

Macroeconomic Overview

This past week, all major U.S. indices increased on a weekly basis with the largest gains accounted for by the NASDAQ Composite Index, reaching its 15-year high. The market responded positive to comments by Federal Reserve Chairwoman Janet Yellen, a weaker U.S. dollar and more favorable conditions in the energy sector after increases in the price of oil. Large cap benchmarks were able to reverse the three week negative trend and recorded gains throughout the week. In effect, the Dow Jones Industrial Average and the NASDAQ Composite increased on a weekly basis by 1.71% and 6.13% respectively, while the S&P 500 increased by 2.39% during the last week. Small cap stocks measured by the Russell 2000 index recorded positive returns of 5.12% throughout the week. The VIX week-to-date change of -18.63% indicates that volatility levels start to decrease again compared to last week, leading to a year-to-date change of -32.19%. The yield of the 10-year U.S. T-note decreased by 20 basis points to 1.9%. In addition, the price of oil

U.S. Stocks		
Index	% Change Week-to-Date	% Change Year-to-Date
DJIA	2.13%	1.71%
S&P 500	2.66%	2.39%
NASDAQ Composite	3.17%	6.13%
Russell 2000	2.78%	5.12%
VIX	-18.63%	-32.19%

increased throughout the week by 1.96% to a price of \$45.72/bbl.

This week's increase in stock prices was primarily driven by comments from the Federal Reserve that have been seen as favorable by investors. Chairwoman Janet Yellen mentioned the possibility of raising interest rates after the

Federal Open Market Committee's meeting in April. For this to happen, medium-term inflation will have to reach the Federal Reserve's target inflation rate of 2%, combined with an improvement in the labor market which has already shown a positive trend in the past months. If an increase in short-term interest rates will not be initiated in the FOMC meeting in April, a raise in interest rates is expected at any of the following meetings. The reason for the Federal Open Market Committee to change their forward guidance was the current situation of the economy that is still facing challenges. In addition, the Federal Reserve lowered their estimates of major economic indicators, such as GDP growth, inflation and long-term employment in the U.S.

Additionally, weak economic data raised sentiment of an increase in interest rates. Industrial production missed February expectations, recording only a 0.1% increase. Manufacturing decreased by 0.2% in February, the sectors third consecutive monthly decline. The largest decline in the industrial sector was recorded by the motor vehicle and parts manufacturer, with a decline in production of 3%. Production from mining activities decreased by 2.5% in February, primarily due to reduced oil drilling caused by a decrease in demand for oil and gas. In addition, the housing market proved to be negatively affected by the strong winter, causing a decline in housing starts in the Northeast region of 56.6%. Overall, construction of residential buildings decreased in February by 17% and did not reach the mark of 1 million housing starts that were expected by analysts. However, the outlook for the U.S. economy for the next six months remains positive. The Conference Board's Index of leading economic indicators rose in February by 0.2%.

The NASDAQ Composite Index outperformed all major indices in the past week to reach the index's 15 year high of 5026.42. Major driver of the index was the biotech sector whose stocks continue to perform very strong. Major biotech stocks recorded large gains throughout the week due to merger and acquisition activity in the biotech sector. In addition, positive drug testing results boosted many biotech stocks. The

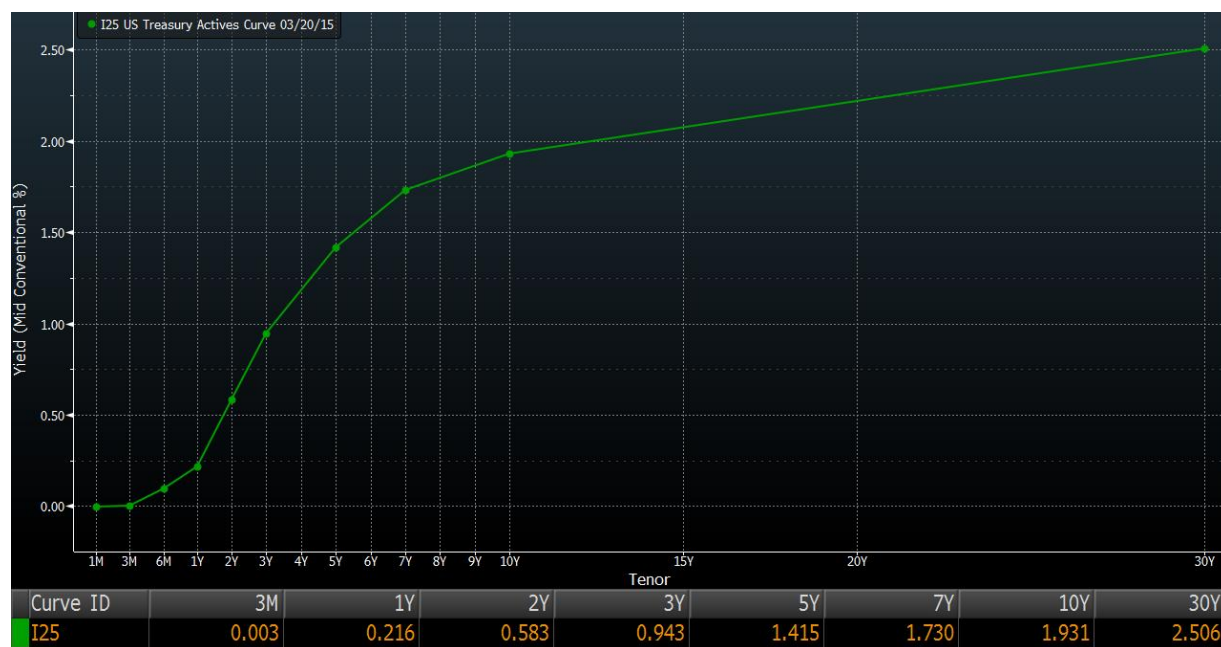
improvement of the oil price also helped energy stocks to rebound and record gains. However, many analysts pointed out that the increase in the price of crude oil won't lead to an upward trend of the oil price due to continuing increases in the global oil supply.

Next week, investors will be looking forward to see data from different economic reports that will have an impact on the global markets. On Monday 23rd, European Central Bank President Draghi will speak. The same day, China will report on performance of their economy's manufacturing sector, measured by the HSBC Manufacturing PMI. Performance in this sector indicates the overall performance of China's economy. On Tuesday 24th, Germany will release data about the performance of the German Manufacturing PMI. The same day, the United Kingdom will report on the economy's Consumer Price Index (CPI) YoY (Feb). On Thursday 26th, the United Kingdom will release retail sales (MoM) (Feb) data.

Bond Report

U.S. Government bonds rallied on Friday, causing the biggest weekly price gain in more than three months. This comes as a result of investors expecting the Federal Reserve to continue to take its time before they start to raise interest rates. The Fed conveyed meetings earlier this week, March 17th and 18th. During said meetings, FOMC members announced their plans to keep interest rates low for a longer period of time in order to give officials flexibility in tightening monetary policy when they feel needed. They also downgraded its outlook of the U.S. economy. Many investors feel this now means the Fed will wait until later in the year, no earlier than September, to raise interest rates. Expectations were that the Fed would raise rates as early as June. As a result of investor's new expectations, bond prices have shot up from the beginning of this week while U.S. treasury yields have decreased. The yield on the benchmark 10-year Treasury note opened at 2.10% on Monday, March 16th. Going in to the Fed's meetings, the 10-year yield was 2.06% and fell drastically to 1.93% on Wednesday. After a slight increase on Thursday, March 19th, to 1.98%, the yield held at 1.93% as the market closed this past Friday, March 20th. This has been the lowest reported yield since February 5th. Foreign Central Banks also continue to slash their holdings of U.S. Treasuries, marking the fifth straight week of foreign holding of U.S. Treasuries cuts. Foreign countries such as those in the Eurozone continue to draw down their reserves in an attempt to defend their currency pegs and force further depreciation against the dollar.





What's Next & Key Earnings

On Monday, March 23, the Existing Home Sales for February report will be released. Existing Home Sales measures the change in the annualized number of existing residential buildings that were sold during the previous month. This report helps to gauge the strength of the U.S. housing market and is a key indicator of overall economic strength. Both MoM and YoY will be released.











On Tuesday, March 24th, the U.S. Core Consumer Price Index will be released. The Core Consumer Price Index (CPI) measures the changes in the price of goods and services, excluding food and energy. The CPI measures price change from the perspective of the consumer. It is a key way to measure changes in purchasing trends and inflation.

On Tuesday, March 24th, the U.S. New Home Sales for February report will be released. New Home Sales measures the annualized number of new single-family homes that were sold during the previous month. This report tends to have more impact when it's released ahead of Existing Home Sales because the reports are tightly correlated. Both Mom and YoY will be released.

On Friday, March 27th, the Gross Domestic Product Price Index for Quarter 4 will be released. The GDP Price Index measures the annualized change in the price of all goods and services included in gross domestic product. It is the broadest inflationary indicator. Forecast is +2.4%, previous was 2.2%.

On Friday, March 27th, U.S. Fed Chair, Janet Yellen, will speak. As head of the Fed, which controls short term interest rates, she has more influence over the U.S. dollar's value than any other person.

Traders closely watch her speeches as they are often used to drop hints regarding future monetary policy.

Symbol	Company	EPS	Forecast	Prev.	Imp.	Period End
Monday, March 23, 2015						
 GGB	Gerda	0.23	0.09	0.05	▼▼▼	12/2014
Tuesday, March 24, 2015						
 MKC	McCormick&Co		0.64	1.16	▼▼▼	02/2015
Wednesday, March 25, 2015						
 GOL	Gol Linhas Aereas Inteligentes		-	-0.43	▼▼▼	12/2014
 PAYX	Paychex		0.46	0.47	▼▼▼	02/2015
 RHT	Red Hat		0.41	0.42	▼▼▼	02/2015
Thursday, March 26, 2015						
 ACN	Accenture		1.07	1.29	▼▼▼	02/2015
 CPL	CPFL Energia		0.15	-	▼▼▼	12/2014
 CAG	ConAgra Foods		0.52	0.61	▼▼▼	02/2015
 GME	GameStop Corp		2.16	-	▼▼▼	01/2015
Friday, March 27, 2015						
 BBRY	BlackBerry		-0.1	-	▼▼▼	02/2015

Actinium Pharmaceuticals, Inc.

AMEX:ATNM

Analyst: Etienne Lehideux

Sector: Healthcare

BUY

Target Price: \$12

Key Statistics as of 3/19/2015

Market Price:	\$2.79
Industry:	Biotechnology
Market Cap:	\$99.0 M
52-Week Range:	\$15.00 – 2.40
Beta:	(0.56)

Thesis Points:

- Actinium offers an effective alternative for treating AML and BMT
- Proprietary technology platform that can lead to licensing opportunities and application to many types of cancers
- Two potentially breakthrough products in the pipeline

Company Description:

Actinium Pharmaceuticals, Inc., a biotechnology company, develops drugs for the treatment of cancer. The company develops therapies for life threatening diseases using its alpha particle immunotherapy (APIT) platform. Its products include Bismab-A for acute myeloid leukemia; Actimab-A, an antibody-drug construct that is in Phase I/II clinical trial for the treatment of acute myeloid leukemia; and Iomab-B, an antibody-drug construct used in myeloconditioning for hematopoietic stem cells transplantation in various indications. The company was formerly known as Cactus Ventures, Inc. and changed its name to Actinium Pharmaceuticals, Inc. in April 2013. Actinium Pharmaceuticals, Inc. was founded in 2000 and is based in New York, New York.



Thesis

Actinium Pharmaceuticals, Inc. is an early stage biotech company that focuses on breakthrough cancer therapy, targeting Bone Marrow Transplant (BMT) and Acute Myeloid Leukemia (AML). Current treatments for both diseases are not effective, especially with patients older than 55. The company developed a proprietary platform in partnership with Memorial Sloan Kettering Cancer Center, which allows a precise targeting of cancer cells without killing other cells and that can be licensed for many other types of cancer. The company also has two products that are respectively in phase I/II and about to enter Phase III of clinical tests. Finally, the company is led by experienced healthcare executives and advised by reputed doctors. The company does not have direct competition, benefits from high barriers to entry, and its current valuation is cheap compared to Bayer's acquisition of similar company Algeta in 2014 for \$2.9 billion.

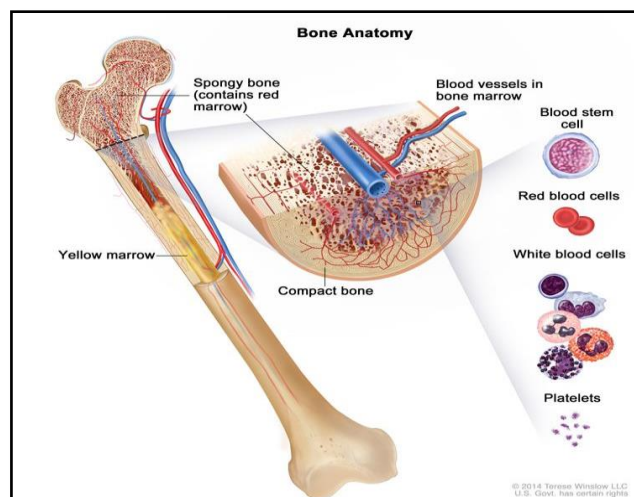
Oncology and Acute Myeloid Leukemia

Actinium Pharmaceuticals, Inc. strives to research and develop breakthrough therapies against cancer. The two main products in the company's pipeline, Iomab-B and Actimab-A, respectively target Bone Marrow Transplant (BMT) and Acute Myeloid Leukemia (AML).

Bone Marrow Transplant represents a \$1.3 billion market in the U.S. and is unaddressed by branded pharmaceutical companies. BMT is also a fast growing hospital procedure in the U.S., especially amongst patients over 50 years old (more than a third versus less than 10% in 2000). The issue that Actinium tries to solve with Iomab-B is the correct preparation of patients before the transplants. Indeed, certain blood cells have to be destroyed completely to avoid graft-versus-host disease after allogeneic transplants.

Acute Myeloid Leukemia, or AML, is a cancer of the blood and bone marrow. Referred to as the most common type of leukemia amongst adults, this cancer alters the normal development of blood stem cells generated by the bone marrow. Instead of maturing to become red blood cells, platelets, or white blood cells, the myeloid stem cells evolve into abnormal, unhealthy cells (also called leukemia cells, or blasts). The accumulation of these cells in the bone marrow avoids

normal cell generation and causes infection or anemia.



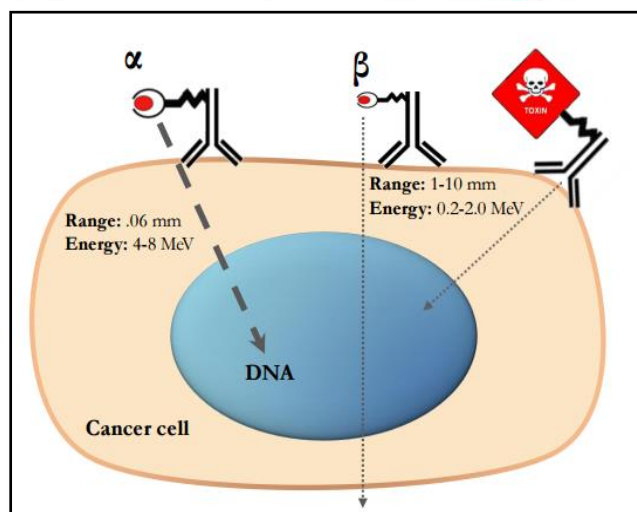
Source: Cancer.gov

There are two main types of treatment used against AML.

First, chemotherapy consists of drugs, ingested or injected, designed to kill cancer cells by targeting the cells that are dividing rapidly. These drugs also kill non-cancerous cells, which results in side effects such as hair loss.

Next, radiation therapy is an alternative [used by approximately 50% of cancer patients](http://Cancer.gov). It consists of using "high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing" (Cancer.gov). The radiation can be either external, using a machine outside the body, or internal, where radioactive substances are injected into or near the cancer. The side effects associated with radiotherapy are often limited to the areas of the body around the tumors that receive the treatment, and other common side effects include fatigue and skin irritation. The most commonly used radiotherapy is Beta radiation, which has two major shortfalls. The treatment kills all the cells that they interact with, which can include cells that are not affected by the cancer. Also, certain cancer cells can resist radiation and grow back after remission.

