STETSON UNIVERSITY

School of Business Administration

Roland George Investments Program

Neal P. Mero, Ph.D.
Dean of School of Business Administration

K.C. Ma, Ph.D., C.F.A.
Director, Roland George Investments Institute
Roland George Chair of Applied Investments

Eugene M. and Christine Lynn Business Center | (386) 822-7442
421 N. Woodland Blvd., Unit 8398 | DeLand, FL 32723

THE GEORGE
INVESTMENTS VIEW

Volume 22 | Newsletter 2017

Dr. K.C. Ma, Director of the Roland George Investments Institute, teaching students about the proper ways to make financial investments.

Director's Letter

by K.C. Ma, Ph.D., C.F.A.
Director, Roland George Investments Institute
Roland George Chair of Applied Investments

Roland George students continue to turn new pages in the proud tradition of the Roland George Investments Program. In 2016, RGIP has been valued by the investment community for its quality student research in both stock and bond portfolios. In addition to commenting on real-time, current economic and company events as requested by U.S. News and World Report, the Street.com, Fortune and Yahoo Finance, to name a few, Roland George students have submitted their research to major online stock websites such as SeekingAlpha.com and Huffington Post, and obtained a significant number of followers.

It is RGIP students' fiduciary duty to watch individual company earnings announcements and listen in on the conference calls. As a result, they are able to respond to media requests for quality comments. For the past year alone, RGIP at Stetson University has been quoted more than 400 times by major news media with hundreds of thousands of online page views.

Within this entire issue, you will see samples of the work of these students.

In this issue of the George Investments View, we share with you more specific recommendations than previously, 10 in total, including some published at Seekingalpha.com, the editorial-reviewed website. Michael Goldman's "Is it Too Early to Invest in Cannabis Stocks" has received more than 12,000 page views and generated more than 100 comments, mostly positive even with its controversial nature. Antoni Akkerman's "Where Should Wingstop Fly from Here?" would have been accepted by Trustees into RGIP's stock portfolio if the title were changed to "Winner! Winner! Chicken Dinner!" as suggested.

The RGIP bond portfolio earned more than 11 percent in 2016, the highest we have seen in any other professionally managed fund. This continuation of the RGIP legacy becomes critical in the midst of the Fed raising interest rates after a decade of inaction. Chris Landers' bond swap "Gulf Energy Corporation for Calumet Specialty," and Evan Albert's "Jefferies for Clear Channel," had very insightful analyses on the state of the fixed income market.

We hope you enjoy reading our work.

Elon Musk vs. Wall Street

With no apparent new fundamental information, shares of Tesla Inc. (NASADQ: TSLA) have soared another 20 percent after last earnings call. Tesla's CEO recently tweeted, "These guys want us to die so bad they can taste it;" and "Just wish they would stop sticking pins in voodoo dolls of me. That hurts, ok?" At this point, it seems futile to justify why TSLA is currently sitting at a record high of $380. But before rushing to blame the market for being irrational or "Tesla has created its own bubble," we are here to make some sense out of the "TSLA Puzzle."

Call Option on Elon Musk's Vision

Scott Kimball at Taplin, Canida & Habacht has hit the nail on the head when he says, "That's why I look at this as an option on Elon Musk. If he gets it right, and he can deliver a power storage option that renders the power grid nothing more than a reserve/backup, the 'breakeven' period for installing solar panels drops by an incredible amount. I don't know what that's worth in current dollars, but it's likely a lot more than $350 a share currently. I can't prove it and it's a long ways away from happening."

It may be fun to quantify how much Tesla's loyal shareholders are willing to pay for Elon Musk's vision beyond what has been deemed deliverable. Loyalty, "faithful adherence to a leader," may be measured by the difference between what Musk forecasts and the street's forecast. The reason why any option has a value is due to disagreement about the future. For Tesla's case, Musk's forecast is often different from that of the analyst community. If shareholders have more trust in Musk's forecast over street's estimate, they will be willing to pay up for the difference in forecast futures. Since Musk's long-term guidance is always higher than analysts' forecast, Musk's call option has a positive value. In other words, loyal Musk followers will pay extra for Musk's vision.

So, it stands to reason that Tesla shareholders are willing to pay first the fair value based on analysts' forecasted fundamentals and an extra call option based on Musk's difference over analysts' estimates. If they always agree, there is no value on the call option. The call can never be negative. If Tesla shareholders lose confidence in Musk's words, the worst case is they fall back to street's estimate and don't assign the extra value. In short, in a real world setting, the actual share price, P, can be demonstrated as follows:

P = Fair value + Call option + Mispricing (1),

where fair value is determined by the actual company's fundamentals. The mispricing is the unexplained portion.

This approach is unique in many ways. First, an option is usually a separate instrument from the underlying asset, stock in this case. Musk's call option is actually embedded in the Tesla stock. Second, for the first time, we can assign a numerical value that investors "willingly" pay for their trust in the founder's vision. Finally, such seemingly rational value can be separated from the typical irrational mispricing, the difference between stock price and its fundamentally determined fair value.

Since the positive call value exists solely on the difference in forecasts of the future, let's talk about such a difference. As shown by in Table 1, the discrepancy between Tesla's guidance and actual outcome has been consistently prevalent. This justifies the value creation of the call option. For Equation (1), while it is standard procedure to estimate TSLA's fair value, it will take some imagination to price Musk's call option.

Table 1: Tesla's Guidance vs. Actual Outcome

Tesla Guidance	Actual Outcome
First Model X delivered 2013	First delivered in wlate 2015
Delivered 55,000 cars in 2015	Delivered 51,000
16,000 vehicles delivered in	Delivered 14,820
20,000 delivered in Q2 2016	Delivered 17,000
80,000 or more in 2016	Delivered 76,230
500,000 vehicles in 2018	At best 260,000 vehicles

Long-Term Call Option Premium

We can look at the call option as "the bet" on Musk's vision to come to fruition. Talking about Musk's vision, Musk's new "master plan" unveiled in the Tesla 2017 Annual Shareholder Meeting includes (1) building a new plant to make Model Y crossover from a completely new platform, (2) an electric semi-truck, (3) thousands more company-owned stores and service centers, (4) a vastly larger Supercharger network, (5) 10 to 20 Gigafactories, and (6) making 5,000 vehicles a week by the end of 2017.

In order to estimate the value of the call, we use the Black and Scholes Option Model, which is known for its accuracy. Under this context, the call option premium can be calculated by the present value of the expected difference between the actual value and the expected value. Musk's call option is a result of the difference between Musk's sales forecast and market consensus forecast (Bloomberg), the option exercise price is set to be the consensus estimate of 2020's revenue, $33 billion ($184 per share). The underlying asset price is Tesla's 2020 revenue guidance ranging from 35 billion ($200 per share) to 40 billion ($212 per share). This is estimated by Musk's claim that Tesla will make 5,000 vehicles a week from Q4 2017 on, up from 2084 units Q1 2017. As the volatility of the underlying asset price, or "std," is the key determinant of option premium, it is set to range between 4 percent and 6 percent, estimated by the surprise of the actual and guided revenue. Another unconventional aspect of the call is its long-term time to maturity. Since the word "vision" implies long time and most estimates go up to 2020, the expiration of the call option is set to 3.5 years from now. In Table 2, the baseline parameter values used in the BS Model are summarized.

Table 2: B/S Option Model Parameters

E =	Strike Price	$184
S =	Current Asset Price	$184
t =	Time to Expiration	3.5 years
std =	Volatility	4%-6%
rf =	Risk-Free Rate	2.50%

Musk's Call Premium

In Table 3, the "baseline" case suggests that there is an expected $12-$28 call premium in "additional" 2020 revenue per share, per Musk's estimate with the more

Table 3: Elon Musk Call Option Premium

6/8/2017		2020 Elon Musk Revenue Estimates			
Q1 2018		$184	$190	$195	$200
	6.0%	$14	$19	$23	$28
VOLATILITY	5.0%	$13	$18	$22	$27
	4.0%	$12	$17	$21	$26

Table 4: Elon Musk Stock Price Premium

6/8/2017		2020 Elon Musk Revenue Estimates			
Q1 2018		$184	$190	$195	$200
	6.0%	$101	$137	$166	$202
VOLATILITY	5.0%	$94	$130	$159	$195
	4.0%	$87	$123	$152	$188

likely $13-$18. Given a current P/S ratio around 7.2, the revenue premium can be converted to actual price premium. In Table 4, I also summarize Musk's price premium under likely scenarios. The call option is equivalent to a $94-$130 price premium with a mean estimate of $115.

TSLA Valuation

More importantly, the estimates of the call option and the stock price premium allow us to better understand the "real" TSLA mispricing as specified in Equation (1). Since what we try to do here is to measure the valuation of the founder's vision, we take a short cut in estimating the fair value portion by simply drawing the opinion from the street analysts. From Bloomberg's analyst recommendations, the consensus (average) fair values range is around $265. Adding an extra $115 Musk's price premium, the resulting TSLA share at $380 becomes fairly priced (Table 5).

Table 5: TSLA Mispricing

Fair Value	$265
+Elon Musk Premium	$94-$130
+ Overvaluation	$0
=Tesla Price (6/14/2017)	$380

Implications

There are many reasons why we did what we did. Since TSLA's fundamental price target is "untouchable," we choose to look into a major portion of the price discrepancy. As all investment actions are investor's options to take, we model the excessive price in the context of investment option. All in all, the market has its own way to judge each decision. If analyst forecasts are wrong, the share price reaction should be contained to the surprise. If Musk is wrong, the investors' buying in his call option should be eventually eliminated. The difference is that the analysts are only judged once a quarter by the earnings report, but Tesla shareholders' loyalty has lasted more than seven years and maybe many more years to come. Regardless, the remaining mispricing should always correct itself quickly.

The bottom line is that there is $100-$135 of a call premium already embedded in the $380 TSLA price. If you "buy into" the existence of Elon Musk's loyalty option, TSLA is currently fairly priced.

Elon Musk tweeted Wednesday afternoon, "In discussions with the government of India requesting temporary relief on import penalties/restrictions until a local factory is built." Shares of Tesla closed higher by 1.25 percent.

Is There $22 Billion Missing in Amazon and Whole Foods' Deal?

Whole Foods (NASDAQ: WFM) CEO John Mackey said the deal with Amazon (NASDAQ: AMZN) was the result of a "whirlwind courtship." Mackey described the initial contact with Amazon like a "blind date."

"It was truly love at first sight," Mackey said, comparing the relationship to an "old traditional marriage, where there are all kinds of rules and chaperones." He said they could not "consummate" the relationship until the deal was official, and that it was "not a Tinder relationship."

Amazon's planned $13.7 billion acquisition of Whole Foods (the "deal") signals a bet that people will opt more for the convenience and low cost of online orders and delivery. An interesting duality is that the largest online business moves toward brick and mortar, while Whole Foods the largest, organic-food, brick-and-mortar store moves online. It may sound like a marriage made in heaven. As this deal is most likely to be consummated, Whole Foods shareholders most likely will be rewarded at least by 27 percent premium by the date of consummation. Amazon's shareholders are at risk of leaving money on the table.

While the grocery industry is highly fragmented, the 20 publicly traded grocers represent $600 billion of the $800 billion United States grocery market. For a typical cash merger and acquisition, you would expect that the Whole Foods deal should have been a non-event. However, to the market's surprise, Amazon has added $14.7 billion (3.1 percent) and Whole Foods has added $4.2 billion (30.7 percent) to each market capitalization in two trading sessions following the announcement of the deal. In total, they have created near $18.88 billion of wealth for their shareholders. After adjusted close to 1 percent general market advance, the net increase is close to $14.7 billion (Bloomberg) (Table 1).

On the other hand, the bid on Whole Foods has been viewed by the publicly traded grocers as Amazon's rite of passage to the $800 billion grocery market. Amazon has fired the first shot to start the beginning of the end for the traditional grocery business. The phrase "Retail is dead!" will soon apply to the ever-so-safe grocery industry. As a result, the announced deal has slammed eight of nine grocery stocks for a combined loss of $2 billion (-6.42 percent).

To the discount stores, the combination between Amazon's e-commerce dominance and Whole Foods' brick-and-mortar national footprint becomes lethal. This signals the further reduction of an already paper-thin industry profit margin.

This has led the discount stores running for cover. Nine of the 11 discount stocks, from Big Lots and Dollar General to Target and Wal-Mart, have lost more than $30.3 billion (-8 percent) of the total market capitalization (Table 2). Between nine grocery stocks and 11 discount store stocks, the total two-day loss amounts to 32.3 billion. After adjusting for the underlying general market advance, the total loss is $37 billion. Since voluntary merger and acquisitions is a value-increasing proposition, it is odd that $22.3 billion (= $37-$14.7) market capitalization seemingly evaporated over a win-win solution without real fundamental news. At this point, I like to examine several possibilities for the $22 billion loss.

At the onset, it may appear that the competitors have disproportionally reacted, given that Whole Foods represents only 2 percent of the grocery industry revenue share. However, every grocer is at risk considering there is theoretically an $800 billion grocery market up for grab. Recently, there is an indication that Amazon is interested in Grub Hub (NASDAQ: GRUB), an online food-ordering company. This may pave the way for Amazon to disrupt the $5.32 trillion U.S. retail and food service sales.

Another likely reason is that there might be more upside for WFM because the Amazon deal is not a done deal. It appears that Amazon's $42 per share bid is considered at the low end of the valuation, and competitive bids may arise to stop Amazon's invasion into the grocery market. It has been estimated that the fair value for WFM is around $45 per share. Any worthwhile and meaningful new bid should be north of $45 per share. The resulting $15 billion plus total cash needed pretty much precludes most of the companies on the table (i.e., Table 1 and Table 2). The only potential suitors, in terms of cash flow availability and debt capacity, include Kroger (NYSE: KR), Costco (NASDAQ: COST), Target (NYSE: TGT), and Wal-Mart (NYSE: WMT).

