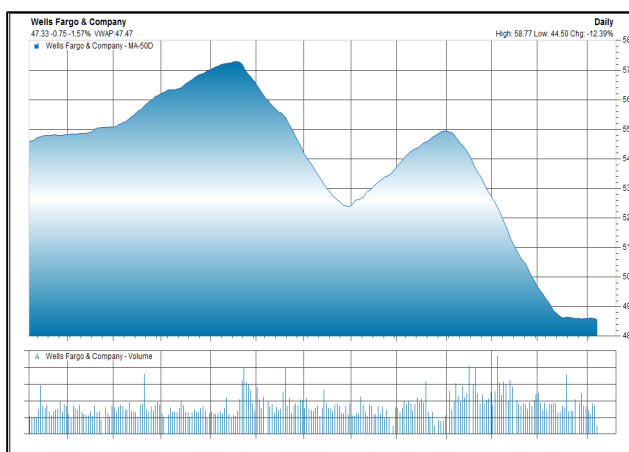
### Conclusion & Recommendation

Across its services, JPMorgan’s major short-term growth drivers are rising corporate profit and investor uncertainty. U.S. corporate profit is projected to increase between 0 % and 2% over the next five years. Generally, investor uncertainty is expected to decrease 2 percentage points over the same period. In the long term, we expect JPMorgan’s management and shareholder strategy to perform strongly despite modest interest rate growth, low oil prices, and a weak industrials sector. With these modest growth forecasts, our dividend discount and PE & EPS models estimate the company is currently reasonably valued. Still, we recommend to HOLD our position in JPMorgan for at least another year.

## Wells Fargo & Company (WFC)

Recommendation <b>BUY</b>	Valuation <b>\$55.40</b>	Last Price <b>\$48.65</b>	Adjusted P/E <b>13.2</b>	Style <b>Large Value</b>	Dividend Yield <b>3.0%</b>
------------------------------	-----------------------------	------------------------------	-----------------------------	-----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Positive
Money Flow	Positive
Relative Strength	Negative



### Introduction

Wells Fargo & Co. is a nationwide, diversified, community-based financial services and bank holding company. It provides banking, insurance, investments, mortgage, and consumer and commercial finance through its stores, ATMs, the Internet, and other distribution channels across North America and internationally.

### Fundamental Analysis

Wells Fargo reported \$48 Billion in earnings in 2015 before a total interest expense of \$3.9 Billion. Lower interest expenses partnered with steady interest income have grown net income since the recession. Generally, a bank’s annual net income should equal at least 10% of its common stockholders’ equity. Wells Fargo’s return on equity of 12.7% allows the stock to trade at a premium to book value. Consequently, Wells Fargo’s profitability exceeds their cost of capital and is generating value for shareholders. Wells Fargo trades at a 48% premium to book value. Still, the firm’s management, especially compared to competitors such as Citigroup, justifies their val-

uation. Due to its operations, Citi must reserve an additional 1.5 percentage points of its capital compared to Wells Fargo. Wells Fargo’s greater profitability combined with its superior management makes the stock extremely attractive within the financial sector. Wells Fargo also offers the second highest dividend compared to its peers. Analysts are generally bullish on Wells Fargo with a number of research firms maintain “buy” or “strong buy” ratings for the company. In line with our valuation, a 52-week price target of \$55 is common.

### Financial Statement Analysis

Wells Fargo has seen net income nearly double since 2010 with a net margin of 23.17 for the same period. Dividends per share have also increased over seven fold since 2010. The fact that management is growing the company and returning money to shareholders makes Wells Fargo extremely attractive for investors.

### Conclusion & Recommendation

Across its services, Wells Fargo’s major short-term growth drivers are the prime rate and aggregate household debt. The prime rate is the interest rate charged by banks to their most creditworthy and largest customers. The prime rate is expected to grow nearly 2 percentage points over the next half-decade. In turn, aggregate household debt is expected to rise 3.9% to 2020. An increase in both of these drivers allows Wells Fargo to realize higher net interest income and revenue. Given healthy financials, sizeable dividends, and sound management our dividend discount and PE & EPS models estimate the company is currently undervalued by about 11%. We recommend buying Wells Fargo at its current price.

## Healthcare

### Introduction

Spending on healthcare is growing at an annual rate of 5-6% and, based upon data from 2014, spending on pharmaceuticals is growing at a rate 2.3 times that pace (cms.gov, retrieved 2016). This growth in spending has fueled increased returns of 5.3% for the healthcare sector and 6.8% for the pharmaceutical industry for 2015, a year when the S&P 500 return was flat. These returns reflect the defensive nature of the healthcare sector where patients continue to consume treatment regardless of the phase of the business cycle.

### Macro Overview

Baby boomers started turning 65 in 2011 and are continuing to do so at a rate of almost a half million per year. And not only are more Americans becoming senior citizens, but they are also living longer causing a tremendous shift in our demographic profile. Many of our senior citizens have multiple chronic medical ailments and, as a result, require more healthcare and use more medications – many more medications. A recent article in JAMA Internal Medicine (March 21, 2016) reported that two-thirds of our older Americans are taking 5 or more medications a day, and this fraction is increasing. This serves as a catalyst for growth in the health care sector, and even more so, in the pharmaceutical industry.

There are an estimated 17.6 million newly insured Americans since the passage of the Affordable Care Act (ACA) in March 2010. In addition, a lower unemployment rate has helped many new job holders get insurance through their employers. Insured individuals are bigger consumers of healthcare than are the uninsured, increasing the population for whom health care dollars are spent on medical services, devices, and medications.

In 2015, \$141B was spent on R&D in healthcare; one-third of which was spent by biotech firms developing new treatment options targeted at specific patient populations. New medications have made an impact. For example, there has been a decrease in cancer-related deaths by 22% over the past two decades. Almost 90% of this improvement in survival was attributable to new treatments, including medications. As payers adopt value-based reimbursement, innovation is being rewarded and biopharmaceuticals receive premium prices for these cutting-edge treatments.

### Equity Selection and Summary

There will be headwinds for the healthcare sector. A strong U.S. dollar makes the exportation of medical devices and medications more difficult. However, this will be somewhat balanced by an improving demographic picture in emerging economies. Calls for reducing costs of health care are a constant threat to healthcare businesses. However, we expect these concerns to be tempered by an insatiable demand for more effective treatments.

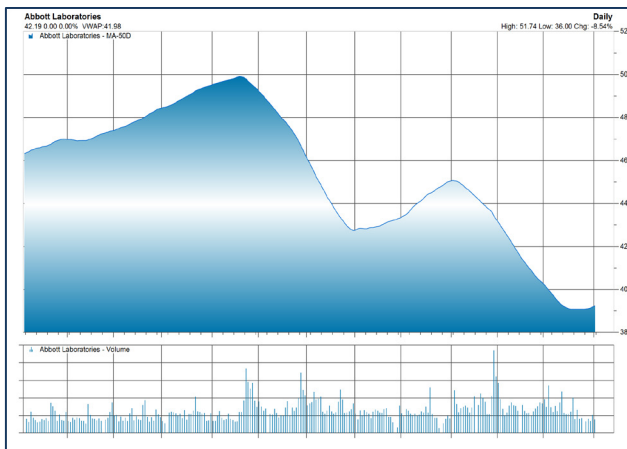
The healthcare sector is defensive in that individuals require treatment when they are ill, independent of what the economic picture looks like. With a somewhat subdued economic forecast, we expect the healthcare sector to outperform the S&P and amongst the industries in this sector, pharmaceuticals, in general, and biopharmaceuticals, in particular, are poised to grow the fastest.

## Abbott Laboratories (ABT)

Recommendation <b>SELL</b>	Valuation <b>\$43</b>	Last Price <b>\$41.66</b>	Adjusted P/E <b>23.7</b>	Style <b>Large Core</b>	Dividend Yield <b>2.4%</b>
-------------------------------	--------------------------	------------------------------	-----------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Negative



### Introduction

Abbott Labs is a diversified company, which has four business segments: established pharmaceuticals, nutritionals, medical devices, and diagnostics. It is truly a global company; doing business in over 150 countries. One half of its revenues are from developed markets and the other half from emerging markets. Its payer profile is a diversified balance between third party payers and self-pay customers.

### Fundamental Analysis

In 2013, in an effort to improve operating margins, Abbott decided to spin off its investigational and medication development segment (AbbVie) to focus of the sale of branded generics, primarily in emerging markets. This move seems to be finally paying off with a revenue growth rate of 19% from 2014 – 2015 in this segment. This occurred despite a strong headwind from the strength of the U.S. dollar. At the same time, sales of nutritionals were flat, hurt by an economic downturn in emerging economies. China represents a large market for Abbott's nutritionals. Revenues from its medical device division

were down 6.5% and Abbott's latest medical device, a dissolving cardiac stent, is troubled with a higher complication rate than previous stents. Abbott's diagnostic division was off 1.5% in this period as well. However, Abbott recently announced an agreement to acquire Alere to expand its point-of-care testing. This will dramatically expand Abbott diagnostic's market penetration both in the U.S. and internationally. It is anticipated that this will add 12 - 13¢ per share revenues in 2017.

### Financial Statement Analysis

We estimate Abbott's intrinsic value to be \$43 a share, slightly higher than its stock price of 40.79 (3/18/2016). Its price to earnings ratio (P/E) of 23.7 is significantly lower than its peers (38.0) but higher than the S&P (17.7). Its aggressive share repurchase program has undoubtedly helped this favorable P/E ratio. It has a dividend yield of 2.4%, which is better than industry average (1.4%) and on par with the S&P.

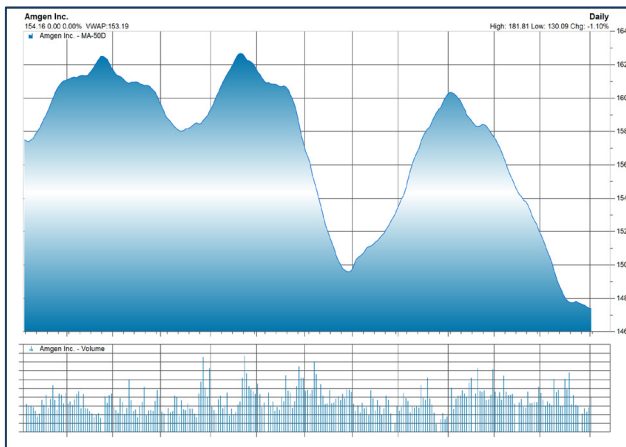
### Conclusion & Recommendation

We find the share price of Abbott Laboratories to be fairly priced. It returns wealth to its investors both through a strong dividend and a share repurchase program. In lieu of other more favorable investments, we reluctantly recommend that shares of Abbott be SOLD.

# Amgen (AMGN)

Recommendation <b>HOLD</b>	Valuation <b>\$179</b>	Last Price <b>\$149.48</b>	Adjusted P/E <b>15.8</b>	Style <b>Large Core</b>	Dividend Yield <b>2.3%</b>
-------------------------------	---------------------------	-------------------------------	-----------------------------	----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



## Introduction

Amgen is one of the world’s largest biotechnology companies. Its focus has been on identifying the molecular basis of disease and designing medicines to correct the flaw. Amgen’s first major achievement was the isolation of a gene on a DNA fragment (1983). This discovery led to the development of Epogen, one of the most successful biologics in history.

## Fundamental Analysis

Amgen’s success has grown from the development of biologic medications such as Epogen, Aranesp, Neulasta, and Neupogen; each of which helps renal and cancer patients rebuild blood cells. Enbrel, another complex biologic medication, has helped revolutionize the treatment of inflammatory diseases. Each of these medications has achieved blockbuster status. With expiring patents, they are beginning to see competition from biosimilars. However, biologics are somewhat shielded from patent expiration-borne competition because FDA approval requires more stringent testing,

they are more difficult to manufacture than small molecule drugs, and are costlier to bring to market. This typically slows the descent of revenues as substitution begins. Meanwhile, drugs like Corlandor, Prolia, Repatha, Sensipar, and Xgeva are forecast as Amgen’s next group of big sellers. Meanwhile, the development of a number of its own biosimilar medications will help Amgen capture market share from the expiring patents of other firms while diversifying its business.

## Financial Statement Analysis

We calculate the intrinsic value of Amgen to be \$179 per share; substantially higher than its share price of \$144.13 (as of 3/17/2016). Its price to earnings ratio is 15.8, lower than its peers and the S&P. Amgen’s dividend yield is 2.3% and we expect this to grow higher. It increased its dividend payment in 2015 by 23% and a similar increase in payout is expected for 2016. Revenues have increased by an annual average of 8.6% for the past five years while earnings per share has grown at an annual rate in the low 20% range. Free cash flows have kept pace with an annual growth rate of 17%, allowing it to fund both the increasing dividend payments and participate in an active share repurchase program.

## Conclusion & Recommendation

We find Amgen to be undervalued and recommend that the portfolio hold this stock. Its strong group of blockbuster drugs is supported by a very promising pipeline of 40 drugs, 12 of which are in their late stages of testing. While a number of its important medications have lost or will lose patent protection in the near future, the development of new products will be the key to maintaining Amgen’s extraordinary growth. We recommend a HOLD.

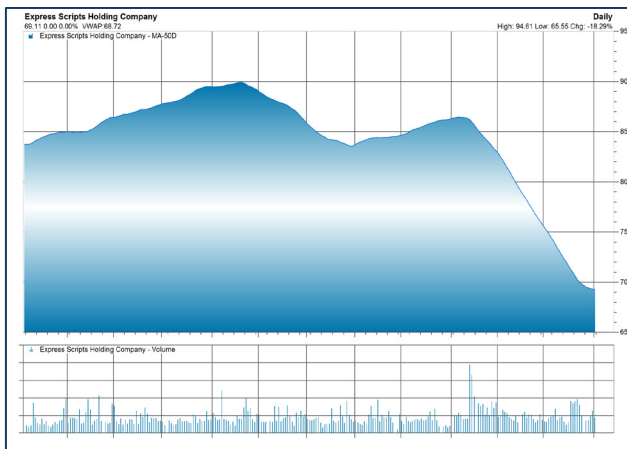


## Express Scripts Holding Co (ESRX)

Recommendation <b>SELL</b>	Valuation <b>\$99.50</b>	Last Price <b>\$69.05</b>	Adjusted P/E <b>19.8</b>	Style <b>Large Growth</b>	Dividend Yield <b>0%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	------------------------------	-----------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Express Scripts is a pharmaceutical benefits manager (PBM) which facilitates the delivery of prescription medications to its members. It processes approximately 1.3B prescriptions annually, making it a dominant player in this industry. This claim volume gives Express Scripts leverage in negotiating discounts with the large pharmaceuticals. While some of the discount is shared with its members and third party payers, Express Scripts retains a portion of the discount.

### Fundamental Analysis

With the advancing age of Americans, we expect to see a continued increase in the number of prescriptions dispensed. Additionally, the growth of biologic and specialty medication use has ushered in a significant increase in the spending on medications. These factors support the need for PBMs. Insurance company Anthem has a contract with Express Scripts for PBM services. This is due for renewal in 2020. Anthem represents 13% of Express Scripts' business. Anthem, in a suit against Express Scripts, is asking for \$3B as its share of annual drug

cost discounts. While this may be excessive, Anthem, which has a pending merger with Aetna, is likely to have enough circulating bad blood by renewal time, that we expect it to join Aetna and form a PBM of its own. Express Scripts, which has a low profit margin to begin with, can ill afford the lost revenues.

### Financial Statement Analysis

We estimate Express Scripts' intrinsic value to be \$99.50 per share which beats its most recent share price of \$71.16 (3/11/2016). Its price to earnings ratio (P/E) is 19.8, in line with the industry and higher than the S&P. Express Scripts is experiencing supernormal revenue growth (28% annual growth) and income (19% annual growth). However, we feel that there is great risk to the current level of growth due to Express Scripts' competitive environment. Additionally, Express Scripts does not pay a dividend.