Another type of radiation therapy uses alpha emitting radioisotopes, which generate more energy than Beta emitting radioisotopes but have a shorter range. It should be noted that the killing power of radioactive particles is proportional to its energy and inversely proportional to its range. Alpha particle carries the most energy but travels the shortest path, while beta particle has less energy but goes farther in the body.



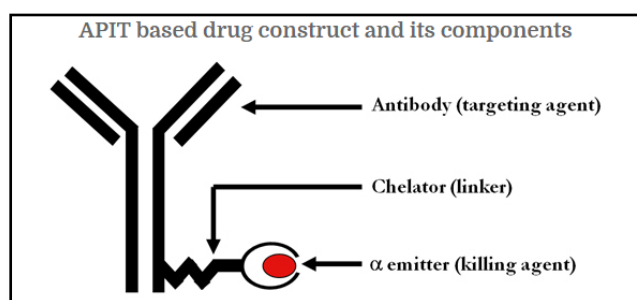
Source: [Actinium's Investor Presentation](#)

Acute Myeloid Leukemia is the deadliest form of leukemia and 55% of AML patients are over 65 years old. Insufficient treatment options are available in the marketplace, and the current treatments kill as many patients as it helps due to toxicity, offering no significant survival benefits.

Competitive Advantage and Industry

APIT Platform

ANTM's main competitive advantage is their proprietary "Alpha Particle Immunotherapy (APIT) platform". It is a highly potent and selective form of targeted radiotherapy, based on attaching alpha emitting radioisotopes (Actinium 225 or Bismuth 213) to monoclonal antibodies (mAbs), which are large molecules capable of binding specifically to cancer cells. By virtue of carrying alpha emitters, mAbs bring them directly to cancer cells where alpha emitters can selectively kill the targeted cell. As the below figure shows, the proprietary platform allows ATNM to "lead" alpha particles directly to cancerous cells, hence avoiding the destruction of unaffected cells.



Source: [Actinium's website](#)

Currently, ANTM's focus is on the clinical testing of their two main products, which are described in the "Pipeline" part later in this report. Although, the company believes that its biggest market opportunity lies in the applicability of the APIT platform technology to a wide variety of cancers.

Their first strategy with this platform is to create other monoclonal antibodies (mAbs) "combos" with proven safety and cancer binding capabilities. The company focuses on unmet needs in the market, where no other treatments are available. Currently, three mAbs are under consideration (Antiangiogenesis, Prostate Cancer, Colorectal Cancer).

The second potential use of their proprietary platform is the development of "Biobetters". It consists of improving the already existing biotech drugs with proven safety and efficacy by applying the APIT technology and creating more efficient "combos".

Intellectual Property

ATNM also have an important intellectual property portfolio that should certainly help the company's success. ATNM's IP estate includes 17 U.S. and 51 international both issued and pending patents. Internally generated patents and in-licensed patents include protection for their Platform Technology, their drug preparation methods, their Isotope production methods, and mAb composition and production, as shown in the table below.

Area	Claim
Methods of treatment (multiple patents)	Protection from toxicity
Platform Technology	Medical Treatment w/α emitters Ac-225 and Bi-213, Treatment of cancer metastases larger than 1mm, DOTA based Ac-225 constructs
Drug Preparation Methods	Ac-225 labeling, Bi-213 labeling
Isotope production methods (multiple patents)	Ac-225 cyclotron production
mAb composition and production (multiple patents)	Production of an tleukemia antibody

Radioisotopes

The radioisotopes that ATNM uses are the alpha emitter Ac-225 and the beta emitter I-131. I-131 is among the best known and well characterized radioisotopes, and is used very successfully in treatment of papillary and follicular thyroid cancer as well as other thyroid conditions. Ac-225 has many unique properties and

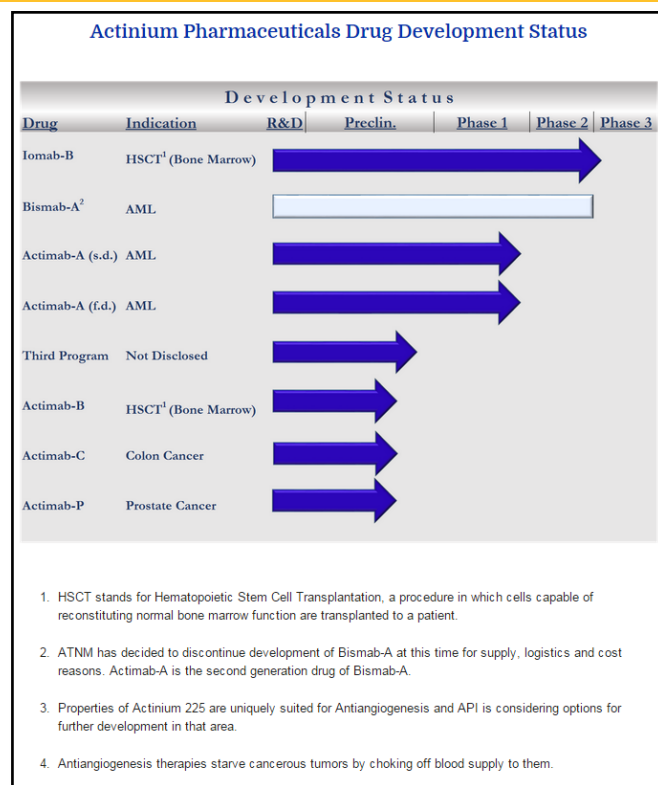
ATNM is a leader in developing this alpha emitter for clinical applications. According to the company's latest [10-K](#), there are no other commercial entities that have significant programs in place for developing Ac-225- or Bi-213-based drugs. In the field of hematopoietic stem cell transplantation, pharmaceuticals currently used for bone marrow ablation/conditioning are generic drugs and ATNM does not recognize any significant industry efforts to enter this area, especially in older patients.

Algeta ASA and Dr. Turck

The only other company working in the field of alpha-particle emitting radioisotopes was Algeta ASA. Founded in 1997 in Norway, it was acquired in 2014 by giant pharmaceutical group Bayer for \$2.9 billion.

Former Algeta's lead product Xofigo is a radiotherapeutic drug prescribed against castration-resistant prostate cancer and symptomatic bone metastases. According to its phase III clinical tests results, the drug improved overall survival rate from 11.2 to 14 months. A recent development that will play in favor of ATNM is that the company's board has retained Roland Turck, MD, former President, Global Specialty Medicine, Bayer Healthcare to provide strategic advice. At Bayer, Dr. Turck played a leadership role in the commercialization of Xofigo. Dr. Turck will provide guidance on the ongoing clinical development, pre-commercialization, and licensing activities for Iomab-B and clinical development and licensing activities for Actimab-A.

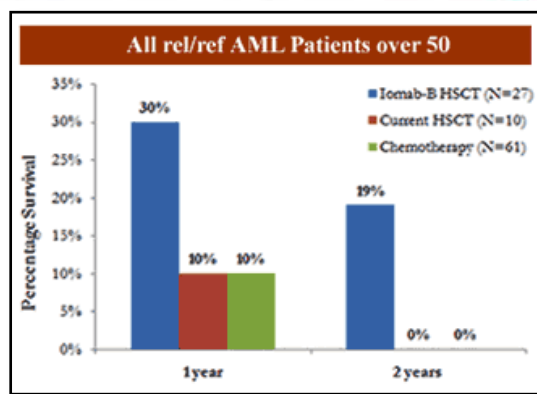
Pipeline



ATNM currently has two main products in clinical testing:

Iomab-B

Iomab-B for Hematopoietic Stem Cells Transplantation has already been successfully used in over 250 patients with incurable blood cancers. In both Phase I and Phase II trials, Iomab-B has led to effective cures in patients with no options left. The only potentially curative treatment option for those patients is bone marrow transplantation (BMT), also known as a hematopoietic stem cell transplant (HSCT), but vast majority of patients over the age of 50 are either ineligible or have a high burden or very resistant disease that makes reduced dose conditioning futile. Iomab-B has demonstrated ability to successfully prepare such patients for bone marrow transplants when no other treatment was indicated. ATNM intends to develop Iomab-B through a regulatory approval via a pivotal registration trial in AML refractory/relapsing patients. That would allow for a relatively quick path to the market and provide a potentially curative treatment to patients who currently have little or no chance of achieving even a temporary remission.



Actimab-A

Actimab-A is the second generation of Bismab-B (which had been discontinued due to high costs), with 500x better potency and 10x lower COGS. It is a radiolabeled antibody being developed for newly diagnosed AML in patients over 60, and is currently in a multicenter Phase 1/2 clinical trial. The preliminary results are positive with no dose limiting toxicities in patients older than 60 and up to 87 years of age who were not eligible for currently approved therapies. Two out of three Actimab-A treated patients achieved complete remission with different degrees of hematological recovery (CRi). These responses were documented in the settings of high pre-treatment leukemia burdens of up to 88% in the bone marrow. In the previous cohort treated at a lower dose level of Actimab-A, one patient achieved CRI.

According to Dragan Cicic, MD, Chief Medical Officer of Actinium, *"We believe the responses observed for Actimab-A, with minimal toxicity being reported, are impressive in this disease setting. These findings build upon those presented and published over the past year which demonstrated a clear survival benefit in secondary AML patients. We remain steadfast in our belief that Actimab-A could play an important role in the treatment regimen for newly diagnosed elderly secondary AML patients who currently have limited treatment options, and have historically achieved overall survival of only 2 to 5 months, depending on treatment modality."* The press release is available [here](#).

Management & Strategy

Dr. Kaushik J. Dave, Ph.D, R.Ph, MBA has been the Chief Executive Officer and President of Actinium Pharmaceuticals, Inc. since September 16, 2013. He also serves as Interim Chief Financial Officer and Principal Accounting Officer. Dr. Dave has more than 17 years in

the pharmaceutical industry, serves as a consultant for investment banks and venture capital firms, and as an advisor to several startup pharmaceutical companies. His broad experience includes securing multiple product approvals from the US Food and Drug Administration (FDA), European Medicines Agency (EMA) and the Medicines Control Agency (MCA). Dr. Dave obtained his Pharmacy degree from University of Bath, UK, a Ph.D in Pharmaceutical Chemistry from the University of Kansas, and an MBA from the Wharton School, University of Pennsylvania.

Dr. Dave's leadership is focused on the development of Actinium's breakthrough therapy products and the FDA application processes. His experience in clinical testing provides him with credibility in terms of drugs application. If the clinical tests and FDA application are successful, Actinium may elect to commercialize Iomab-B on its own or with a partner in the United States and/or outside of the United States to out-license the rights to develop and commercialize the product to a strategic partner. In the case of Actimab-A, the company will most likely seek to enter into strategic partnerships whereby the strategic partners co-funds further human clinical trials of the drug that are needed to obtain regulatory approvals for commercial sale within and outside of the United States. In parallel, Actinium intends to identify and begin initial human trials with additional actinium-225 product candidates in other cancer indications. The company intends to retain marketing rights for its products in the United States whenever possible and out-license marketing rights to our partners for the rest of the world.

To assist the company's management in their research and development, a Clinical Advisory Board and a Scientific Advisory Board are in place. The former is focused on Hematology and Actimab-A related issues while the latter focuses on Bone Marrow Transplant and Iomab-B related issues. Members of these boards include experienced researchers from different cancer research centers, such as Fred Hutchinson Cancer Research Center, Seattle, WA, Memorial Sloan Kettering Cancer Center, New York, NY, or MD Anderson Cancer Center.

Actinium Pharmaceuticals, Inc.'s majority shareholder is AHLB Holdings, LLC, with approximately 16% and is wholly owned by Memorial Sloan Kettering Cancer Center. ATNM's second largest shareholder is a subsidiary of Merck and Co. As of the end of 2014, management's ownership was approximately 2%.

Financials and Valuation

Because ATNM is still at an early stage and does not sell any of its products, it is difficult to proceed to a financial analysis and valuation for the company without using guessimates. The 2014 transaction between acquirer Bayer and target company Algeta set a precedent with a \$2.9 billion valuation and revealed significant potential for ATNM. Analysts estimate that clinical tests will be done and FGDA approval granted by 2018, where ATNM could start generating revenues. It must not be forgotten that key player Dr. Tuck just joined Actinium's advising team. Another scenario for Actinium would be to get acquired. 2015 developments should also impact ATNM stock prices. With Iomab-B entering phase III, both professionals and investors will increase their interests for the product and for the company. ATNM is currently trading near its 52 weeks low of \$2.4, and the downside is limited considering that the company manages to raise approximately \$20 million a year from shareholders.

Unlike most other biotech companies, the success of this investment does not only rely on FDA approval of the current pipeline's products. Actinium's competitive advantage lays in its proprietary APIT platform, that could be used with the right partners and generate significant licensing revenues.

My DCF analysis implied a Terminal Value approximately \$1 Billion by 2022 and a price per share of \$11.7. The terminal growth used was 5% and the discount rate 14%.

CalAmp Corp.

NASDAQ: CAMP

Analyst: Kyle White

Sector: Technology

Limit Buy:

\$16.50

Price Target: \$24.00

Key Statistics as of 3/18/2015

Market Price:	\$17.54
Industry:	Communications Equipment
Market Cap:	\$635 M
52-Week Range:	\$14.74-34.47
Beta:	0.94

Thesis Points:

- Leader in Wireless Data Communications, a new business space with incredible potential
- Great financials, minimal debt, strong cash flows, strong and improving margins
- Extremely diverse when compared to similar companies
- Past stock movements have left investors reluctant to move into stock
- Current state of technology is first stable platform for industry to take off

Company Description:

CalAmp Corp. develops and markets wireless communications products and solutions for various applications worldwide. It operates in two segments, Wireless DataCom and Satellite. The Wireless DataCom segment offers solutions for mobile resource management applications, machine-to-machine communications space, and other emerging markets that require connectivity anytime and anywhere. Its M2M and MRM solutions enable customers in energy, government, and transportation markets to optimize their operations by collecting, monitoring, and reporting business-critical data and required intelligence from high-value remote and mobile assets. This segment offers a portfolio of wireless communications products, such as asset tracking devices, targeted telematics platforms, fixed and mobile wireless gateways, and multi-mode wireless routers. It also offers cloud-based telematics platform-as-a-service and targeted software-as-a-service applications that facilitate the integration of the company's and third party applications through application protocol interfaces. The Satellite segment develops, manufactures, and sells direct-broadcast satellite outdoor customer premise equipment and whole home video networking devices for digital and high definition satellite television services.

Stock Price CAMP



Thesis

One of the miracles of the Internet is how it fundamentally changed the interconnectedness of the human race. What were once far-flung and diverse corners of the globe were suddenly brought together through a complex global network where ideas could flow freely, and saw many aspects of our lives strengthened. The greatest invention in human history had achieved a global scale down that had never been witnessed and will likely never be replicated, no matter how specular a means we could produce to physically propel ourselves through time and space. However far we are now able to travel in the span of a second, many of our technological achievements achieved quite the opposite, always being right where we left them; stuck in a world where a mile away was still some unfathomable difference. But why couldn't the internet change that too? CalAmp Corp. is on the cusp of answering that very question. In the not so distant future, everything from your toaster to your car will in some way be directly integrated into the internet, constantly relaying convenient, usable, and most importantly secure data to everyone from the manufacturer to your insurance company. The Internet of Things will soon be an integral part of every single persons lives, and with an extremely attractive piece of the proverbial pie, in terms of an unparalleled product portfolio, strong global distribution channel, and proven effectiveness in the space, CalAmp certainly deserves the attention of prospective investors.