Ironically, if this is a reasonable possibility, why have the same stocks experienced the largest two-day drop in share values amid the announcement of the Amazon/Whole Foods deal (Table 1 & Table 2)?

In the meantime, Whole Foods CEO Mackey continued the romantic allusion of the meeting. "The executives from both sides immediately hit it off," he said. "We just had these big grins on our faces. These guys are amazing. They're so smart. They're so authentic. They say what's on their mind," and he concluded with "until death do us part."

Does this sound like a partner constantly looking for something better on the horizon?

Barring the two unlikely cases above, there is always the possibility that AMZN has left some of the value that the competitors concede on the table. If this turns out to be the case, AMZN should have another $46 a share upside on the deal.

After all, nobody should lose in a food fight.

Table 1: 6/16/17 and 6/19/17 Grocery Stock Performances

Grocers	Market Cap ($mil)	2-Day P&L (%)	2-Day P&L ($mil)	Revenue ($mil)
Casey's General Stores (NASDAQ:CASY)	$4,235	-0.50%	-$21	$7,243
Ingles Markets (NASDAQ:IMKTA)	$688	-4.29%	-$29	$3,848
Kroger (NYSE:KR)	$20,061	-7.82%	-$1,568	$115,337
Natural Grocers Vitamin Cottage (NASDAQ:NGVC)	$196	-4.12%	-$8	$736
Sprouts Farmers Market (NYSE:SFM)	$2,889	-3.03%	-$88	$4,184
Smart & Final Stores (NYSE:SFS)	$666	-19.64%	-$131	$4,400
Smart & Final Stores (NYSE:SFS)	$865	-14.10%	-$122	$12,480
Village Super Market (NASDAQ:VLGEA)	$361	1.00%	$4	$1,631
Weis Markets (NYSE: WMK)	$1,305	-3.42%	-$45	$3,251
Total	$31,265	-6.42%	-$2,008	$153,110

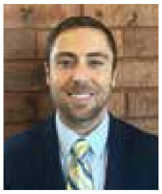
Table 2: 6/16/17 and 6/19/17 Discount Store Performances

Discount Stores	Market Cap ($mil)	2-Day P&L (%)	2-Day P&L ($mil)	Revenue ($mil)
Big Lots (NYSE:BIG)	$2,117	-1.19%	-$25	$430
Burlington Stores (MYSE:BURL)	$6,720	-0.30%	-$20	$57
Costco Wholesale (NASDAQ:COST)	$73,293	-24.28%	-$17,796	$123,285
Dollar General (NYSE:DG)	$19,229	-0.86%	-$165	$16,748
Dollar Tree (NASDAQ:DLTR)	$16,585	-3.00%	-$497	$12,971
Fred's (NASDAQ:FRED)	$409	-3.58%	-$15	$569
Ollie's Bargain Outlet (NASDAQ:OLLI)	$2,503	1.83%	$46	$122
Pricesmart (NASDAQ:PSMT)	$2,584	-2.21%	-$57	$1,521
Target (NYSE:TGT)	$29,025	-6.76%	-$1,963	$13,863
Tuesday Morning (NASDAQ:TUES)	$83	2.63%	$2	$10
Wal-Mart Stores (NYSE:WMT)	$226,811	-4.32%	-$9,801	$268,131
Total	$31,265	-6.42%	-$2,008	$153,110

Table 3: Competitor's Cash Flow Availability and Debt Capacity

Grocers and Discount Stores	Free Cash Flow	Cash	Debt/Total Assessment
Casey's General Stores (NASDAQ:CASY)	25M	75.775M	822.87M/2.73B
Ingles Markets (NASDAQ:IMKTA)	21.38M	5.67M	866.47M/1.68B
Kroger (MYSE:KR)	560M	1.23B	11.82B/37.52B
Natural Grocers Vitamin Cottage (NYSE:NGFC)	(24.93M)	4.01M	58.85M/282.24M
Sprouts Farmers Market (NYSE:SFM)	73.33M	12.46M	372.36M/1.5B
Smart & Final Stores (NASDAQ:SFS)	(50.95M)	54.23M	616.58M/1.95B
SUPERVALU (NYSE:SVU)	179M	332M	1.44B/3.58B
Village Super Market (NASDAQ:VLGEA)	44.13M	88.37M	43.56M/450.25M
Weis Markets (NYSEL:WNK)	9.44M	92.97M	64.47M/1.43Bw
Big Lots (NYSE:BIG)	222.14M	51.16M	106.4M/1.6B
Burlington Stores (MYSE:BURL)	414.93M	109.39M	1.12B/2.57B
Costco Wholesale (NYSE:COST)	643M	4.72B	4.42B/33.16B
Dollar General (NYSE:DG)	1.04B	187.91M	2.71B/11.86B
Dollar Tree (NASDAQ:DLTR)	1.1B	870.4M	6.16B/15.94B
Fred's (NASDAQ:FRED)	(64.22M)	5.83M	128.38M/730.71M
Ollie's Bargain Outlet (NASDAQ:OLLI)	50665M	98.68M	188.92M/1.04B
Pricesmart (NASDAQ:PSMT)	61.72M	200.04M	73.54M/1.09B
Target (NYSE:TGT)	3.88B	2.51B	11.03B/37.43B
Tuesday Morning (NASDAQ:TUES)	(37.13M)	14.15M	0/361.97M
Wal-Mart Stores (NYSE:WMT)	20.91B	6.86B	42.01B/198.82B

Bond Swap Recommendation Gulfport Energy Corp. for Calumet Specialty



by Chris Sanders

Buy Candidate Analysis

Gulfport Energy Corp. is an oil and natural gas exploration and production company based in Oklahoma. The company conducts operations concerning exploration, exploitation, acquisition and production of natural gas, natural gas liquids, and crude oil. The majority of their production, 93 percent, is currently natural gas and natural gas liquids while the remaining 6 percent is crude oil Gulfport represents a pure-play investment in the oil and gas exploration sector. The company prefers to explore new areas for oil and gas reserves to secure a first-mover advantage in uncrowded and untapped regions. The company currently has a B1 credit rating from Moody's and a B+ credit rating from Standard & Poors.

Overview

In order to determine the benefit of swapping the Calumet Specialty bond for Gulfport Energy Corp., several variables must be examined and analyzed. The first variable to be examined is interest rates. From there, a forecast will be developed over the next 12-18 months. An interest rate stress test with 122 scenarios is run to show the potential profit and loss from each scenario. Additionally, a credit stress test was run to show the effects of a rating upgrade during the workout period. Under the most likely scenario, the Roland George Fixed Income Portfolio would pick up 297 basis points from the swap. This basis point pick-up is broken down into interest rate pick-up, credit risk pick-up, sector pick-up, and bond mispricing pick-up.

Swap Rationale

With the United States facing possible increased GDP growth as well as a healthy bump in inflation, interest rates are very likely to increase in 2017 and 2018. Operating under the assumption that my forecast is correct, swapping Calumet with Gulfport Energy will be a beneficial move that will help maximize total returns of the portfolio and protect it from adverse interest rate moves.

Firstly, it is important to realize the differences in the two companies. Calumet is a crude oil refiner. They process crude oil into gasoline, diesel, and jet fuel as well as a variety of different waxes, solvents, and lubricating oils. Gulfport, on the other hand, is a driller. They explore, locate, and extract crude oil and natural gas from the ground. They conduct well construction, continue to maintain certain wells, and sell off certain wells to pursue new ventures.

Gulfport specializes in horizontal drilling techniques, meaning they can access subterranean reserves that are difficult to reach or were previously inaccessible. This technology along with 100 percent ownership of their most productive acreage means they can drill at reasonably low costs as well. The company's lifting cost last year, or cost of producing one barrel of oil equivalent, was $5.58 compared to the industry average of $6.43. In 2016, Gulfport produced a quarterly average of 118 thousand barrels of oil equivalent per day (MBOE/day). Taking that quarterly average, annualizing it, and comparing it to hedged and unhedged prices received minus expenses allowed a calculation for break-even prices. Currently, Gulfport's break-even prices are $33.20 per barrel for crude oil and $2.85 per thousand cubic feet (MCF).

These break-even prices are well below the average prices for WTI crude throughout 2016, which was $42.17. However, unusually warm winter temperatures throughout the world reduced natural gas demand, suppressing prices to an average of $2.55/MCF. At the same time, the world saw a dramatic slow-down in natural gas production as drillers went under, leaving a huge supply gap. When coupled with a projected increase in demand, this supply gap is expected to push prices to about $4/MCF by the end of 2018, nearly double the current price. Additionally, OPEC's struggle to fully enforce its desired production cuts is expected to hold crude prices around $55/barrel.

Regression Analysis

I conducted regression analysis comparing the historical changes of the S&P 500 and Henry Hub natural gas spot prices with the historical yield of Gulfport's bond. Similarly, I conducted a regression analysis comparing the historical changes of the S&P 500, 10-Year Treasury rates, and the historical yield of Calumet's bond.

Yield Change in Gulfport = - .00918 * (+8% gain S&P 500) – 1.22361 * (+90% gain Nat. Gas)

Yield Change in Gulfport Energy = -80 basis pts

Yield Change in Calumet = - 0.0139 * (+8% change in S&P 500) – 0.4597 * (+5% change in Dollar Index) + 1.4746 * (+85 bp change in 10-Year)

Yield Change in Calumet = +131 basis pts

Based on my analysis, I expect the S&P 500 to return a positive 8 percent throughout the workout period. Similarly, I expect the 10-year yield to increase 85 basis points, a change of 33 percent from current levels. Future rate hikes by the fed will hold the Dollar at a 5 percent gain for the year. Finally, natural gas prices are expected to pick up significantly throughout the holding period and in coming years. The consensus is calling for spot prices around $4/MCF, nearly double current levels. Low dollar values allow for volatile and large percentage changes in short periods of time. With these estimates, the regression analysis forecasted an 80 basis point decrease for Gulfport and a 131 basis point increase in Calumet. As shown below, if the aforementioned scenario were to play out, the portfolio would see a pick-up of 297 basis points.

Spread Summary

Below you can see the spread summary between Gulfport and Calumet's bonds. Over the past year, the yields have been relatively volatile. Calumet enjoyed the normalization of crude prices while Gulfport struggled with reduced natural gas demand throughout 2016. However, due to OPEC's struggle with enforcing its agreed production cuts and the impending reversal in the natural gas market due to a supply shortage, Gulfport's yield will continue to fall throughout the holdout period. Meanwhile, Calumet's yield will rise substantially due to their insolvency and bankruptcy probability.

Interest Rate Stress Test

Interest rates are one of the key determinants in the price of a bond. To analyze the impact of changing rates, I performed a stress test showing the spreads as well as the net profit/loss and basis point pick-up of the swap under numerous conditions. In total, 122 scenarios were run that test the results of basis point movements from 30 basis points to 150 basis points in each direction. Included is the predicted outcome derived from the regression analysis discussed earlier.

Credit Rating Stress Test

To examine the effects of a credit downgrade after purchase, I looked at a comparable oil & gas bond with a CCC+ rating. The table below shows the magnitude of the loss the portfolio could expect to incur if Gulfport were to experience credit downgrade. However, Gulfport is in excellent financial standing with low debt levels and growing their business. Lucrative acreage acquisitions in the past 24 months caused Moody's and S&P to upgrade Gulfport's outlook from stable to positive last year. Once these wells are developed, Gulfport could very likely see a credit upgrade. Regardless, I ran a simulated swap moving out of a CCC+ into a B-. The result was a loss of 456 basis points.

Conclusion

Exposure to the energy sector is important for a well-diversified portfolio and considering its projected growth in the coming years. Gulfport is one of the best possible current plays in the oil and gas sector. Experienced management with years of successful strategic execution allowed the company to survive the plunge in both oil and natural gas. Rather than fight low market prices, the company sought out valuable acreage with untapped reserves. Finally, its superior horizontal drilling technology allows them to extract oil and natural gas at much lower costs than its competitors. In contrast, Calumet has been flirting with insolvency for the past 24 months. Not only would a swap under the predicted conditions provide a positive 297 basis point pick-up, but it would prevent us from holding another company that falls into bankruptcy.

Company	Gulfport	NRG Energy	Sanchez Energy	KN Energy
Coupon	6.625%	6.625%	6.125%	6.30%
Maturity	5/1/2023	3/15/2023	1/15/2023	3/1/2021
YTM	6.58%	6.37%	6.86%	6.32%
Modified	4.06	3.79	4.10	3.59
Convexity	0.20	0.16	0.20	0.15
Price	$100.15	$102.00	$96.53	$99.92
Rating	B-	B	B	B-
Optionality	Callable	Callable	Callable	Callable
Sector	Oil & Gas	Oil & Gas	Oil & Gas	Oil & Gas

Company	Calumet	American Energy	BES Inc.	Atrium Energy
Coupon	7.625%	7.125%	7.75%	7.125%
Maturity	1/15/2022	11/1/2020	10/15/2022	11/15/2021
YTM	12.04%	12.41%	12.31%	12.71%
Modified Duration	3.44	3.05	3.82	3.01
Convexity	0.16	.14	0.19	0.11
Price	$84.50	$85.13	$82.10	$80.95
Rating	CCC+	CCC+	CCC	CCC+
Optionality	Callable	Callable	Callable	Callable
Sector	Oil & Gas	Oil & Gas	Oil & Gas	Oil & Gas

Company	Calumet	Gulfport	Oil & Gas Industry
Total Debt	$1.99 Billion	$1.59 Billion	-
Debt/Equity	9.84	0.69	0.73
Coverage Ratio	-0.6	2.1	1.5
Current Ratio	1.18	4.18	1.29
ROA	-81.8%	-26.0%	0.0%
Profit Margin (FY 16)	-9.1%	-6.9%	0.4%
Profit Margin (5 Yr. Avg.)	-2.1%	23.7%	21.6%

BONDS

Bond Swap Recommendation Jeffries for Clear Channel

by Evan Albert

Overview

Jefferies Group LLC is an American global investment bank and institutional securities firm headquartered in New York. The firm provides clients with capital markets and financial advisory services, institutional brokerage, securities research, and asset management. This includes mergers and acquisitions, restructuring, and other financial advisory services.