### Conclusion & Recommendation

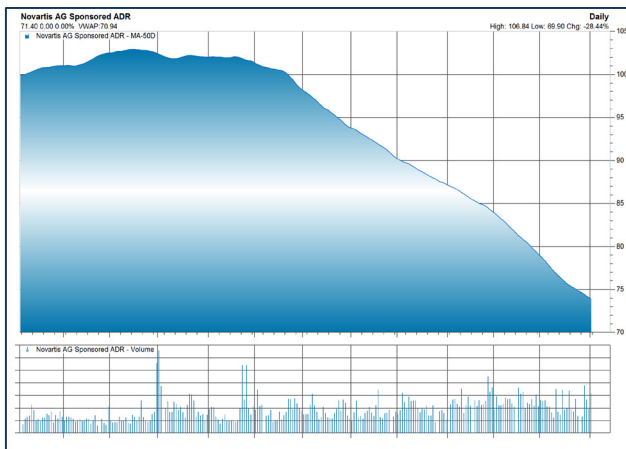
We suggest that Express Scripts be sold from the existing portfolio. Although we find Express Scripts' share price to be undervalued, its competitive environment will act as a strong headwind. This is not reflected in our quantitative analysis, but we feel that the added risk is not justified. This is amplified for a company which does not pay a dividend. We recommend a SELL.



## Novartis AG (NVS)

Recommendation <b>HOLD</b>	Valuation <b>\$91</b>	Last Price <b>\$72.54</b>	Adjusted P/E <b>14.8</b>	Style <b>Large Core</b>	Dividend Yield <b>3.8%</b>
-------------------------------	--------------------------	------------------------------	-----------------------------	----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Novartis is a well-diversified company whose strength emanates from its branded pharmaceuticals division with a strong portfolio of multi-billion dollar drugs together with an extensive pipeline of promising new medications. Novartis' generic division, Sandoz, complements the branded pharmaceutical line and is positioned to take advantage of the many blockbuster drugs as they lose patent protection.

### Fundamental Analysis

Novartis' portfolio is very strong with nine blockbuster drugs ( $\geq$  \$1B in annual revenue) and one mega blockbuster ( $\geq$  \$4B in annual revenue). Of these blockbusters, only Glivec (\$4.6B in annual revenue), Diovan (\$2B in revenue) and Exforge (\$1.0B) will face generic competition in the period through 2016. A pipeline filled with 16 promising new drugs supports its star-studded line up. Sandoz, the second largest producer of generic medications worldwide, has a portfolio of 1100

products for a wide variety of ailments. It has a focus on well-differentiated products with a higher margin. Novartis completed the sale of its vaccine business to GlaxoSmithKline and its animal health business to Eli Lilly, two areas which operated at low margins and performed poorly for Novartis. These sales generated value for shareholders and simultaneously allowed Novartis to focus on higher margin pharmaceutical sales. This is expected to accelerate earnings growth in the intermediate term.

### Financial Statement Analysis

We calculate the intrinsic value of Novartis to be \$91 a share, which is substantially higher than its current share price of \$72.68 (as of 3/18/16). Its price to earnings ratio is a low 14.8, helped by Novartis' aggressive share repurchase program. This P/E ratio is considerably lower than its peers (17.9) and the S&P (17.7). In addition to boosting shareholder value through repurchased shares, Novartis pays a hefty dividend with a yield of 3.8%, which beats both its peers (1.31%) and the S&P (2.5%).

### Conclusion & Recommendation

We find Novartis (NVS) to be undervalued and recommend that our portfolio hold this stock. Its portfolio with numerous blockbuster drugs and its pipeline of future blockbusters has Novartis positioned for high single digit revenue growth through 2020. Its strong dividend yield is a key factor supporting our recommendation to HOLD this stock in the face of an economic forecast of slow market growth.

## NuVasive Inc (NUVA)

Recommendation  
**SELL**

Valuation  
**\$32**

Last Price  
**\$30.66**

Adjusted P/E  
**36.2**

Style  
**Small Growth**

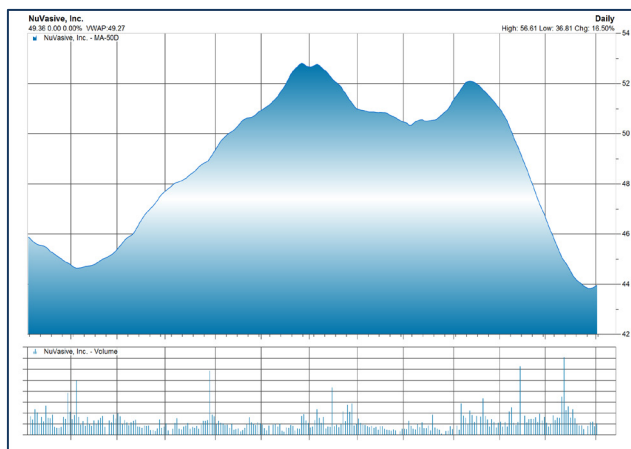
Dividend Yield  
**N.A.**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Positive

Relative Strength Negative



### Introduction

NuVasive is a medical device company specializing in the development of instrumentation and products used in spine surgery. It has helped to pioneer a minimally invasive surgical approach that speeds recovery and reduces hospital stays.

### Fundamental Analysis

NuVasive faces several key headwinds. Spine surgery is a \$4.2B industry in the U.S. and it has attracted a lot of attention with at least 22 companies participating in minimally invasive spine surgery. The competition is keen with several large companies leading the way. Medtronic, Stryker, Zimmer Biomet, Depuy Synthes, and Smith & Nephew represent formidable opponents for NuVasive. In addition, cost containment is a major emphasis in the current healthcare environment. There is payer pushback for procedures that can be classified as unproven or investigational. NuVasive finds itself fighting this battle with third party payers. Moreover, the arrival and proliferation of bundled reimbursement for care delivered in hospitals and outpatient surgical facilities will place

increasing downward pressure on fees in the medical instrument industry.

### Financial Statement Analysis

NuVasive has experienced an average of 10% growth in revenue over the past 5 years. However, income growth has been erratic with a loss of \$17M in 2014. Free cash flows were negative in 2015. NuVasive does not yet pay a dividend and the negative cash flow in 2015 makes it unlikely that it will begin to pay one soon.

### Conclusion & Recommendation

It is our recommendation that NuVasive be sold. Although its technology seems innovative, the medical instrument industry is highly competitive and we are in a time when cost containment for healthcare is being stressed. This is taking the form of payer pushback and decreased rates of payment. It is our view that this will severely limit NuVasive's income growth, so we recommend a SELL.

## Roche Holding AG (RHHBY)

Recommendation  
**HOLD**

Valuation  
**\$36**

Last Price  
**\$30.64**

Adjusted P/E  
**24.9**

Style  
**Large Core**

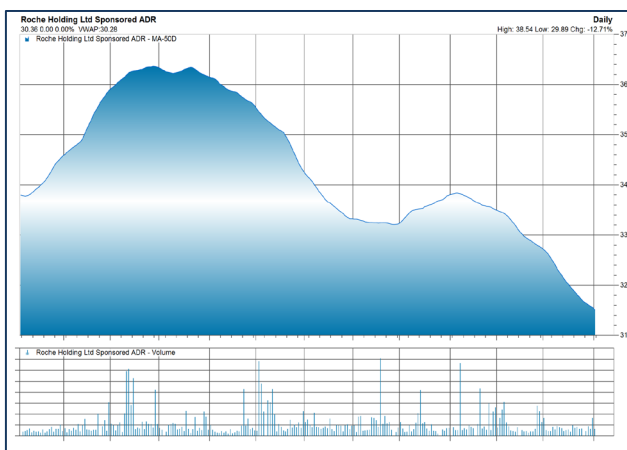
Dividend Yield  
**3.30%**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Positive

Relative Strength Neutral



### Introduction

Roche, a Swiss company, is the world's third largest pharmaceutical. The majority of its medications are biologics in the cancer immunotherapy category. Roche pairs its portfolio with laboratory diagnostic capabilities, which enable it to identify biomarkers that correlate with the susceptibility of a given cancer to a prescribed treatment regimen. This creates a unique platform for Roche.

### Fundamental Analysis

Thirteen of the 19 medications in Roche's portfolio have patents that have expired or soon will. Nevertheless, new studies continue to support expanding indications for its existing medications. Competition for biologics face taller hurdles than competition for expiring small molecule drugs resulting in a more subdued decline in revenues for biologics as patents expire. In addition, its aging portfolio is supported by an exciting pipeline of new agents, many of which are in the late stages of testing.

There has been a recent increase in the demand for improved care for cancer. For Roche, which is at the pinnacle of cancer care, this is likely to serve as a growth driver for 2017-2018 and beyond.

### Financial Statement Analysis

We find Roche's intrinsic value to be \$36.00 per share, which beats the recent closing price of \$31.41 (as of 3/15/2016). The price to earnings ratio (P/E) is 24.9, which is lower than the industry average (33.7) but higher than the S&P (17.7). There has been consistent annual revenue growth of 4.4% over the past 5 years despite a recent headwind from a strong Swiss franc. Income has been off in 2014 and 2015 and this is expected to continue through 2016 with renewed income growth thereafter coming as some of its newer products are launched. Roche has a strong dividend yield of 3.3%, which is higher than peers (0.9%) and the S&P (2.4%).

### Conclusion & Recommendation

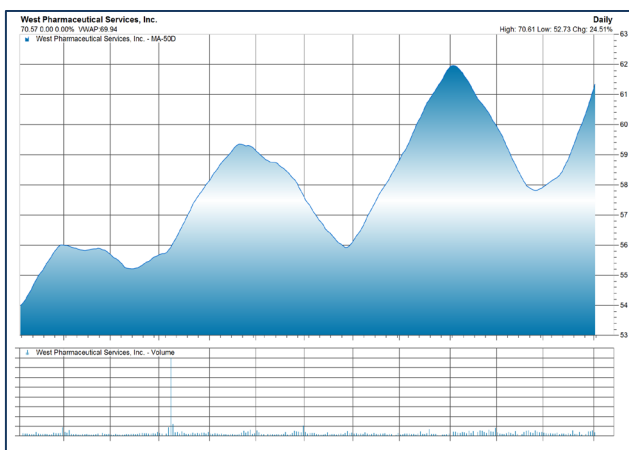
The share price of Roche is somewhat undervalued. It has an exciting roster of new medications in late stages of testing and this, together with its diagnostic testing capabilities, will serve as a growth driver. We recommend that the portfolio HOLD its shares of Roche.

## West Pharmaceutical Services (WST)

Recommendation <b>SELL</b>	Valuation <b>\$32</b>	Last Price <b>\$68.45</b>	Adjusted P/E <b>49.7</b>	Style <b>Mid Growth</b>	Dividend Yield <b>0.7%</b>
-------------------------------	--------------------------	------------------------------	-----------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



### Introduction

West Pharmaceutical Services is a leading manufacturer of packaging and delivery systems for injectable and topically-applied drugs. It works alongside major pharmaceutical companies in the design, manufacture, and sterile assembly of packaging components for the delivery of medications to patients. Its headquarters are in Pennsylvania and it services customers on five continents.

### Fundamental Analysis

West Pharmaceutical Services, as a manufacturer of injectable drug delivery and packaging systems for medications, is capitalizing on the growth of biologic medications. We expect to see continued growth in this area and this may provide somewhat of a tailwind for West. West experienced 6.0% average annual revenue growth and 19.4% average annual income growth in the period from 2011 – 2014. With the headwinds of a strong U.S. dollar, West had negative growth in both of these areas in 2015 and we are concerned that this negative effect will continue through 2016.

### Financial Statement Analysis

We find West's share price of \$65.48 (on 3/18/2016) to be significantly higher than the intrinsic value as calculated using any of our discounted dividend models. Its price to earnings ratio (P/E) of 49.7 supports the notion that West is over-priced. It has a dividend yield of 0.7%, which is on par with its industry average (0.8%) but considerably lower than the S&P (2.4%).

### Conclusion & Recommendation

We find West Pharmaceutical Services to be overvalued. Its share price has fluctuated widely over the past year from a low of \$53.93 a share to its current value. Given this analysis together with its low dividend yield, we recommend a SELL.

## Industrials

### Overview

The industrial sector involves firms that manufacture and distribute goods, 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 proportion of part time jobs continue to worry some analysts. The deteriorating situation in the European Union, China, and overall slow growth in emerging markets are concerns in the following trading period.

### Manufacturing Recession

Global manufacturing has been in a recession mainly driven by the decreased growth in China. To offset this, international central banks are implementing policies to stimulate economic growth. In the U.S., Industrial capacity utilization has declined since the beginning of 2016, at a rate that is below the long-run (1972-2015) average, and total industrial production is below the 2015 level. However, lower energy prices and low interest rates have created a better environment. In February, The Supply Management's Manufacturing Index moved positively above the 50 range, below 50 indicates contraction. Furthermore, the general abundance of cash on balance sheets could help push management to invest in new, more efficient equipment that can increase productivity and drive top-line sales. Despite the abundance of cash and near all-time high capital average age of equipment, companies have not been investing capital for replacements. This trend should continue, and will cause slow growth of the manufacturing industry and overall industrial sector. As a result, we are avoiding manufacturing-based companies, because this segment is experiencing a recession and trends are expected to continue to decline or remain stagnant.

### Global Conflict

Global terrorism and conflicts are widespread and affecting every region. Russian and Chinese governments have publicly showed increased military power with Russian intervention in Ukraine and Syria and Chinese controversial expansion in the Pacific. The U.S. government increased the budget for the Department of Defense by \$25 billion, the first time since 2012, and despite overall cost reductions. Continued geo-political conflict is a driver for the defense industry.

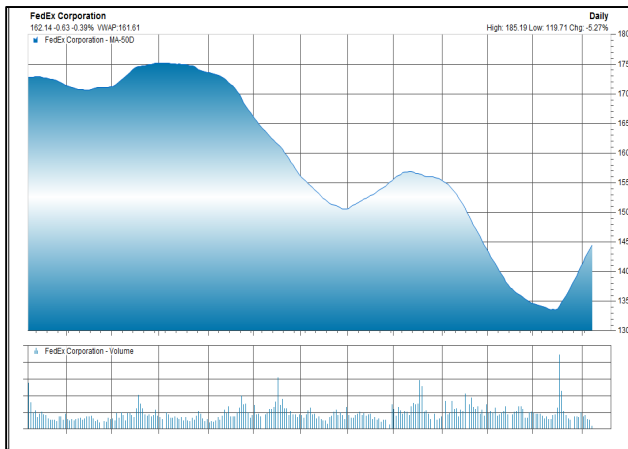
### Conclusion and Recommendation

Global terrorism and conflicts are widespread and affecting every region. Russian and Chinese governments have publicly showed increased military power with Russian intervention in Ukraine and Syria and Chinese controversial expansion in the Pacific. The U.S. government increased the budget for the Department of Defense by \$25 billion, the first time since 2012, and despite overall cost reductions. Continued geo-political conflict is a driver for the defense industry.

## FedEx Corporation (FDX)

Recommendation <b>SELL</b>	Valuation <b>\$97.58</b>	Last Price <b>\$161.61</b>	Adjusted P/E <b>39.5</b>	Style <b>Large Growth</b>	Dividend Yield <b>0.6%</b>
-------------------------------	-----------------------------	-------------------------------	-----------------------------	------------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Negative



### Introduction

FedEx Corporation provides transportation and business services as well as e-commerce under the corporate umbrella. The company provides its services through four segments: FedEx Express, FedEx Ground, FedEx Freight and FedEx Services.

### Fundamental Analysis

The company lowered 2016 growth estimates due to subdued global and domestic economic growth. Since the final months of 2014, global oil prices have decreased significantly. FedEx Corporation will continue to realize high margins as fuel costs, a significant part of the cost structure, remain at lower levels for 2016. However, low oil and a strong USD have caused the economy to contract, hurting overall sales. Due to the strong USD, FedEx's acquired TNT Express, increasing and improving operations in the European market. Overall, the company has limited foreign exposure with 72% of the \$48B total sales from the United States.

The company has kept the new pricing structure from 2015, which combines weight and dimensional pricing.

This new model is expected to boost revenues; as larger packages will start contributing more to the company's revenue. In addition, the recent UPS earnings call identified changes in their product line, shifting more towards expensive airfreight. Despite the potential for FedEx to have a similar shift towards the higher margin product, the potential increase in sales will not offset the overall slow global and domestic growth.

### Financial Statement Analysis

This new model is expected to boost revenues; as larger packages will start contributing more to the company's revenue. In addition, the recent UPS earnings call identified changes in their product line, shifting more towards expensive airfreight. Despite the potential for FedEx to have a similar shift towards the higher margin product, the potential increase in sales will not offset the overall slow global and domestic growth.