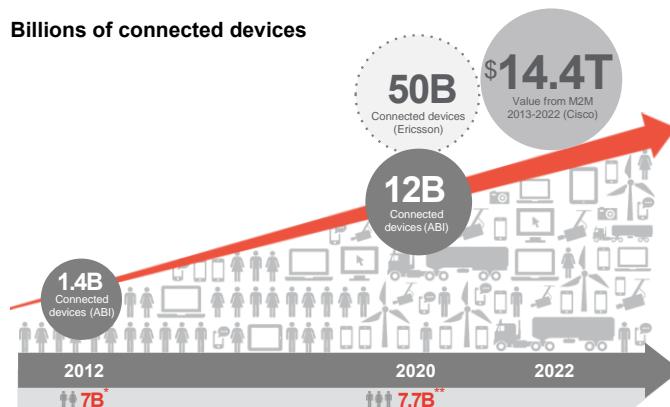
Industry Leadership

As of today Machine-to-Machine connected devices number 91 million units, moving to 128 million units by the end of 2015, and reach a whopping 180 million units in 2016, and will only grow from there. Of this constantly increasing base, CalAmp's machine-to-machine business represents 4.5 million units, and in the near term expects to add a million units are year. In what can only be described as a fiercely competitive market environment, this nearly 5% market share is huge. While other companies, like primary competitor Sierra Wireless may command the lions share of the revenues in the industry at roughly 34%, CalAmp is more than happy to approach the situation from another direction. While CalAmp truly wants to represent itself as a well-managed, diversified company with incredible product

offerings, it's key interests lie in two areas that would drive business towards what would be typically viewed as a market niche. Heavy equipment manufacturing and insurance telematics are extremely nubile markets, but with huge potential, and when combined, they look to represent a majority of future machine-to-machine applications as well as mobile resource management. It is often the case that in terms of new, innovative technologies, you often see small firms boldly embracing new ideas, while larger more complex companies timidly test the waters. Refreshingly this has not been the case for these two segments. Caterpillar the world's largest producer of heavy equipment has had no qualms about making moves into the market. Due in large part to the small profit margins associated with construction projects, it is important to maintain accurate records concerning equipment utilization, repairs and maintenance. Before bringing on CalAmp as part of the value chain, CAT had no compelling way of dampening these fears in potential customers, which surely had some impact on top line growth as consumers skittishly moved around the decision to purchase. Now with the ability to remotely track asset utilization, location, and maintenance schedules, the single biggest cost for CAT customers could be effectively and tangibly cut, and increased the likelihood of purchase. And Caterpillar is likely only the first step in a long, long journey. With major players like Komatsu, Volvo, and Hitachi-Hitachi up for grabs, the sky is the limit, especially as CalAmp moves from hardware sales to subscription based fees within their product ecosystem. Just to provide an idea of the scope the industry is expected to achieve:

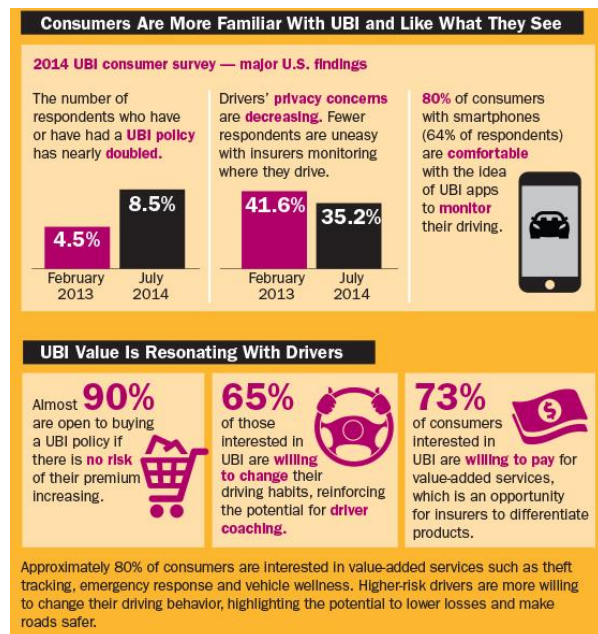
Long-term growth opportunity in IoT

Billions of connected devices



While extremely similar to the applications available in the heavy equipment field, the insurance telematics end of CalAmp's ambitions is far more untested. While some

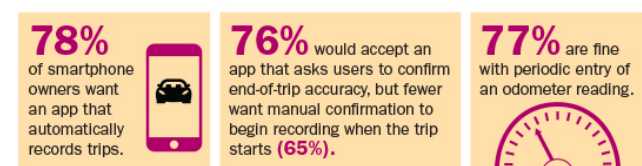
big auto insurers have moved into the space, such as Progressive and Allstate, it has yet to find its footing among the insured. Data collected by Tower Watson, an auto insurance group, does however provide an extremely attractive picture moving into the future, shown below.



While CalAmp does provide some software services through the Android platform, it would represent a less than ideal situation for the company and insurers due to inadequate data collection.

Smart Phones Are Appealing but Come With Challenges

The consumer experience is at the center of many smartphone-based UBI program challenges. Consumer smartphone app preferences include:



Battery Usage Tops Smartphone App Issues

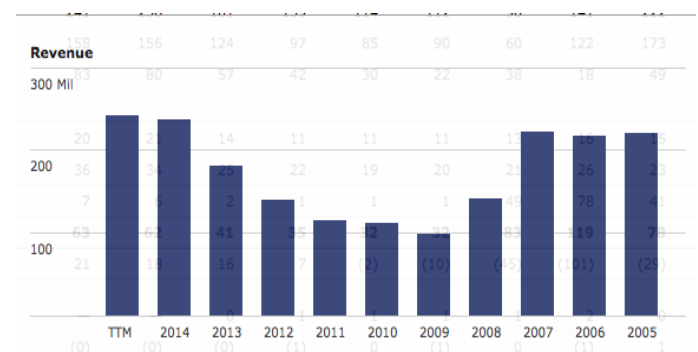


The second part of the survey provides extremely attractive data for both CalAmp hardware and its developing ecosystem, simultaneously allowing for increasing topline growth while drawing down on operating costs. While the company currently has running agreements Modus, Himex, and RAC (small firms), short run guidance for the service is guiding down, and most likely will not become a large driver of revenue growth until late 2016, 2017. While the company

doesn't draw a lot of attention to it, it does have a successful satellite business to draw on. Primarily partnered with EchoStar, who in turn does the majority of its business with DIRECTV, CalAmp's satellite business tends to be variable, shifting with year-to-year product mix. It is clear from earnings calls and investor material, the business is of secondary importance to the company, and in the long run the CalAmp simply wishes to normalize the revenue stream. Once this is accomplished, there may be significant chance of divestiture as its wireless data com segment continues to catch fire.

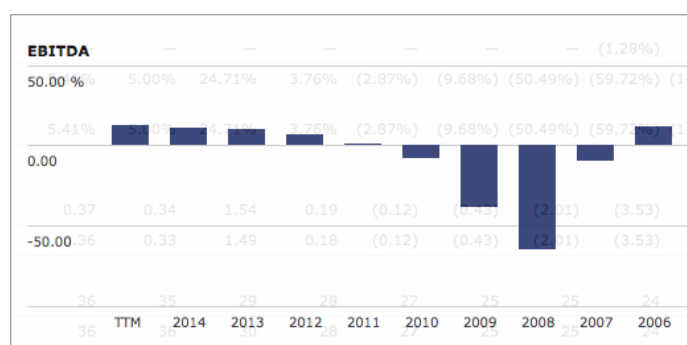
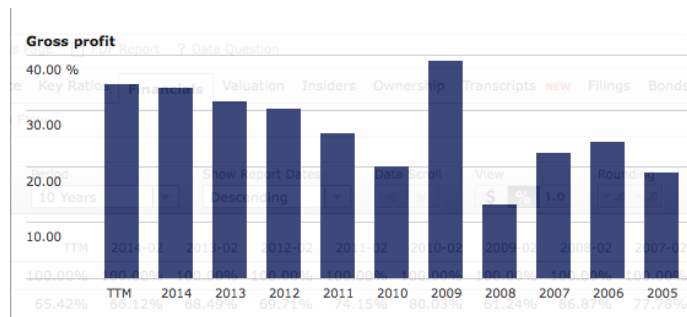
Strong Financials

While CalAmp's brightest days lie in the future, there current financial situation is one that is truly impressive. Looking at revenue growth alone we can see that year-over-year the company has achieved growth on average of 22% per year since 2011. Coming out of the financial crisis (which proved to be a real disaster for the company) it's renewed strength should be a reminder that this is a strong company with proven ability to survive through hard times, having survived both the dot.com bubble in the late 90's and the pricing bubble that proceeded it in 1997. Much of this revenue growth comes in large part due to the company's growth in its wireless datacom business, which has grown substantially since inception, and is continuing to find serviceable markets all over the world. The companies satellite segment on the other hand, while strong, has produced flat revenue over the past few years, as focus shifts, but this is made up for in the fact that operating costs have managed to come down significantly.



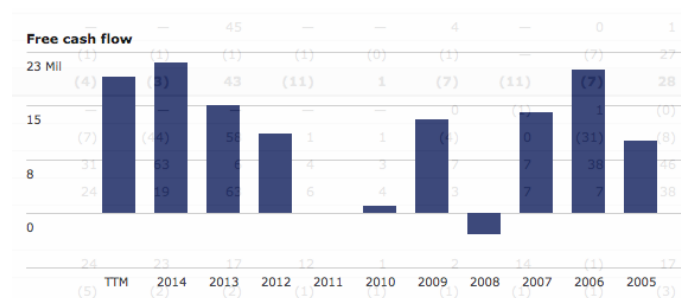
The observed increases in revenue is one of the key drivers in the price of the stock, and going into the future it will play an even more prevalent part as opportunities present themselves in a rapidly expanding marketplace which is projected to grow to 20 billion

devices by 2020 from the 128 million we see today. Another area that CalAmp shown strength in is its ability to decrease COGS and operating expenses, increasing margins and delivering more value to shareholders.



Looking at the charts above, it is immediately clear that the company is quickly and effectively taking steps to bring down costs a leave more on the table for its investors. Much of the company is witnessing in terms of success are attributed to its continued plays into the IoT, which while hardware intensive, look to provide a significant level of minimal cost SaaS and PaaS moving into the future. With these primary goals in mind, it isn't unrealistic that this company has much more room to bring down operating costs as we move into the future. The company's ability to achieve this demonstrates that management is looking leverage their unique position to create as much return as possible on invested capital, which leads to the topic of debt. Compared to many of the company's peers, debt for CalAmp is nearly nonexistent.

company isn't saddled down with interest payments, which would otherwise dilute value. Secondly, the companies low debt profile means that in the future, the company should experience little to no issue in terms of debt financing, which given the charted growth of the company may be beneficial. A final note on debt is that the very lack of its presence on the balance sheet makes CalAmp that much more desirable as an acquisition target in a highly competitive industry. The ground laid by the company and it promising paths for growth, makes CalAmp a small but tasty fish, in a pond full of sharks. However given various poison pills within the company, CalAmp seems to believe that it is more than capable of creating value into the future without being brought into the fold of a larger company such as Cisco or Sierra Wireless. Final house keeping notes in terms of financials; the company, through feast or famine has been able to sustain sizable free cash flows.

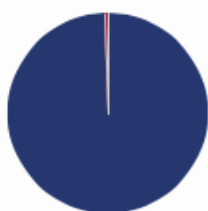


Having consistently produced FCF that represented 10% of the company's overall revenue, funds continue to flow into their war chest, year-over-year that can be used in future acquisitions and organic growth plans. As CalAmp continues to increase revenues faster than its costs, the cash flows can only balloon going forward, very quickly transforming the company into a cash cow.

Diversified Product Portfolio

In terms of sheer product offering, most of the wireless datacom industry can hardly hope to match CalAmp. While many companies attempt to make it in just one vertical market segment, CalAmp is making plays across the board including construction, field service/delivery, local government, oil/gas, public safety, rail, small/medium sized businesses, transportation, utilities, vehicle finance, and water/wastewater programs. While tending to a wide range of customer bases is certainly strength, constantly keeping competition on its toes, it hardly begins to scratch the surface of what CalAmp offers. In conjunction with industries that it serves,

Equity and Debt CAMP



At \$800,000, debt represents only the most miniscule part of the company's total invested value, which has a number of benefits. The first of these is that the

CalAmp offers over 70 unique products and services, all of which can be tailored in one way or another to a customer's unique position. Many of the product offerings of the company are designed to seamlessly work together add incremental value to every single product. Still though the true benefit of this company's services are through its SaaS and PaaS systems and its in-house app store ecosystem. Built with inherent flexibility, the app store has the ability to allow third parties to develop and host material that could be sold to customers. Customers too have the ability to create their own unique solutions that can seamlessly integrate with CalAmp's existing software and hardware, further enriching the ecosystem. A large part of what CalAmp will be in the future, is organizing and streamlining the data provided by customers, and offering cloud-based services to ensure maximize security and efficiency of operation, which will serve to drive down cost both at CalAmp and its business and government partners. Based on the promise of efficient government alone, this company is a clear winner!

Rich Ratio/Volatile Past Making for Skittish Investors



Observing the course of CalAmp stock, it is no secret that life has been rocky for investors at best. Spending the large majority of its life as a penny stock, CalAmp has experienced two major periods of speculation, only to plummet shortly after when the promise of true M2M faded into the sunset. Many expect this trend to continue into the future, which could prove detrimental for nervous long-term investors. For short-term value investor though, rapid short-term appreciation is exactly the type of thing that makes a stock a buy. While this price movement may apply to the downside, it is more probable that the stock has found a price floor, which is

supported by future growth. It would take a string of bad quarters to squash investor confidence in this stock. Another concern is shown below

Company	P/E Ratio
CalAmp	52.22
Freescale Semiconductor	48.39
NXP Semiconductors	45.14
Ambarella	43.18

are the companies P/E ratios. At 52.22 times earnings, CalAmp at glance seems like a very, very expensive stock. Compared with companies operating in a similar space however, it becomes much more reasonable, but still outside the norm of the over tech industry at just 15 times earnings. Given the strength of the company's balance sheet, and much lower forward multiples shouldn't foster too many timid feelings based on what only appears expensive.

Technology Finally Ready

While it should be recognized that massive growth in M2M (connections and revenue) has been predicted every year for at least the last decade, only for realized growth to fall short of most of these lofty expectations. However due to two key factors, it is a fair bet that this time around M2M and wireless datacom are here to stay. The first factor is the increased interest in M2M by wireless carriers, and the widespread proliferation of smart devices (smartphones, tablets), which work in tandem to create a sustainable environment for the fledgling technologies. These factors represent positive fundamental developments that will most likely drive increasingly stronger M2M adoption and thus, revenue growth.

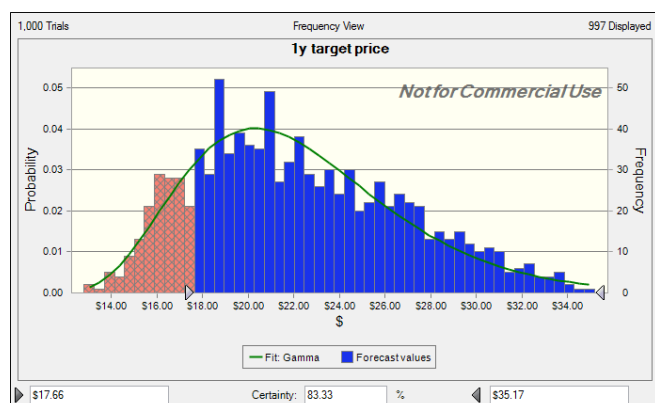
Increased carrier support. Wireless carriers are finally showing greater interest in M2M as a way to monetize their networks. On the surface, wireless carriers have shown M2M support for many years, creating special initiatives and business units. However, the core strategic focus of the carriers had remained voice subscriber acquisition and the monetization of SMS and voice capabilities. In the grand scheme of things, M2M was not strategically important to carriers. In the last few years, the North American market has become saturated – there are few new voice subscribers to add, with many existing subscribers already having data and SMS plans

as well. The operators have been forced to look beyond traditional human-linked phone subscribers for meaningful growth. Similar to smart device adoption, this is a new and recent dynamic. Carriers are finally seeing M2M for what it truly is: a viable margin play, creating an opportunity for them to monetize data with manageable strain on the network. Carriers are now, at the highest executive levels, embracing M2M, and this is creating better, more industry friendly and creative pricing options and substantial carrier resources to assist solution providers in selling and implementing M2M solutions.