Operations

Jefferies has coverage groups spanning across all industries including Aerospace & Defense, Business Services, CleanTech, Consumer & Retail, Energy, Financial Institutions Group, Financial Sponsors, Gaming & Leisure, Healthcare, Industrials, Maritime, Media, Public Finance, Real Estate & Lodging, Technology, and Telecommunications.
**FOMC 2017 Target Level*

Swap Rationale

The proposed swap would take us out of Clear Channel's consumer discretionary sector and replace it with Jefferies, which is part of the Financial Services sector. Jefferies is unique in that it is one of the purest investment banking plays available and it stands to profit from rising interest rates. In a rising interest rate environment, they stand to benefit. Clear Channel on the other hand has been declining steadily and has seen its share price decline from their 2016 high of $7.25 down to $4.65, a drop of nearly 36%. This reflects the uncertainty of their business prospects moving forward. The swap for Jefferies would allow us to increase our bond rating from B up to a BBB-. This may seem like a drastic change, however I anticipate Jefferies's yield to drop in the coming months due to their significant negative correlation with the 10-Year Treasury.

Regression Analysis

I conducted a regression analysis comparing the movements of Jefferies's yield and the U.S. 10-year Treasury and the S&P 500. I also compared Clear Channel's yield movements with the 10-year Treasury and the market. By analyzing the results, I was able to predict the yield changes implied by my estimated shift for the 10-year Treasury in 2017.

JEF Yield Change = (-0.115 * 2.7%) + (0.008*9%) = -10.69 Bp

JEF Yield Level = 5.79% + 0.0517 = 5.68%

CCO Yield Change = (0.05678 * 2.7%) = +15.33 Bp

CCO Yield Level = 5.22% + 0.1533 = 5.38%

Yield Curve for JEF

I also utilized Bloomberg's Fair Value function to find JEF's fair value when compared with the USD United States Financial BBB- Index. This resulted in a spread of 36.3 basis points. This indicates an overvaluation and that over time the yield will drop to the industry level resulting in a gain for the portfolio. The spread between the bond candidate and its industry rating is shown on graph (on page 13).

Mispricing = 36.3 bp spread

Yield Curve for CCO

I again utilized Bloomberg's Fair Value function to find Clear Channel's fair value when compared with the USD United States Communications B Index. This resulted in a spread of -46.2 basis points and indicates an over evaluation. Over time I expect this gap to close and for Clear Channel's yield to increase which would be detrimental to our portfolio.

Mispricing: -46.2 bp spread

Mispricing Change

After analyzing the mispricing from the yield curves, I applied this to both my buy and sell bond. This gave me a total pick-up of 588 bp from entering the implied yield movements into the Horizon return calculator on Bloomberg. This is a useful comparison, however it must be considered that Clear Channel may be trading as a higher rating than given to its bond. If this is the case, then it would be fairly valued and it would be incorrect to assume that the yield will increase. This is why my expected swap profit is based solely off of my regression results.
**Regression Analysis is the sole basis for my Swap Recommendation*

Source of Swap Profit

While in my above analysis I predicted a 178.4 bp pick-up, it is important to investigate where that pick-up will come from and what amount comes from which source. I analyzed four sources of return for my swap including interest rate risk, sector, credit rating, optionality, and mispricing. The sum of these factors gives me the overall basis point pick-up of 178.4 that I will illustrate in the below tables.

Bp Pick-up = **Interest Rate** + **Sector** + **Optionality** + **Mispricing**

Interest Rate Pick-up: 233 Bp

To find the interest rate pick-up I found a bond with very characteristics in terms of rating, optionality, and sector to that of Clear Channel, but changed the modified duration from 3 to a bond with a similar duration to that of JEF's at 11. Increasing the duration is the primary source of our return, however as previously mentioned this is offset by JEF's negative correlation.

Sector Pick-up: -48 Bp

I also analyzed the sector risk pick-up from swapping Jefferies for Clear Channel. I compared Clear Channel to similar bonds with the same rating, but that reside in the financial industry. From this analysis I concluded that it would cost us 48.2 basis points to switch into the more desirable financial industry.

Optionality Pick-up: -61 Bp

Switching to a bullet from a callable bond is beneficial to the portfolio because the bond cannot be called in the event of a debt restructuring by Jefferies. This benefit comes with a cost and I was able to isolate the cost of changing the maturity type by holding constant yield to maturity, modified duration, and sector.

Mispricing Pick-up: 39 Bp

Jefferies's bond is significantly undervalued, while Clear Channel's bond is trading at a premium compared to their industry. The mispricing pick-up is found from subtracting the other pick-ups. Considering that compared to their industries Jefferies is undervalued and Clear Channel is overvalued, this mispricing attribution is reasonable. If JEF's bond was to return its expected yield, the portfolio would be in an excellent position to experience positive returns.

Credit Analysis

It is important to look into the financial stability of JEF when considering a position for our portfolio. The company experienced earnings volatility in the beginning of 2016 due to the bear market related to the collapse of oil. However, they stand to benefit from increasing cash flows since they derive 27 percent of their revenue from interest charges. They were also most recently reviewed on February 27, 2016, when Fitch reaffirmed their long-term debt rating of BBB- and confirmed their outlook is stable. JEF currently has a debt to equity ratio of 2.38 and this ratio has been decreasing for the past six years. Their percentage of long-term debt to total capital is at 30.2 percent, which represents an uptick of 3.9 percent compared to 2015.

Conclusion

The proposed swap will generate a 178 basis point pick-up if Jefferies's yield decreases by the estimated 11 basis points and Clear Channel's decreases by 16 basis points. Therefore I recommend that the Roland George Investments Program swap its Clear Channel position for Jefferies's bond. An increase in duration contradicts common practice in a rising interest rate environment, however Jefferies' negative ten-year correlation negates this. This provides our portfolio the unique opportunity to switch into a financial company with strong prospects and produce a positive swap profit. The increase in rating also hedges us against a widening credit spread in the event of a flight to quality. During the past week, we have already seen escalating geopolitical tensions and in the event of future conflicts I expect bonds below investment grade, like Clear Channel, to experience a rising yield as investors seek safer investments. Therefore, I recommend the Roland George Investments Program swap its position in Clear channels bond for Jefferies's bond.

Bp Pick-up	Interest Rate	Sector	Optionality	Mispricing
178	233	-48	-61	54

Sell Candidate		Buy Candidate
Clear Channel	**Company**	Jefferies Group LLC
6.50%	**Coupon**	6.25%
11/15/2022	**Maturity**	02/15/2036
5.74%	**YTM**	4.80%
3.13	**Modified Duration**	11.02
0.12	**Convexity**	1.70
102.453/102.902	**Bid/Ask Price**	105.235/106.232
5.738/5.601	**Bid/Ask Yield**	5.807/5.739
106.125	**Cost Basis**	---
B	**Rating (S&P)**	BBB-
Callable	**Optionality**	Bullet
Communications	**Sector (GICS)**	Financial Services
N/A	**Basis Point Pick-up**	178
2.87	**Portfolio Duration**	---

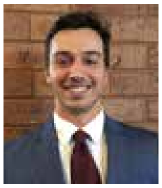
Sell Candidate		Buy Candidate	Buy Candidate
CCO	**Company**	Century Link	Sprint
6.50%	**Coupon**	7.60%	8.75%
11/15/2022	**Maturity**	09/15/2039	03/15/2032
5.74%	**YTM**	8.78%	6.58%
3.13	**Modified Duration**	9.93	8.84
0.12	**Convexity**	1.56	1.08
102.453	**Price**	88.46	120.414
B	**Rating (S&P)**	B	B
Callable	**Optionality**	Bullet	Bullet
Communications	**Sector**	Communications	Communications
-	**Bp Pick-up**	239.8	226.2
	Average Bp	223	

Company	Jefferies	Financial Industry	Clear Channel	Communications
Total Debt	$32.23 B	N/A	$20.6 B	N/A
Debt/Equity	5.89	0.36	473	80
Current Ratio	10.36%	1.87	3.82	2.61
ROA	0.1%	6.2%	7.13%	6.8%
Profit Margin	2.52%	17.3%	3.72%	4.2%

Scenario	Bp Pick-up
No Change	60.4
Regression Analysis*	178.4
Mispricing Change	588.3
Average	275.7

Input Variable	Coefficient	Std. Error	t Stat	P-Value
Intercept	0.064997	0.518074	0.125460	0.900473
S&P Change	0.302752	0.30058	1.007225	0.316863
10 Y Change	-0.147158	0.098149	-1.499328	0.137724

Bond Swap Recommendation
Conn's for Clear Channel



by Salvatore Raitano

Buy Candidate Analysis

Conn's sells furniture and related accessories for the living room, dining room and bedroom, as well as traditional and specialty mattresses; home appliances, including refrigerators, freezers, washers, dryers, dishwashers and ranges; a variety of consumer electronics, including LCD, LED, 3D, Ultra HD and plasma televisions, Blu-ray players, home theater and video game products, digital cameras and portable audio equipment; and home office products, including computers, tablets, printers and accessories.

Swap Rationale

The RGIP fixed income position in Clear Channel Holdings is one of our lower yielding holdings and as such is on the safer side of our portfolio although it only has a B rating. This translates to a lower return on a risky investment and it is time to remove ourselves from this position. The bond that would be replacing Clear Channel in the portfolio has a similar duration and would slightly increase the portfolio's duration by .07, to 2.94 years. This would slightly increase overall exposure to interest rates while increasing our return potential by assuming more credit risk. Clear Channel's yield has been historically volatile and this is considered a risky, low yielding bond.

Conn's Inc. bond has a rating of B- and a yield to maturity of 10.66. The yield is so high because of perceived problems with their cash flows. Since they received this rating, however, they have returned their operating cash flows to a positive. Their cash flows were negative because of a strategic shift that reduced revenues due to increased requirements for their credit department, which relates to 77 percent of their revenues. By increasing their credit requirements, CONN lost revenue in the short term but has since returned it to pre-adjustment levels and managed to increase margins on their credit business by 3.2 percent year-over-year growth. The below the market has been significantly lowering the yield on this bond because of improving business factors and increasing cash flows.

The graph above plots Clear Channel Outdoor on the B Communications yield curve and it shows that CCO is overvalued significantly for the yield that it is trading at.

Credit Watch List

When Conn's first released their bond offering, they were added to the credit watch list within the first two months and this caused their yield to skyrocket. There were perceived cash flow problems within the company and their yield was even more adversely affected. Looking forward another year, it was determined that they can make all their coupon payments with improving cash flows.

Conn's is no longer on the credit watch list and was removed in November 2015. When the bond was first issued, it was listed on the credit watch since it was their first debt offering but has since been taken down from that list. This readjustment combined with improving business underwriting practices within their financing department will further drive down their yield and improve our future profit.

Regression Analysis

Regression analysis was conducted using daily historical yield data for Conn's bond and the US 10-year Treasury and US 2-year Treasury. The results were significant and highly correlated as shown below.

Yield Level CONN = 0.02 + (-0.2212*-0.02125) + (-0.1506*-0.00375) = +25 bp

Based on my market analysis, I predict interest rates to increase by 50 bp over the workout period. This increase would reflect a total return for the 10-year Treasury of -212.5 bp and a negative total return change for the 2-year of -37.5 bp. This would only increase the yield by 25 bp.

Yield Level CCO = 6.848 + (-0.370*3) + (1.723*10) = +23 bp

Based on my market analysis I predict interest rates to increase by 50 bp over the workout period this would reflect a total return for the 10-year Treasury of 300 bp and a negative total return change for the S&P 500 of 8 percent. This would increase CCOs yield by 25 bp.

Interest Rate Stress Test

Interest rates will play a vital role in the pricing of bonds. To analyze this, I conducted multiple interest rate stress tests to determine how sensitive each bond is to interest rate change and how much bp pick-up or loss we would incur on the two bonds. I went about this process by utilizing the Fixed Income Horizon Analysis found on Bloomberg. I used 49 different combinations of interest rate movement and determined the new yield of each bond, the dollar profit or loss and finally the basis point pick up or loss from the two bonds. I stressed in increments of 25 bp in each direction up to 75 basis points for each bond as well as workout date to fit into that of our investment policy statement and ran each test. The results of this interest rate stress test can be found in the table, located on the next page.

Sources of Swap Profit

I identified the potential for a 329 bp pick-up. It is important to identify exactly where that pick-up will come from for each source. The four sources of return are interest rate risk, sector risk, optionality risk, and mispricing. Since the bonds being proposed for a swap have the same optionality, I will breakdown the other three sources.

Bp Pick-up = Interest Rate + Sector Risk + Credit Risk + Mispricing = 329

Bp from Interest Rate = +95

Bp from Sector Risk = +75

Bp from Credit Risk = +157

Bp from Mispricing = +2

Interest Rate Pick-up

To estimate the bp pick-up from the risk of changing interest rates I found two bonds whose durations average out to the relevant duration of Conn's Inc. This returned a bp pick-up of 95 from interest rate risk.

Sector Risk

The proposed swap would take us out of Clear Channel's Advertisement and Marketing sector and position us within the high margin regional retail sector. This sector is difficult to e-commercialize because of the large size of the products and the high shipping costs that are associated with these. To estimate the swap profit associated with this sector I used to similar companies within the consumer discretionary sector and returned a bp average swap profit of 60.

Credit Risk

Credit risk is the greatest source of swap profit. By switching from a B to a B- I calculated a weighted average bp pick-up of 157 bp. The two bonds I used to estimate this were the most similar I could get to my own bond. I weighted the Acosta Inc. 7.75 percent bond less because it is a CCC+ rating instead of a B-.