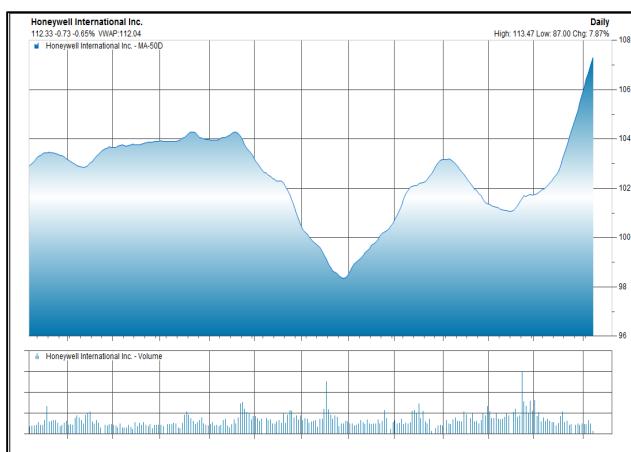
### Conclusion & Recommendation

This new model is expected to boost revenues; as larger packages will start contributing more to the company's revenue. In addition, the recent UPS earnings call identified changes in their product line, shifting more towards expensive airfreight. Despite the potential for FedEx to have a similar shift towards the higher margin product, the potential increase in sales will not offset the overall slow global and domestic growth. We recommend SELLING FedEx.

## Honeywell International Inc. (HON)

Recommendation <b>SELL</b>	Valuation <b>\$110.45</b>	Last Price <b>\$112.18</b>	Adjusted P/E <b>18.4</b>	Style <b>Large Core</b>	Dividend Yield <b>2.2%</b>
-------------------------------	------------------------------	-------------------------------	-----------------------------	----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Honeywell International is a US based conglomerate with a focus on technology and manufacturing. Key business segments include aerospace, performance materials, automotive, chemicals and home and industry products.

### Fundamental Analysis

Honeywell is one of the largest conglomerates in the world, and operates in a variety of large business segments in more than 100 countries. Of the \$38.5B in revenue, 61% are from the United States, 5% are from China, and the remaining from developed nations. Despite diversification, the company has significant international exposure, which threatens total revenue growth because of a subdued global economy.

Management announced a five-year plan, ending in 2018, to invest in organic and external growth while reducing costs. Despite claims to focus on organic growth, the company has spent approximately \$5.5B over 2015

acquiring companies to bolster its revenue segments. The company has three revenue segments focusing on aerospace, automation and control solutions, and performance materials and technology. The slowdown in China and collapse of the domestic energy sector are risks to sales, as Honeywell sells and supports electronic systems for manufacturing plants and oil drilling systems.

### Financial Statement Analysis

Sales fell 4.3% from \$40B in 2014 to \$38.5B in 2015. To offset the loss, cost of goods sold and selling, general, and administrative costs fell 7.7% and 7.2% resulting in growth of gross income, net income, and EBITDA. Gross income grew by 2.2%, lower than 2014 and in line with a declining trend since 2012. However, net income and EBITDA were higher than previous years at 12.5% and 10.8%, mainly a result of significant cost reductions. Management will be able to pay the dividend, continue the share repurchase program, and pay off the looming total debt increase of \$6B, due to increases in free cash flow. Cash levels have been high with relative low expenses on debt servicing and dividends. Despite recent cost reductions, the decrease in sales and outlook of slow global growth increases the risk of reduced future sales growth and the opportunity to cut costs further.

### Conclusion & Recommendation

Honeywell has large foreign exchange risk and a bleak sales growth forecast, due to subdued global growth. Despite their diversified position, both geographically and across business segments, cutting costs further will be difficult and it appears that management has not been able to generate growth organically. As a result, we recommend to SELL this position.

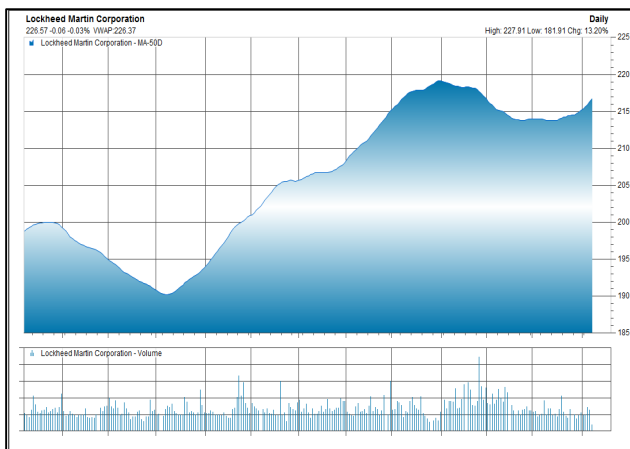


## Lockheed Martin Corporation (LMT)

Recommendation <b>HOLD</b>	Valuation <b>\$233.78</b>	Last Price <b>\$225.62</b>	Adjusted P/E <b>19.1</b>	Style <b>Large Core</b>	Dividend Yield <b>3.0%</b>
-------------------------------	------------------------------	-------------------------------	-----------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Lockheed Martin Corporation is an aerospace and defense company that operates in multiple segments including aeronautics, space systems, technology services and electronic systems. In 2015, the US Government accounted for close to 80% of the company’s revenues.

### Fundamental Analysis

Lockheed Martin benefits from relative revenue stability because of its significant government contracts. Although the U.S. Government budget decreased over the past year, the Department of Defense budget increased to \$25 billion, the first time since 2012. The increased budget is a positive indicator for Lockheed Martin’s revenue growth because of its historical reliance on revenues. In addition, the company has a unique product line and intensive R&D. The broadening of its portfolio through strategic acquisitions of Sikorsky Aircraft Corporation in 2014 and Leidos Hlds, an information system and global solutions firm in 2015, will show positive results for its bottom line. Furthermore, the company expects a contract renewal in 2017 for its acquired BlackHawk product line, which is

expected to generate \$2B a year for the following five years. Finally, Lockheed Martin announced a \$3B share repurchase program, to be completed in 2016, which in prior years has boosted the stock price and EPS.

### Financial Statement Analysis

While Lockheed Martin’s revenue has increased at a slow pace, 0.2% over the last five years, its net margin has grown significantly and is at its highest, 13.5%, since 2008. Since 2014, management has increased sales while reducing cost of goods sold. Lockheed Martin’s free cash flow has been steadily increasing and can support both debt repayments and future share repurchase programs. We anticipate next year’s share repurchase to be between 2015 and 2014 amounts, of \$3B and \$1.9B.

### Conclusion & Recommendation

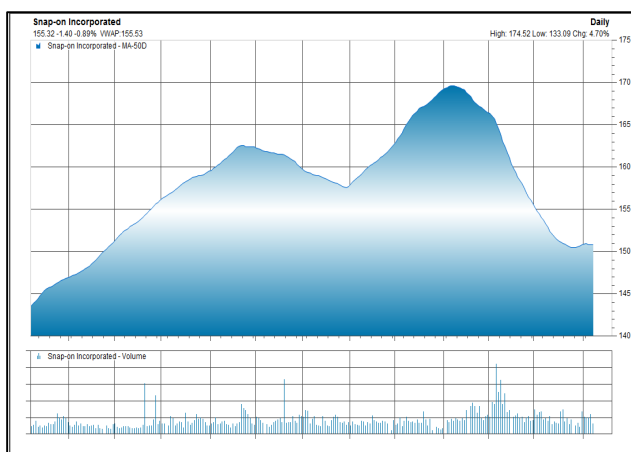
We can expect Lockheed Martin’s top line growth to continue for 2016. Furthermore, as the U.S. is Lockheed’s biggest buyer, the company will benefit from an increased budget and global hostility. Continual terrorism and regional conflicts in the Middle East and Asia will continue to drive demand for products and services. Finally, based on our economic outlook, the strong financial position of the company, and management’s efforts to increase value, we rate the stock as a HOLD.



## Snap-on Inc. (SNA)

Recommendation <b>HOLD</b>	Valuation <b>\$157.06</b>	Last Price <b>\$158.57</b>	Adjusted P/E <b>19.2</b>	Style <b>Mid Core</b>	Dividend Yield <b>1.6%</b>
-------------------------------	------------------------------	-------------------------------	-----------------------------	--------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Snap-on Incorporated markets and manufactures high-end tools, equipment, diagnostics, repair information systems and other system solutions for professional users. Snap-On Tools Group segment provides vehicle service and repair technicians through the company's worldwide mobile tool distribution channel. The Repair System and Information Group segment serves other professionals vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealerships through direct and distributor channels. The Financial Services segment consists of the business operations of Snap-On Credit LLC, the company's financial services business in the United States, and Snap-On's other financial services subsidiaries in those international markets where Snap-On has franchise operations.

### Fundamental Analysis

Snap-on Incorporated markets and manufactures high-end tools, equipment, diagnostics, repair information systems and other system solutions for professional users. Snap-On Tools Group segment provides vehicle service

and repair technicians through the company's worldwide mobile tool distribution channel. The Repair System and Information Group segment serves other professionals vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealerships through direct and distributor channels. The Financial Services segment consists of the business operations of Snap-On Credit LLC, the company's financial services business in the United States, and Snap-On's other financial services subsidiaries in those international markets where Snap-On has franchise operations.

### Financial Statement Analysis

Snap-on continues to see revenue growth and its sales have increased by an average of 6% over the past 5 years. In 2015, Snap-on was able to realize cost reduction initiatives, set forth by management to make the company leaner, which is demonstrated in the reduction in cost of goods sold. Consequently, increases in profitability margins currently set the company apart from the rest of its closest competitors. Snap-on's EPS in 2015 was \$8.10, an increase of 13.4% from the year prior. Furthermore, Snap-on has achieved its highest ROE of 20.72% in 2015. Besides strong financial performance, management has been returning excess cash flow to shareholders on a regular basis, with the last dividend increase announced reaching an impressive 15.1% relative to the previous dividend. Management is conservative but responsive to changes in the economy.

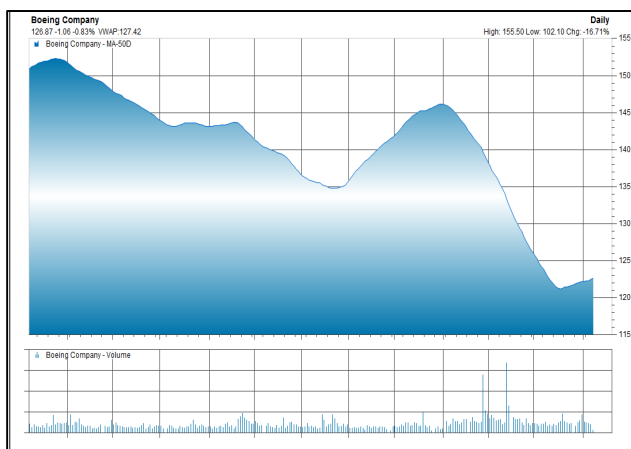
### Conclusion & Recommendation

Snap-on's performance year over year has been extremely positive. Based on the financial position of the company, management's use of cash, and relative inelastic demand for its products, we believe that the company will continue to outperform the market and recommend to HOLD for the next twelve-month period.

## Boeing (BA)

Recommendation <b>BUY</b>	Valuation <b>\$142.64</b>	Last Price <b>\$128.57</b>	Adjusted P/E <b>17.6</b>	Style <b>Large Core</b>	Dividend Yield <b>3.3%</b>
------------------------------	------------------------------	-------------------------------	-----------------------------	----------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Negative
Relative Strength	Neutral



### Introduction

The Boeing Company designs, develops, manufactures, sells, services, and supports commercial jetliners, military aircraft, satellites, missile defense, human space flight, and launch systems and services worldwide. The company operates in five segments; the largest are Commercial Airplanes and Boeing Military. These segments develop, produce, and market commercial and military jet aircraft and provides services to the commercial airline industry. The last three segments are network and space systems, integrated logistics, and facilitates financing solutions. The revenue segments have international exposure and carry foreign exchange risk as over 50% are from other global regions.

### Fundamental Analysis

Boeing faced major headwinds at the end of 2015, beating estimates but releasing disappointing news. The SEC released an investigation into Boeing’s project accounting.

In addition, Boeing announced that it potentially would be unable to recoup costs on the 787 project and lowered guidance on 2016 airplane deliveries to 740-745 from the 2015 record of 760. All of these issues are reflected in the current stock price, which has risen from its lows around \$120. Although an SEC investigation can further lower the stock price, project accounting rules are unclear and are difficult to prosecute. Furthermore, investments into the 787 project were made years ago and the company will start to earn a profit on every plane made towards the end of 2016. Last, the company is increasing efficiencies and demand is changing to the higher margin models.

### Financial Statement Analysis

Due to record high deliveries in 2015, Boeing sales increased by 5.9%. Despite this, COGS and SGA rose by 6.95% and 0.15%. As a result, net income and EBITDA decreased by 5% and 1%. To reduce costs, management announced cost reduction initiatives to cut jobs at its Washington plant and renegotiate contracts with all of its suppliers. In addition to cost initiatives, the company plans to improve its low manufacturing efficiency. The company currently has a backlog of \$490B, which is a problem because revenue is recognized upon delivery to the airlines. As a result, management outlined steps and expects efficiency to increase by 20%, starting in 2016. During the backlog, customers have begun upgrading and switching to higher margin models. The change in product mix and increase in efficiency will drive free cash flow. The company has a history of paying its dividend and has purchased \$6B worth of shares over the last two years.

### Conclusion & Recommendation

The company is trading at a discount and will reduce costs, increase efficiency, generate cash, and continue its share repurchases. We recommend a BUY.

## Technology

### **Growth in Technology budgets will Create Demand for Application Software and Consulting**

The Technology sector has performed relatively well during the first quarter of 2016 despite the overall downturn in the markets, and has shown signs of a rebound during March. The current rebound is predicted to continue in a stable pace during 2016 as optimism about the market returns. Companies in the technology sector are overall reporting healthy balance sheets showing solid cash balances and relatively low debt amounts. During the first quarter of 2016, we have seen companies in the tech sector increasing dividend payments. In a rather uncertain market where expectations of high returns are pessimistic, dividend payments could become a more attractive option.

### **Increased Capital Expenditures Will Boost Growth**

In recent years, companies have shown showed low investment in technological advances and improvements, especially towards production. For companies to stay competitive and productive, they are poised to change this trend and invest more capital into technology, allowing them cut costs, and increase efficiency. Expectations of an increase in capital expenditures and an increase in consumer's willingness to spend on technology are likely to boost the growth of the technology sector. Companies continue to move towards cloud-based software (SaaS) in order to become more cost-efficient and consumers now lay heavier focus on the integrity of their information. As a result, data security especially related to the clouds has become an integral part in company's success.

### **Mergers & Acquisitions as Driving Factors**

Mergers and acquisitions has in recent years been a driving factor in the technology sector and is expected to remain such during 2016. This is largely due to an increased number of mature technology companies, inexpensive debt financing, and reasonable valuations. Additionally, we have seen companies especially within the semiconductor industry looking to create shareholder value through consolidation, and as this trend remains, we expect to see further growth within the sector.growth in this industry. The chart below illustrates how the S&P 500 Information Technology Index (in blue) has outpaced the S&P 500 (in green) within the last year.

## Amdocs Ltd. (DOX)

Recommendation  
**SELL**

Valuation  
**\$50.00**

Last Price  
**\$60.07**

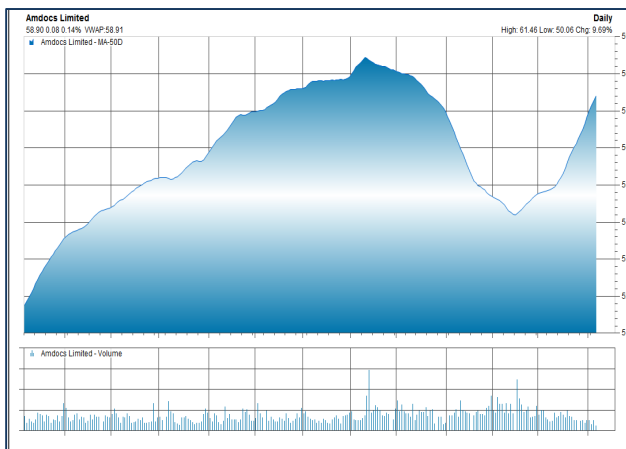
Adjusted P/E  
**15.32**

Style  
**Mid Core**

Dividend Yield  
**1.35%**

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Amdocs, Limited develops, implements and manages software and services aimed to enable service providers in the introduction of new products. These software and services assist with computer systems integration for communications, media and entertainment and are associated with business support systems and operational support systems.