Proliferation of smart devices, applications. With the widespread acceptance of smartphones, tablets, and the applications used with them is creating a mobile information-centric culture: individuals are becoming used to accessing highly-dynamic data about various things (e.g., traffic, weather, stocks) at any time and any location, typically experiencing such real-time information every day. Based on these every-day experiences, which influence the decisions people make, users are increasingly recognizing how such real-time data could have tremendous value in the business environment. As individuals all over the world become more and more accustomed to the increasing prevalence of these devices, barriers for M2M and other wireless data communication systems will begin to fall by the wayside.

nothing if not exceptional. With some short-term confusion on the direction of the tech industry, coupled with increasingly likely corrective forces in the market, there may be some downward pressure on the stock. Examining the output of a Monte Carlo simulation run through the pro forma, there is roughly a 15% of this lower movement. A likely low point for this stock in that event would be around \$13 to \$14. However given the 30% upside with a \$24.00 target price, and the high probability of such an event make this stock both cheap (intrinsic value \$20.00), but a great long term pick.

Forecasts



CalAmp finds itself in an excellent opportunity. It finds itself the center of a revolution in the way we live our lives, conduct our business, and run our governments. With an already proven track record, deep customer channels and new and exciting partnerships with Caterpillar and insurance companies should prove to be

CENTER FOR GLOBAL FINANCIAL STUDIES

CalAmp Corp.		CAMP	Analyst Kyle White	Current Price \$17.54	Intrinsic Value \$20.53	Target Value \$23.47	Divident Yield 0%	Target Return 33.79%	BULLISH	
General Info		Peers	Market Cap.		Management					
Sector	Information Technology	Digi International Inc	\$251.62		Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	
Industry	Communications Equipment	Ruckus Wireless, Inc	\$1,073.70		Burdick, Michael	Chief Executive Officer, Presiden	\$ 1,628,862.00	\$ 1,621,018.00	\$ 1,853,276.00	
Last Guidance	Dec-23-2014	Sierra Wireless Inc	\$1,393.50		Vitelle, Richard	Chief Financial Officer, Principal	\$ 724,076.00	\$ 840,555.00	\$ 841,580.00	
Next earnings date	4/24/2015	Novatel Wireless Inc	\$215.46		Sarkissian, Garo	Senior Vice President of Corpora	\$ 543,634.00	\$ 656,313.00	\$ 647,726.00	
Market Data		Microelectronics Technology Inc	\$4,492.83		Friedlander, Neil	Vice President of Operations	\$ -	\$ -	\$ -	
Enterprise value	\$594.37	MOBI Development Co., Ltd.	\$1,468.53		Schmid, Justin	Senior Vice President of Marketir	\$ -	\$ -	\$ -	
Market Capitalization	\$933.35	Wuhan Fingu Electronic Technology Co.,	\$7,726.73		Hannah, Robert	Vice President and General Mana	\$ -	\$ -	\$ -	
Daily volume	0.86	Aviat Networks, Inc	\$76.66		Historical Performance					
Shares outstanding	35.95	Numerex Corp.	\$209.95		CAMP	Peers	Industry	All U.S. firms		
Diluted shares outstanding	36.48	KVH Industries Inc	\$222.58		Growth	2.9%	10.0%	10.4%	6.0%	
% shares held by institutions	77.02%	Current Capital Structure		Retention Ratio	22.5%	-149.7%	70.4%	61.6%		
% shares held by insiders	4.19%	Total debt/market cap	0.13%	ROIC		0.3%	17.1%	11.8%		
Short interest	10.69%	Cost of Borrowing	12.54%	EBITA Margin	6.6%	6.4%	12.1%	13.7%		
Days to cover short interest	7.02	Interest Coverage	10542.64%	Revenues/Invested capital	116.6%	101.6%	127.2%	202.3%		
52 week high	\$32.69	Altman Z	10.11	Excess Cash/Revenue	11.8%	33.8%	44.2%	18.5%		
52-week low	\$14.74	Debt Rating	AA	Unlevered Beta	1.78	1.06	1.26	0.95		
5y Beta	0.99	Levered Beta	1.42	TEV/REV	0.8x	1.9x	2.2x	2.4x		
6-month volatility	48.96%	WACC (based on market value weights)	9.00%	TEV/EBITDA	11.4x	48.1x	14.2x	11.3x		
Past Earning Surprises		Revenue		EBITDA	Norm. EPS	TEV/EBITDA	13.1x	17.8x	15.4x	
Last Quarter	-0.1%			4.2%	8.7%	TEV/UFCF	10.4x	8.9x	26.8x	
Last Quarter-1	0.2%			5.4%	10.5%	Non GAAP Adjustments				
Last Quarter -2	1.6%			4.5%	5.6%	Operating Leases Capitalization	100%	Straightline	10 years	
Last Quarter -3	-2.6%			-17.2%	-9.1%	R&D Exp. Capitalization	100%	Straightline	10 years	
Last Quarter -4	3.7%			-0.7%	9.5%	Expl./Drilling Exp. Capitalization	0%	N/A	N/A	
Proforma Assumptions		Period		Rev. Growth	Adj. Op. Cost/Rev	Forecasted Profitability				
Operating. Cash/Cash	0.0%	LTM	10%	81%		Revenue	NOPLAT	Invested capital	UFCF	
Unlevered Beta	1.40	LTM+1Y	12%	78%		\$241.26	\$22.29	\$195.85	\$24.68	
Rev/Invested Capital	117.0%	LTM+2Y	19%	78%		\$271.36	\$27.15	\$241.27	\$2.97	
Continuing Period Revenue Growth	3.0%	LTM+3Y	24%	79%		\$322.47	\$32.63	\$268.16	\$5.74	
Long Term ROIC	11.9%	LTM+4Y	29%	79%		\$399.67	\$40.70	\$299.65	\$9.21	
Invested Capital Growth	Follows Forward Rev. Growth	LTM+5Y	22%	79%		\$515.46	\$52.54	\$336.31	\$15.88	
Justified TEV/REV	2.0x	LTM+6Y	16%	80%		\$628.82	\$64.11	\$378.65	\$21.77	
Justified TEV/EBITDA	11.4x	LTM+7Y	11%	80%		\$729.82	\$74.81	\$414.94	\$38.52	
Justified TEV/EBITDA	13.1x	LTM+8Y	8%	79%		\$810.82	\$83.80	\$445.50	\$53.24	
Justified TEV/UFCF	10.4x	LTM+9Y	6%	79%		\$879.37	\$91.81	\$472.42	\$64.89	
Valuation		ROIC		WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	11.2%	9.0%		\$6.64	\$731.78	\$0.77	-\$12.22	\$743.22	\$21.49	
LTM+1Y	12.5%	9.1%		\$8.22	\$819.76	\$0.77	-\$21.80	\$840.79	\$24.22	
LTM+2Y	13.5%	9.2%		\$11.52	\$890.82	\$0.77	-\$42.72	\$932.77	\$26.81	
LTM+3Y	15.1%	9.2%		\$17.54	\$967.49	\$0.77	-\$70.57	\$1,037.29	\$29.71	
LTM+4Y	17.5%	9.3%		\$27.30	\$1,047.34	\$0.77	-\$94.14	\$1,140.70	\$32.59	
LTM+5Y	19.0%	9.4%		\$36.15	\$1,126.53	\$0.77	-\$119.73	\$1,245.48	\$35.64	
LTM+6Y	19.7%	9.5%		\$42.06	\$1,193.27	\$0.77	-\$161.50	\$1,354.00	\$38.59	
LTM+7Y	20.2%	9.6%		\$46.67	\$1,250.73	\$0.77	-\$217.22	\$1,467.18	\$41.78	
LTM+8Y	20.6%	9.7%		\$50.98	\$1,302.23	\$0.77	-\$283.56	\$1,585.01	\$45.08	
LTM+9Y	20.9%	9.8%		\$54.74	\$1,351.10	\$0.77	-\$355.69	\$1,706.01	\$47.46	
Monte Carlo Simulation Assumptions							Monte Carlo Simulation Results			
Base		Stdev		Min	Max	Distribution	Intrinsic Value		1y-Target	
Revenue Variation	0	10%		N/A	N/A	Normal	Mean est.	\$21.49	\$24.22	
Op. Costs Variation	0	10%		N/A	N/A	Normal	σ(e)	\$0.32	\$0.25	
Market Risk Premium	5%	N/A		5%	7%	Triangular	3 σ(e) adjusted price	\$20.53	\$23.47	
Long term Growth	3%	N/A		3%	10%	Triangular	Current Price	\$17.54		
Terminal Value	0	0.1		N/A	N/A	Normal	Analysts' median est.		\$26.15	

Entergy Corp.

NYSE:ETR

Analyst: Nicholas Luca

Sector: Utilities

BUY

Price Target: \$103.42

Key Statistics as of 03/19/2015

Market Price:	\$77.94
Industry:	Electric Utilities
Market Cap:	\$14.11B
52-Week Range:	\$63.87 - 92.02
Beta:	0.28

Thesis Points:

- Consistent earnings growth through demand, not price increases
- Undervalued by market due to last earnings miss
- High yield distribution
- Financially improving through restructured cost structure and new revenue streams

Company Description:

Entergy Corporation, together with its subsidiaries, engages in the electric power production and retail electric distribution operations in the United States. It operates in two segments, Utility and Entergy Wholesale Commodities. The Utility segment generates, transmits, distributes, and sells electric power in portions of Arkansas, Mississippi, Texas, and Louisiana, including the City of New Orleans; and distributes natural gas. The Entergy Wholesale Commodities segment is engaged in the ownership, operation, and decommissioning of nuclear power plants located in the northern United States; sells the electric power to wholesale customers; offers services to other nuclear power plant owners; and owns interests in non-nuclear power plants that sell the electric power to wholesale customers. This segment sells energy to retail power providers, utilities, electric power co-operatives, power trading organizations, and other power generation companies. It generates electricity through wind, gas/oil, nuclear, coal, and hydro power. The company's power plants have approximately 30,000 megawatts (MW) of aggregate electric generating capacity, including approximately 10,000 MW of nuclear-fueled capacity. It delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi, and Texas. The company was founded in 1989 and is based in New Orleans, Louisiana (Yahoo Finance).



Thesis

As of March 19th, 2015, Entergy Corp. (ETR) is a BUY at \$77.94 due to an increase in demand for electricity that Entergy will continue to meet as they invest in transmissions projects to further meet future demands, and keep prices from increasing. Entergy is a safe investment as they are the leading electricity provider of the Gulf Coast, and are continue investing into nuclear energy in the Northeast. Along with their nuclear power segment, they have also restructured their cost structure that should show some serious cost reduction in 2015. Entergy Corp. interest in increasing shareholder value and their distribution of nearly a 5% dividend make them an attractive company to invest in.

Cost Structure - New Revenue Streams

Entergy operates primarily through two business segments: Utility and Entergy Wholesale Commodities. The Utility business segment includes the generation, transmission, distribution, and sale of electric power in parts of Arkansas, Mississippi, Texas, and Louisiana, including the City of New Orleans; and operates a small natural gas distribution business. The Entergy Wholesale Commodities business segment includes the ownership and operation of six nuclear power plants located in the northern United States and the sale of the electric power produced by those plants to wholesale customers. This business also provides services to other nuclear power plant owners. Entergy Wholesale Commodities also owns interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers.

Segment	% of Revenue			% of Net Income			% of Total Assets		
	2014	2013	2012	2014	2013	2012	2014	2013	2012
Utility	78	80	78	88	116	110	82	82	82
Entergy Wholesale Commodities	22	20	22	31	6	5	22	22	22
Parent & Other	—	—	—	(19)	(22)	(15)	(4)	(4)	(4)

Their Entergy Wholesale commodities segment has undergone some changes that have bettered the company's financial position. This has been primarily stimulated through the shutting down of the Vermont Yankee nuclear plant. The plant was shut down in 2012 due to no longer being able to compete with low natural gas prices and a complex cost structure. After investing the money to actually divest the plant, annual costs have reduced severely; the reflection in net income is inevitable, growing from 5% in 2012 to 31% in 2014. Entergy expects these reductions in costs to be even

more heavily reflected in 2015 as they have finally wrapped up the closing in 2014.

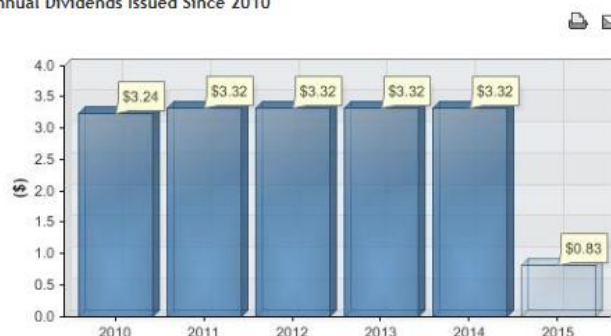
Along with restructuring, they are also investing in a new transmissions project referred to as the Lake Charles Transmission Project, which will prepare them for future demand in the area. Entergy is upgrading its transmission network and building a new power plant in Lake Charles, Louisiana. This new gas-powered plant, called 9-Mile Six, is the first new power plant in Louisiana in thirty years.. Preliminary plans call for an estimated \$187 million, including contingency, investment in the Lake Charles area. The project represents one of the largest single transmission projects in Entergy's history. It includes construction of two new substations, expansion of a third, and adding about 25 total miles of high-voltage transmission lines – including both 500 kV and 230 kV lines – to move power more reliably and efficiently into a region projected to have the fastest job growth rate in the state.

In addition to enhancing reliability, operational flexibility, and helping meet the increased demand in the region, the project will also improve access to lower cost generation in the Midcontinent Independent System Operator, Inc. market, potentially reducing costs for all customers in the area.

High Yield Distribution

One of the ways that Entergy hopes to boost shareholder value is through share repurchases. Although share repurchases don't necessarily put money directly into investors' pockets, they do make a company appear cheaper on a P/E basis by reducing the number of shares outstanding. The main allure for Entergy is its dividend. Entergy currently offers a dividend yield of 4.4%. Even though Entergy is not a high-flying growth stock, its dividends can make money for its shareholders.

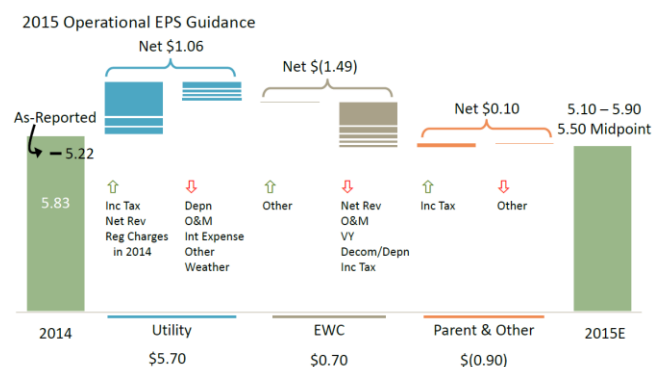
Annual Dividends Issued Since 2010



Undervaluation by the Market Due to Overdramatic Response to Earnings

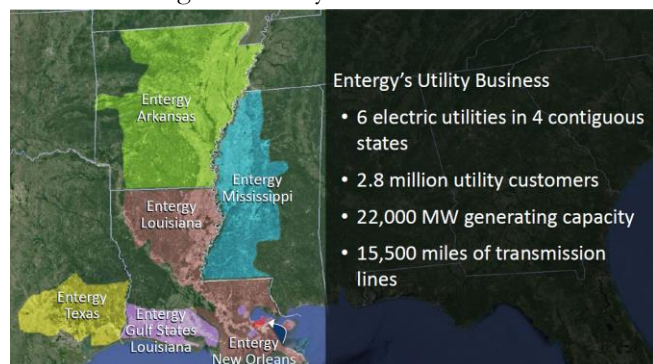
Entergy's other business, nuclear generation has taken a hit as dry gas prices sunk from \$4.00/mcfe to about \$2.75/mcfe over the last few months. Nuclear electricity must compete with natural gas for electricity demand. Entergy based its multi-year earnings expectations on the assumption of about \$4/ mcfe natural gas. The effect on 'EWC,' the nuclear business, is illustrated below. As you can see, in 2015, the earnings hit from low dry gas prices is roughly equal to the earnings growth in transmission. Going by strip pricing only, earnings will down by mid-single digits this year, assuming midpoint guidance.