Mispricing

From the three other sources of swap profit, I identified that 100 bp came from interest rate risk associated with increasing duration from 3.2 to 4.2, 75 bp came from switching from the ads & marketing sector into the consumer discretionary sector, and an additional 205 bp increase resulted from downgrading the rating from a B to a B-. The remaining swap profit of 7 bp is a result of mispricing and represents an undervaluation.

Credit Analysis

It is important to look at the financial stability of Conn's Inc. before considering swapping them into our portfolio. The company experienced declining top and bottom line revenues in 2013 and 2014. This however, has begun to turn around. They have almost returned to pre-2013 levels and have shown a capacity to continue to expand growth. For this large retailer of furniture, electronics, and smaller appliances, they have experienced average same store sales growth for the past year of 12.2 percent compared to the industry average of 6 percent. Although they have been able to grow their total number of stores from 90 to 112, and increase their same stores sales growth, their stock price and bond yield were both negatively impacted in a significant manner.

I built a pro-forma income statement and pro-forma cash flow statement to estimate the relevant cash flows that can be paid back to debt holders. The cash flow from operations has been consistently positive over the past five years, with only one quarter in which their operating cash flow went negative. This shows that they can still successfully achieve their core business strategy of selling and financing furniture, electronics and appliances.

Cash flows from investing activities has been consistently negative because Conn's has been expanding their facilities and increasing their number of retail stores, so they have been investing heavily in capital expenditures. They have expressed interest to open 5 additional stores within the next year to further grow revenue, which will increase Investing CF and explain their negative flows for the remainder of 2017. Their cash flows from financing activities has varied significantly over the past twenty quarters from -$90 million to $58 million.

This is Conn's only bond offering and they have an EBITDA coverage ratio of 7.8. While they are a B- they have been significantly beaten down by the market and both their stock price and bond yield have been unfairly punished as a result.

Credit Rating Stress Test

If Conn's Inc were to be downgraded from a B- rated bond to a CCC+ their yield would most likely increase by 50 bp, causing a loss of 175 bp in total return. I compared Conn's to a candidate within its own sector with a similar maturity and optionality but the credit rating was dropped two times. By being downgraded to a CCC+ it would most likely subject Conn's to a negative shift of close to 100 bp.

Conclusion

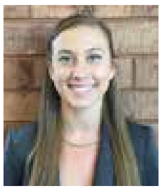
The Base Case Scenario is that CONN's yield goes up by at least 50 bp while CCO's yield goes up by 50-75 bp. This results in a total swap profit of 329 bp. CONN will be less negatively affected by increasing interest rates because of their in-house financing business, which will be positively affected by rising rates. Conn's Inc. was unfairly punished because of weak financial performance in 2013-14 and have since recovered and are returning to their core business practices. Their yield may rise slightly with rates, however, it is artificially high leading to an undervaluing of this 7.25 percent coupon bond.

Sell Candidate		Buy Candidate
Clear Channel	**Company**	**Conn's Inc.**
6.5%	**Coupon**	7.25%
11/15/2022	**Maturity**	7/15/2022
5.55	**YTM**	10.66
3.631	**Modified Duration**	4.194
-2.29	**Convexity**	0.219
103.25/104.25	**Price**	86/87
B+	**Rating (S&P)**	B-
Callable	**Optionality**	Callable
Ads & Marketing	**Sector**	Cons. Discret.
-	**BP Pick-up from Other**	365
-	**BP Pick-up**	2

Sell Candidate		Buy Candidate	Buy Candidate
Clear Channel	**Company**	**Sprint Corp.**	**Ziggo Bond**
6.50%	**Coupon**	7.125%	5.875%
11/15/2022	**Maturity**	6/15/2024	1/15/2025
5.52%	**YTM**	5.91%	3.823%
3.22	**Modified Duration**	5.498	4.367
0.13	**Convexity**	0.3786	-4.7393
$103.25	**Price**	$107	$104.10
B	**Rating (S&P)**	B	B
Callable	**Optionality**	Callable	Callable
Ads & Marketing	**Sector**	Ads & Marketing	Ads & Marketing
-	**Basis Point Pick-up**	117	72
-	**Average Bp**	95	

Sell Candidate		Buy Candidate	Buy Candidate
Clear Channel	**Company**	**Party City**	**Petsmart Inc.**
6.5%	**Coupon**	6.125%	7.125%
11/15/2022	**Maturity**	8/15/2023	3/15/2023
5.55	**YTM**	5.62	8.373
3.631	**Modified Duration**	4.344	4.672
-2.29	**Convexity**	-1.0059	0.283
103.25/104.25	**Price**	101.38/102.38	93.13/94.13
B+	**Rating (S&P)**	B-	B-
Callable	**Optionality**	Callable	Callable
Ads & Marketing	**Sector**	Cons. Discret.	Cons. Discret.
-	**BP Pick-up**	50	80
-	**Average Bp**	75	

Bond Swap Recommendation Sprint Corp. for Clear Channel



by Abigail Fucciani

Buy Candidate Analysis:

Sprint Corporation, commonly referred to as Sprint, is an American telecommunications holding company that provides wireless services and is an internet service provider. The Company, along with its subsidiaries, is a communications company offering a range of wireless and wireline communications products and services that are designed to meet the needs of consumers, businesses, government subscribers and resellers. The company offers wireless and wireline services to subscribers in approximately 50 states, Puerto Rico, and the U.S. Virgin Islands under the Sprint corporate brand, which includes its retail brands of Sprint, Boost Mobile, Virgin Mobile and Assurance Wireless on its wireless networks utilizing various technologies, including third generation (3G) code division multiple access (CDMA), fourth generation (4G) services utilizing Long Term Evolution (LTE). It is the fourth largest mobile network operator in the United States, and serves 59.5 million customers, as of January 2017. The company also offers wireless voice, messaging, and broadband services through its various subsidiaries under the Boost Mobile, Virgin Mobile, and Assurance Wireless brands, and wholesale access to its wireless networks to mobile virtual network operators. The company is headquartered in Overland Park, Kansas.

Swap Rationale

The fixed income fund's position in Clear Channel communication bond has many similarities to that of my proposed swap for Sprint. Both are high yield bonds with credit ratings of B. They are also within the same sector of communications. However, Sprint is in a much better position of growth which will allow us to capitalize upon it. We would be able to do this without taking on much more risk and simply adjusting for duration. Increasing our duration would not negatively affect us, even with the projected rate hikes. It would put us in a better position to profit from a longer duration with Sprint. Sprint has not been profitable since 2006 which makes them trade as if they are more risky than they really are. They have recently changed their business strategy to become profitable in the next few years allowing them to pay off their debt.

My expectations of interest rates rising by 30 basis points within the workout period signals that my bond yield would shift in a negative direction of around 24 basis. However, Clear Channel would shift upward by 12. As the Treasury continues to increase, Sprint and Clear Channel will mimic each other's moves in very similar ways. We can expect to see the Treasury increase as the economy picks up. With Sprint's growth and similar yield movements, we can continue to see the spread narrow between Sprint and Clear Channel. This provides evidence that the spread between Sprint and Clear Channel is narrowing. At this rate, I believe that the spread will continue to narrow and eventually cross over our workout period.

Regression Analysis

I conducted a regression analysis using excel data analysis comparing the movements of Sprint's historic yields to that of 10-year Treasury historic yield and S&P 500 return. The results are listed as below.

Yield Sprint = 16.77% – 3.4*(3) – .13*(10)

Yield Sprint = 5.27% = –85 bp

I also conducted a regression analysis comparing the movements of Clear Channels historic yield to that of the Treasury and S&P return. The results are as follows.

Yield Clear Channel = 6.6% – .15*(3) – .05*(10)

Yield Clear Channel = 5.65% = 89 bp

Based on my analysis, I expect the 10-year Treasury to increase to an average of 3 percent over our workout period. This resulted in an estimated yield change for CCO of 89 basis points. Based off of my regression analysis, Sprint will decrease 85 basis points. However, I feel that I should take a more conservative estimate. I believe Sprint will decrease by 24 bp and Clear Channel will increase by 12 bp. For these reasons, I am confident in the company's ability to execute financially in the coming months. If this estimated scenario occurred, the portfolio would see a pick-up of 225 basis points. I applied the regression results into the horizon return analysis on Bloomberg to give me the following result.

Yield Curve for Sprint

I utilized Bloomberg's Fair Value function to find Sprint's fair value when compared with the USD United States B Communication Index. This resulted in a spread of 50 basis points. You can see below the spread between the bond and its industry rating.

Mispricing = -65 basis points

Yield Curve for Clear Channel

I again utilized Bloomberg's Fair Value function to find Clear Channel's fair value when compared with the USD United States B Communication Index. This resulted in a spread of 8.2 basis points. You can see below the spread between the bond and its industry rating.

Mispricing = -8.2 basis points

Mispricing Change

After looking at the mispricing from the yield curves I applied this to both my buy and sell bond. This gave me a total of a 225 basis point pick-up after entering my regression results into the Horizon Return Analysis calculator on Bloomberg.

Spread Summary

Below you can see the spread summary between Sprint and Clear Channel. Over the past year, the spread has continued to narrow and is expected to continue to narrow. The swap to a longer duration bond will help us profit over our workout period.

Credit Rating Stress Test

I also conducted a credit rating stress test to determine the capital loss the portfolio would incur if Sprint downgraded after our purchase. This would be the scenario that would occur if, after Sprint was purchased, it was downgraded a rating from a B to a B-. I found this to be comparable because the next comparable bond in the industry was MDC Partners. While Sprint's credit rating remains stable, according to Moody, there leaves little room to believe that the bond would default or become a lower rating. Sprint has been increasing their cash flow and is expected to have positive profits in the near future.

Source of Swap Profit

While in my above analysis I suggest a 225 basis point pick-up, it is important to investigate where that pick-up will come from and what amount comes from each source. I analyzed two sources of return for my swap, which included the interest rate risk and mispricing. The sum of these criteria gives me the overall basis point pick-up of 84 that I will illustrate below in the tables.

Bp Pick-up = Interest Rate + Mispricing

Interest Rate Pick-up: +222 bp

To find the interest rate pick-up, I found a bond with very similar characteristics in terms of rating, optionality and sector to that of Clear Channel, but changed the duration from 3.13 to that with a similar duration to that of Sprint.

Mispricing Pick-up: 3 bp

Sprint's bond is significantly undervalued, while the Clear Channel bond is trading at fair value. The mispricing basis point pick-up is found from subtracting the other pick-up.

Callability Schedule

Sprint's first bond becomes callable as of November 15, 2024 at the price of $100. It can be called with a 30 day minimum notice. They may be called in part or in full.

Credit Analysis

It is important to closely examine the financial stability of Sprint when considering purchasing it for our portfolio. Since 2006, profitability has not been a strength of Sprint's. However, it was part of their strategy to undercut their larger competitors to gain subscribers. Now that Sprint has managed to gain on their competition, they are beginning to change their original game plan and compete with the larger competitors at a profitable pricing strategy.

One of the most concerning factors of Sprint is their high level of debt with $37 billion and a debt to equity ratio of 1.15. This debt level, however, is not unusual. Comparing Sprint's debt levels to that of a similar competitor, T-Mobile which has a debt level of $30 billion and a debt to equity of .55. For this reason, Sprint could be considered risky if it were not for their recent move toward a profitable strategy. Sprint is getting rid of their business plan of undercutting competitors and will now catch up in profitability. Since June 2016, Sprint's profitability has increased by 19 percent, proving that they are on a positive trend. Going forward, this perceived risk will benefit us without actually the concern of Sprint defaulting. A pro forma income statement and statement of cash flows has been generated to show estimated growth.

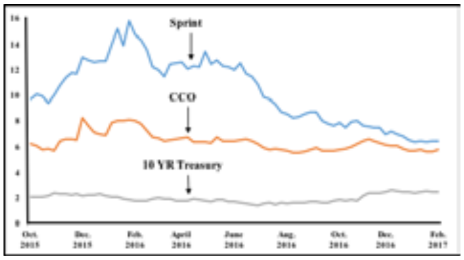
As for Clear Channel, the company currently has $5.12 billion in debt, significantly less than that of Sprint. They also have a profit margin of 5.23 percent, whereas Sprint remains unprofitable. With the shortened duration, less debt and profitability, in comparison, Clear Channel is a much safer bond than Sprint, even taking into account that they both have a B credit rating. Though Sprint appears to be more high risk with their debt levels and higher duration, it is extremely unlikely that Sprint would default on their debt or be unable to pay it back.

Credit Watch

Sprint is not under any credit watch under any rating agency at this time.

Conclusion

Sprint has made significant gains in the wireless cellphone provider industry, becoming one of the four largest providers. The company continues to make progress toward increasing their subscription base. Sprint has created a positive reputation and brand image of quality and one of the best providers. Their method to creating this growth forced Sprint to take on more debt and go without a profit since 2006. However, they have recently made enormous changes to their method. They will no longer be offering 50 percent price cuts to those who switch from their competitors to them as a provider. This will make a large impact on their profitability as they begin to compete with their other competitors on a pricing basis. As Sprint grows revenues and profitability, they will have no problem paying off their debt. Our position in Clear Channel leaves us little room to profit. Increasing our duration and switching to Sprint will put us in a much more effective position to benefit. The swap will earn us a 225 basis point pick up if Sprint's yield decreases by 24 basis points and Clear Channel increases by 12 basis. Therefore, I recommend that the Roland George Investment Program swap its position of the Clear Channel bond for the Sprint bond.