### Fundamental Analysis

During the first quarter of 2016, Amdocs announced partnerships with Adobe and frog with the goal to bring expertise together from three major players in each of their areas. In January 2016, Amdocs also revealed that they had completed the purchase of Israeli Revenue Assurance software company, Cvidya. As approximately,

30% of Amdocs revenue is made up from their international operations and customers this creates a rather significant exposure to foreign exchange risk. Furthermore, Amdocs derives 70% of its revenue from its 10 largest customers exposing the company to great client and industry risk, mainly from the telecom sector. A single pullout of a large customer could result in a great disruption in Amdocs financials and further growth.

### Financial Statement Analysis

Amdocs, Ltd. reported free cash flow of \$163 million for the first fiscal quarter of 2016. The Board of Directors raised the quarterly dividend payout by 14.7%, effective march 2016, which amounts to \$0.195 per share. Based on the stock re-purchase program from March 2015, Amdocs shows a reliability in their repurchase program, already buying back \$100 million ordinary shares in the first fiscal quarter of 2016.

### Conclusion & Recommendation

Although Amdocs, Ltd has reported relatively stable and growing results in 2015 the company's narrow industry and international client base exposes the company to both foreign exchange and industry risk. Based on a modest economic outlook for Amdocs along with a high level of risk exposure we recommend SELLING this holding.

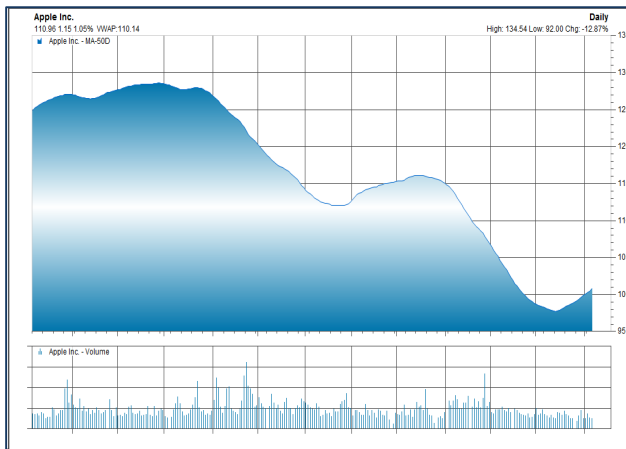
## Apple Inc. (AAPL)

Recommendation	Valuation	Last Price
<b>HOLD</b>	<b>\$143.40</b>	<b>\$109.56</b>

Adjusted P/E	Style	Dividend Yield
<b>11.28</b>	<b>Large Growth</b>	<b>1.99%</b>

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### 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

In 2015 mainly due to the release of iPhone 6 and 6s we saw Apple grow their revenue by 28% or \$51 Billion. Due to macroeconomic slowdown, currency headwinds, and also the unusually high revenue bar set in 2015 we expect

Apple's revenue to drop slightly in 2016. Although we expect a slowdown in the sales of iPhones, we believe Apple has created an "ecosystem" that has proved very effective in retaining customers. As a result, we expect that growth in iPhone sales to remain stable in the long-term. As growth in iPhone sales decline, we still believe in Apples capacity to keep innovating at a high rate, and we expect to see high growth in other areas such as Apple Watch and Apple TV. In order to stay competitive, we believe Apple will focus more resources towards innovating further on the iPhone, creating new usage areas that will increase the overall user experience.

### Financial Statement Analysis

Although we saw unusually high growth in revenue in 2015 we expect Apple to grow revenue by about 6% through 2016. Over the next five years, Apple is expected to grow earnings by an average of 11.95% per year. In 2015 we saw an increase in earnings per share by 43% and an increase in free cash flow by about 40%. Despite an expected slowdown in sales of the iPhone we are confident that we will see continued growth in Apple.

### Conclusion & Recommendation

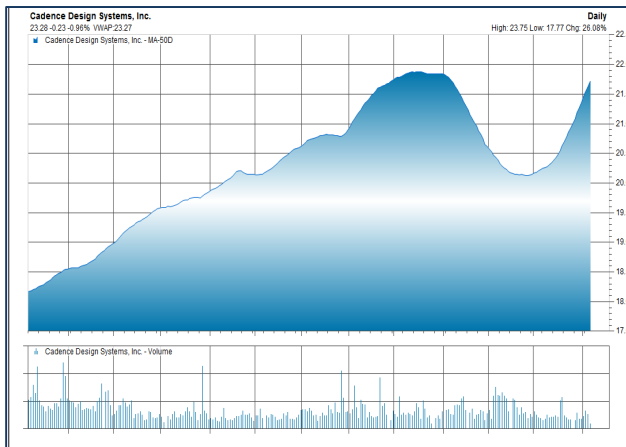
Although we expect to see a slight slowdown in growth of revenue we remain confident about Apple's ability to stay innovative, and we believe this will allow for continued long-term growth in the sales of their iPhones. In 2016 we expect to see high growth in the sales of other products such as the Apple Watch and Apple TV, and we believe this will make up for some of the loss in revenue in iPhone sales. Based on our valuation of \$143.4 we see Apple as currently undervalued and recommend to HOLD this stock.

## Cadence Design Systems Inc. (CDNS)

Recommendation <b>BUY</b>	Valuation <b>\$22.85</b>	Last Price <b>\$23.77</b>	Adjusted P/E <b>28.32</b>	Style <b>Mid Growth</b>	Dividend Yield <b>N.A.</b>
------------------------------	-----------------------------	------------------------------	------------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Neutral
Relative Strength	Neutral



### 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

With the dollar growing in strength, we estimate growth in terms of revenues but not at a relative pace to the industry and industry competitors. Risks with Cadence include a lower than expected cost savings from prior restructuring and a lower than expected recovery from the global economic slowdown. CDNS produced promising financial results during 2015 and is expected to continue doing so in the upcoming years. During 2015 Cadence not only performed well financially, they also showed signs of a high level of innovational capacity, coming out with nine new products during the year. During Q4 a particularly

high customer demand for their newly launched product, Palladium Z1, helped drive sales significantly. As consumer demand for electronic design products and services is expected to grow, CDNS should be able to maintain a steady increase in sales. Cadence announced an agreement with ARM in March 2015. This agreement allows reciprocal access to relevant IP portfolios, as well as the rights to both companies to manufacture test chips containing Cadence IP and ARM IP and provide development platforms to customers. This agreement should prove beneficial in terms of accelerating time to market for customers.

### Financial Statement Analysis

Cadence Design Systems Inc. reported revenue growth of 7.66% (1.58bn to 1.70bn) with a steady average three-year revenue growth of 8%. Additionally, the company reported an increase in net income by 58% (159mn to 252mn) and a growth in FCF of 20%.

### Conclusion & Recommendation

Using a free cash flow analysis, Cadence Design Systems is marginally undervalued. We recommend BUYING this stock. CDNS is financially healthy and is forecasted to grow earnings by 15.16% in 2017 and at an average of 9.61% over the next five years.

## EMC Corporation (EMC)

Recommendation  
**HOLD**

Valuation  
**\$36**

Last Price  
**\$26.71**

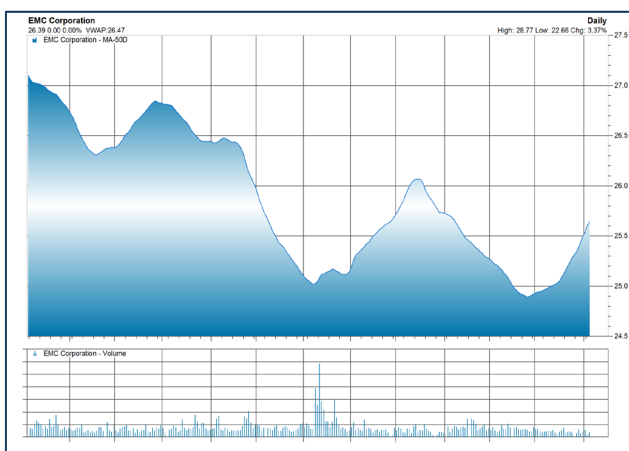
Adjusted P/E  
**25**

Style  
**Large Cap Blend**

Dividend Yield  
**1.75%**

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

EMC Corp is a leading provider of information infrastructure solutions and services blended with virtual infrastructure technologies. EMC information infrastructure business consist of three separate divisions: Information storage, Enterprise content Division and RSA Information Security.

### Fundamental Analysis

EMC leads in the information technology storage space segment providing its services to enterprises and government entities around the world. As the company enters into 2016, we foresee growing demand for internet-based computer solutions as industry participants are constantly trying to reduce cost and

improve customers service. We also expect a rise in demand for data-center computing solutions, however, we also see an increase in price competition as hardware vendors experience decreasing margins. As of March, 2016 Ernst & Young and EMC announced a strategic alliance to assist clients accelerate return on investment and build stronger strategic initiatives and technology implementations. The alliance provides a collaboration between both companies in joint offerings across EMC activities and E&Y practice areas. The joint services will cover enterprise mobility management, government risk and compliance, data center network visualization and cyber security.

### Financial Statement Analysis

We expect revenues to rise in 2016 by 2.0% and 4.9% in 2017. Growth will be driven by an increased implementation of cloud computing blended with revenue from new product offerings and 80% stake in VMWare. We forecast annual margins to remain within the 60% range posted in 2015, along with a decrease in expenses as EMC experience economies of scale.

### Conclusion & Recommendation

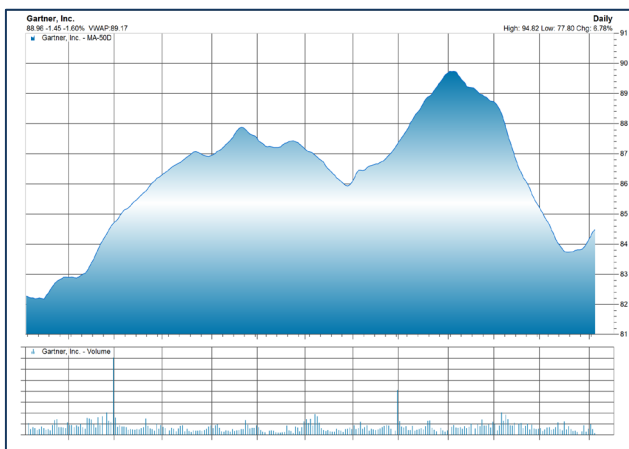
Based on the company's global and domestic outlook and corporate strategy, we expect revenues to rise and EPS to increase through 2017. Using a dividend discount model, EMC is undervalued by approximately 18%. We recommend this stock a HOLD.

## Gartner Inc. (IT)

Recommendation <b>SELL</b>	Valuation <b>\$92.76</b>	Last Price <b>\$88.33</b>	Adjusted P/E <b>43.89</b>	Style <b>Mid Growth</b>	Dividend Yield <b>N.A.</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

Gartner, Inc. is the world's leading information technology research and advisory company. The company delivers the technology-related insight necessary for its clients to make the right decisions, every day. From CIOs and senior IT leaders in corporations and government agencies, to business leaders in high-tech and telecom enterprises and professional services firms, to technology investors, Gartner is the valuable partner to clients in approximately 10,000 distinct enterprises worldwide.

### Fundamental Analysis

As demand for consulting and IT infrastructure services increased over past few years Gartner has experienced modest growth. We think business consulting will remain healthy in 2016 as we see companies attempt to manage uncertainty. However, we expect higher levels of caution to be accounted for as global growth concerns many clients particularly overseas. We anticipate that Gartner will look to supplement growth with partnerships and acquisitions due mainly to significant competition.

### Financial Statement Analysis

Gartner managed to generate a revenue CAGR of 12% over the last 5 years, and upon our analysis of financials we are cautious about Gartner's ability to sustain this level of revenue growth. We expect a slowdown in global IT spending, reducing productivity and increasing competition. We expect margins to remain flat through 2020, and revenue growth to decelerate over the long-term.

### Conclusion & Recommendation

As we experience global growth concerns around the world blended with a reduction in IT spending and questionable revenue growth. We recommend SELLING this stock. Using a free cash flow analysis, Gartner is fairly valued at the current price levels.

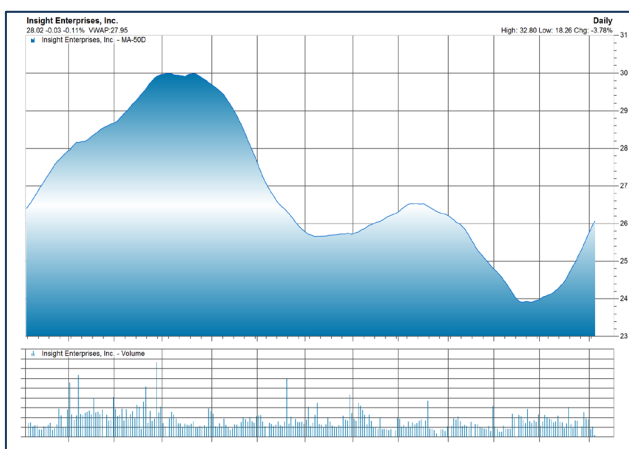


## Insight Enterprises, Inc. (NSIT)

Recommendation <b>HOLD</b>	Valuation <b>\$43.98</b>	Last Price <b>\$28.63</b>	Adjusted P/E <b>13</b>	Style <b>Small Value</b>	Dividend Yield <b>N.A.</b>
-------------------------------	-----------------------------	------------------------------	---------------------------	-----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Positive



### Introduction

Insight Enterprises, Inc. offers information technology hardware, software and service solutions to businesses and public sector institutions. The solutions offered are virtualization, collaboration, security and cloud computing. It operates in three geographic segments: North America, Europe, Middle East, Africa and Asia Pacific.

### Fundamental Analysis

We anticipate a continued stabilization in demand related to PC's and electronic components. We also expect the strength of the U.S dollar to continue in 2016, restraining revenues for many players in this sub sector. More recently this technology sub-industry has experienced uneven growth however, due to the consolidation of technology distributors improving supply chains we expect growth to be more stable over the next 5 years. Consolidated net sales increased in 2015 by 1% compared to 2016 including

a 7% increase in North America. During 2015 the company repurchased approximately 3.3 million shares of its own common stock, which totaled \$92 million. Despite dampened market conditions in the last quarter of 2015, Insight Enterprise's EMEA business continues to expand its cloud service capabilities increasing sales by more than 20%.

### Financial Statement Analysis

Gross margins increased 5% year over year in 2015, as well as an increase in gross profit of 6% for EMEA business. Earnings growth was flat for the most part, mainly due to the effects of foreign currency movements. Earnings from operations in North American totaled \$103.8 million accounting for 2.7% of net sales.

### Conclusion & Recommendation

Using the approach of free cash flow analysis, we recommend HOLDING this stock. Due to Insight's unique ability to provide clients hybrid-cloud and cloud based solutions and \$50 million share repurchase program, we expect Insight to continue as a key player in the workforce solutions business.

## Materials

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. In accordance with our economic outlook, we anticipate greater demand for some industries represented in the sector, but not for all.

Over a trailing twelve-month period the Materials sector generated a -10.4% return compared to the S&P 500 return of -2.5%. The spread between market and sector return started to drastically widen in July 2015 and remained significant since.

In the materials sector, lower oil prices can be a double edged sword. For some companies, lower prices mean lower input costs, which may lead to higher profit margins. However, many U.S. companies use inexpensive domestic natural gas instead of oil both for energy and as a component feedstock to their output products and may not benefit as much as some global competitors if oil prices remain low.

Construction activity in the U.S. has continued to increase through 2015, and we believe it is likely to continue growing in the coming year. Companies that produce construction materials may benefit from ongoing demand growth, including makers of raw building materials as well as manufacturers of finishing materials such as paint and resins. As in 2015, companies with lower production and distribution costs are likely to outperform their competitors.

A global slowdown in demand has intensified a cyclical oversupply in the commodities market, leading to headwinds for mining, metals, and energy. In U.S. agriculture, commodity prices we believe will recover and the market for agricultural materials will gradually return to growth and the increased demand for agricultural products will deplete current supply inventories.

In the past year, there have been several major consolidation deals introduced, and active M&A activity in the sector may remain. With revenues and earnings weakened by the slower global economy, most secure companies stand to pick up assets from competitors at bargain prices.