Although they missed earnings estimates by roughly 6%, I believe that it was primarily due to the natural gas prices. Commodities go up and down, but Entergy continues to build the base of their business and are preparing for future demands.



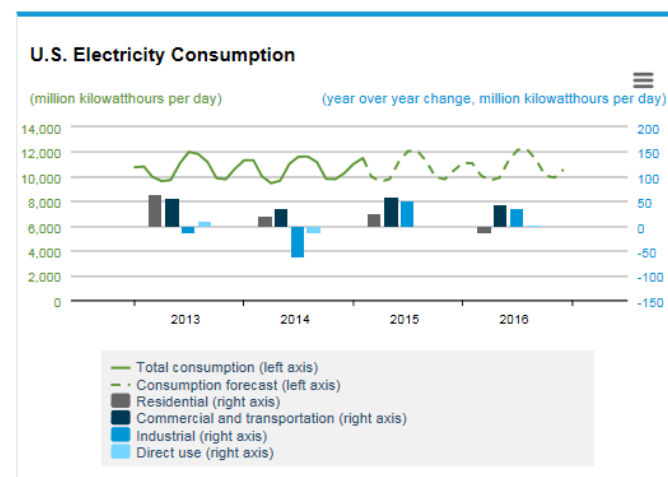
Consistent Earnings Growth

The petrochemical boom has been sparked in the United States due to low dry gas and NGL input prices. Because of this, there is an increase in power demand, more specifically in Louisiana. Entergy Corp. is the largest provider in Louisiana as well as the Gulf Coast, of which should lead to growth this year.



Siena Market Line 2nd week of February 2015

Entergy is the dominant leader, and have little to no competition in the Gulf Coast. This was a concern because the change in demand is already a big factor in their success, so if they can at least eliminate their competition, and with demand expected to continuously increase (see chart below), then they are in good position to grow and remain the market leader



CENTER FOR GLOBAL FINANCIAL STUDIES

Entergy Corporation		ETR	Analyst Nicholas Luca	Current Price \$79.05	Intrinsic Value \$85.85	Target Value \$103.42	Dividend Yield 4%	Target Return 35.03%	BULLISH
General Info		Utilities	Peers	Market Cap	Management				
sector	Utilities	Electric Utilities	Xcel Energy Inc	\$17,598.16	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
industry	Electric Utilities		Dominion Resources, Inc	\$42,474.86	Denault, Leo	Chairman, Chief Executive Officer	\$ 3,043,594.00	\$ 7,665,652.00	\$ 11,824,034.00
last guidance	Feb-05-2015		FirstEnergy Corp.	\$15,322.60	Marsh, Andrew	Chief Financial Officer and Exec.	\$ -	\$ 2,503,136.00	\$ 3,242,418.00
next earnings date	4/28/2015		Consolidated Edison, Inc.	\$18,003.89	Savoff, Mark	Chief Operating Officer and Exec.	\$ 2,439,265.00	\$ 2,338,973.00	\$ 3,441,571.00
Market Data			PPL Corporation	\$22,927.98	Mount, Alyson	Chief Accounting Officer and Sec.	\$ 1,179,046.00	\$ 997,209.00	\$ 1,409,240.00
Enterprise value	\$27,179.87		American Electric Power Co., Inc.	\$28,251.13	West, Rodasik	Chief Administrative Officer and	\$ 2,943,622.00	\$ 4,003,467.00	\$ 3,631,066.00
Market Capitalization	\$14,267.02		Edison International	\$20,907.29	McDonald, Hugh	Chairman of Entergy Adams I	\$ 1,295,297.00	\$ 855,303.00	\$ 1,306,327.00
Daily volume	3.04		Public Service Enterprise Group Inc.	\$21,322.90	Historical Performance				
Shares outstanding	180.48		Southern Company	\$40,464.59	ETR		Peers	Industry	All U.S. firms
Diluted shares outstanding	180.30		Exelon Corporation	\$28,384.77	Growth	2.0%	2.7%	4.1%	6.0%
% shares held by institutions	91.07%		Current Capital Structure		Retention Ratio	18.8%	30.4%	28.1%	61.6%
% shares held by insiders	0.45%		Total debt/market cap	51.62%	ROIC	30.3%	10.7%	19.2%	11.8%
Short interest	1.98%		Cost of Borrowing	5.18%	EBITDA Margin	17.7%	19.6%	17.2%	13.7%
Days to cover short interest	2.40		Interest Coverage	322.88%	Revenue / Invested capital	61.8%	50.8%	54.3%	202.3%
12 week high	\$92.02		Altman Z		Excess Cash / Revenue	10.9%	4.2%	6.1%	18.5%
12-week low	\$65.42		Debt Rating	CCC	Unlevered Beta	0.31	0.33	0.40	0.95
1y Beta	0.28		Levered Beta	1.23	TEV/REV	2.3x	2.6x	2.5x	2.4x
1-month volatility	20.66%		WACC (based on market value weights)	6.94%	TEV/EBITDA	7.4x	8.5x	9.3x	11.3x
Past Earnings Surprises					TEV/EBITDA	12.9x	12.7x	14.7x	15.4x
	Revenue	EBITDA	Norm. EPS		TEV/UCF	14.9x	38.9x	43.7x	26.8x
1st Quarter	4.4%	-13.4%	-7.4%		Non-GAAP Adjustments				
2nd Quarter	2.1%	-8.6%	0.0%		Operating Leases Capitalization	100%	Stageline	10 years	
3rd Quarter	1.9%	0.1%	1.8%		R&D Exp. Capitalization	100%	Stageline	10 years	
4th Quarter	13.4%	-3.9%	0.0%		Exp./Diluting Exp. Capitalization	0%	N/A	N/A	
5th Quarter	8.3%	-13.9%	14.9%		SG&A Capitalization	0%	N/A	N/A	
Profitability Assumptions		Period	Rev. Growth	Adj. Op. Cost/Rev	Revenue	Forecasted Profitability	NOPLAT	Invested capital	UCF
Operating Cash/Cash	0.0%	LTM	10%	67%	\$12,494.92	\$1,825.74	\$20,216.41	\$1,825.74	
Unlevered Beta	0.75	LTM+1Y	4%	68%	\$12,950.89	\$1,543.06	\$19,066.52	\$2,692.94	
Rev./Invested Capital	62.0%	LTM+2Y	4%	68%	\$13,451.57	\$1,476.59	\$18,532.04	\$2,011.07	
Continuing Period Revenue Growth	2.0%	LTM+3Y	5%	68%	\$14,083.79	\$1,497.54	\$18,296.87	\$1,732.70	
Long Term ROIC	14.5%	LTM+4Y	5%	68%	\$14,731.64	\$1,554.54	\$18,211.02	\$1,640.38	
Invested Capital Growth	Equals to Maintenance	LTM+5Y	4%	68%	\$15,394.57	\$1,614.55	\$18,200.84	\$1,624.74	
Unlevered TEV/REV	2.0x	LTM+6Y	4%	68%	\$16,071.93	\$1,682.60	\$18,422.65	\$1,460.79	
Unlevered TEV/EBITDA	7.4x	LTM+7Y	4%	68%	\$16,763.02	\$1,755.61	\$18,483.98	\$1,694.29	
Unlevered TEV/EBITDA	12.9x	LTM+8Y	4%	68%	\$17,467.07	\$1,837.83	\$18,542.62	\$1,779.19	
Unlevered TEV/UCF	14.9x	LTM+9Y	4%	68%	\$18,183.22	\$1,926.12	\$18,594.40	\$1,874.34	
Valuation		ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	9.0%	6.9%	\$422.82	\$30,911.33	\$14,030.11	\$1,990.91	\$14,890.31	\$86.81	
LTM+1Y	7.6%	7.0%	\$126.00	\$31,831.72	\$14,030.11	\$635.99	\$18,437.60	\$104.17	
LTM+2Y	7.7%	7.1%	\$123.60	\$31,112.22	\$14,030.11	\$2,781.88	\$19,863.99	\$112.45	
LTM+3Y	8.1%	7.2%	\$169.14	\$31,119.67	\$14,030.11	\$4,768.23	\$21,857.80	\$123.96	
LTM+4Y	8.5%	7.2%	\$229.30	\$31,459.86	\$14,030.11	\$6,801.75	\$24,231.50	\$137.36	
LTM+5Y	8.9%	7.3%	\$281.30	\$31,931.81	\$14,030.11	\$8,915.38	\$26,817.09	\$152.08	
LTM+6Y	9.2%	7.3%	\$363.48	\$32,459.99	\$14,030.11	\$10,960.35	\$29,390.22	\$166.59	
LTM+7Y	9.5%	7.3%	\$403.49	\$33,234.95	\$14,030.11	\$13,348.52	\$32,553.37	\$184.14	
LTM+8Y	9.9%	7.4%	\$463.51	\$33,836.28	\$14,030.11	\$15,928.32	\$35,734.49	\$201.97	
LTM+9Y	10.4%	7.5%	\$530.31	\$34,401.99	\$14,030.11	\$18,719.30	\$39,091.18	\$216.59	
Monte Carlo Simulation Assumptions		Base	Stddev	Min	Max	Distribution	Monte Carlo Simulation Results		
Revenue Variation	0	10%	N/A	N/A	N/A	Normal	Mean est.	\$86.81	\$104.17
Op. Costs Variation	0	10%	N/A	N/A	N/A	Normal	σ(e)	\$0.32	\$0.25
Market Risk Premium	6%	N/A	5%	7%	7%	Triangular	3 σ(e) adjusted price	\$85.85	\$103.42
Long term Growth	2%	N/A	2%	6%	6%	Triangular	Current Price	\$79.05	
Forecasted Value	0	0.1	N/A	N/A	N/A	Normal	Adjusted median price		\$85.10

FireEye, Inc.

NASDAQGS:FEYE

Analyst: Ryan Ahlers

Sector: Technology

BUY

Price Target: \$49.46

Key Statistics as of 3/18/2015

Market Price:	\$42.60
Industry:	Infrastructure Software
Market Cap:	\$6,630.6 M
52-Week Range:	\$77.25 – 24.81
Beta:	N/A

Thesis Points:

- Fast growing market will keep demand high and fuel strong growth
- Industry leading technology
- Improving margins will increase value

Company Description:

FireEye, Inc. provides cyber security solutions to companies worldwide. They specialize in detecting, preventing, and resolving cyber-attacks. FireEye takes a unique approach to cybersecurity by preventing cyber-attacks before they occur versus identifying them after they have happened. FireEye is operated by a management team that has extensive background and knowledge in the field of cybersecurity. Chairman and CEO, David DeWalt, was president and CEO of security software giant McAfee from April 2007 to May 2012 before leaving for FireEye, Chief Operating Officer, Kevin Mandia and Chief Technology Officer, David Merkel, both have a background in cybersecurity as special agents with the Air Force Office of Special Investigations. FireEye competes among some of the industry leaders in cybersecurity such as IBM, Oracle, Cisco Systems and Palo Alto Networks, but differentiates itself with its industry leading MVX engine virtual technology, which has allowed FireEye to rapidly grow and become a new industry leader.



Thesis

Cybersecurity, the processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access is not a new concept and has been around since the inception of the internet. Although, what is new are the methods, resources and frequency that hackers are performing malicious activity against corporations. FireEye Inc., is becoming the go-to provider for cutting-edge security systems and services for the corporate world. With cyber-attacks becoming more frequent every day, the demand for FireEye's industry leading technology will continue to grow and their revenues will grow with it. As FireEye's revenue increases, their margins will improve, increasing value.

Industry Overview

The cyber-security industry has been in a continuous growing demand the past couple of years and shows no sign of slowing down. This industry demand is fueled by the growing number of cyber-crimes that are occurring and the realization of how important it is for corporations to protect themselves. In December of 2013, Target had a data breach that allowed thieves to steal 40 million credit/debit card numbers, 70 million personal records of customers (name, address, email, phone, etc.) which resulted in a 46% decrease in profits for the Q4 of 2013 when compared to the previous year. Breaches, such as the Target breach, have been happening more frequent among companies, exposing their corporation and customers to risk. This unfortunate truth is what is driving the cyber-security market today. Corporations want to avoid being the next victim of a data breach, which in result will expose private information of the company and their clients.

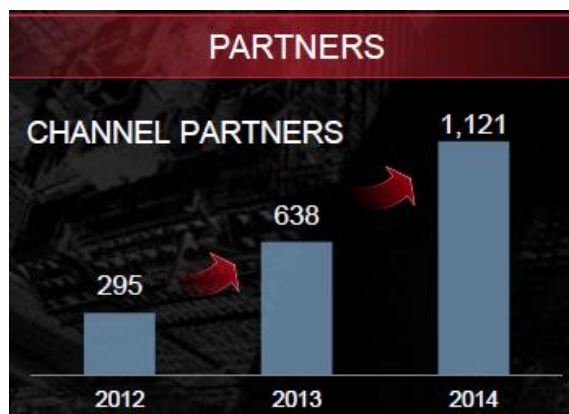
High Demand, High Revenue Growth

As mentioned, the cyber-security market is growing due to the overall demand needed to secure corporations private and sensitive information from the increasing threat of cyber-attacks. What is promising about this industry growth for FireEye is where the growth is occurring. Some of the obvious growth for FireEye over the past year has been from high profile companies in

which they jumped from less than 15% of the Global 2000 to about 25% of the Global 2000 (an annual ranking of the top 2000 public companies in the world by Forbes magazine). This trend still allows FireEye to gain a potential 75% growth among the world's top 2000 companies.

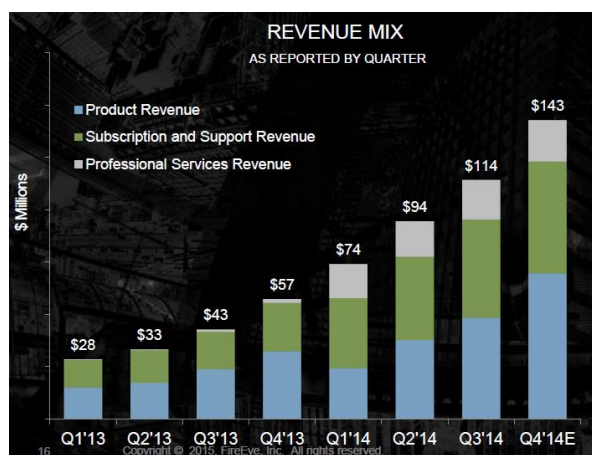
Another reason for the fast growing security market is because of the emphasis for an increase in security spending from within a corporation's top management. With the publicity of recent data breaches at notable companies, other CEOs, boards and executive teams have become more aware of the risk their company could have and, in response, are beginning to increase security budgets. This resonates throughout the entire corporation making a ripple effect to whoever they do business with. The result, FireEye is seeing a shift in the demographic of companies that they do business with. CEO David DeWalt states, "Our customers include the governments of more than 60 countries now; hundreds of financial firms and critical infrastructure companies as well as retailers, healthcare providers, and now entertainment companies. We are even seeing small companies from hospitals, the law firms, to biotech, high-tech start-ups turning to FireEye to protect their critical assets and reduce their risk." This evolving demand for cyber security across all sectors of the economy are allowing for an immense growth opportunity for FireEye.

The demand in growth among various companies has led FireEye to increase the number of channel partners 75%, from 673 to 1121, in 2014, including major companies such as Sing Tel, Verizon, Deutsche Telekom and Telefonica which increases the effectiveness of their flagship virtual machine MVX technology.



In result, FireEye has seen tremendous year-to-year revenue growth of 163.5% from 2013 to 2014 and has added 1030 new customers in 2014 alone. Below is a

quarterly representation in the increase of FireEye's revenue.



FireEye's impressive growth over the past couple of years should continue. The cyber-security market is still growing and nowhere near maturity yet; therefore FireEye will continue to be the leader of the market.