Sell Candidate		Buy Candidate
Clear Channel	**Company**	**Sprint**
6.5	**Coupon**	7.625
11/15/2022	**Maturity**	2/15/2025
5.54	**YTM**	6.5
3.13	**Modified Duration**	5.74
0.12	**Convexity**	0.41
102.88/103.76	**Bid/Ask Price**	105.85/107.44
5.609/5.333	**Bid/Ask Yield**	6.635/6.378
102.125	**Cost Basis**	-
B	**Rating (S&P)**	B
Callable	**Optionality**	Callable
Communications	**Sector**	Communications
-	**Basis Point Pick-up**	225 bp

Bp Pick-up	Interest Rate Risk	Mispricing
103	+222	+3

Sell Candidate		Buy Candidate
CCO	**Company**	**McClatchy**
6.5	**Coupon**	9%
11/15/2022	**Maturity**	12/15/2022
5.54	**YTM**	7.49
3.13	**Modified Duration**	3.02
0.12	**Convexity**	0.12
B	**Rating**	Buy Candidate
Callable	**Optionality**	Callable
Communication	**Sector**	Communication
	Basis Point Pick-up	222

Cannabis Index

by: Michael Goldman

Sector: Health Care

Industry: Pharmaceuticals

Tickers: APHQF, TWMJF, GWPH

Recommendation: Buy

Price Targets: $5.63, $12.52, $156.87

What is Medical Cannabis?

Medicinal cannabis, also known as medical marijuana, refers to cannabis when it is used to treat or relieve a symptom, ailment or condition with a prescription from a licensed doctor. Any cannabis which contains an effective amount of active cannabinoids, can be considered medicinal cannabis if it is used for that purpose. Reasons for a medical cannabis prescription include but are not limited to muscle spasms caused by multiple sclerosis, nausea from chemotherapy, poor appetite and weight loss caused by chronic illness such as HIV or nerve pain seizure disorders, and Crohn's Disease. Medical cannabis is legal in the United States in 28 states and Washington DC, and is completely legal in Canada. The only difference between medicinal and recreational cannabis is that recreational is used for non-medicinal purposes and for pleasure or addiction.

Investment Rationale First-time Legalized Addiction: Cannabis has been consumed for thousands of years dating back to the early days of the Ancient Greeks in 440 B.C. Humans have a natural tendency to become addictive to substances that they can use for medicinal or recreational purposes. Human addiction is inevitable and serious profit can be made from this vulnerability. For the first time in history, cannabis is becoming legal for medicinal and recreational use in the United States and Canada, and it has been one of the most rapidly growing industries that the market has ever seen.

Movement from Prescription Pills to Cannabis: The room for growth in the cannabis industry is limitless. One of the reasons for future growth is the movement from prescription pills to medicinal cannabis. Not only are prescription pills more addictive than cannabis, but also they are also much more harmful to consume than cannabis is. Cannabis is a naturally grown plant that comes from the earth, while pills are made by machines in factories. Another reason for future growth in this industry is the legalization of cannabis for both medicinal and recreational purposes.

Early-entry Monopolistic Industry: The cannabis industry is still in its infant stage. Being such a young industry comes with a lot of regulations, licensing, fees and laws protecting the future of the industry. It is so difficult to start a company in the cannabis industry because of all of the regulations and licensing that needs to be done prior to being able to produce and sell cannabis. It is virtually a monopoly because there is a huge barrier of entry for companies to join. In Canada, there are only 23 licensed producers of medicinal cannabis. Two of the three companies in this index own 45 percent of Canada's medicinal cannabis market share, making it a de facto monopoly. The severity of politics involved with the production and distribution of cannabis carries over to the hardships companies face when trying to get into the industry. The time is now to get in this industry, it is not too early, and is not too late.

Impact of Legalization: In the United States, cannabis has been taboo since when it was prohibited on a federal level. Ever since California had legalized cannabis for medicinal purposes in 1996, states have been changing their stances on the substance, especially as of the past few years. Looking at past revenues and number of states that legalized cannabis can be used to create future predictions of cannabis revenue in the United States.

Aphria Inc. (OTC:APHQF) Business Description: Aphria Inc., previously Black Sparrow Capital Corp., is a Canadian-based company, which is involved in producing and selling medical cannabis through retail sales and wholesale channels. The company's retail sales are mainly sold through the company's online store, as well as telephone orders. Its wholesale shipments are sold to other Medical Purposes Regulations Licensed Producers.

Canopy Growth Corporation (OTC:TWMJF) Business Description: Canopy Growth Corporation, formerly Tweed Marijuana Inc., is a diversified cannabis company. The company, through its subsidiaries Tweed Inc. (Tweed), Bedrocan Canada Inc. (Bedrocan) and Tweed Farms Inc. (Tweed Farms), is engaged in the business of producing and selling legal marijuana in the Canadian medical market. It is also focusing on producing and selling marijuana in the recreational market in Canada. Its core brands are Tweed and Bedrocan. Tweed is a licensed producer of medical marijuana.

Revenue Breakdown: Canopy Growth Corporation operates 100 percent in Canada, and in one segment, the production and sales of medicinal marijuana.

Historical Earnings Growth: The average historic earnings per share for Canopy has been -$.06 since its beginning in April in 2010. Over the past eight quarters the earnings per share has been an average of $0. That is a massive increase compared to the prior eight quarters average of -$0.34 . Canopy's earnings have been increasing as a result of margin expansion. This is a result of falling investment in sales and a stable investment in research and development. They also have started showing positive earnings for the first time in 2.5 years. This earnings growth can be attributed to recent acquisitions, increased facility space to meet demand, and strong governance and leadership.

Valuation: To calculate the fair value price for GW Pharmaceuticals I used the Franchise Value Model.

Franchise Value Model: The Franchise valuation incorporates the company's ability to repeat its business model at a lower cost. If the market has not factored the company's franchise ability into its current price, the company's stock should sell at a discount. Franchise value is created when the company uses its competitive advantage to reinvest its earnings at a rate higher than the rate of return normally required by investors. Although costs are expected to increase, revenues are expected to outweigh those costs. Using this model I found a fair value for Canopy Growth Corporation of $12.56 USD, an undervaluation of 54 percent.

GW Pharmaceuticals (NASDAQ:GWPH) Business Description: GW Pharmaceuticals plc is a biopharmaceutical company focused on developing and commercializing therapeutics from its cannabinoid product platform in a range of disease areas. The company's lead cannabinoid product candidate is Epidiolex, which is a liquid formulation of pure plant-derived cannabidiol (CBD). The company offers Sativex (nabiximols), which is indicated for the treatment of spasticity due to multiple sclerosis (MS). The company can be seen as a takeover company for other Big Pharma companies with failing cannabinoid drug.

Revenue Breakdown: The company operates through three segments: Commercial, Sativex Research and Development, and Pipeline Research and Development. The Commercial segment distributes and sells the company's commercial products. The Sativex Research and Development segment seeks to maximize the potential of Sativex through the development of new indications. The Pipeline Research and Development segment seeks to develop cannabinoid medications other than Sativex across a range of therapeutic areas using its cannabinoid technology platform.

Revenue Growth: Revenue has grown historically at 22 percent over the past 10 years. I estimated revenue growth by taking the growth rate of last year's revenue, and using that against the historic growth, generating 11% annual growth over the next four quarters. I took the change in the growth rates and applied that to the estimates of the next four quarters. Revenue is expected to increase due to the release of Epidiolex later in 2017, if it is approved.

Gross Profit: Gross Profit has been decreasing ever since Q3 2015, when it was at its peak of $12.1 million. Gross profit is expected to increase to $3.4 million in Q1 of 2018. The company is supposed to stay flat for the second and third quarter of 2017 but then increase 48 percent and 32 percent respectively in the fourth quarter of 2017 and the first quarter of 2018. The dramatic increase in gross profit will be due to the release of Epidiolex later this year.

Valuation: To calculate the fair value price for GW Pharmaceuticals I used the Sales Franchise Value Model.

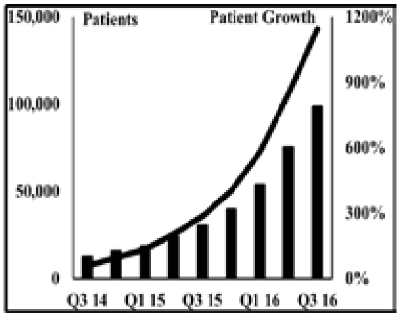
Franchise Value Model: The Franchise valuation incorporates the company's ability to repeat its business model at a lower cost. Since the market has not factored the company's franchise ability into its current price, the company's stock should sell at a discount. Franchise value is created when the company uses its competitive advantage to reinvest its earnings at a rate higher than the rate of return normally required by investors. Costs are expected to decrease, which will increase gross profit for the company in the following year. Using this model I found a fair value for GW Pharmaceuticals of $156.87 USD, an undervaluation of 25.4 percent.

Recommendation: I recommend that the Roland George Investments Program purchases 243 shares of GW Pharmaceuticals priced at $123.33 for a total of $29,969.19. I recommend that we purchase 7,143 shares of Aphria Inc. at $4.90 a share for a total of $35,000. I also recommend we buy 4,242 shares of Canopy Growth Corporation for a total of $34,997. I arrived at these values by weighting GWPH at 30% and Aphria Inc. and Canopy Growth Corporation both at 35 percent from a total value of $99,966.89.

Market Profile (as of 3/12/2017)

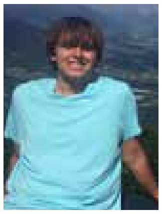
	APHQF	TWMJF	GWPH
52-Week Price Range	$0.92-$5.79	$1.84-$14.39	$79.62-$137.88
Average Daily Volume	185,650	291,658	377,377
Shares Outstanding	111.61 M	124.8 M	25.2 M
Market Capitalization	$621.94 M	$1.32 B	$3.15 B
Book Value Per Share	0.87	1.53	19.02
Price/Earnings	154.06	-1,613.98	-38.18
Debt/Equity	5.9	2.85	3.56
Return to Equity	0.97%	-0.35%	-20.03%
Return to Assets	4.47%	1.19%	-20.21%

Exhibit 8: Medicinal Cannabis Patients in Canada



STOCKS

Netflix (NYSE:NFLX), Domino's (NYSE:DPZ) and Craft Brew Alliance (NYSE:BREW)



by: Lucas Wheaton

Recommendation: Buy

Highlights

Online Streaming: The growth of this index and the chill factor are both directly related to the growth of Netflix and Netflix subscribers. These are key determinants of how many people are staying home and contributing to the chill factor. Netflix is the industry leader in the online streaming services industry and has two main advantages over its competition. These are its original programming, which has garnered praise from viewers and critics alike, and its big data analytics, which provide the information needed for recommendations. These combined give Netflix a clear advantage over the competition, plus Netflix is the most direct way to invest into this trend.

Delivery Food: The chill factor is all about staying home, so delivery food fits right into this motif, and what better delivery food than pizza? Domino's has risen to the top of the competition in the competitive quick service pizzeria segment, taking market share from both Papa Johns and Pizza Hut. Domino's has redefined themselves and gained competitive advantages in online and mobile sales and customer loyalty. These have led to the insane growth that Domino's experienced. While the industry as a whole declined in same store sales, Domino's grew their same store sales by 13 percent.

Craft Beer: Most people associate beer with relaxation, but craft beer is becoming more associated with chilling. Craft Brew Alliance is an ideal company as they only operate within the craft beer segment and they are small enough to where they do not perform similarly to other beer companies. Craft beer being a part of this chill factor is still new and is growing in popularity among Millennials, who drive the growth in the craft beer segment.

What is the Chill Factor?

Last year, one stock made a 68% return, and it wasn't a technology stock. It was instead Domino's which outperformed the S&P 500 by 51 percent. Normally, this shouldn't happen. Why would a pizza company increase so dramatically? This is because of the chill factor.

The Chill Index is constructed on the trend of more and more Americans preferring to have a night in instead of going out. The chill factor is the set of activities and products that people do and consume when they have a night in. This index seeks to tap into this phenomenon by investing into three underlying industries who also benefit from this. These are home video streaming services, delivery food, and craft beer.

Netflix: A video streaming service that offers movies, TV shows, and original content. Netflix pioneered video streaming, which has led them to experience massive subscriber growth over the past eight years. Currently, at 93.8 million subscribers, Netflix is also the largest video streaming service.

Domino's: An international chain of quick service and delivery pizza restaurants. The company operates in three segments, Domestic Stores, Supply Chain, and International Franchise. Domino's has expanded from just a pizza restaurant, offering a variety of pizzas, pastas, sandwiches, salads, chicken wings, sides, and desserts.

Craft Brew Alliance: A brewing company that specializes in the craft beer segment. They operate with their major brands, Red Hook, Kona, Widmer Brothers, Omission, Square Mile, and Resignation Brewery. Each of these brands is targeted for different craft beer segments in order to reduce branding overlap.

Investment Rationale: Chill at Home: Imagine the scene, you invite some buddies over and order some delivery for dinner. When they get there you guys eat some Domino's pizza and watch Netflix. After the show ends, you play some FIFA together while drinking some Kona craft beer. The night is then ended with some cigars and liquor. This is the chill factor. This generation is shifting the way that free time is spent. Instead of going out on the town for a night of drinking and debauchery, it is instead spent at home binge watching your favorite TV show. Staying home and playing video games on a Friday night is now more common than going out to party on Friday. This is because staying home is both cheap and convenient, two things that this generation desires. Why spend up to $20 on a movie when you can watch it at home? Or spend $6.50 on a bottle of beer when you could go out and buy a six pack for a little extra? You used to stay home if you had no plans and now staying home is your plan.

Takeout and Delivery: Nothing quite ruins the mood of chilling like having to get up to make food or go out and get it, but delivery has your back. Now, you don't even have to make a phone call to get delivery with ordering online through apps and Twitter. These apps have completely integrated delivery into the mobile era. Not only does delivery help you chill, but it is cheaper and more convenient than sit-down restaurants. Sure, your significant other will still want the occasional casual or upscale dining, but more often than not they will be more than happy to lie on a couch and binge watch TV with some delivery pizza. Delivery has grown along with the chill factor, as more and more people join in on chilling out. Delivery will only continue to increase its slice of the pie with the rise of the chill factor.