## Cabot Corporation (CBT)

Recommendation  
**SELL**

Valuation  
**\$40.48**

Last Price  
**\$47.28**

Adjusted P/E  
**9.3**

Style  
**Small Value**

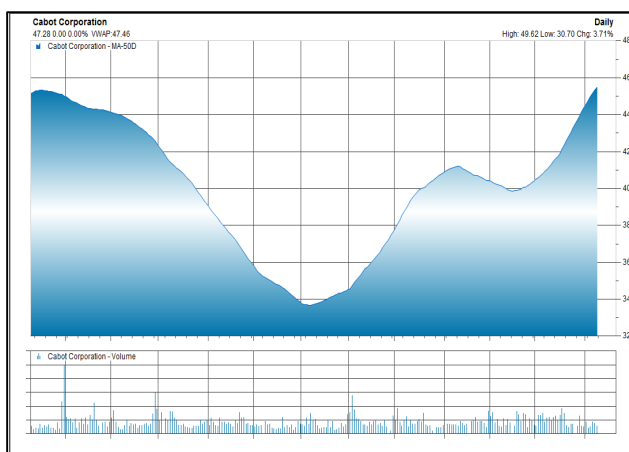
Dividend Yield  
**1.9%**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Neutral

Relative Strength Negative



### Introduction

Cabot Corp. was founded in 1882 and is headquartered in Boston, Massachusetts. The company engages in manufacturing and supplying organic chemicals and products (e.g. aerogels, carbon blacks, drilling fluids, inkjet colorants, metal oxides, and rubber). The company manages its operations through four different segments: Advanced Technologies, Performance Materials, Purification Solutions, and Reinforcement Materials.

### Fundamental Analysis

Cabot Corp. is expanding its core business in the United States, which will strengthen its market leading position in the purifications solutions segment. The Mercury and Air Toxics Standard [MATS] from December 2011 which took effect in April 2015 and is designed to limit the emissions of toxic air pollutants such as mercury, arsenic and metals from coal and oil-based power plants. Cabot Corp. offers a wide range of activated carbon and recently announced the opening of a new liquidate coal mine in Marshall, Texas.

The chemicals industry is capital-intensive. The industry annually spends roughly \$50 billion on research and development. The industry is cyclical and affected by costs for basic commodities, especially oil and gas. Price fluctuations impact dependent industries such as resins, plastics, synthetic fibers, pesticides, lubricants, paints, coatings, adhesives, soaps and cleaners, pharmaceuticals, and many other products with special applications. Looking ahead, the chemicals industry is expected to recover along with the overall economic condition. However, high crude oil prices may raise production costs and lackluster demand in emerging economies may offset certain positives. The industry may see increased consolidation due to intense competition, the need for cost efficiencies, and economies of scale. Cabot's gross profit margin for the first quarter of its fiscal year 2016 has increased when compared to the same period a year ago. However, sales and net income fell significantly, underperforming compared to the average company in its industry.

### Financial Statement Analysis

Cabot has weak liquidity. Currently, its Quick Ratio is 0.73 which shows a lack of ability to cover short-term cash needs. The company's liquidity has decreased from the same period last year. At the same time, stockholders' equity has significantly decreased by 36.91% from the same quarter last year. Overall, the key liquidity measurements indicate that the company is in a position in which financial difficulties could develop in the future.

### Conclusion & Recommendation

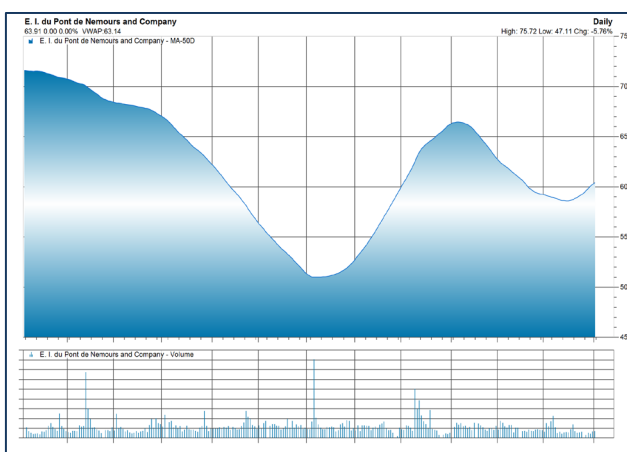
In the short term, Cabot Corp will continue to be hampered by the struggling chemicals market and coupled with its bleak financial outlook it is difficult to recommend CBT. In the long term, CBT's sole reliance on a bounce back of the chemicals market is risky and our valuation signals an overvalued stock price. We recommend our position to SELL Cabot.

## E.I. du Pont de Nemours and Company (DD)

Recommendation <b>BUY</b>	Valuation <b>\$69</b>	Last Price <b>\$62.68</b>	Adjusted P/E <b>30.1</b>	Style <b>Slow Growth</b>	Dividend Yield <b>2.6%</b>
------------------------------	--------------------------	------------------------------	-----------------------------	-----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Positive



### 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 has also increased its research into genetically modified seed technologies, making it one of the most prominent global seed providers. The company posted revenues in 2015 of \$25.8B.

### Fundamental Analysis

DuPont is known by most as a chemical producer, but over the years, its portfolio has shifted markedly to agriculture, nutrition, and biosciences. DuPont's advanced materials business has produced some noteworthy (and high-profit) 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 demonstrate DuPont's successful product development and innovation. The

agriculture business should make up more than 40% of DuPont's operating profit following the Chemours spin-off. 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. However, the company's most recent annual report says, since 2008, it has improved N. American corn market share by 7 point and soybean market share by 10 points. DuPont competes directly with agribusiness giant Monsanto for market share of agriculture inputs. DuPont plans to merge with Dow in the second half of 2016 and then split the combined entity 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.

### Financial Statement Analysis

Dividends per share remain stabilized as well as EBITDA margins. DuPont's continued push into agriculture will produce long term benefits as its costs are poured into R&D. It has maintained net income margin of about 8% and EBITDA margins of 18%. Management has laid out an annual run-rate cost savings target of \$3B from the "merger of equals" with Dow.

### Conclusion & Recommendation

The company has a solid record of innovation, and we think it will be able to replace earnings from older products as they fall out of favor by new technologies.

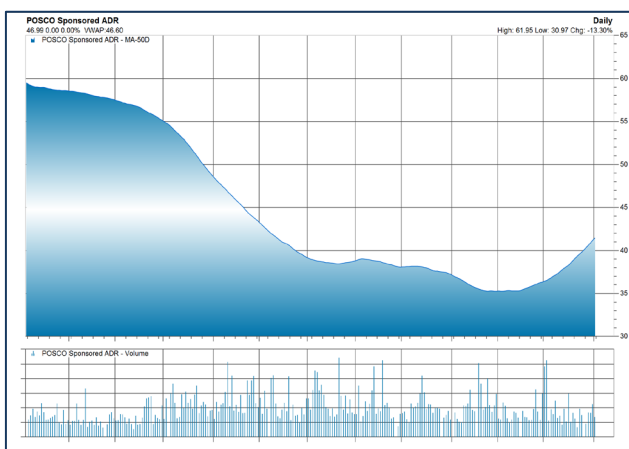
Our discounted cash flow model estimates the company is currently undervalued by at least 10%. We recommend our position to BUY DuPont.

## POSCO Sponsored ADR (PKX)

Recommendation <b>HOLD</b>	Valuation <b>\$46</b>	Last Price <b>\$42.42</b>	Adjusted P/E <b>4.76</b>	Style <b>Slow Growth</b>	Dividend Yield <b>1%</b>
-------------------------------	--------------------------	------------------------------	-----------------------------	-----------------------------	-----------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### Introduction

POSCO (formerly Pohang Iron and Steel Company) is a multinational steel-making company headquartered in Pohang, South Korea. POSCO currently operates two integrated steel mills in South Korea and operates a joint venture with U.S. Steel, USS-POSCO, located in Pittsburg, California. The company generated revenues of \$58.9 billion in 2014.

### Fundamental Analysis

POSCO reported a 2015 net loss of KRW 96 billion, below expectations, owing to poor performance of subsidiaries, valuation losses, and unfavorable forex environment. In particular, the operating margin of 4.1% fell short of projections, as competition from China continued to affect the steel business, weakening selling prices for the firm's products. The firm's two main steel mills are the largest in the world, with capacity of roughly 20 million tons each. They also have the most advanced blast furnaces in the world. Its plants have successfully commercialized a series of steelmaking technologies, such as the Finex technology and the fully automated linear production system. These

technologies reduce production costs by 10% on average by using cheap raw material, reducing energy usage, and cutting production lead time. Furthermore, the firm remains committed to restructuring its loss-making subsidiaries, which should improve cash flow to the company. Meanwhile, according to its Annual Report, management guided that if raw material prices stay at current levels, there will be limited impairment charges on its mining assets going forward. POSCO has arrived at a crossroads after years of underperformance and peers catching up technologically. Under the direction of a new CEO, the company is looking to rebuild its lead through renewed focus on technological innovation and

### Financial Statement Analysis

POSCO has seen revenue growth of 4.7% year over year for 2014 while it has maintained operating margin of about 4% and EBITDA margins of 2.4%. Efforts to restructure the firm's businesses and scale down on capital expenditure are bearing fruit, with free cash flow turning positive to KRW 5.86 trillion in 2015, up from negative KRW 1.58 trillion in 2014. Owing to the improved liquidity, the firm maintained its annual dividend of KRW 8000 per share in 2015.

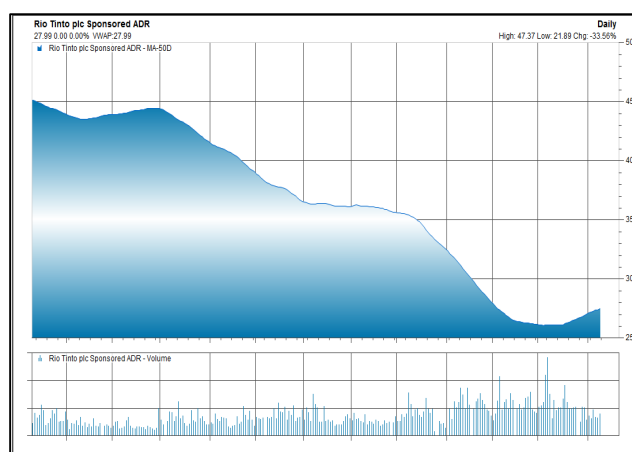
### Conclusion and Recommendation

POSCO's success in technological innovation and proximity to emerging markets bode well for the company's cost-leadership and long-term growth potential. In the longer term, we expect POSCO'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 8%. We recommend our position be held for at least another year.

## Rio Tinto plc Sponsored ADR (RIO)

Recommendation <b>SELL</b>	Valuation <b>\$21.20</b>	Last Price <b>\$27.99</b>	Adjusted P/E <b>14.2</b>	Style <b>International</b>	Dividend Yield <b>6.9%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	-------------------------------	-------------------------------

Technical Analysis	
Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Negative



### Introduction

Based in London, United Kingdom, Rio Tinto plc [RIO] was founded on March 30, 1962. The company engages in finding, mining, and processing a range of mineral resources. RIO operates through five business groups around the world: Aluminum, Copper, Diamonds & Minerals, Energy, and Iron Ore.

### Fundamental Analysis

Rio Tinto has a large portfolio of long-lived assets with low operating costs. Operations include aluminum, coal, copper, diamonds, gold, iron ore, industrial minerals and uranium. This competitive resource base sets Rio Tinto apart from most peers. However, capital costs were inflated by substantial procyclical investment during the height of the China boom, the rot setting in by overpaying for Alcan and subsequent excessive iron ore expansion at the resource boom; the combination of these factors means that returns are likely to remain below the cost of capital for the foreseeable future. As a commodity

producer, Rio Tinto is a price taker, not a price maker. The lack of pricing power is aggravated by the volatile and cyclical nature of commodity prices. We don't assign an economic moat to Rio Tinto, given the bloated invested capital base doesn't permit returns in excess of the cost of capital. The firm's assets are large, however, and despite being overcapitalized, generally have low operating costs. Significant environmental and operating risks are associated with mining, and some of the company's assets have country-specific risks. Rio Tinto has an outsize exposure to iron ore mining, and the dramatic flattening in the industry cost curve for that commodity leads to an elevation in operating leverage. Rio Tinto has low operating costs and a sound balance sheet, but faces the cyclicity of commodity prices, the high capital intensity and poor capital allocation. As the low-cost majors expand and high-cost miners fall off the other end, Rio Tinto's operating leverage increases with lower iron ore prices.

### Financial Statement Analysis

Iron ore comprises 70% of Rio Tinto's fair value estimate, with 35% of projected revenue to 2024 and 70% of EBIT. Iron ore margins remain high relative to the next largest value contributors, copper and aluminum, despite a lower iron ore price forecast. Forecasted Rio Tinto iron ore EBITDA margins average 47% to 2024, compared with 41% for copper and just 15% for aluminum. Our fair value estimate employs an 11% cost of equity, reflecting high cyclicity and operating leverage, coupled with moderate financial leverage.

### Conclusion & Recommendation

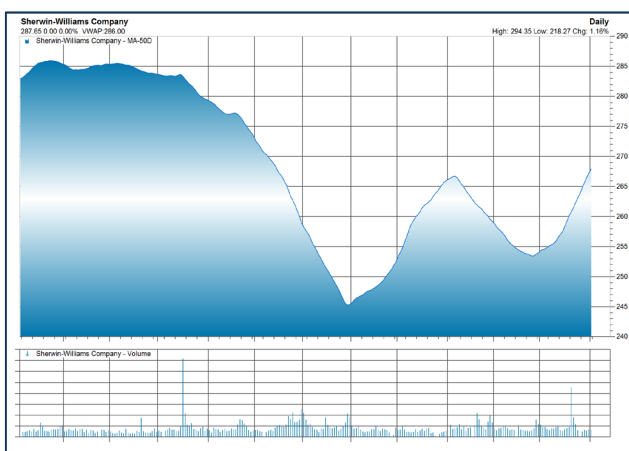
Rio Tinto is the world's lowest-cost iron ore miner, but boom time investment has destroyed returns. We recommend SELLING Rio Tinto.

## Sherwin-Williams Company (SHW)

Recommendation <b>BUY</b>	Valuation <b>\$302.15</b>	Last Price <b>\$283.17</b>	Adjusted P/E <b>25.4</b>	Style <b>Slow Growth</b>	Dividend Yield <b>1.23%</b>
------------------------------	------------------------------	-------------------------------	-----------------------------	-----------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Neutral
Relative Strength	Neutral



### 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.

### Fundamental Analysis

Sherwin-Williams' earnings surged 54.7% to \$2.12 per share in the fourth quarter of 2015 from \$1.37 recorded a year ago, driven mainly by improved operating results in the Paint Stores and Consumer Groups units. For full-year 2015, Sherwin-Williams posted earnings of \$11.16 per share, up roughly 27% from \$8.78 per share earned in 2014. For full-year 2015, Sherwin-Williams logged revenues of \$11,339.3 million, up 1.9% from the 2014 level. Sherwin-Williams' philosophy is to diversify its customer base and expand its operations into various geographies. The company follows a method of growing

through acquisitions and internal initiatives such as efficient working capital management and innovation. This enables the company to somewhat reduce its dependency upon prevailing market conditions. Sherwin-Williams recently announced a strategic acquisition of Valspar. This acquisition falls in line with SHW's plan to expand geographically and will provide a wider consumer base among its consumer paint segment. This acquisition will provide Sherwin-Williams areas in which it does not already compete. Sherwin-Williams' aggressive cost control initiatives, working capital reductions, supply chain optimization and productivity improvement should continue to yield margin benefits. The company's working capital ratio dropped to 8.6% of sales at the end of 2015 from 10.1% a year ago. Robust working capital management helped the company to generate healthy cash from operations of \$1.45B in 2015. Moreover, with continued fall in the price of crude oil, Sherwin-Williams expects to see lower year-over-year input costs in 2016. Sherwin-Williams anticipates average year-over-year raw material cost for the paint and coatings industry to be down in the mid-single digit range in 2016.

### Financial Statement Analysis

Sherwin-Williams has seen revenue growth of an average of 6% over the past three years. Management has been adamant about keeping dividends high as well. Recently, Sherwin-Williams increased its dividend to .84 per share per quarter.

### Conclusion & Recommendation

Across all its product segments, Sherwin-Williams short-term driver is going to be its expanded footprint. In the longer term, we expect SHW'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 6.5%. We recommend to BUY Sherwin-Williams.