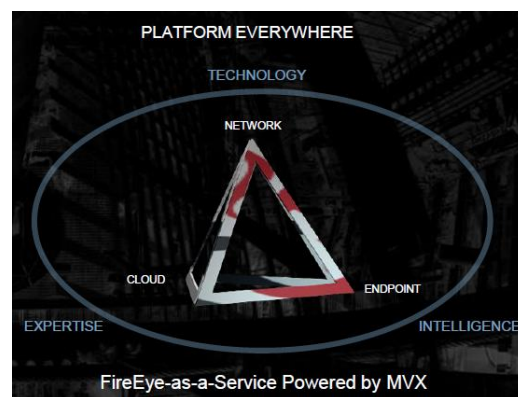
FireEye is expected to continue expanding into three key areas: the Global 2000, internationally and smaller companies lower in the supply chain to the larger companies. As mentioned, larger companies are raising their budgets to expand on cyber-security and they will expect the smaller companies in their supply chain to follow suit and increase their cyber-security measures, keeping the window of high demand and revenue growth open for FireEye.

Industry Leading Technology

FireEye currently has the industry leading technology in cyber-security. Currently, there are threats among three areas: the network, the cloud and the endpoint.



What sets FireEye apart from their competitors is their ability to monitor and control threats from everywhere that a user may be.



The ability for FireEye to do this stems from their technology, intelligence and expertise. At the core of the technology is their MVX engine virtual machine which simulates an operating system, such as Microsoft's Windows or Apple's OS X, to make the malicious code believe it is within an actual operating system and activate within the virtual operating system instead of the customers actual network. Once this happens, the threat is detected and isolated, saving the customer from a data breach.

What makes FireEye's approach even more unique is their intelligence capabilities. All of the MVX devices are strengthened through FireEye's subscription service, Dynamic Threat Intelligence cloud. This service utilizes data from around the world keeping systems up to date the instant a new threat is known. Customers of FireEye have their security updated around 60 times a day, compared to other main competitors that update their services once or twice a day, at the most. As FireEye adds additional customers, more data points are added, making the cloud more effective and, in turn, making FireEye's system more valuable and appealing to more customers, a very lucrative circle. As customers use FireEye's products they like the results, resulting in a high retention rate and the customers enroll in the subscription service. This subscription service is offered at \$10,000 a month which allows for a base of recurring and predictable revenues. With improving and leading technology, FireEye will continue to draw in new customers and grow their revenues, a key value driver.

Improving Margins

When looking at FireEye's margins, one would think that they are not a healthy company, but there are reasons for their current subpar margins. Pre-IPO (September of 2013) FireEye had a focus on growing the company for future growth. CEO David Dewalt explains, "We

invested heavily on becoming a global company, things like putting human capital on locations around the world, 24x7 support, setting up our international subsidiaries to create better tax effective rates, doing things that allow us to become a strong big company.” This effort of becoming a large, strong and international company raised expenses far faster than revenues. FireEye set up a sales presence in 67 countries and grew their total employees from 416 in 2012 to 2,418 in 2014. This large expense set up FireEye to succeed in the future as a cyber-security provider, not just for the United States, but for the world. It has allowed them to sustain the high revenue growths they have achieved in the past couple of years and will allow them to continue in the years to come. As sales continue to increase throughout the next couple of years revenues will become greater than expenses, improving FireEye’s margins. Management is projecting operating cash flow to be positive in 2 – 4 years and operating income to be positive in 3 – 5 years.

Conclusion

FireEye Inc. is an innovative technology company operated by a management team with more than enough experience in the industry of cyber-security. With their industry leading technology they are able to answer the three questions all companies want to know: who attacked them, what was taken and what they should do next. The cyber-security industry is rapidly expanding in an attempt to protect companies against the equally rapidly expanding cyber-attacks that are occurring thousands of times a day. With the expanding and growing market, FireEye will continue to organically grow into a profitable company and continue to add value to the company and to shareholders. As cyber-crime activity continues to grow and affect more people everyday the technology and services that FireEye sells will become much more valuable. FireEye is a company that will keep corporations and their stakeholders’ information safe, a cost many will become more open to paying. For these reasons, FireEye Inc. is a BUY.

CENTER FOR GLOBAL FINANCIAL STUDIES

FireEye, Inc.		feye	Analyst Ryan Ahlers	Current Price \$42.60	Intrinsic Value \$43.18	Target Value \$49.46	Divident Yield 0%	Target Return 16.13%	NEUTRAL
General Info		Peers	Market Cap.		Management				
Sector	Information Technology	Fortinet Inc.	\$5,785.31	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	
Industry	Software	Splunk, Inc.	\$7,620.17	DeWalt, David	Chairman and Chief Executive C	\$ 7,463,188.00	\$ 971,177.00	\$ -	
Last Guidance	Feb-11-2015	Palo Alto Networks, Inc.	\$11,923.00	Aziz, Ashar	Founder, Vice Chairman and Ch	\$ 2,387,037.00	\$ 452,869.00	\$ -	
Next earnings date	NM	Tableau Software, Inc.	\$6,728.46	Sheridan, Michael	Chief Financial Officer, Principal	\$ 359,536.00	\$ 715,207.00	\$ -	
Market Data		Proofpoint, Inc.	\$2,274.52	Mandia, Kevin	Chief Operating Officer and Seni	\$ -	\$ -	\$ -	
Enterprise value	\$6,228.43	Imperva Inc.	\$1,288.18	King, Alexa	Senior Vice President, General C	\$ 654,371.00	\$ 658,722.00	\$ -	
Market Capitalization	\$6,630.64	Barracuda Networks, Inc.	\$2,022.61	Williams, Jeffrey	Senior Vice President of America	\$ 686,202.00	\$ 869,173.00	\$ -	
Daily volume	3.30	Qualys, Inc.	\$1,579.42	Historical Performance					
Shares outstanding	155.67	Symantec Corporation	\$16,220.17		feye	Peers	Industry	All U.S. firms	
Diluted shares outstanding	142.18	Progress Software Corporation	\$1,346.71	Growth	28.9%	16.2%	11.8%	6.0%	
% shares held by institutions	57.31%	Current Capital Structure		Retention Ratio	0.0%	175.5%	74.8%	57.5%	
% shares held by insiders	13.53%	Total debt/market cap	0.00%	ROIC		4.0%	18.3%	12.7%	
Short interest	9.93%	Cost of Borrowing	0.00%	EBITDA Margin	0.0%	27.9%	15.6%	13.7%	
Days to cover short interest	2.20	Interest Coverage	0.00%	Revenues/Invested capital	20.1%	79.2%	137.2%	202.3%	
52 week high	\$78.74	Altman Z	6.27	Excess Cash/Revenue	#DIV/0!	17.2%	38.4%	18.5%	
52-week low	\$24.81	Debt Rating	D	Unlevered Beta		0.97	1.01	0.95	
5y Beta	0.00	Levered Beta	1.41	TEV/REV	20.5x	4.1x	4.4x	2.4x	
6-month volatility	56.82%	WACC (based on market value weights)	9.37%	TEV/EBITDA		17.3x	15.6x	11.3x	
Past Earning Surprises				TEV/EBITDA		21.0x	18.7x	15.4x	
	Revenue	EBITDA	Norm. EPS	TEV/UFCF		76.0x	24.0x	26.8x	
Last Quarter	1.1%			Non GAAP Adjustments					
Last Quarter-1	-1.7%			Operating Leases Capitalization	100%	Straightline		10 years	
Last Quarter-2	4.8%			R&D Exp. Capitalization	100%	Straightline		10 years	
Last Quarter-3	3.2%			Expl./Drilling Exp. Capitalization	0%	N/A		N/A	
Last Quarter-4	2.0%			SG&A Capitalization	50%	Straightline		10 years	
Proforma Assumptions		Period		Rev. Growth	Adj. Op. Cost/Rev	Revenue	Forecasted Profitability		
Operating. Cash/Cash	0.0%	LTM	163%	51%		\$425.66	NOPLAT	Invested capital	UFCF
Unlevered Beta	1.40	LTM+1Y	60%	24%		\$681.06	-\$115.74	\$1,420.87	\$86.81
Rev/Invested Capital	79.0%	LTM+2Y	40%	23%		\$953.48	-\$64.17	\$2,305.37	-\$746.12
Continuing Period Revenue Growth	3.4%	LTM+3Y	35%	23%		\$1,287.20	\$120.35	\$2,854.71	-\$428.99
Long Term ROIC	13.5%	LTM+4Y	32%	21%		\$1,699.11	\$318.60	\$3,388.22	-\$214.91
Invested Capital Growth	Equals to Maintenance	LTM+5Y	26%	24%		\$2,140.87	\$551.48	\$3,938.64	\$1.06
Justified TEV/REV	4.0x	LTM+6Y	22%	26%		\$2,611.87	\$742.93	\$4,536.80	\$144.78
Justified TEV/EBITDA	15.6x	LTM+7Y	18%	28%		\$3,082.00	\$924.14	\$5,281.92	\$179.02
Justified TEV/EBITDA	18.7x	LTM+8Y	12%	29%		\$3,451.84	\$1,094.78	\$5,950.29	\$426.41
Justified TEV/UFCF	25.0x	LTM+9Y	10%	30%		\$3,797.03	\$1,217.64	\$6,618.42	\$549.51
							\$1,326.10	\$7,252.95	\$691.58
Valuation		ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	-7.1%	9.4%	-\$234.48	\$6,809.20	\$0.00	\$114.24	\$6,694.96	\$44.14	
LTM+1Y	-4.5%	9.5%	-\$322.36	\$8,104.88	\$0.00	\$584.46	\$7,520.42	\$50.21	
LTM+2Y	5.2%	9.6%	-\$123.92	\$9,597.96	\$0.00	\$787.96	\$8,810.01	\$58.44	
LTM+3Y	11.2%	9.7%	\$50.94	\$10,941.95	\$0.00	\$772.70	\$10,169.25	\$67.34	
LTM+4Y	16.3%	9.8%	\$256.90	\$12,186.45	\$0.00	\$529.91	\$11,656.54	\$76.89	
LTM+5Y	18.9%	9.9%	\$408.83	\$13,317.40	\$0.00	\$177.61	\$13,139.79	\$86.71	
LTM+6Y	20.4%	9.9%	\$550.38	\$14,485.65	\$0.00	-\$183.06	\$14,668.70	\$96.16	
LTM+7Y	20.7%	10.0%	\$635.36	\$15,457.32	\$0.00	-\$654.18	\$16,111.50	\$105.32	
LTM+8Y	20.5%	10.1%	\$682.62	\$16,366.60	\$0.00	-\$1,106.82	\$17,473.42	\$114.06	
LTM+9Y	20.0%	10.3%	\$709.73	\$17,208.01	\$0.00	-\$1,618.66	\$18,826.67	\$120.94	
Monte Carlo Simulation Assumptions		Base	Stdev	Min	Max	Distribution	Monte Carlo Simulation Results		
Revenue Variation	0	10%	N/A	N/A	Normal	Mean est.	Intrinsic Value	1y-Target	
Op. Costs Variation	0	10%	N/A	N/A	Normal	σ(e)	\$44.14	\$50.21	
Market Risk Premium	5%	N/A	5%	7%	Triangular	3 σ(e) adjusted price	\$0.32	\$0.25	
Long term Growth	3%	N/A	3%	29%	Triangular	Current Price	\$43.18	\$49.46	
Terminal Value	0	0.1	N/A	N/A	Normal	Analysts' median est.	\$42.60	\$43.35	

NorthStar Realty Finance Corp.

NYSE: NRF

Analyst: Brian Johnke

Sector: Financials

BUY

Price Target: \$24

Key Statistics as of 3/19/2015

Market Price:	\$18.57
Industry:	Real Estate Investment Trust
Market Cap:	\$5.75 B
52-Week Range:	\$14.06-19.74
Beta:	0.96

Thesis Points:

- Expanding Healthcare Real Estate Portfolio
- Added to MSCI US REIT Index
- Spin-Off of European Investments (NRE)
- High Yield Dividend

Company Description:

NorthStar Realty Finance Corp., a real estate investment trust (REIT), operates as a commercial real estate (CRE) investment and asset management company in the United States. It focuses on originating, structuring, acquiring, and managing senior and subordinate debt investments secured primarily by commercial, multifamily, and healthcare properties, which include first mortgage loans, subordinate mortgage interests, mezzanine loans, credit tenant loans, and other loans, such as preferred equity interests in borrowers who own such properties. The company's net lease properties primarily include office, industrial, and retail properties leased under net leases to corporate tenants; and healthcare properties focusing on mid-acuity facilities, such as skilled nursing and assisted living facilities leased under net leases to healthcare operators; and manufactured housing communities. Its asset management business focuses on commercial real estate related activities, such as sponsoring and advising its sponsored REITs; and managing and advising its collateralized debt obligation financing transactions. NorthStar Realty Finance Corp. also invests in CRE securities, including CMBS, unsecured REIT debt, and CDO notes backed primarily by CRE securities and CRE debt. The company has elected to be taxed as a REIT and it would not be subject to federal income tax, provided it distributes at least 90% of its taxable income to its shareholders. NorthStar Realty Finance Corp. was founded in 1997 and is headquartered in New York, New York. (CIQ)

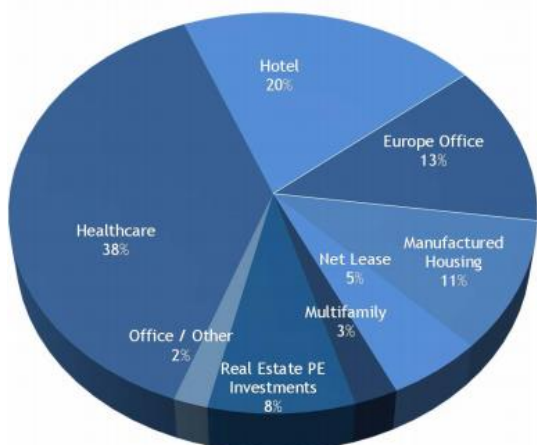


Recommendation

As a diversified REIT with a high and growing dividend, NorthStar Realty Finance is a BUY with a one year target price of \$24, which combined with its high yield and growing dividend of nearly 10% NorthStar Realty Finance provides a great investment opportunity. Look for advance in 2015 as it completes the spin-off of its European portfolio into a separate publicly traded REIT (NRE). Moving forward, NRF's diverse portfolio and ability to identify lucrative investment opportunities will play a key role as the company continues to grow.

Expanding Healthcare Portfolio

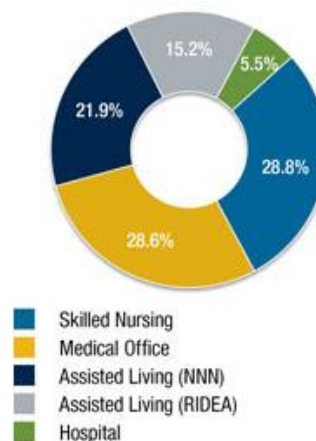
NorthStar has built its healthcare real estate portfolio to 463 properties totaling nearly \$5.8 billion since its inception in 2004. NorthStar's healthcare investments currently make up about 38% of its total portfolio which is by far its largest investment sector.



**NRF's Real Estate Investments by type*

NorthStar's management team understands the tremendous opportunity that the healthcare sector presents over the next few decades and has positioned NorthStar to be able to take advantage of it. The nearly 77 million people that make up the baby boomer generation began to retire in 2011, combined with increasing life expectancies; there will be an increased need for non-acute care facilities in the coming years. NorthStar is ready to take advantage of the increased demand for non-acute care facilities by specifically targeting these kinds of investments in recent years.

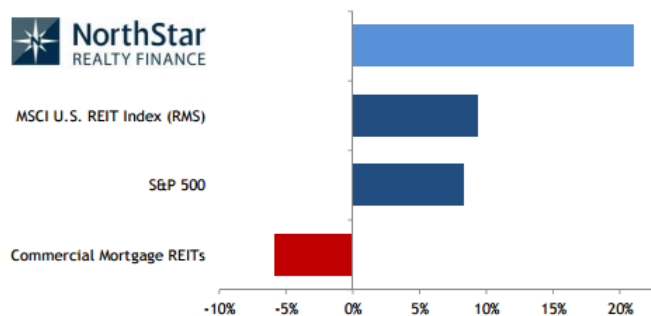
Healthcare by Property Type²



On December 3, 2014 NorthStar announced the closing of a \$4 billion acquisition of Griffin-American Healthcare REIT II. The acquisition includes a portfolio of 289 medical office buildings, senior housing, skilled nursing facilities and hospitals diversified across 32 states and the United Kingdom. NorthStar is well positioned to capitalize on the positive trends in the health care real estate it targets.