Growth Driver: The only real measure of this chill factor is Netflix subscriber growth over time. Netflix subscribers can be used as a proxy for the people staying home. This growth is representative of the past growth of the chill factor. This chill factor is not just a passing trend or fad. It is here to stay and continue to grow. The future expected growth of Netflix subscribers is based on both historical data and expectations. This is the primary growth driver of the chill factor, and represents how the chill index has and will grow. The rise of the chill factor leads into what I like to call the circle of chill night. This is illustrated in the table below, but it is the idea of the different products and pastimes that people like while staying home. The circle of chill night is more than just products and companies, it is the idea that these products fit in perfectly with the idea of chill.

Industry Leader: Netflix is the industry leader and they have used their position to solidify their prominence through their increase in services. Netflix not only pioneered online movie and TV show streaming, they were also the first ones to produce an original show only offered through their streaming service. Netflix has

93.8 million subscribers worldwide, over Amazon's 66 million prime members, but below HBO's 134 million subscribers. However, Netflix has been growing their subscriber base much faster than both Amazon and HBO, especially with 47 percent of Netflix subscribers outside the U.S..

Valuation: For Craft Brew Alliance, I used the residual income model and the intrinsic P/E model. For the residual income model, I got a fair value of $18.50, an undervaluation by 36.54%. For the intrinsic P/E model, I found the fair value to be $17.52, an undervaluation of 29.30 percent. The average fair value for Craft Brew Alliance is $18.01, an undervaluation by 32.92 percent.

For Netflix, I used both the residual income model and the free cash flow model. For Netflix I also assumed a 12.5 percent required rate of return and a 12.7 percent Bp growth rate, resulting in a fair value of $158.55, an undervaluation by 12.37 percent. For the free cash flow model, I assumed a free cash flow growth rate of 9.72 percent and got a fair value of $159.05, an undervaluation of 12.72 percent. The average fair value for Netflix is $158.80, making it undervalued by 12.55 percent.

For Domino's, I used the residual income model and the sales franchise value model. For the residual income model I found a fair value of $202.26, an undervaluation of 8.31 percent. For the sales franchise value mode, I found a fair value of $200.69, an undervaluation of 7.48 percent. The average fair value is $201.47, an undervaluation of 7.89 percent.

Market Profile (as of 3/11/2017)

52-Week Price Range	$116.91-$118.07
Average Daily Volume	658,104
Market Cap	8.98 B
Beta	0.14
Book Value Per Share	-40.27
Price/Earnings	46.43
Shares Outstanding	48 M
Return to Equity (TTM)	-11.59%
Dividend Yield	0.80%

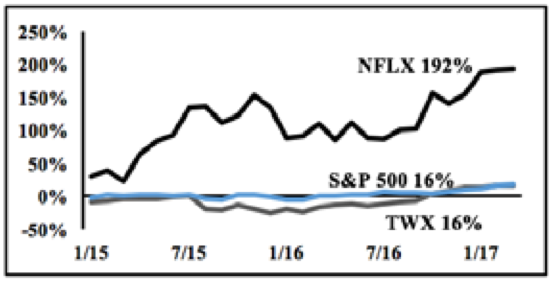
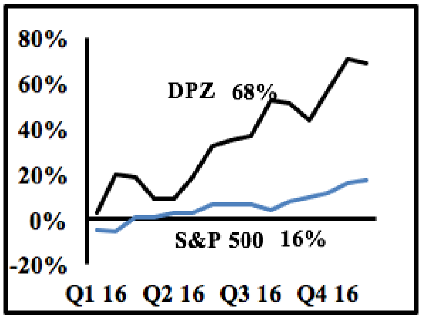
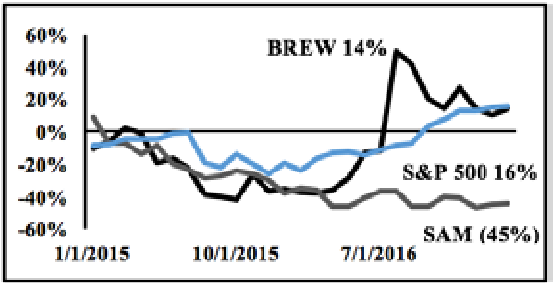


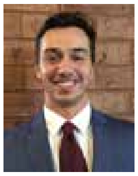
Exhibit 1: DPZ Return





STOCKS

What is the Cloud?



by: Salvatore Raitano

Exhibit 1: Cloud 4 Index

Company Name	Ticker	Last Price
Oracle Inc.	ORCL	39.35
Rackspace	RAX	32.00
Salesforce.com	CRM	71.50
Zendesk Inc.	ZEN	30.78

Source: Reuters

Cloud Computer: In layman's terms, Cloud Computer is simply computing performed over the internet. The cloud is an interconnected network of thousands of servers in many different places that can effectively function as one continuous source or as many individual servers at will. This allows for virtually unlimited scaling, for any situation, in any place.

Investment Rationale Ecosystem of Cloud Formations: The future of computing is contained within the ecosystem of the cloud. This network provides a means for businesses and consumers to combine their work desktop, personal desktop, emails and all other computing functions into one place, accessible from anywhere. Major companies such as Alibaba, Apple and Amazon make all of their applications and services available through their cloud, cultivating a consumer dependence on their ecosystem. Cloud is the "warehouse" for this ecosystem. Cloud computing already makes up 5 percent of total computing with an expected increase of 300 percent over the next three years. The age of PC computing is coming to a close, permanently washing away the need for physical terminals.

First Index of Its Kind: Cloud 4 sets itself apart by being the first index to rely almost entirely on exposure to the cloud. All other supposed cloud indexes contain large companies with only a small fraction of their revenue generated by cloud services. Amazon, Microsoft and IBM own 50 percent of the revenue generated by the cloud, but this accounts for less than a quarter of their total revenue. To create Cloud 4, I selected companies that generate the majority of their revenue strictly from the cloud. This has been done to benefit from the inevitable computing shift away from physically limited systems. The unlimited and unconstrained freedom that comes with being in the cloud is already becoming the norm. Cloud computing is the future which is why we are getting in now.

Acquisition Potential: Up to this point in time, the cloud computing industry has been filled with mergers and acquisitions of unique cloud services and peripherals by the major cloud players (Amazon, Microsoft and IBM). Zendesk and Rackspace fit this criterion and thus are major acquisition targets. Since the creation of this Index, Rackspace has already been acquired by a private equity firm, Apollo Global Holdings. RAX was acquired at a 38 percent premium, $32 per share, and was acquired in an effort to consolidate a group of managed cloud services. Since the announcement RAX price has stayed at almost exactly $32, the acquisition will be finalized by the end of the fourth quarter 2016.

Oracle Corp. (NYSE:ORCL) Business Description: Oracle (ORCL) utilizes its proprietary software and applications to give companies a platform to manage its entire business in the cloud. Its main service utilizes consumer data to price products and services for businesses. Oracle was the first to develop the Hybrid Cloud which mimics current operating systems and allows for seamless transitions between any OS. This allows for increased flexibility and accessibility for all cloud products and services from any device. Oracle is the world's second largest software company with $37 billion in FY16 revenue.

Revenue Breakdown: Oracle mainly generates revenues through its Business Development Software and their Hardware Business Development. Oracle's Business Development Software accounts for 87.9 percent ($9.311 million) of its total quarterly revenue. The majority of Oracle's Business Development Software consists of its E-Business Suite. The E-Business Suite is built on a unified information architecture allowing unlimited control and scalability. Applications within this suite include financials, projects, marketing, sales, order management, supply chain, manufacturing, service and human resource management. 20 percent of this business is directly from cloud purchases and this cloud percentage is growing by 25 percent annually, as a portion of total software business. Oracle's Hardware Business has become only 12.1 percent ($1.283 million) of their total revenue. Oracle has been phasing out their hardware business to focus more resources on its cloud and software sectors.

Revenue Growth: Oracle's revenue has grown at a 15-year historic rate of 7.4 percent. I estimated revenue growth by averaging historical growth rates for software revenue starting at the time that Oracle first started distributing its software through the cloud, this gave me a growth rate of 8.7 percent. Then I used their SaaS and PaaS revenue growth rate of 48 percent and used that to grow out their cloud revenue as a percentage of total.

Software Revenues: Software as a percentage of total revenue has been marginally increasing each quarter since the first quarter of 2014. It started at 82 percent in Q1 2014 and has since increased to 88.3 percent, I used this growth average of 0.38% to grow out software revenues as a maximum percentage of total revenue of 90 percent.

Earnings per Share: With the projected boost in net income as a result of the increasing revenue from cloud-based software, which has a gross margin averaging 62 percent, EPS is projected to grow dramatically. Oracle has boosted its strategic share buyback by $10 billion. It has been decreasing outstanding shares by 150 million shares annually since 2013 and I continued this rate of share decrease through the end of 2017.

Valuations: To find the fair value for Oracle Corp. I used two valuation models, Constant Dividend Growth Model and Total Cash Flow Model.

Constant Divident Growth Model: Oracle started paying a dividend in 2009 and management has expressed intent to continue to grow this payment. Oracle has grown its dividend at a historical rate of 22 percent but has begun to slow down. I used the past five years and got a growth rate of 14 percent. This resulted in a fair value of $45.40 and, compared to the last close price of $38.01, Oracle is currently 16 percent undervalued.

Total Cash Flow Model: Oracle's free cash flow has also been growing at a steady rate with a historical average of 21 percent, and in the past five years they have grown FCF by an average of 10 percent. Using this growth rate and a 15 percent WACC I calculated a fair value of $60.27, an undervaluation of $36.

Business Description: Salesforce (CRM) was the first to deliver a cloud computing sales platform that can be scaled and fit to virtually any business. Salesforce was developed early in the formation of the cloud and as such holds a large percentage of cloud market share. CRM's newest software, Salesforce Einstein, is an AI that learns from all of a business's cloud data. It delivers predictions and recommendations based on a company's objectives and strategies, and automates communication across all devices.

Salesforce Inc. (NYSE:CRM) Revenue Breakdown: Salesforce (CRM) is the founder of the SaaS industry and is the absolute leader in Customer Relationship Management sector, hence the ticker CRM. The average industry growth of the sector is 23 percent year-over-year with Salesforce's CRM annual growth rate slightly higher than the average at 24 percent. Salesforce's revenue is broken up into four sections based on its cloud services: Sales Cloud, Service Cloud, App Cloud and Marketing Cloud. The revenue breakdown for Q2 of Salesforce's fiscal year 2017 is as follows:

- **Sales Cloud:** accounts for 40 percent of Salesforce's total revenue with $755 million.
- **Service Cloud:** accounts for 30 percent of Salesforce's total revenue with $575 million.
- **Application Cloud:** accounts for 19 percent of Salesforce's total revenue with $353 million.
- **Marketing Cloud:** accounts for 11 percent of Salesforce's total revenue with $202 million.

Revenue: Salesforce's two main revenue categories - Subscription and Support, and Professional Services - grow at different rates. To calculate the growth rate for Professional Services, I took the average rate over the past six years which gave a growth rate of 24 percent. Subscription and Support revenue was more difficult to calculate due to CRM's large number of acquisitions that skew growth rates. By taking Salesforce's growth rate over the past five years and subtracting the revenue addition from the 23 companies they acquired, I was able to isolate their portion of organic revenue, which gave a growth rate of 22 percent. With the acquisition revenue, its historic growth rate was 38 percent, giving an inorganic growth rate of 16 percent. Since Salesforce generates revenue solely based on cloud products and services, I did not have to isolate strictly cloud growth. To estimate revenue growth, I took the average change of the revenues from quarter to same prior quarter (Q1 16 to Q1 15), and then I took the change between the growth rates and applied them to the four most recent quarters. I got growth rates for Q1, Q2, Q3 and Q4 as follows: 26.8 percent, 24.6 percent, 25.6 percent and 25.3 percent, respectively.

Earnings per Share: To calculate the average number of shares outstanding I assumed that Salesforce would continue selling shares at a constant quarterly rate of 1.2 percent. This gave an average shares outstanding of 700 million. This resulted in a growing earnings per share. Basic EPS in the second quarter of 2016 was higher than average as a result of abnormally large tax deductions that added to net income. Normalized EPS grew at a rate of 23.3 percent quarterly.

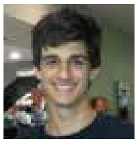
Zendesk Inc. (NYSE:ZEN) Business Description: Zendesk (ZEN) charges businesses to use its cloud to direct calls, emails, and other tech support inquiries without physical customer service equipment. Its Cloud Voice service immediately connects customer representatives with customers, foregoing the need for physical call centers. Zendesk uses analytics tools on customer's cloud data to identify opportunities for customer service improvement.

Revenue Breakdown: 85 percent of Zendesk's revenue is generated by SaaS in the form of Human Capital Management and Customer Relationship Management. Revenue from HCM and CRM are subscription based mostly which results in a consistent revenue stream. The other 15 percent of revenue comes from cloud support services offered to clients based on cloud application developing platforms for client use (PaaS).

Acquisition Target: Zendesk is the smallest company, by revenue and market cap, within the index and sets itself apart by being the first solely cloud company that offers a cloud-based artificial intelligence (AI) customer service software. Zendesk has successfully been growing its revenues at an average annual rate of 74 percent. This is by far the highest compound annual growth rate of any customer relationship management company and makes it an acquisition target for larger companies to boost inorganic growth. Consistently beating expectations for every quarter since its IPO, Zendesk has proven that it is able to sustainably and explosively grow and compete.

Valuations: To calculate fair value for Zendesk Inc., I used a price-to-sales model because of its rapidly growing revenue. Using weighted analyst estimates as well as my own, I estimated future sales to be $414 million in the coming year, which gave me a price-to-sales multiple of 6.18. By comparing this multiple to competitors I found a mean price-to-sales per share of 10.2, which returned a fair value of $45.01, an undervaluation of 39 percent.