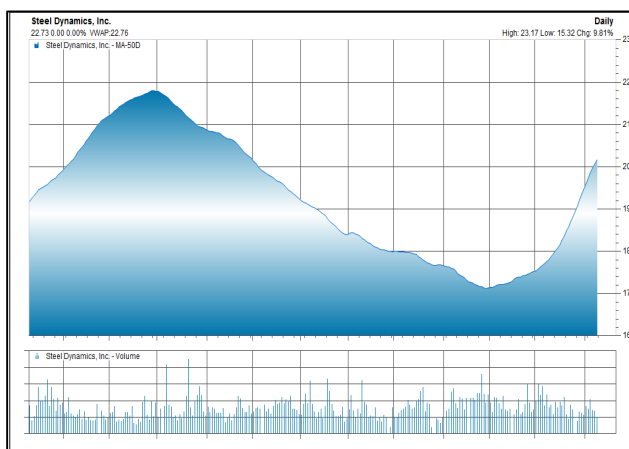


## Steel Dynamics, Inc. (STLD)

Recommendation <b>SELL</b>	Valuation <b>\$19.20</b>	Last Price <b>\$22.73</b>	Adjusted P/E <b>14.2</b>	Style <b>Mid Growth</b>	Dividend Yield <b>2.5%</b>
-------------------------------	-----------------------------	------------------------------	-----------------------------	----------------------------	-------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Negative
Relative Strength	Negative



### Introduction

Steel Dynamics, Inc. was founded in 1993 Fort Wayne, Indiana and is a diversified carbon-steel producer and metals recycler. The mini-mill producer operates through three different business segments: Steel Operations, Metals Recycling & Ferrous Resources Operations and Steel Fabrication Operations. Steel Dynamics competes with a large portfolio of products ranging from flat-rolled and structural steel to special-bar- quality steel and rails to joists, girders, and decking for commercial and governmental buildings.

### Fundamental Analysis

One of the largest U.S. steelmakers by production volume, Steel Dynamics enjoys a low-cost position on the steelmaking cost curve. A relative newcomer to the U.S. steel industry, having been incorporated in 1993, Steel Dynamics melts ferrous scrap metal to produce a wide variety of steel products via its fleet of seven electric arc furnaces. The company's operating model offers low operating leverage relative to its integrated peers as well

as significant flexibility with regard to both the scale and scope of steel production. Unlike most steelmakers that predominantly produce long-rolled steel for construction, manufacturing, or railway applications, flat-rolled steel accounts for more than half of Steel Dynamics' production volume. The application of high-iron-content pig iron allows for the production of higher-strength steel than the use of scrap alone. Because its steelmaking operations depend heavily on ferrous scrap metal, Steel Dynamics vertically integrated by acquiring metal recycler OmniSource in 2007 for a total consideration just above \$1 billion. Additionally, the company invested more than \$300 million in its Mesabi Nugget joint venture with Kobe Steel that was designed to provide iron units to its EAFs at favorable costs. Management decided to idle the operation in May 2015, however, as the associated cash costs were not competitive with global pig iron export prices.

### Financial Statement Analysis

Steel Dynamics' operating margins remain well below historical highs, and since we forecast that steel prices will decline further through 2020, the company's operating environment is likely to remain challenging. Steel Dynamics should be able to generate a 7% midcycle operating margin. Combining our cost of equity assumption with an 8.0% cost of debt assumption, our model assumes an 8.4% weighted average cost of capital. In Steel Dynamics's most recent quarter, EPS fell -75 percent to \$0.09 from \$0.36 a year earlier and revenues decreased to \$1.59B from \$1.95B.

### Conclusion & Recommendation

Given the negative outlook on the steel industry in the US and a strengthening dollar we believe that STLD will disproportionately be negatively affected by the market forces against it. We recommend SELLING Steel Dynamics.

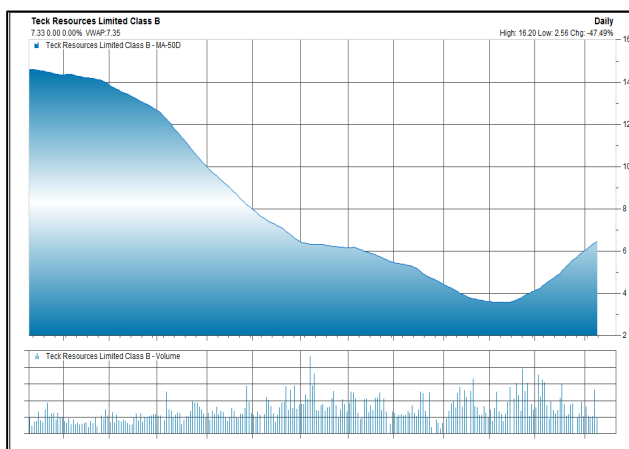


## Teck Resources Limited Class B (TCK-US)

Recommendation <b>SELL</b>	Valuation <b>\$7.88</b>	Last Price <b>\$9.53</b>	Adjusted P/E <b>11.1</b>	Style <b>Slow Growth</b>	Dividend Yield <b>1.05%</b>
-------------------------------	----------------------------	-----------------------------	-----------------------------	-----------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Negative
Relative Strength	Negative



### Introduction

Teck Resources Ltd. was founded in 1951 and is headquartered in Vancouver, Canada. The company is engaged in mining and mineral processing and development. TCK operates through four business units focused on: Copper, Steelmaking Coal, Zinc, and Energy.

### Fundamental Analysis

Teck Resources [TCK] is the world's second largest producer of metallurgical coal [MC] (between 26m and 27m tons), used by integrated steel mills to produce coke. Teck is a producer of high-quality metallurgical coal. Used in steelmaking, met coal prices benefited from China's fixed-asset investment boom, but will be hard hit in a rebalancing. Amid weaker Chinese steel demand and lower domestic Chinese freight costs, we expect China's met coal import needs to decline. We expect global seaborne demand growth to slow considerably, with India the main source of incremental demand. China plays a defining role for Teck, as the biggest buyer of everything

Teck digs out of the ground: metallurgical coal, copper, zinc, and lead. With the exception of lead, demand for these commodities is tied to fixed-asset investment, including infrastructure and construction. In fact, China consumes roughly half of all steel-making coal produced globally and 42% of global copper production. This means that as China's economy slows, with GDP growth predicted to fall to 6.5% during 2016 and taper off to 6.2% in 2017, so too will demand for steel-making coal and copper. This is of significant concern. Teck carries a mountain of debt totaling \$7.7 billion—a considerable pile of debt for company that has considerable financial obligations and is battling declining cash flows.

### Financial Statement Analysis

With its decent cash cost position, we expect Teck to remain profitable, though decidedly less so than it had been. In 2015, TCK's revenue fell 4% from the year prior this is coupled with a 14% decline from the previous two years. Teck's operating income has gone into the red this past year while slashing its dividend to shareholders from .90 per share down to .20 per share amid the commodity market downturn.

### Conclusion & Recommendation

We expect a rebalancing of China's economy from investment to household consumption will mean weaker demand growth for investment-oriented commodities and lower prices than Teck has enjoyed in the past. We recommend SELLING Teck.

## Telecommunications Services

### Sector Overview

The telecommunications industry is well positioned for growth and the momentum is expected to continue into 2016. Especially with the auctioning of the 600 MHz low-band spectrums scheduled for March 29th. This spectrum will allow for faster speeds and better penetration through buildings for services who are able to purchase segments of the spectrum and this will be a key component to any company looking to compete in a market where speed is king.

The wireline sub-sector has been subject to consolidation into three dominant companies, Verizon, AT&T and CenturyLink, although there are still the mid-sized Frontier and Windstream and about 200 small regional private firms. Business and consumers are pushing for more hosted cloud services and expanded broadband speed to accommodate video streaming. Hence, speed rather than price is becoming the competitive advantage in the industry. In 2015, 83% household contributed to at least one paid TV service nonetheless wireline revenue declined.

The wireless sub-sector likewise is dominated by the same three companies. Further consolidation is unlikely due to regulatory concerns about the oligarchical nature of the business. Wireless services are saturated, over 104% by population, and so methods to counteract the pervasive poaching of customers and to ensure customer retention drives the market, the key method for retention being LTE speed.

Searching for revenue some companies (for example Windstream, American Tower and Crown Castle) have turned to leveraging their property holdings through the issuance of REITS. Another innovation, with potential growth opportunity, is the creation of Mobile Virtual Operation. Prepaid Sim cards and no contract plans have also been making some headway, but these are low revenue, low margin services and as yet not a significant bottom-line contributor for larger companies.

### Investment Objective and Strategy

The Telecommunication sector is a small part of our portfolio but it can give a path for portfolio diversification. Saturation in the market has made it so the key differentiator and driver for growth is the speed offered by any given provider. By concentrating our investment on companies that are aligning themselves with providing the fastest service we believe the sector could be a large contributor to our overall return for the portfolio. As such, we have chosen to overweight the sector and concentrate our investment on market leaders both domestically and internationally.

## BCE Inc. (BCE-US)

Recommendation  
**BUY**

Valuation  
**\$48.70**

Last Price  
**\$45.84**

Adjusted P/E  
**20.34**

Style  
**Large Value**

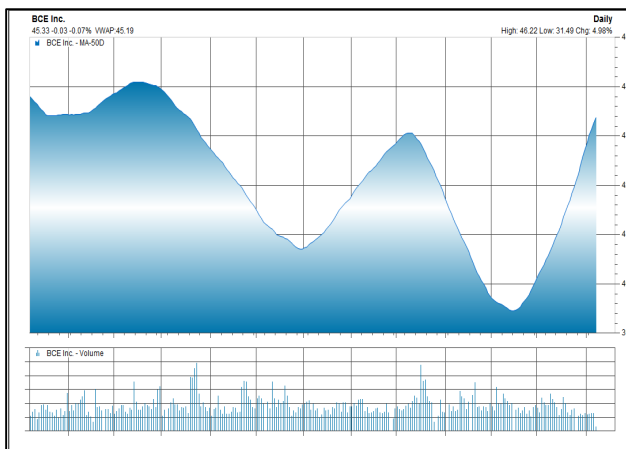
Dividend Yield  
**4.56%**

### Technical Analysis

Bollinger Bands Neutral

Money Flow Positive

Relative Strength Negative



### Introduction

BCE, Inc. provides communication services to residential and business customers in Canada. The company offers various services, including bell mobility wireless, high-speed bell Internet, bell satellite TV and bell fiber TV, bell home phone local and long distance and bell business markets Internet protocol-broadband and information and communications technology services. It generated \$16.82 billion in revenue in 2015.

### Fundamental Analysis

BCE reported \$2.09 billion in earnings in 2015 up 7.89% from the previous year when measured in CAD to mitigate fluctuations in the USD:CAD exchange rate. On the surface BCE-US has been somewhat negatively affected by the strengthening of the USD but the fundamentals of the Company are strong and with a projected stable USD BCE can be bought for a bargain. BCE faces very low competition in the Canadian marketplace, they are a market leader in both innovation and service, and have recently benefited from a reduction in their debt expense brought on by a lowering of the interest rate in Canada

which enabled them to refinance their long-term debts and lower their costs. They also stand out in growth expectations given that they are expected to have long-term growth of 5.3% as compared to their closest competitor Rogers Communications Inc. who actually has a negative long-term growth rate of -5.8%. Much like Verizon, BCE is driving for better quality and service to sustain their competitive advantage. They are pursuing a multitude of process and hardware improvements as well as finding new markets. Recently they branched out into providing specialized devices to increase accessibility to the disabled, this is great for both PR and is an untapped market in Canada where 14% of the population above 15 is disabled and could be captured by these device improvements.

### Financial Statement Analysis

BCE has seen revenue growth averaging at 3.60% for the last five years while also growing net income by an average of 4.59% a year. The fact that management is growing the company and margins makes BCE willing and able to meet its current financial obligations and fund its intended quality and service improvements – providing profitable growth for the next few years.

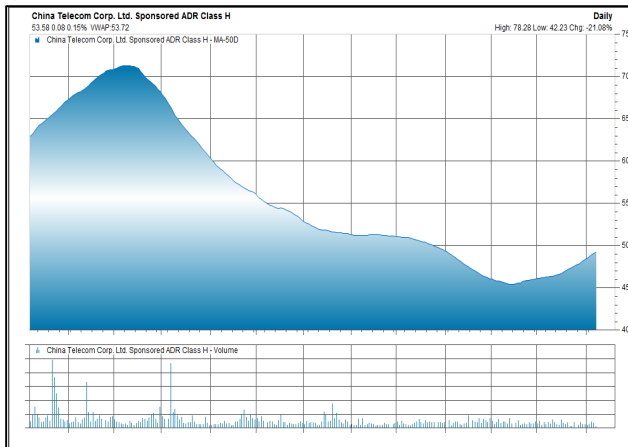
### Conclusion & Recommendation

Based on our fundamental analysis of BCE, we recommend that the stock be added to the portfolio. BCE's primary short-term growth driver is the increasing amount of fixed broadband Internet subscribers globally. This indicator is expected to continue its rapid growth over the next five years in the range of 4-5%. In the long term we expect that BCE's push for quality, dedication to process improvements and exploitation of new markets will help them outperform their competitors and maintain their position as the market leader in Canada. Even with a high-risk premium to account for the exchange rate risk our discount dividend model suggests the stock is undervalued and is a BUY.

## China Telecom Corp. ADR (CHA)

Recommendation <b>HOLD</b>	Valuation <b>\$53.68</b>	Last Price <b>\$52.59</b>	Adjusted P/E <b>15.46</b>	Style <b>Large Core</b>	Dividend Yield <b>2.41%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	----------------------------	--------------------------------

Technical Analysis	
Bollinger Bands	Negative
Money Flow	Positive
Relative Strength	Neutral



### Introduction

China Telecom Corp Ltd is an integrated communications company that provides a range of services including wire line and mobile voice services, Internet and add on services in the Peoples’ Republic of China.) It has about 109m wire line, 100m broadband and 190m mobile. These numbers have somewhat stagnated or even shrank since last year’s report. The company is a subsidiary of the holding company, China Telecommunications Corporation.

### Fundamental Analysis

China Telecom benefited from the 2008 Chinese telecommunications restructuring by being able to grow their wireless customer base. According the March 2015 6-K report, the company Chairman is satisfied that the promotion for Internet-oriented transformation is bearing fruit. The mobile subscribers grew to 190m and the 3G/4G network, which grew by 2.15% in 2015. Wire line

broadband subscribership of 107m represents 40.0% of the total number of broadband customers in China. However, like most other telecom companies around the world, wireline voice-access numbers were down, losing 30.9% of its users. The company launched its “Speedy Connect” prepaid cards to capture more wireless users in 2014 and has paid dividends with a modest increase in mobile users. China’s economy is slowing, but still has a comparatively high GDP growth rate of more than 6.8%. This fact, plus the sizable untapped rural population, gives the company growth opportunities within its borders for the next few years.

### Financial Statement Analysis

China Telecom achieved moderate revenue growth of 2.04% in 2015 but this was diminished by the strengthening of the USD:CNY exchange rate, which caused a significant price drop from a high of \$78.28 in April to a low of \$42.23 in January of 2016. PE has fallen significantly from the previous year (18 to 12.6) and as such we believe the stock will go up with a stable dollar and strong long-term growth rate for the company 4.5%.

### Conclusion & Recommendation

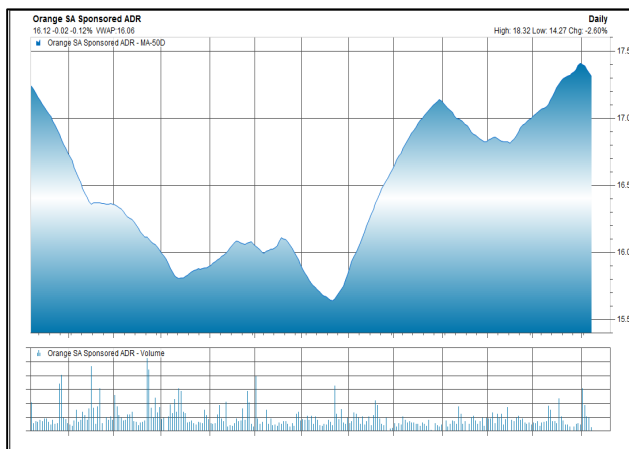
China Telecom is an aggressive company in a market with large numbers of potential customers. The company recognized the value of wireless services for China’s vast rural areas and it has refocused its offerings to take advantage of this consumer segment. Although it hasn’t paid out as well as they have hoped the increase in the dividend yield to 2.4% as well as the company’s focus on core market improvement lead to a hold recommendation for the next year. Using a dividend discount model we have determined the stock is currently undervalued and a HOLD.