Added to MSCI US REIT Index

In 2014, NorthStar made the transition from a mortgage REIT to a traditional REIT. Transitional REIT's are required to have over 75% in owned real estate assets; NorthStar's current number is approximately 79%. As a result of this transition NorthStar is now a member of the MSCI US REIT Index, an index that it has outperformed by nearly 10% annually since 2004.



**Compounded annual return October 2004-March 2015*

NorthStar's addition to the MSCI index is a direct result of its Griffin-American Healthcare REIT II acquisition. As a result of this move, NorthStar should see an increase in institutional buying in the coming years.

Spin-Off of European Investments (NRE)

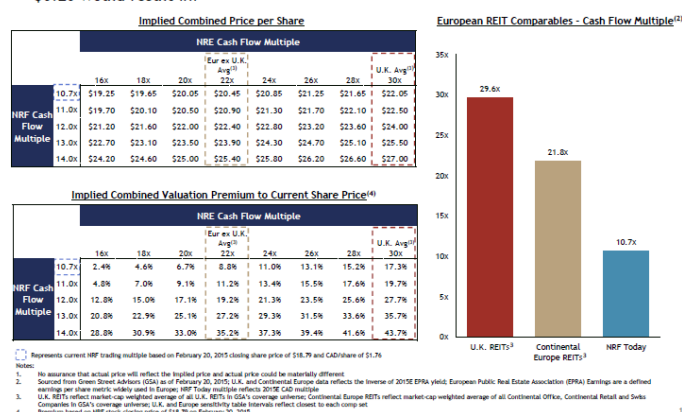
On February 26, 2015 NorthStar announced plan to spin off its European real estate portfolio into a separate publically traded REIT. Known as NorthStar Realty Europe, the new REIT is comprised of 50 properties worth approximately \$2 billion located mainly in Germany, the United Kingdom, and France.

The spinoff provides a few advantages to NorthStar investors:

- Take advantage of the opportunity in Europe
- Rid themselves of the risk in Europe

NorthStar's European portfolio is currently undervalued in comparison to European REIT's. NorthStar trades at approximately 10.7x cash flow while European Commercial REIT's trade at nearly 22x cash flow, this excludes the 30x cash flow that the average REIT in the United Kingdom trades at.

□ NRF hypothetical CAD per share of \$1.50 and NRE hypothetical CAD per share of \$0.20 would result in: ⁽¹⁾

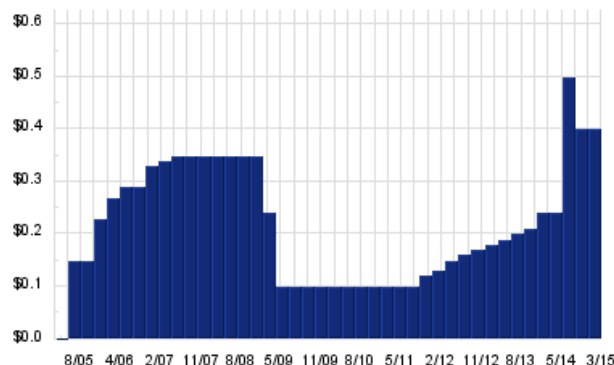


**Potential returns based on cash flow multiples [Zoom in]*

There is no disputing the fact that the Euro's recent decline has had an effect on NorthStar's European investments, especially the value of lease payments collected. Investors that are uncertain about the future of the Euro may look towards NorthStar Realty Finance once the spinoff is complete.

High Dividend Yield

A major reason to consider an investment in NorthStar is its high yield dividend. The amount of cash distributions paid by NorthStar to shareholders has rebounded substantially since the recession starting in 2009.



**NRF historical quarterly dividend graph (2005-15)*

As an REIT, NorthStar is required to distribute at least 90% of its taxable income to shareholders annually. This means that as NorthStar grows, so will its dividend payments. On March 13, 2015 distributed \$0.40 to shareholders which, when annualized, provides an 8.7% return.

CENTER FOR GLOBAL FINANCIAL STUDIES										
NorthStar Realty Finance Corp.		nrf	Analyst Brian Johnke	Current Price \$18.75	Intrinsic Value \$24.01	Target Value \$23.22	Divident Yield 10%	Target Return 33.42%	BULLISH	
General Info			Peers	Market Cap.		Management				
Sector	Financials		New Residential Investment Corp.	\$2,168.20	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	
Industry	al Estate Investment Trusts (REITs)		Chimera Investment Corporation	\$3,309.44	Hamamoto, David	Chairman and Chief Executive Officer	\$ 13,849,831.00	\$ 18,464,876.00	\$	-
Last Guidance	(Invalid Identifier)		MFA Financial, Inc.	\$2,985.12	Tytlis, Albert	President	\$ 8,627,049.00	\$ 12,546,618.00	\$	-
Next earnings date	5/11/2015		Starwood Property Trust, Inc.	\$5,423.08	Hess, Debra	Chief Financial Officer and Treasurer	\$ 2,698,462.00	\$ 3,649,374.00	\$	-
Market Data			Two Harbors Investment Corp.	\$3,322.83	Gilbert, Daniel	Chief Investment & Operating Officer	\$ 8,627,049.00	\$ 12,478,271.00	\$	-
Enterprise value	\$0.00		CYS Investments, Inc.	\$1,492.45	Lieberman, Ronald	Executive Vice President, General Counsel	\$ 1,110,799.00	\$ 2,042,280.00	\$	-
Market Capitalization	\$4,487.91		Annaly Capital Management, Inc.	\$10,159.09	Raffe, Daniel	Executive Vice President	\$ -	\$ -	\$	-
Daily volume	1.70		PennyMac Mortgage Investment Trust	\$1,585.57	Historical Performance					
Shares outstanding	309.47		Redwood Trust, Inc.	\$1,541.73	nrf		Peers	Industry	All U.S. firms	
Diluted shares outstanding	197.99		New York Mortgage Trust Inc.	\$843.39	Growth	20.3%	24.3%	53.1%	6.0%	
% shares held by institutions	63.80%		Current Capital Structure		Retention Ratio	523.6%		361.3%	61.6%	
% shares held by insiders	0.79%		Total debt/market cap	#DIV/0!	ROIC			15.8%	11.8%	
Short interest	1.56%		Cost of Borrowing	0.00%	EBITA Margin	13.1%	#VALUE!	#DIV/0!	13.7%	
Days to cover short interest	0.81		Interest Coverage		Revenues/Invested capital	11.9%	4.3%	2.7%	202.3%	
52 week high	\$35.86		Altman Z		Excess Cash/Revenue	#VALUE!	212.1%	8.9%	18.5%	
52-week low	\$15.95		Debt Rating	D	Unlevered Beta	0.31	0.17	0.46	0.95	
5y Beta	2.10		Levered Beta	0.64	TEV/REV		0.0%		2.4%	
6-month volatility	19.84%		WACC (based on market value weight)	6.26%	TEV/EBITDA				11.3%	
					TEV/EBITA				15.4%	
					TEV/UFCF				26.8%	
					Non GAAP Adjustments					
					Operating Leases Capitalization	100%	Straightline		10 years	
					R&D Exp. Capitalization	100%	Straightline		10 years	
					Expl./Drilling Exp. Capitalization	0%	N/A		N/A	
					SG&A Capitalization	0%	N/A		N/A	

Perion Network Ltd

NASDAQ:PERI

Analyst: Sofian Belhadj

Sector: Technology

BUY

Price Target: \$5.3

Key Statistics as of 3/18/2015

Market Price:	\$3.24
Industry:	Business Software & Services
Market Cap:	\$226.5 M
52-Week Range:	\$3.11-11.86
Beta:	2.36

Thesis Points:

- A shift from desktop advertising to mobile advertising automated
- Expected revenue greater than estimated
- A worldwide presence diversity the risk

Company Description:

Perion Network Ltd., a digital media company, provides products and services to consumers focusing on second wave adopters. The company's products include IncrediMail, a communication client, which is used for managing email messages and Facebook feeds, and offers various graphic and personalizing capabilities, as well as Molto, an email application for the iPhone; Smilebox, a Internet photo sharing and social expression for desktops and smart-phones; and Sweet IM, an instant messaging application. It also offers CodeFuel solution, which provide publishers and developers monetization opportunities through DisplayFuel, a browser extension that offers recommendations, deals, coupons, and relevant content to users as they browse online, as well as through InstallFuel platform, offers developers the ability to incorporate ads into the download and installation process of their software. In addition, the company operates ClientConnect, a cloud-based platform, which allows online publishers to create, implement, and distribute Web browser toolbars and other monetization tools and services to targeted audiences. The company is headquartered in Tel Aviv, Israel.



Thesis

Perion challenge is to be able to fight competitors that are bigger in size and also in market shares.

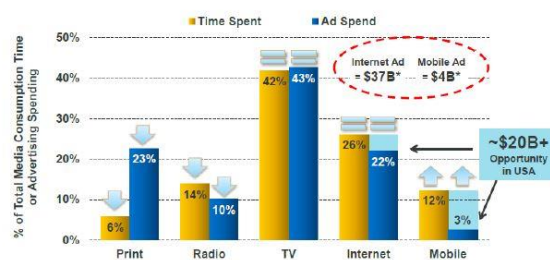


Perion is able to control 2% of the US search market for desktop search, which is lower than google with 67% of the market share and Microsoft with Bing has 18% of the market share. The potential of PERI are enormous considering the changement of business model that would be effective on the next two quarter of 2015. The mobile advertising business automatized to reach customers that is the right user is growing with the growing data possibly and a significant growth opportunity and leverage core competencies that Perion concentrate with acquisition of two companies for the past year. It is an opportunity for investors to enter in a position in a multibillion dollar business when the mobile advertising platform would effective for PERI in the mid-2015 and 2016.

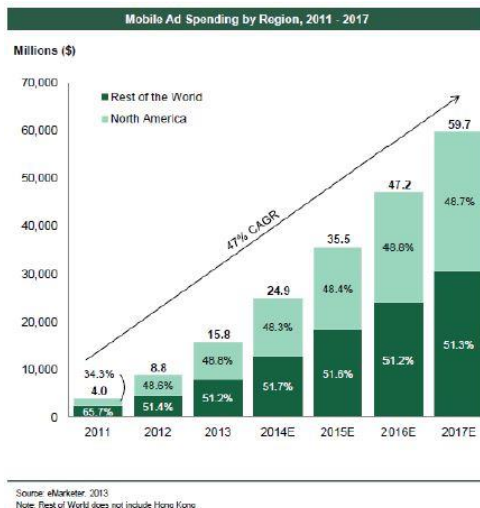
Macro overview Mobile advertising

The mobile advertising is an industry that is growing at fast pace since the mutation from desktop to mobile started with the introduction of smartphone. The important input is the times spent on the device versus the money spend on coverage of the media. As an example the TV commercial represent 43% of time spent by household and also 43% on the advertising budget.

% of Time Spent in Media vs. % of Advertising Spending, USA 2012



As a comparison the advertiser spend 3% of the total budget spent on advertising for a 12% of time spent in 2012. The advertising on mobile has the potential just in the US to reach \$20B. The forecast of the mobile ad spending is expected to grow at a 47% per year until 2017 for worldwide spending budget.



The specificity on the business is complicated because advertiser to be effective have to match with their client preference, in other world the objectives is to 'Put the right ad in front of the right user at the right user at the right time automatically. The companies on this industry are competing with their algorithm for which has the best conversion rate for seeing the ad to purchasing the item. The advertising on mobile display witch is the automatic marketing had grown at a 20% per year CAGR from 2011-2015.

Figure 1: Global Display Advertising Spend, \$B



Source: Deutsche Bank, Zenith Optimedia

The mobile display advertising is the fastest growing segment on the display Ad market. Despite a research report from the Deutsche Bank it was a \$5B market in 2013 and is expected to reach \$14B in 2016 with a 59% CAGR.

Management

Perion management has proven to be effective in the past years when they decided to stop the dividend distribution that led them to have a build up in cash that enabled them to make crucial acquisitions because they look forward on the advertising business. The management is focusing on their mutation phase, they started cutting their cost by reducing their staff in a shrinking business with desktop business mostly controlled by Google and Microsoft. A reduction of 20% on their staff that accrued a \$4 million one-time expense with the reorganization. The management is also drastically reducing their marketing expense for the next 2 years. Despite the management the company is experiencing economy of scale with the acquisition of Growmobile INC San Francisco company and Makemereach SAS a French company. The CEO bought \$50,000 in 2014 at \$7.40 and in the earnings call says that it would happen again. The management looks confident about the future transformation of their business model and especially because they have a vision to aggressively enter into the mobile advertising business.

Ownership

The director EREZ DROR owns 13.79% of the total shares, he is the founder of the largest internet company in Israel. Ronen Shilo who is an Israeli entrepreneur who

is considered as an innovator and software technologist owns 13.93% of the total shares. Benchmark Capital is an American venture capital firm responsible for the early stage funding of several successful startups including Twitter, Uber, Snapchat, and Instagram own 13.64% of the company. Rinat Zack and Rinat Jacques who is also an entrepreneur who created Model N (NYSE:MODN) own 9.18% respectively.



The owners of PERI seem very established investors who had worked on software technology or the technology business and did not sell any shares since their acquisition.

A shift from desktop advertising to mobile advertising automated:

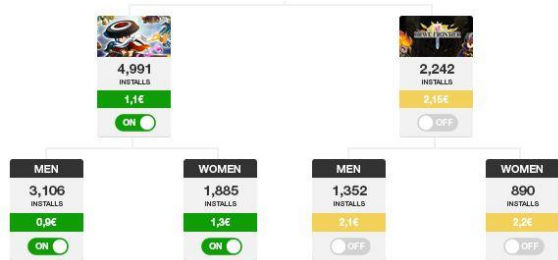
The business model will expand into mobile which is different from the advertising technology used on PC. It would require a different approach of the business, in order to run a campaign a brand needs single point solutions and used around 12 different systems. The results are poor campaign performance and a low ROI. Perion acquired GrowMobile to solve the problem of mobile advertising that provides an end-to-end solution for running advertising campaigns and measure the analytics and technical integration. With GrowMobile, data from all traffic sources and campaigns is compiled in easy-to-understand graphs and tables, enabling immediate analysis and effective action. The objective is to scale the campaign and make it flexible which means that advertisers could adapt easily in function of their changing needs. The GrowMobile platform enables Perion to retarget high quality users when needed.

without using any other external source. The technology is well managed by PERI and is easily visible with graphs table to make intelligent decision for company. The result was a dashboard that brings in 75+ different marketing sources, including ad networks, ad exchanges and more, where app publishers can plan their media campaigns, spend their marketing budgets and then track the results.



The beta version of the 'self-serve advertising platform' had been launched and the final version is expected to be available in the coming months. Peri

The second acquisition is MakeMeReach a French premium social advertising startup that had doubled its revenue year to year in 2014. The company enables PERI to have strong European presence with Facebook, twitter marketing. The objective of MakemeReach is to simplify the creation process to the management of a campaign on the major social media.



The objectives are simplified and have a clear view of what is happening with the advertising campaign. The advantage is that specific data of customers that convert the most which mean most reactive to the campaign that can be converted into a profitable target. The time frames of the campaign are also computed in order for marketer to boost the campaign performance.

The two company acquired already have \$80 million in

managed revenues and are key to the success of the shift from desktop to mobile for Perion.

Expected Revenue greater than estimated

Perion has been moving away from its previous business model of working with search engines, especially Google, to distribute software for desktop, and moving towards optimizing mobile campaigns. PERI was very dependent on Google which had changed their policy multiple times and for that reason Perion had been on trouble with google search engine. Chrome made significant change that despite Perion passed the issue with Google but also with Microsoft and are now working together with the search protection mechanism. The company's stock had decreasing since the market was wrong about a thesis: Google search engine change their policy but it was only in Google Chrome. The current environment is positive for Perion in the next coming quarter because the previous news had damaged PERI core business.