Match Group Inc.



by Bernardo Carabelli

Recommendation: Buy

Company Business Description

Dallas-based Match Group Inc. is the world's leading provider of dating products and operates a portfolio of over 45 brands, including Match.com, OkCupid, PlentyOfFish, Tinder, and Meetic. The company currently offers their dating products in 42 different languages across more than 190 countries. Match Group Inc. currently boasts a total of 5.5 million paying subscribers through its various dating websites. Since 2009, Match Group Inc. has invested over $1.2 billion to acquire 25 new brands to their dating portfolio. Match Group Inc. (NASDAQ:MTCH) had its IPO on November 18, 2015, at $12 per-share and has IAC as their parent company with ownership of 82.8 percent of MTCH shares and 98% of MTCH voting interest. Additionally, the company used to operate in a non-dating segment which consists of the Princeton Review. However, in March 31, 2017, Match Group Inc. announced the completion of its previously announced sale of its entire non-dating business to ST Unitas.

Dating Portfolio

Dating is a highly personal endeavor and consumers have a wide variety of preferences that determine what type of dating product they are going to choose. Therefore, Match Group Inc. has a wide portfolio of brands that allows them to reach a broad range of different users. Below is a description of their key brands:

- **Match.com:** Founded in 1995, Match.com was one of the pioneers of the online dating category. Its distinguishing feature allows users to both search profiles, receive algorithmic matches and the ability to attend live events promoted by the company. Match.com has a high percentage of paying users, at 59M monthly users, and has a relatively balanced age distribution across this single population.
- **Tinder:** Launched in 2012, Tinder has risen to popularity faster than any other product in the online dating industry. Tinder's mobile-only offering and distinctive right swipe feature have led to significant adoption among the Millennial generation.
- **PlentyOfFish (POF):** POF was launched in 2013 and acquired in 2015 by Match Group Inc.. The product has similar features to Match.com and has been growing in popularity over the years with very limited marketing spending. PlentyOfFish has a broad appeal in the central United States, Canada, and the United Kingdom as well as other international markets.
- **Meetic:** Meetic is a leading European online dating company based in France. Meetic is a similar product to Match.com and provides Match Group Inc. the opportunity to grow in European territory.

Sources of Revenue Dating

The Match Group Inc. dating revenue is generated in three different ways. First, a significant portion of dating revenue is from recurring fee-paying subscriptions, which provide unlimited access to a bundle of features for a limited time period. Second, Match Group also makes money from its à la carte features, where users pay a fee for a specific action or event. Lastly, Match generates revenue via online advertising, which is referred as indirect revenue. Dating revenue currently represents approximately 90% of Match Group Inc.'s total revenue.

Non-Dating

Match Group Inc.'s non-dating segment is generated by The Princeton Review. Revenue is primarily earned from fees received directly from students for in-person and online testing preparation classes, access to online test preparation materials and individual tutoring services. Non-dating segment represents 10 percent of Match Group Inc. total revenue. However, it recently announced the signing of a definitive agreement to sell The Princeton Review to ST Unitas, a global education technology company. The transaction was recently completed by both parties on March 31, 2017.

Growth Drivers

Tinder's strong growth: The most downloaded dating app in the world is considered the biggest growth driver within the Match Group Inc. portfolio. Tinder has grown its subscriber base from zero two years ago to over 1.7 million paying subscribers as of the end of 4Q16. In fact, Tinder's 244k new subscribers in 4Q16 and revenue of approx. $175M surpassed JP Morgan's analyst estimation of 234K and $156M respectively, finishing the year with more than double the number of paid members compared to 2015. Furthermore, Tinder is looking to continue its momentum in 2017 as 2016 data showed U.S. unique visitors at 10M, a 51 percent year-over-year growth. Tinder now has over three times the number of unique visitors as Bumble (2.5M), Hinge (63k), and Happn (522k) combined. Additionally, new product features look to increase paid sub penetration of its currently 1.7M paying members of its approx. 30M monthly average users. These include: 1) Impact from recent product additions such as the new Spotify partnership (allow users to post their music preference to their account and increase personalization of the app), and Tinder Boost (which allows users to pay to have their profiles displayed first to users in their geography for 30 minutes) should increase Tinder's value; 2) New technology investments such as artificial intelligence, augmented reality and virtual reality should continue to attract new users to the platform; 3) Alternative Login/ Web app will allow Tinder to expand its access to new geographies, new use cases, and new demographics; 4) Investments in advertising and product features such as Boost and Tinder Social should also boost Tinder's total revenue. In short, all of these new and upcoming features should continue to drive Tinder's subscriber conversion and revenue as they continue to position themselves to attract the Millennial generation with their product.

Analyst Updates: Match Group Inc. currently has a mean recommendation of 2.13 out of 5. According to Thomson Reuters, there are currently 17 analysts covering the stock, 4 recommend a strong buy, 8 recommend a buy, and 4 recommend to hold. There is only one sell recommendation and the mean target price is at $19.67. This represents an undervaluation of 17.6 percent.

Competitive Positioning

Leading provider of dating products: Match Group Inc. operates 4 of the 5 top grossing dating apps in North America, and 3 out of the top 5 worldwide, including Tinder, the most downloaded mobile dating app in North America. Additionally, according to Research Now, 89 percent of singles in North America recognize at least one of the Match Group Inc. brands when shown a list of online dating services. With that said, I believe MTCH's scale of approximately 60M monthly average users, 5.5M paid members, and operating experience of over 15+ years will drive gains in customer acquisition efficiency, yield optimization on premium brands, product enhancements, and cross selling. Also, 5 out of the 10 traffic leading U.S. dating websites, in 2016, were part of Match Group Inc.'s brand portfolio. Match.com and POF lead the ranking with 35 million and 25 million unique monthly visit, respectively, for 2016.

Valuation: Sales Franchise Value Model: The Sales Franchise valuation is often used when dealing with companies that are able to repeat its business model at a higher profit margin. This model distinguishes between a company's current profit margin and the margin that can be derived from future opportunities. The underlying assumption for Match Group Inc. is that it will be able to improve its profit margin by lowering its operating costs while increasing its total revenue via Tinder's explosive growth. Using its current profit margin of 14.02 percent and our expected future profit margin of 15.02 percent, we determined the median fair value for MTCH to be $19.53, undervalued by 18.72 percent.

Implied P/E Model: The Implied P/E Model can be used to identify mispricing of stocks based on the difference between the return on equity and the required rate of return. If the return on equity exceeds the rate of return that investors require, given the investment's risk characteristics, the company's growth potential might be mispriced. With a current ROE of 43.70 percent, a required rate of return of 13.95 percent, and a sustainable growth rate of 11.28 percent, I estimated MTCH's fair value to be $18.89, an undervaluation of 14.86 percent.

Average Fair Value: After averaging both valuations, Match Group Inc.'s fair value was found to be $19.21. This reflects an undervaluation of 16.78 percent.

Market Profile (as of 4/05/2017)

52-Week Price Range	$10.06-$19.74
Average Daily Volume	1,161,904
Shares Outstanding	46 M
Market Capitalization	4.23 B
Book Value Per Share (MRQ)	$1.94
Price/Earnings (TTM)	25.82
Revenue	$1.22 B
YTD Return	-3.8%
Return to Equity (TTM)	43.7%
Return to Assets (TTM)	9.46%

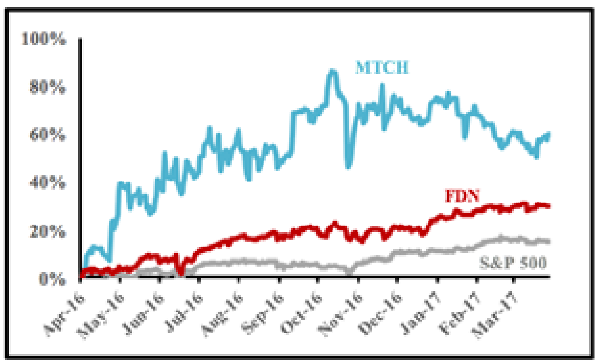
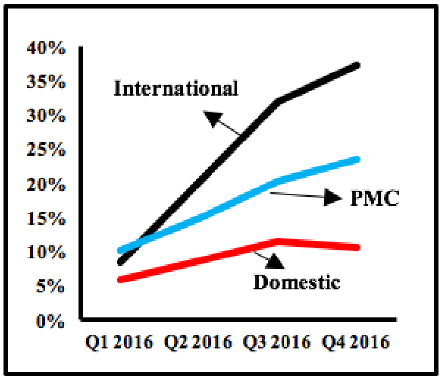
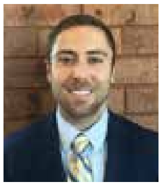


Exhibit 5: Revenue Growth by Segment



STOCKS

VR Index (VR4)



by: Chris Landers

Introduction

The idea of virtual reality (VR) dates back to the early 1800's. Artists would attempt to paint 360-degree murals to give the viewer the feeling of actually being present in the event or scene depicted. In 1838, English physicist Charles Wheatstone invented the stereoscope, which created three-dimensional images by placing two slightly different two-dimensional photographs in front of each eye. The modern idea of VR was created by science fiction writer Stanley G. Weinbaum in the 1930's. Weinbaum came up with the idea of "Pygmalion's Spectacles," a pair of goggles that would immerse the wearer in a fictional world and would replicate sights, smells, feelings, and tastes. In 1961, Philco Corporation introduced the "Headsight," the first version of a head-mounted display (HMD). The Headsight contained two independent screens in front of each eye and incorporated motion tracking. Major advancements in the virtual reality industry came in the 21st century with rise in popularity of smartphones, high-powered gaming platforms, and more advanced display technology.

STOCKS

Industry

VR has started to penetrate a wide variety of industries. As a result, several industry, research and consulting firms have started tracking the economic impact of this technology. Some are less conservative than others, but the general consensus is that the VR industry will have its first $1 billion year in 2017. The majority of sales this year will be from hardware. This is a promising sign as more hardware sales will result in a larger market exposure of VR content. By 2020, the industry will generate over $100 billion. By 2025, it will be a $150 billion industry. The gaming industry was the first to aggressively embrace the arrival of VR. Aerospace and defense quickly followed suit as a means to train pilots and service members. More recently, media and entertainment outlets have begun trying to produce VR content.

Investment Rationale

Disruptive Industry: Starting by simulating sight and sound, VR is moving towards replicating taste, touch and smell. One sense at a time, VR technology revolutionizes human perception of a real environment without physically being there. Now, thousands of years of human sensory evolution is set to be forged through computers anytime, anywhere. There is no part of peoples' lives that VR cannot and will not infiltrate. Virtual reality is a virtual reality.

Early Entry: As revolutionary as this may sound, VR is still in its infant stage. However, the sky is the limit for the industry which will generate over $100 billion by 2025. In the first two months of 2016 alone, the VR industry raked in over $1 billion in private equity. Though this is more than the tech industry has ever secured in an entire year, they haven't even scratched the surface. There are 10 major public companies trying to get into the VR space, investing $3.5 billion so far. We want to be part of that $3.5 billion out of the $100 billion market potential right now.

Proprietary VR Index: Of the combined $2.5 trillion market cap of the public companies looking into this technology, less than one-quarter of 1 percent is directly exposed to VR. That being said, there are no public companies completely devoted to producing VR products. The big-name companies outsource production of software and hardware. This is precisely why we are here. We seek to surgically extract the companies who stand to benefit the most from the coming VR revolution. These companies will form the first-ever index that is solely dedicated to VR that will, in turn, profit the most.

Market Impact

VR hardware sales are of particularly important focus as they enable the viewing of VR content and use of VR applications. Hardware represents approximately 30 percent of the potential $100 billion revenue to be generated by 2025. As of now, these products are mainly tailored toward enterprise solutions and gaming. The consumer-level products are compatible with mobile devices and PCs, which number over 4 billion worldwide. I estimate a CAGR of 250 percent of VR hardware through 2020.

VR hardware brought in $90 million in revenue in 2014. It jumped to $760 million in 2015. This was mainly due to increased shipments of higher-priced, enterprise hardware that had been delayed from the previous year. 34 million VR-capable graphics processing units (GPUs) were sold last year with an average selling price of $300. However, most dedicated gamers prefer high-end GPUs that can sell for up to $3,000. This gives GPU producers immense pricing power and room to grow.

Display technology is another integral part of VR adoption. Because VR headsets place screens less than an inch from the user's eyes, crisp and powerful displays are necessary for viewing VR content. This means that the newly introduced OLED technology will gradually phase out the traditional LCD.

The limitations of LCD technology in VR application is that each pixel is illuminated by a single light source, usually placed on the side of the device. This gives you limited control over brightness settings across the screen and makes producing certain colors, like true black, impossible. OLED pixels each emit their own light, letting you control each individual pixel. The result is a much clearer picture that lasts longer and can support viewing in 4K and Ultra HD.

OLED displays are already starting to flood the market. The issue right now is pricing. This newer technology is not as refined as LCD technology, making production costs and, therefore, selling price expensive. Within the next two years, pricing will fall as OLED becomes the standard for not just VR, but all display devices.

Commercial HMDs (head-mounted displays) got off to a slower start than most manufacturers would have hoped for. HTC has sold 100,000 of their Vive models this year so far. Steam, one of the largest gaming networks in the world, reports that over 95,000 users are playing games that require VR HMDs. This is 10-fold compared to last year. The International Data Corporation, a global market intelligence firm, estimates 10 million HMD units will be shipped this year. This will grow to over 110 million by 2020, a CAGR of nearly 200 percent.

Though consumers will likely use existing platforms for multiple VR uses (smartphones, tablets, PCs), software will have to be diversified. Thus far, manufacturers like Google, Oculus and Unity have been rolling out software development kits (SDKs) like hotcakes. This will lead to the development of VR-specific applications and APIs.