## Orange SA ADR (ORAN)

Recommendation <b>SELL</b>	Valuation <b>\$15.70</b>	Last Price <b>\$17.57</b>	Adjusted P/E <b>16.99</b>	Style <b>Mid Value</b>	Dividend Yield <b>2.55%</b>
-------------------------------	-----------------------------	------------------------------	------------------------------	---------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Neutral
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Orange SA provides businesses, consumers and other users with fixed and mobile telecommunications, data transmission, Internet and media, and other value added services. Orange operates in France, Spain, and Poland and has a smaller presence in Algeria, Egypt and other African and Middle Eastern countries, either directly or through investments in local telecom companies.

### Fundamental Analysis

Back in 2013 ORAN removed itself from select markets in order to focus on more profitable markets. Though this seemed like a good plan the highly competitive market in Europe has not allowed for repositioning into new more profitable markets as ORAN had planned. As a result, ORAN has faced pushback on attempted acquisitions and has failed to step into new areas of the market. Essentially, ORAN basically gave up on smaller markets rather than putting in the effort to develop them and no those markets have been overtaken by competitors. On the positive side,

the divestiture did help reduce costs more than the reduction in revenues, which led to a 59% increase in net income for the company in 2015. The only question remaining is at what cost? Despite the push back from the market on acquisitions ORAN continues to push and is currently pursuing acquisition of assets from LEKSI and Bouygues Telecom. This resilience as well as the company's continual work to be a leader in innovation has allowed for a steady stock price improvement in the last 6 months (low \$14.78 in October to \$17.53 currently).

### Financial Statement Analysis

Sales for 2015 continued the 4-year trend of losses, decreasing 14.8% from the 2014 year-end figures. The company expects that its restructuring efforts will net positive growth in the coming years, but our team remains hesitant. Though ORAN improved its bottom line substantially (59%) in the end of 2015, the team believes the improvement was gained at the cost of future competitiveness. Given the highly competitive European market we believe it's just a matter of time until the company's choice to surrender markets comes back to bite them.

### Conclusion & Recommendation

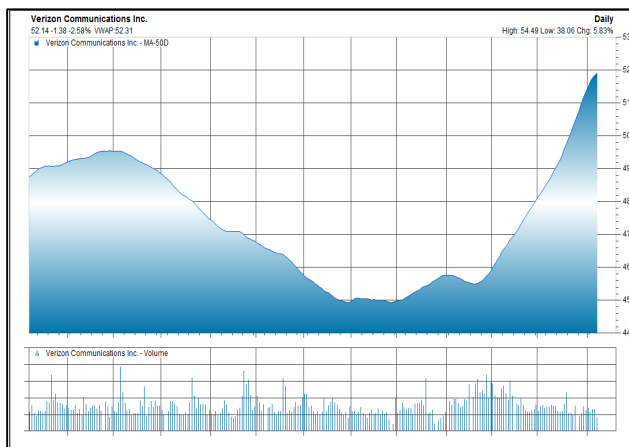
Orange SA has stripped itself of unprofitable investments but has done so at the cost of competitiveness. The biggest driver of short-term growth for the firm is worldwide fixed broadband Internet subscribers. The fact that their driven by a somewhat tapped out driver as well as their large losses in revenue led our discount dividend model to give a valuation of \$15.70/share to ORAN, a 10.4% discount of the current market price. Thus we recommend SELLING the stock given our expectation of price reductions within the next three to four months.

## Verizon Communications (VZ)

Recommendation <b>BUY</b>	Valuation <b>\$63.33</b>	Last Price <b>\$54.03</b>	Adjusted P/E <b>12.37</b>	Style <b>Large Value</b>	Dividend Yield <b>4.22%</b>
------------------------------	-----------------------------	------------------------------	------------------------------	-----------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Verizon Communications Inc. operates as a holding company, which provides broadband, wireless and wire line communications services to consumer, business, government and wholesale customers. It operates through Wireless and Wire line segments. It is a familiar brand and generated \$131.62 billion in revenue in 2015.

### Fundamental Analysis

Verizon reported \$131.62 billion in revenues (leading to \$17.88 billion in earnings) in 2015 up 3.6% from the previous year. Which came as a small shock given the company's growth in revenue over the past 4 years has hovered in the 4% range. Despite the lower growth number for 2015, hopes are still high for Verizon as they continue their dedication to being a service quality leader in the industry as evidenced by their lead role in pushing to bring higher speed 5G service to their customers in 2017. The company's most recent annual report says it will remain competitive by continuing its efforts to be a quality and service leader in their increasing demand market. The

company plans to continue investing in network improvements in the form of purchasing space on the 600 MHz low-band spectrum, pushing to bring 5G speed to its high end retail customers by 2017, and a possible purchase of valuable Yahoo assets. In regards to competitors, Verizon has a higher long-term growth rate (6.3%) than its direct competitor AT&T (4.6%) and has a better ability to service the growing demand in the industry than smaller competitors. Verizon is winning the quality battle and has been rewarded with higher customer satisfaction and retention than any of their direct competitors. The only threat posed to Verizon by competitors is one of price gouging utilized by Sprint however, the strategy is not sustainable and Verizon has taken action to reacquire those customers who have changed providers in pursuit of lower expenditure.

### Financial Statement Analysis

Verizon has seen revenue growth averaging at 4.32% for the last five years while it has increased the net income margin over the past three years from 11.5% to 17.88% in 2015. The fact that management is growing the company and margins makes Verizon willing and able to meet its current financial obligations and fund its intended quality and service improvements – providing profitable growth for the next few years.

### Conclusion & Recommendation

Based on our fundamental analysis of Verizon, we recommend that the stock be added to the portfolio. Verizon's major short-term growth driver is raising average hourly earnings in the United States. Average hourly earnings are projected to grow 1.5% to 2% each of the next five years. In the long term we expect that Verizon's push for quality and dedication to process improvements will help them outperform their competitors and capture a large percentage of the most profitable segments of the market. We recommend a BUY.

## Utilities

### **The Federal Reserve – This Year, Next Year, Sometime Certainly**

Given the raise in the Federal funds rate back in December of 2015 it is highly doubted that we will see another interest rate hike within the next twelve months. Citing the price of Oil and the soaring dollar the general consensus amongst market analysts is that the global market can't handle another rate hike. The team expects to see either zero or one rate hike in the coming twelve months.

### **Utilities Overview**

The Utility sector is driven by fuel and borrowing costs. The low interest rates, and the precipitative drop in energy prices in 2015, have benefited the utility companies, but have been the cause of higher than normal stock price volatility. Larger utility companies are hedged against price moves in fuel costs, particularly in gas and coal, the major sources of power plant fuel and the smaller companies have been able to profit from the lower energy prices. In the longer term, the high regulatory environment which governs consumer pricing reduces the opportunities for revenue growth so when the driving costs rise, dividend yields fall, since increase costs are not easily passed on to consumers. Anticipated rises in energy prices and interest rates in the coming year will reduce margins and dividend growth and may already be affecting the sector returns. Also, the decreasing dividend yield across the sector is discouraging for long-term returns.

### **Investment Objective and Strategy**

Based on the outlook of 2016 economic growth and stock market forecast, the team sets the objective for the Utilities sector as seeking income through regular payment of dividend. Although we are unsure that the utilities sector will return as well as previous years given the vast jump to them following the January dip in the stock market. In a time where investors are jumping so quickly into the utilities market chasing a dividend we believe that the stocks are overpriced and dividend yields will continue to lower.

We have chosen therefore to underweight this sector and maintain the existing ETF as well as adding two stocks we believe will perform better than others in the sector.

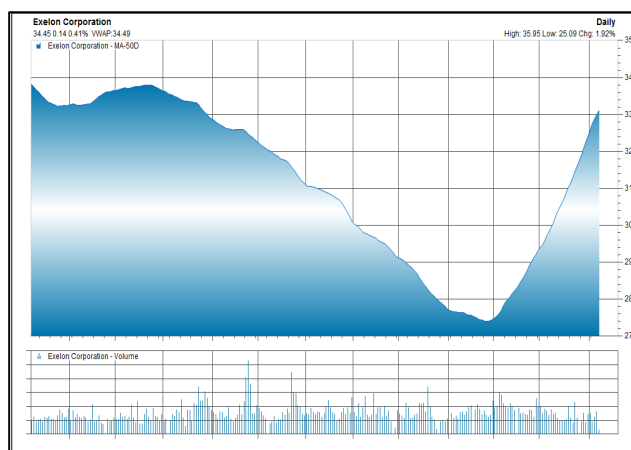


## Exelon Corp (EXC)

Recommendation <b>BUY</b>	Valuation <b>\$42.89</b>	Last Price <b>\$35.45</b>	Adjusted P/E <b>13.95</b>	Style <b>Large Value</b>	Dividend Yield <b>3.51%</b>
------------------------------	-----------------------------	------------------------------	------------------------------	-----------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	Negative
Money Flow	Positive
Relative Strength	Neutral



### Introduction

Exelon Corp. operates as a utility services holding company that is engaged, through Generation, 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 \$28.33 billion in 2015 an 8.29% increase from the previous year. Not an odd number given that the year-over-year average of sales growth has been 8.99% per year for the past 5 years.

### Fundamental Analysis

Exelon EXC reported net income of \$2.27 billion in 2015 up 39.8% from the previous year bringing them out of a slump in net income over the preceding three years, where average net income was only \$1.5 billion per year. While the performance has been good this year there is a lot of concern over the status of a 2-year merger with Pepco. The merger would make the combined company the largest U.S. electric utility. The merger has been fighting to become a reality for over two years now and is rumored to be finished by the end of March. Either way

the resolution of this merger will be good for Exelon. It would be much better that it be completed, but either way the resolution of the issue will be beneficial to investors because it will take away some market anxiety surrounding the decision. In terms of competition EXC stands out. It has the largest long-term growth rate among its competitors at 4.6% (Southern Company 3.5%, Duke 4.3%, PPL 3.9%). It also has a smaller P/E ratio compared to top competitors; 13.7 for EXC (competitors range between 15.7 PPL and 17.7 Southern Company). This tells us that the portfolio can purchase EXC at a lower relative price.

### Financial Statement Analysis

Exelon has seen revenue growth of 8.99% on average for the last five years and in 2015 got out of a slump in net income with a 39.8% rise to \$2.27 billion. Management continues to actively pursue process improvement and acquisitions the position the company for further growth. The merger promises increased growth in both revenue and net income and with an adjusted P/E of 13.72 the stock can be acquired at a bargain compared to competitors.

### Conclusion & Recommendation

EXC's biggest short-term driver of growth is the price of natural gas, which is expected to fluctuate between \$2.32/mmbtu and \$3.11/mmbtu between now and the end of 2017. In the long term we expect that Exelon's resolution of the two-year merger battle, dedication to process improvements and focus on improving the bottom line will help them outperform their competitors and allow them to maintain their position in the marketplace and benefit our portfolio greatly for years to come. Even with the wide fluctuation in the price of Natural gas our dividend discount model showed that EXC was currently undervalued and with that in mind we recommend the stock as a BUY.



## PPL Corp (PPL)

Recommendation  
**BUY**

Valuation  
**\$41.21**

Last Price  
**\$37.70**

Adjusted P/E  
**15.1**

Style  
**Large Value**

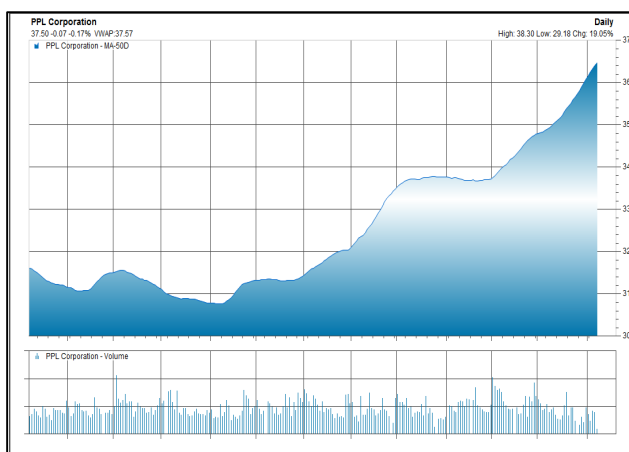
Dividend Yield  
**4.09%**

### Technical Analysis

Bollinger Bands Negative

Money Flow Positive

Relative Strength Negative



### Introduction

PPL Corp is an energy and utility holding company. Through its subsidiaries, it is engaged in the generation and marketing of electricity in the northeastern and western U.S. and in the delivery of electricity in Pennsylvania and the U.K. PPL recently spun off its generation business into a new stand-alone company Talen Energy Corporation. PPL published \$7.67 billion in revenue in 2015.

### Fundamental Analysis

PPL reported net income of \$1.6 billion in 2015 up 1.72% from the previous year. While this growth may seem insignificant they were able to spin off an entire business unit in 2015 and still grow the bottom line. This comes as a big shock when taking into account that the company's top line dropped by 40% as a result of the spinoff. The spinoff enabled PPL to focus on its core profitable business. The Spinoff has reaffirmed PPL in their strong financial foundation. 2015 saw an increase in net income,

ROE, EPS and has set the stage for sales growth in the coming years. The spinoff gave PPL a large influx of cash that they now intend to use for infrastructure improvements that allow them to better serve their core business. The influx of cash will also be good given that new regulations may force them to invest in lower-emissions from their coal-burning plants. In addition to the qualitative aspects of the business PPL also offers a reasonably high dividend yield compared to competitors, 4.13%. We expect this yield to only increase with the changes management has put into place.

### Financial Statement Analysis

PPL had revenues drop by 40% in 2015 due to the sale of Talen Energy. While this may seem disconcerting they actually raised net income by 1.72% at the same time. This tells us that the sale helped PPL come back in line with its core business. It is also worth noting that prior to the revenues grew by an average of 32.24% in each of the previous 4 years and management expects higher growth rates to follow with the concentration shift. Also worth noting is that sale has allowed PPL to reduce its COGS by 48.7% from the previous year. All signs point to sustainable growth in profits in the coming years.

### Conclusion & Recommendation

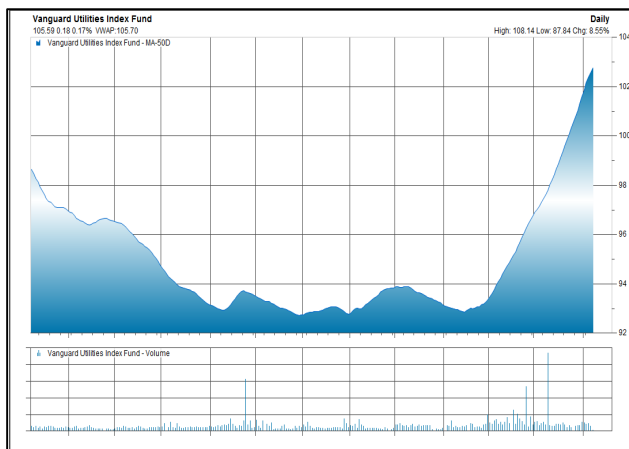
Based on our fundamental analysis of PPL we recommend that the stock be added to the portfolio. The principle short-term growth driver for PPL is U.S. crude oil reserves, which are expected to increase between 2.43% and 4.72% annually for the next three years. In the long term we expect that PPL's sale of Talen Energy, dedication to process improvements and focus on the core business will help them outperform their competitors and drive them to a stronger position in the marketplace. Using a discount dividend model we determined that the stock is currently 11% undervalued and is a BUY.

## Vanguard Utilities Fund ETF (VPU)

Recommendation <b>HOLD</b>	Valuation <b>\$105.95</b>	Last Price <b>107.01</b>	Adjusted P/E <b>17.00</b>	Style <b>Large Cap</b>	Dividend Yield <b>3.41%</b>
-------------------------------	------------------------------	-----------------------------	------------------------------	---------------------------	--------------------------------

### Technical Analysis

Bollinger Bands	High
Money Flow	Positive
Relative Strength	Negative



### Introduction

Vanguard Utilities Fund (VPU) is an exchange-traded fund incorporated in the United States. It seeks to track the performance of MSCI Investable Market Utilities Index. VPU contains a range of different sized companies and the holdings weighted by market cap.

### Fundamental Analysis

The Fund holds about 83 stocks; no one holding is greater than 8.0% of the market value; however, the top ten names by size constitute 48.12% of the fund. It pays quarterly dividends. As one of the top utility sector ETF performers in 2015, the Fund has a trailing 1 year return of 14.41% and an average dividend yield of 3.69% (past 10 years); its 2015 payout of \$3.40 was a 4.9% increase from 2014 and is expected to grow by another 4.5% into 2016. The Fund's expense ratio is a sector low of 0.10% and the turnover rate 7.0% also below sector fund average. Good diversification across large and small sector stocks and the stability of utilities due to regulation, contribute to the low risk measures relative to the S&P Utility Sector Index; beta of 1.00 and Sharpe Ratio of 0.87x.

### Fund Analysis

There is consensus among the utility sector analysts (S&P, Deloitte, Seelt and Zacks) that 2016 will be a year to watch this sector. The moderate growth economy with increased housing, means an anticipated increase in power generation of 0.8% (Energy Information Administration). Elements of long time industry restructuring, such fuel source changes to natural gas, increased use of renewables and electrical storage capacity increase, should start to be operational. The utilities sector returned in 2015 -4.25% as compared with the S&P 500's 1.38%.

### Conclusion & Recommendation

VPU contains a broad selection of the utility stocks, closely tracking the sector. Therefore, it captures the stability of the large firms' dividend payments and the increased profits of the smaller companies due to lower fuel costs, without straying into the riskiest of the small utility providers. With minimal expected growth in 2016 the utilities sector is not somewhere we want to invest a lot in but the dividend provided by VPU and the concentration on high performers in the fund we recommend HOLDING the stock.

## Fixed Income Assets

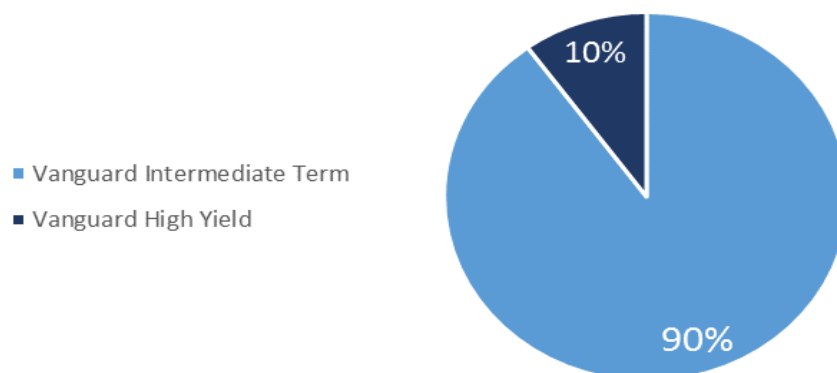
### 2016-2017 Outlook

As mentioned in our previous analysis we anticipate only one additional rate hike in 2016. We expect this to affect significantly short-term rates. However, we are pricing in an extremely sluggish pace of tightening. We allocated three main factors that will affect the speed at which the FED will raise interest rates. The first factor is inflation; we expect core inflation to reach modest levels of around 1.8%, close to the FED's target. As unemployment continues to fall, we believe there will be a rise in wage inflation and core inflation. Our second factor is productivity and growth, due to significant global growth issues we don't assume this will have a large effect in 2016. However, if productivity picks up we can expect to see an increase in growth rates, subsequently causing inflationary pressures to stay mild and enable the FED to increase rates at a slow pace. Third is the financial condition of the economy. It's possible the dollar could continue to strengthen throughout 2016, placing downward pressure on exports as they become more expensive and less attractive to global buyers. This downward pressure could impact U.S. company sales and earnings potential causing slower U.S economic growth.

In an environment surrounded by uncertainty and the presidential election quickly approaching, we foresee further volatility across markets as global growth is restrained led by a slowdown in China and the timing of the FED's first hike. U.S. treasuries remain attractive across the globe as investors seek dollar denominated yields, however, we will reduce our exposure to shorter maturities which expect to be more susceptible to rate increases.

As we observe the present shape of the yield curve flatten out in recent weeks, blended with a volatile start to the year stemming from global growth issues, the bond market is still reluctant to signal a recession in the coming year. Yield spreads have recently widened in an environment of increased uncertainty, although the majority of widening has taken place in the corporate sector. In order to reach our objective with the fixed income section of the portfolio we have decided to use this section to enhance the level of diversification in the portfolio. Specifically, we have selected two Vanguard investment grade funds: Vanguard Intermediate term (VFIDX), Vanguard High Yield Corporate (VWEAX). The proposed allocation is displayed below.

Bond Allocation



**Vanguard Intermediate-Term Investment Grade Fund (VFIDX) 90%**

The Vanguard intermediate fund offers some significant diversification strategies to medium and high quality investment grade bonds with an average maturity of five to ten years. As an investment management team we aimed for a position further out on the yield curve as we anticipate at least one additional rate hike this year. Our reasoning for this decision is due to short term rates being more sensitive to rate hikes than long-term rates, therefore we targeted longer duration exposure in the portfolio. The fund contains a pool of investment grade corporate bonds, consumer loans and, U.S. government bonds. The expense ratio for the fund is also 76% lower than the average expense ratio of funds with similar holdings. The funds provide an SEC yield of 2.58% with an average duration of 5.4 years and an average return of 5.98% since inception.

**Vanguard High Yield Corporate (VWEAX) 10%**

As we aimed for diversification in the bond section of the portfolio, we decided to gain some exposure to high yield. We knew high yield bonds return a healthy coupon and are not so sensitive to changes in interest rates, they also offer a decent return based on the level of risk. The fund has an average duration of 4.5 years and an average credit quality of B as well as a coupon of 6.04%. Since inception the fund has provided a load adjusted return of 6.38 and maintains a Sharpe ratio of .45. We anticipate our 10 % allocation to high yield corporate bonds combines the benefits of monthly income and broad diversification and management of interest rate risk.

**Conclusion**

In the current environment we do believe that the FED will raise rates at least once in 2016, and due to these conditions, we decided to gain diversification in the bond segment of our portfolio decreasing our exposure to short-term rates. The combination of Intermediate-term bonds and high yield will enable us to hedge against interest rate risk while providing excess returns to the portfolio.

**Appendix**

## Crummer SunTrust Portfolio Investment Policy Statement

(Revised April 6th 2008)

### 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 affect 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 +/- 20% from each sector's S&P 500 market weight.

3.3 Objective: These short-term and long-term approaches are consistent with the intent to maintain the Portfolio's value in down market environments and increase its value in up market environments while funding scholarships—all without diminishing principal.

### 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 realize income and, therefore, the Portfolio need not generate income to fund its spending policy. The cash requirements can be met by liquidating securities before May 1 (see Section 7) and will usually be covered by normal sell recommendations.

### Sector & 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 ten market sectors. These sectors are listed in Table B. The tactical target deviations are +/- 20% 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 essential 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.

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

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

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

10.2.1.6 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.



10.2.2 Each of the three size styles is combined with value and growth to produce seven equity styles: large growth, large value, mid growth, mid value, small growth, small value, and international.

10.2.3 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.

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

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

10.3.10 Derivatives: The 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.

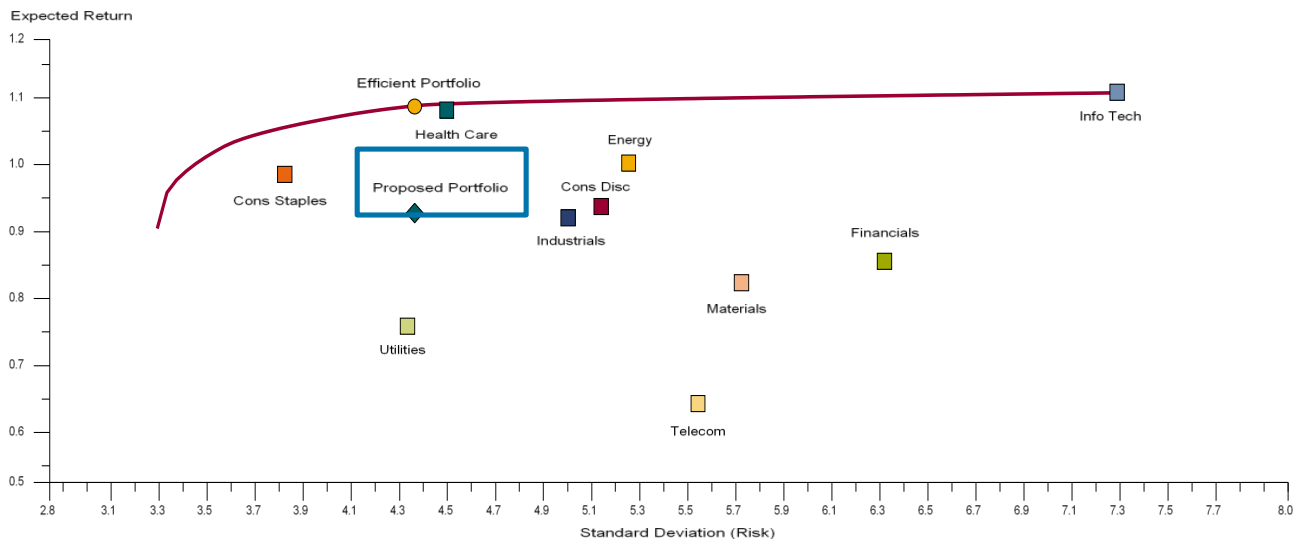
<b>Table A</b>		
Target Rates of Return, Components, and Spending Policy		
	Long Term	Short Term
Administrative and Trading Expenses	½ - 1%	½ - 1%
Allowance for Inflation	2 - 3%	Consumer Price Index
Distribution from Portfolio	3½ - 5½%	Approximately \$25,000
Portfolio Real Growth	2 - 2½%	> 0%
Target Total Return	8 - 11½%	Dependent On Above

<b>Table B</b>	
Crummer/SunTrust Portfolio Equity Portfolio Sectors	
S&P 500 Sector	Benchmark
Consumer Discretionary	S&P Consumer Discretionary Index
Consumer Staples	S&P Consumer Staples Index
Energy	S&P Energy Index
Financials	S&P Financials Index
Healthcare	S&P Healthcare Index
Industrials	S&P Industrials Index
Information Technology	S&P Information Technology Index
Materials	S&P Materials Index
Telecom	S&P Telecom Index
Utilities	S&P Utilities Index
Target Deviation for any sector is +/- 20% of its S&P 500 market weight	

Table C				
Crummer/SunTrust Portfolio Asset Allocation Guidelines				
Asset Class	Target Range			Benchmark
	Low	Mid	High	
Large Cap - Growth	10%	20%	30%	Russell 1000 Growth
Large Cap – Value	10%	20%	30%	Russell 1000 Value
Mid Cap – Growth	5%	7.5%	10%	Russell MidCap Growth
Mid Cap – Value	5%	7.5%	10%	Russell MidCap Value
Small Cap - Growth	5%	10%	15%	Russell 2000 Growth
Small Cap – Value	5%	10%	15%	Russell 2000 Value
International Equity	5%	10%	15%	MSCI – EAFE
Fixed Income	12%	15%	18%	Vanguard Total Bond Market Bond Index Fund
Derivatives	10% Max			
Cash	as needed			
Minimum weight for any asset class is 5%				

## Mean-Variance Efficiency Analysis

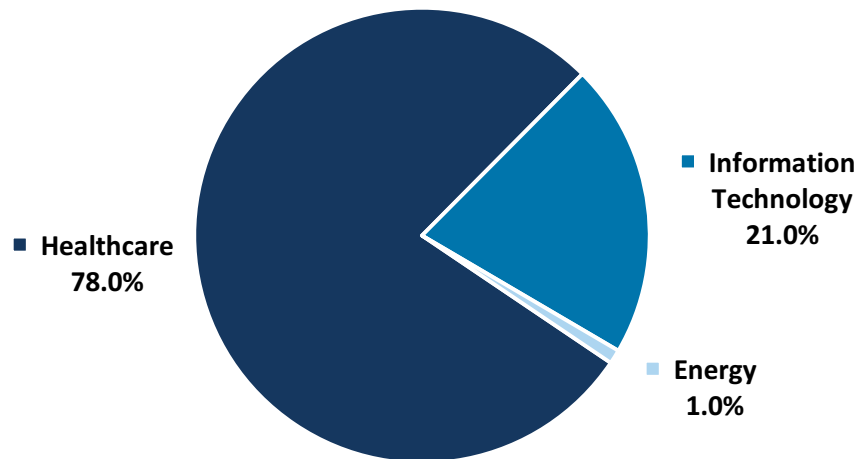
Mean-variance efficiency analysis is part of modern portfolio theory. Although not a widely used guide to constructing portfolios, this analysis can identify where the proposed portfolio might be improved. To conduct this analysis we assembled historical data for the ten equity sectors and constructed 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.



Crummer SunTrust Portfolio  
Mean-Variance Analysis

Of most interest in this analysis are the two portfolios: proposed (in green) and mean-variance efficient (in orange on the efficient frontier). The proposed portfolio offers an expected annual return of 11.2% with a standard deviation of 15.1%. The corresponding MVO efficient portfolio has the same risk but a higher expected return, 13.1%. Unfortunately, this increase in return requires a sector allocation that places 78% in the Healthcare sector, 21.0% in Information Technology and 1.0% in Energy (shown in the chart below).

Efficient Portfolio with the Same Risk as the Proposed Portfolio



This portfolio, while more efficient and promising a higher return, 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.

## Technical Analysis

Although fundamental value-based analysis was the primary method for stock recommendations, we also used some technical analysis tools to determine whether the timing of the trade is right. Within the portfolio management group, we hold the belief that fundamental analysis answers the question of, “What securities do we buy and sell?” while technical analysis provides the answer to, “Is this a bad time to buy or sell the securities identified?” The three tools that each analyst used after conducting fundamental research were Bollinger Bands, Money Flow Index and RSI.

### Bollinger Bands

Bollinger Bands were created by John Bollinger in the 1980s to measure the peaks and troughs of the price relative to previous trades. The bands are as follows:

- Middle band – a simple moving average (SMA)
- Upper band – shows a standard deviation above the middle band
- Lower band – shows a standard deviation below the middle band

When the price is at the lower band, it is expected to revert upward toward the middle band. When the price is at the upper band, it is indicating a reversion downward to the middle band. However, the Bollinger Bands can also indicate price breaks to the upside and downside if the price goes outside of either band with strong volume.

### Money Flow Index

The Money Flow Index is an oscillator that uses both price and volume to determine if money is flowing in or out of a security. Money flow is positive when there is buying pressure and negative when there is selling pressure. This number is multiplied with the RSI and gives a range from 0 to 100. This indicator tells whether a stock is overbought (80 or above) or oversold (20 or below).

### RSI

The RSI, developed by J. Welles Wilder, is the Relative Strength Index. The RSI is a momentum oscillator that monitors both the speed and change of price movements. The indicator ranges from 0 to 100 and indicates overbought (above 70) and oversold (below 30) conditions.

### Value at Risk

“Value at risk (VaR) measures the worst expected loss under normal market conditions over a specified time interval at a given confidence level.”- Financial Modeling, Simon Beninga. VaR is another technical tool that helps us to evaluate the changes we propose and is widely used in investment banking. It is required for commercial banks under Basel III.

One way to interpret this concept is that VaR answers the question: Over the next year, how much would the Rollins SunTrust Portfolio lose in the event of a major market breakdown, which has a 5% probability. 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. Our VaR calculation uses the historical returns for each sector and assumes no trading during the next year. We calculate VaR for the portfolio with current market and proposed sector weights to determine whether we are risking more money by carrying out our proposed allocations.

Our Findings:

- VaR with our proposed sector weights at 5% confidence level: \$660,174.37
- VaR with current portfolio sector weights at 5% confidence level: \$664,264.33

Our VaR analysis suggests that our proposed sector allocation reduces our portfolio risk by \$4,090 compared to current sector allocations. This slight decrease in VaR can be explained by our focus to strengthen consumer discretionary, healthcare, and IT, while we lower the weight on consumer staples, financials, industrials, and utilities. This means that compared to last year’s changes, we will risk less money with our new allocation.