With all of this in mind, I identified the most likely markets VR technology would disrupt and looked at their respective current market sizes to estimate the value of the VR software market.

Adoption Rate

VR is what we call a disruptive technology. It will change the way people operate in certain facets of life. To predict the adoption rate of VR technology, I looked at the adoption rates of other disruptive technologies, specifically PCs and smartphones.

PCs changed the way people worked, making the workforce more efficient. So, not surprisingly, enterprise level application was the main driver for adoption of personal computing technology. Exhibit 1 (pictured right) shows the total number of shipments to enterprises vs. consumers.

The introduction of smartphones changed society completely. Mobile phones freed people from the clutches of wires. Smartphones gave people that power of the computer with the added feature of mobility. Unlike PCs, consumers drove the mass adoption of smartphones. I graphed the adoption purchases of smartphones compared to general mobile phones (Exhibit 1).

PCs took longer to fully penetrate the consumer market because no technology had existed like it before. Many people had to be trained to use them. Smartphones came onto the market 10 years after the initial introduction of PCs so much of the population was familiar with their operations. As the population gets more tech-savvy, adoption of new technology happens more quickly.

VR is an interesting case because it uses existing technology, such as mobile devices, but has vastly different applications on a very broad user base. Entertainment applications will drive adoption at the consumer level. The problem is that consumers won't purchase VR hardware until there is ample content available. Unfortunately, content makers are hesitant to ramp up production until an ample hardware base exists in the market. What we have is the classic chicken and egg fiasco.

Exhibit 1: Index Overview

Company Name	Ticker	Last Price
NXP Semiconductors	NXPI	$83.90
Photronics, Inc.	PLAB	$10.58
Technicolor SA	TCLRY	$6.88
Vuzix Corp.	VUZI	$9.16

Exhibit 3: VR 4.0 vs. S&P 500 and Industry

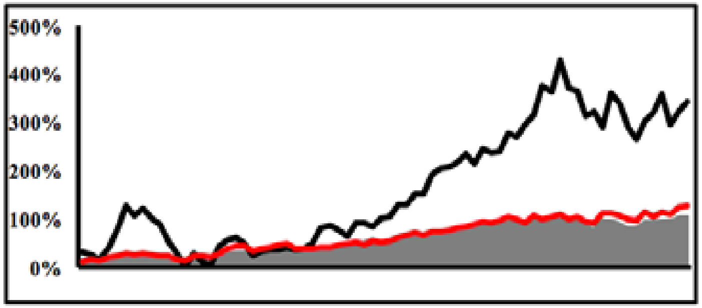


Exhibit 7: Enterprise vs. Consumer PC Shipments

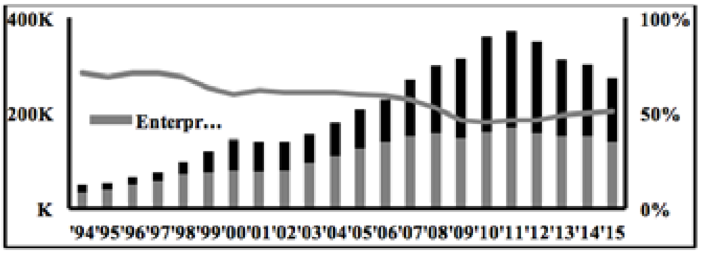
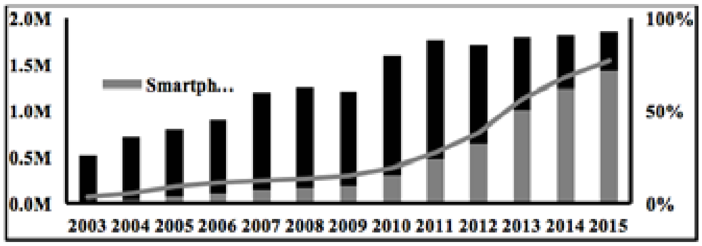


Exhibit 8: Smartphone vs. Mobile Phone Shipments



STOCKS

Zoetis

zoetis

by: Po-Hsun Ho

Clear Leader and the Only One in the Global Animal Health Industry

Zoetis is the clear leader in the global animal health industry. Its revenue was 44 percent more than next biggest player. Not only is it the biggest, it's the only pure player in the top seven biggest company. Others are just a small subdivision of pharmaceutical companies. If you want to invest purely in the animal health industry, Zoetis is your only choice and the best choice.

Trends Driving Pet Industry Growth: In recent years that has started to translate to actually treating pets more like people - a trend called "humanization." Pet owners are seeking out more expensive medical treatments. Animal medical spending appears to be increasing at a faster rate than the human equivalent. Between 1996 and 2012, our own health care spending surged by almost 50 percent while pet medical spending jumped by 60 percent. During the same period, the percentage of physicians increased by 40 percent while the supply of veterinarians all but doubled.

Trends Driving Livestock Industry Growth: Due to the rise of middle class globally, the demand to protect these animals will only increase. This industry also benefits from favorable growth tailwinds that should allow Zoetis to increase revenue at a mid-single digit, long-term growth rate. Rising standards of living in emerging markets should lead to wider adoption of meat-heavy diets, driving greater demand for livestock products. Per capita meat consumption has grown around 3 percent annually in developing and emerging economies (DEE) since the mid-1990s. Given that two-thirds of the world's population lives in the DEE, with its relatively faster population and income growth, potential opportunities are rising for the industry.

Industry Advantage over Human Pharma: The R&D cycle in animal health is much shorter and much cheaper than compared with the human pharmaceutical industry. As it takes about half as long as for human drugs (around five to six years) and typically costs less than $20 million (sometimes less than $10 million). This is a cash pay business whether to ranchers for animal health or for pet owners to vets. They also do not have to worry about third-party payers like traditional pharmaceutical companies must contend with. Government payers or large insurance organizations have the power to force generic utilization, squash price increases and, even in extreme cases, force price cuts onto drug manufacturers. However, animal health products are purchased by a fragmented group of meat producers, veterinarians and pet owners, allowing very little bargaining power over the highly concentrated animal health firms.

Business Description Company: Zoetis Inc. is a global leader in the discovery, development, manufacture and commercialization of animal health medicines and vaccines, with a focus on both livestock and companion animals. It has a diversified business, commercializing products across eight core species: cattle, swine, poultry, sheep and fish (collectively, livestock) and dogs, cats and horses (collectively, companion animals); and within five major product categories: anti-infective, vaccines, parasiticides, medicated feed additives and other pharmaceuticals.

Investment Rationale Zoetis Inc. is being recommended as a Buy for the following reasons:

Growth of pet ownership and concern of animal welfare: Many types of pets have long been considered part of the family, but in recent years that has started to translate to actually treating pets more like people – a trend called "humanization." Pet owners are seeking out higher quality foods, more high-end accessories and more expensive medical treatments. It is increasing their willingness to spend on pet healthcare. Pets (like people) are living longer, requiring more complex and extended medical care. Businesses that cater to these niche products and services are booming. Baby boomers are launching their real kids into the wild and replacing them with pets -- and they are pampering them. In almost all spending categories, spending declines once a person reaches 55 years of age, but pet spending is peaking between the ages of 55 and 64. At the other end of the age bracket, millennials – people born between 1985-2010 – are probably the first generation to grow up thinking of pets more like humans than animals. They are finding their independence and have disposable income – and they are buying pets and spoiling them. Great for the industry – these folks will be loyal customers for decades.

Growth of emerging market for meat consumption: 72 percent of Zoetis Inc.'s international revenue is come from livestock. There is a positive correlation between income level and meat consumption. Improving standards of living in the emerging markets should drive greater adoption of meat-heavy diets over the longer term. To meet the demand, the world's livestock sector is growing at an unprecedented rate. Demand for livestock products will nearly double in sub-Saharan Africa and South Asia, from 200 kilocalories per person per day in 2000 to some 400 kilocalories in 2050. People In the developing world eat 32 kilograms of meat a year on average, compared to 80 kilograms per person in the industrial world. Looking at the changes over time by country reveals that, in most countries, the per capita consumption of meat increases along with the rise in per capita real GDP. It seems likely that this relationship arises because meat is not an essential product like grains, which are used as a food staple, and its consumption is easily influenced by income level. Zoetis expects to benefit from growth in number of livestock in emerging markets globally.

Industry Analysis: Pet industry revenue has shown growth even during times of economic trouble, including the recent Great Recession, so it only makes sense that our current relative economic strength bodes well for continued industry strength. Zoetis will benefit from pet owners' increasingly viewing pets as members of the family, which drastically increases their willingness to pay for expensive treatments. Zoetis is likely to grow at a rate relatively close to the industry, but it should be able to maintain above-average margins due to its scale. Especially in emerging markets, Zoetis' scale allows it to use its own salesforce, while smaller competitors are often forced to rely on more expensive distributors. Spending on animal medical needs has soared over the past two decades. According to an annual survey by the American Pet Products Association, Americans spent $15.4 billion on veterinary care in 2015. Revenue in the whole pet industry is expected to be $62.75 billion in 2016, an increase of more than 4 percent over 2015. The average annual growth rate since 2002 is 5.4 percent, and revenue has been growing steadily for well over 20 years. According to the Bureau of Labor Statistics, above average job growth is expected for the industry – 11 percent growth between 2014 and 2024.

Valuation: Sales Franchise Value Model: This valuation determines whether a company can repeat its business model at a lower cost. Franchise value is created when the company uses its competitive advantage to reinvest its earnings at a rate higher than the required rate of return. Given that Zoetis is projected to continue its expansion efforts and growth opportunities in the foreseeable future, the franchise value model is appropriate for identifying the company's valuation. For calculation purposes, we used a required rate of return of 9 percent. The growth rate was estimated using the numbers derived in the Pro Forma Income Statement and projected shareholders' equity, resulting in a 7 percent growth rate and profit margin from 12.06 percent to 17.72 percent. We get fair value of $60, undervalued by 11 percent.

Implied P/E model: The Incremental P/E Model is trying to capture the company's ability to reinvest its earnings at the superior rate. The model assumes that the extra return that the company produces above the required rate of return will continue forever. Given that Zoetis has pretty robust business model and is riding a global trend. We can expect in foreseeable future, it can keep growing at a steady pace. With expected EPS $2.78, sustainable growth rate 5 percent, and required rate of return 9 percent, the fair value is $61, undervalued by 13 percent.

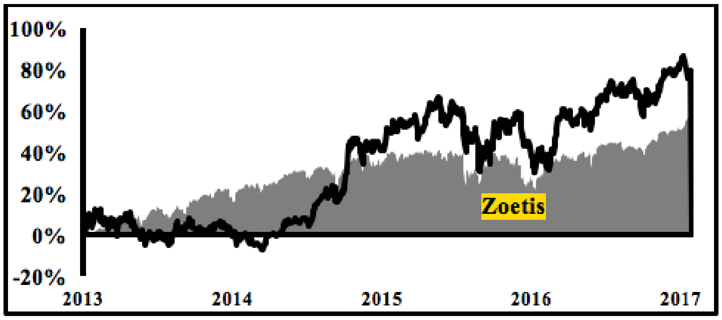
Ticker: ZTS

Recommendation: Buy
Price: $54 (as of 3/17/2017)
Price Target: $60.50

Earnings/Share	Mar.	Jun.	Sept.	Dec.	Year	P/E
2014	$0.38	$0.38	$0.41	$0.10	$1.57	28.49
2015	0.41	0.43	0.50	0.43	1.77	30.14
2016	0.48	0.49	0.52	0.47	1.96	29.09
2017E	***0.49***	***0.55***	***0.63***	***0.64***	***2.78***	***23.29***

Market Profile (as of 3/13/2017)

52-Week Price Range	$39.52-$56.50
Average Daily Volume	3,352,938
Beta	1.22
Shares Outstanding	491.93 M
Market Capitalization	26.35 B
Institutional Holdings	93.5%
Insider Holdings	0.01%
Total Debt/Equity	298.07
Return to Equity	63.24%



S&P 500

STOCKS

Roland George Investments Program | Class of 2016-17

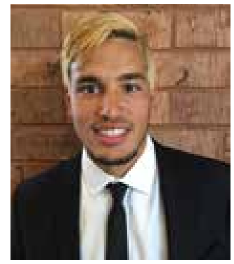

Evan Albert


Ally Ambrose


Harold Antor


Mac Buckle


Jared Carver

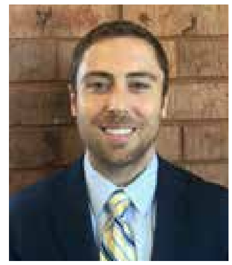

Sebastian Contreras


Abigail Fucciani


Marissa Hehli


Austin Higgins


Thomas Kaufmann


Chris Landers


Kenneth Matthews


Pat Nelson


Salvatore Raitano


Hallan Castro Yan


Alex Zhu


Anna Zhu

(Pictured Front Row - Left to Right): Dr. K.C. Ma, Chris Landers, Alex Zhu, Jared Carver, Abigail Fucciani, Hallan Castro Yan, Anna Zhu, Ally Ambrose, Mac Buckle, Marissa Hehli
(Pictured Back Row - Left to Right): Evan Albert, Salvatore Raitano, Austin Higgins, Sebastian Contreras, Thomas Kaufmann, Kenneth Matthews, Harold Antor, Pat Nelson

RGIP Awards

G.A.M.E. Competitions		
2011	**Champion**	Bond
2012	**Champion**	Core Stock
2013	**Champion**	Bond
2014	**Second Place**	Growth Stock
2014	**Champion**	Bond
2015	**Second Place**	Bond
2015	**Fourth Place**	Growth Stock
2016	**Second Place**	Bond

STETSON UNIVERSITY

SCHOOL OF BUSINESS ADMINISTRATION
Roland George Investments Program
421 N. Woodland BLVD., Unit 8398
DeLand, FL 32723