The management lowered their expectation on revenue saying that it would be lower by \$7 million to \$10 million with an unchanged EBITDA. Currently the company's EV/EBITDA is trading at 1.5x compared to 16.5x for its peers. The company's P/V is trading at 0.9x compared to 4.7x for its peers. Perion EBITDA Margin is about 26% compared with the peers that have an average of 20%. The EBIT/Interest Expense of PERI is 27.4x compared with only 9.1x for the company peers. The Altman Z score of Perion is 8.45 which are very far from the possibility of bankruptcy compared with 3.16 for the average peers. Most of the multiple that depict Perion are showing that the company is unevaluated compared to its peers.

A global presence to diversify the risk

The company is power to be a leader in the mobile advertising business because Perion has the advantage of having workforce around the world that is targeting clients in France and Spain, Italy, Germany, and a little bit of Scandinavia and UK is probably, from a client basis, 50%-plus of our clients. The Asia-Pacific represents about 10% that has the potential to reach the level of Europe. The US market is representing 30% to

40% of the revenues. The company has the potential to grow domestically in the US with the acquisition of a San Francisco company and also in Europe with the acquisition of a Paris based company. The company is in line with their shift from desktop to mobile by having an allocation of revenue internationally that have a potential to continue growing.

10.7% leading to an Economic Value Added spread of 5.7%.

All these assumptions are considered conservative regarding company's potential and leads to a 1 year target price of \$5.3, representing an upside potential of 62% based on current market price.

Conclusion

Perion is an undervalued company that is in total mutation in term of business model. The company is very strong concerning their fundamental even if for the moment the market is not understanding that the Q1 could potentially see a reduce amount in term of benefit. The potential for investors are very interesting when we know that most of the owner of the stock are people that worked on the technological business and are entrepreneur that know the hidden potential of the company. The management has the capacity to perfectly integrate the company into the mobile market advertising and have dominant market share that clearly indicate confidence.

Valuation

The valuation of Perion has been made using a proforma that is presented on the last page of this report.

Revenue growth for FY2015 has been estimated at -44.8%, FY2016 has been estimated at 10% in line with consensus estimations, and rapidly decremented by 2% year after year to a long term growth of 3% this growth is considered conservative regarding the company's growth potential over next years and according to its business remodeling and Investments in new businesses.

Operating costs over revenues have been increased from 74.1% for FY2014 to 74.5% by 0.5% increments. This increase is also conservative regarding the company's initiatives put in place to gain in productivity and economy of scale made with two acquisitions.

The 10 year median for the company is 74.1% but has been accounted at a long term level of 80%. Return on Invested Capital is expected to be 16.4% during FY 2015 compared to a Weighted Average Cost of Capital of

CENTER FOR GLOBAL FINANCIAL STUDIES									
Perion Network Ltd.	PERI	Analyst Sofian Belhadi	Current Price \$3.25	Intrinsic Value \$5.15	Target Value \$5.26	Divident Yield 0%	Target Return 61.97%	BULLISH	
<u>General Info</u>		<u>Peers</u>	<u>Market Cap.</u>	<u>Management</u>					
Sector	Information Technology	Blucora, Inc	\$591.85	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	
Industry	Internet Software and Services	Rocket Fuel Inc	\$413.41	Horowitz, Corey	Chairman and Chief Executive C	\$ 1,026,000.00	\$ 1,128,500.00	\$ 1,370,400.00	
Last Guidance	Feb-25-2015			Kahn, David	Chief Financial Officer, Secretary	\$ 193,000.00	\$ 185,000.00	\$ 212,830.00	
Next earnings date	NM			Greene, Jonathan	Executive Vice President and Me	\$ 294,000.00	\$ 253,000.00	\$ 254,160.00	
<u>Market Data</u>				Olsen, Robert	0	\$ -	\$ -	\$ -	
Enterprise value	\$152.75			Ranum, Marcus	Other Professional	\$ -	\$ -	\$ -	
Market Capitalization	\$228.93			<u>Historical Performance</u>					
Daily volume	0.08			PERI		Peers	Industry	All U.S. firms	
Shares outstanding	70.66			Growth		21.7%	12.4%	6.0%	
Diluted shares outstanding	70.33			Retention Ratio	0.0%	462.2%	84.0%	61.6%	
% shares held by institutions	10.98%			ROIC			16.0%	11.8%	
% shares held by insiders	36.90%			EBITDA Margin	0.0%	10.6%	14.1%	13.7%	
Short interest	0.21%			Revenues/Invested capital	149.3%	81.9%	132.0%	202.3%	
Days to cover short interest	1.29			Excess Cash/Revenue	#DIV/0!	96.5%	54.8%	18.5%	
52 week high	\$11.77			Unlevered Beta		1.30	1.14	0.95	
52-week low	\$3.11			TEV/REV	0.6x	7.8x	3.9x	2.4x	
5y Beta	0.00			TEV/EBITDA	2.5x	101.0x	16.7x	11.3x	
6-month volatility	54.36%			TEV/EBITA	3.1x	110.2x	19.9x	15.4x	
				TEV/UFCF		201.0x	30.5x	26.8x	
				<u>Non GAAP Adjustments</u>					
				Operating Leases Capitalization	100%	Straightline		10 years	
				R&D Exp. Capitalization	100%	Straightline		10 years	
				Expl./Drilling Exp. Capitalization	0%	N/A		N/A	
				SG&A Capitalization	0%	N/A		N/A	

REX American Resources Corp.

NYSE: REX

Analyst: Benjamin Lunaud

Sector: Energy

BUY

Price Target: \$77

Key Statistics as of 3/19/2015

Market Price:	\$58.65
Industry:	Renewable Energy
Market Cap:	\$ 469.4 M
52-Week Range:	\$51.12-110.65
Beta:	3.06

Thesis Points:

- Change in commodity prices should lead to a higher stock price
- New technologies allow reduced costs
- REX should continue to outperform its competitors
- Multiples and the share repurchase program show that REX is undervalued

Company Description:

REX American Resources Corporation, through its subsidiaries, produces and sells ethanol. The company operates in two segments, Alternative Energy and Real Estate. The Alternative Energy segment is engaged in the production of ethanol, dried and modified distillers grains, and non-food grade corn oil. Its dry distiller grains with solubles are used as proteins in animal feed. The Real Estate segment is involved in leasing real estate properties. The company was formerly known as REX Stores Corporation and changed its name to REX American Resources Corporation in 2010. The company was founded in 1980 and is based in Dayton, Ohio.



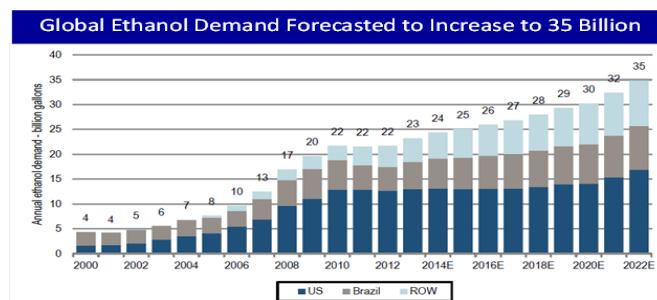
Thesis

Rex American Resources lost almost half of its value in less than seven months and is now undervalued. The stock has been oversold because of low oil prices as it is a substitute for ethanol. A possible increase in oil prices would increase REX's return to investors making the company a possible long term investment opportunity. An increase in ethanol prices (lowest price in 5 year) will increase the company's revenues. REX has been investing in new technologies allowing costs reduction; margins should increase, therefore increasing the value of the company. In addition, insiders' ownership is 16%, meaning that they are involved in REX American Resources and have an incentive to lead the stock price to increase. Recent shares repurchase from the company as an investment is a proof that the company believes that the stock is undervalued.

Industry Overview

Demand for ethanol is increasing through the years as it has a positive impact on the US economy and on the environment. The ethanol industry produced approximately 14.3 billion gallons in 2014, thereby reducing the U.S. reliance on foreign oil. As a consequence, it helps the U.S balance of trade and helps the U.S to move towards energy independence. There are several national benefits; government payments to corn growers have fallen from almost \$9 billion in 2006 to less than \$2 billion in 2013, a decrease of 78%. Ethanol production generates higher tax so more revenues for the U.S. The production added over \$53 billion to the U.S. GDP and increased household income by almost \$27 billion. Also, farm states are less impacted by challenged economic environments. Ethanol estimated to have supported over 379,000 jobs from agriculture to manufacturing to the service sector. On a life cycle basis, corn-based ethanol reduces greenhouse gas emissions (GHGs) by almost 34% compared to gasoline; 14.3 billion gallons of ethanol reduced GHG emissions by 39.6 million metric tons.

As a consequence, ethanol demands has been increasing and in expecting to do so. The graph on the top right corner shows that by 2018, Ethanol demand should increase from 24 billion gallons in 2014 to 28 billion gallons in 2018, a 17% increase. By 2022, the demand for ethanol should increase at a 5% annual rate.



Stock Price Catalyst

The increase in ethanol demand should lead to a higher ethanol price, meaning a substantial increase in revenue for REX. In addition, REX and other competitors decided to cut ethanol production for an undetermined period. There is already an excess ethanol production. The low ethanol price makes the production too costly for REX and its competitors, reducing their margins. A lower production will reduce REX costs, and increase ethanol prices at the same time. As a result, a higher demand and lower supply should increase ethanol price



which is at a 5 year low (graph above), increasing REX's revenues faster than expected. Also, by reducing its costs, the company will be able to increase its margins and create value to the company.

The graph below shows that oil prices and REX stock price are highly positively correlated. Indeed, oil is a



substitute for ethanol. REX has been oversold because

of the free fall in oil prices. However, REX performances are not impacted by the oil price. Despite a decrease in commodity prices, the company has been able to triple its net margins in the last quarter. A sustained fuel price increase (which is at its lowest level since 2009) would cause the market to reverse its sentiment and become bullish on the corn ethanol industry.

Finally, corn prices are at their lowest level since 2010. REX is able to generate revenue from distiller grains coming from ethanol production. These revenues allow the company to have roughly 30% of their production costs to come back. Therefore, a higher corn price would allow increased revenue from distiller grains, meaning a lower cost of production.

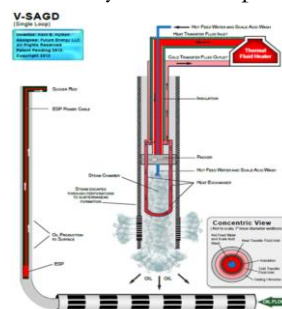
With these three commodity prices at 4-5 years low, REX has been able to increase its revenues, decrease its costs, and triple its net margin and EBITDA margin in a challenging market, outperforming its competitors. An increase in commodity prices should increase the company's margins even faster, as revenues are expected to grow by more than 200% (with existing commodity prices), and costs are expecting to be reduced.

Technology

REX's investments in technology (providing a better efficiency in Ethanol production) allow the company to increase its return on investments and return on invested capital faster than its competitors. REX utilizes a state-of-the-art ethanol production technology. All plants are highly efficient Fagen, Inc. (Fagen is the largest, most respected green energy design-builder in the U.S. constructed) utilizing ICM, Inc. technology. This allows maximized ethanol plant returns by running plants efficiently, often above nameplate capacity. It allows avoiding waste in the production process by producing distillers grains as animal feed. Finally, it

Siena Market Line 2nd week of March 2015

Future investments are expected to generate even more returns. Most of the world's oil reserves are in the form of heavy oil in deposits at depths below 2,000 feet.



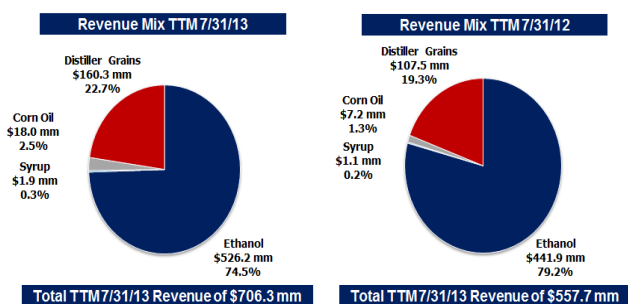
Current methods are limited by the heat losses on the surface and in the well bore as the steam is sent down the injection well. For any particular heavy oil reservoir and price of oil, there is a maximum depth of the reservoir that can be

economically exploited. REX invested in patented technology with potential to steam oil at depths currently unattainable. New downhole steam generator technology seeks to create steam at depths below 2,000 feet to produce deep heavy oil. This represents a modest investment for a high potential return. REX has invested almost \$1.3M (through 10/31/14) for 60% equity stake in technology developer, to secure patents, and to pursue commercialization of the downhole steam generation technology. This technology should reduce their costs of production, meaning a possible increase in margins for REX.

REX vs competitors

REX main competitors are Pacific Ethanol, inc (PEIX) and Green Plains, inc (GPPE). REX is doing better than its competitors and its industry average over the last few years. REX has some competitive advantages: it has advanced technologies; is align with farmers, farm cooperatives and farming communities as co-investors and owners of ethanol production facilities. This facilitates access to grain supply and allows local community support. REX plants are in the best locations, are close to rail access and feedstock. So REX is expected to substantially outperform its industry.

Even if their competitor's margins have been dramatically impacted by low ethanol prices, REX's net margins and EBITDA margin have nearly triple in the last quarter. EBITDA margin is 22.7% in the first quarter of 2014 compared to 10% for PEIX and GPPE. LTM EBITA 1 year growth was 263% for REX compared to a median of 73.36% for its overall competitors. Net income margins grew by 500% from 2014 to 2015, significantly more than the competitors' median of 89.72% over the same period. The company's last ROIC was 50.4%, higher than the peers' ROIC of



allows the production of corn oil. The charts above show that revenue from distiller grains increased by 49% from 2012 to 2013 thanks to this technology.

2.34%. Concerning the debt, REX has a negative net debt of \$131 million and a TIE of 45x, more than 6 times its peers'.

Overall, REX did better than its industry average over the last few years in term of debt management, liquidity and profitability.

Undervalued

REX lost almost half of its value in less than 7 months and recently underperformed its competitors' stock prices. Concerning the last quarter, REX sales declined from \$166.2 million to \$138.5 million, a decrease of 17%, reflecting lower ethanol and drilled distiller grain pricing. However, gross profit for the quarter doubled from \$18 million to \$36.5 million. REX just completed its best quarter in earning per shares with a record of \$2.86. Also, REX reported record third quarter net income of \$23.3 million. By having competitive advantages and performing better than its peers in a challenging environment, REX should beat analyst estimates expectations for the next quarters.

By looking at multiples and doing relative valuation, we can conclude that REX is undervalued compared to its peers. REX P/E ratio is 6.08x compared to 17.74x for the industry average. The median P/E is 9.82x for its peers. NTM EPS is \$8.69, as a consequence, the target price of REX is $8.69 \times 9.82 = \$85$. Then, if REX returns to its P/E historical median of 9.4x, the company target price would be $9.4 \times \$8.69 = \82 . Finally by being conservative and considering no increase in margins, NTM EBITDA would be \$134 million. The median NTM EV/EBITDA is 6.12x: as a result, the implied enterprise value is $\$134 \times 6.12 = \820 million. By adding the cash (\$164.3 million) and deducting the debt (\$33.5 million), the implied equity value is \$950.88. Therefore, the target price is \$118.86.

REX is substantially undervalued compared to its peers.

Ownership and share repurchases

Insiders have 17% ownership in the company. This is an important percentage meaning that they have a high incentive to increase the share price. Also, the company announced in their last earning calls that they were allowed to purchase an additional 500,000 shares, bringing the total authorization to 601,096 shares. This represents an investment for the company and proves that REX considers that its stock is undervalued. At the

announcement of the stock repurchase, the price was at \$65.

Conclusion

As a result, REX's the 1 year target price is \$77 per share, a potential upside of 31%. Revenue is the most important driver of value creation for the years to come. ROIC is expected to grow as well with the capital invested in new technologies. REX has been outperforming its competitors despite low commodity prices. An increase of commodity prices could generate substantial additional revenue for the company. REX is mainly focused on reinvesting its free cash flows in the company and investing in new plants. The stock price of \$58.65 per share is considered undervalued. The recommendation is a **buy**.

REX American Resources Corporation rex				NAME HERE		Current Price: 61.68		Lower Bound Intrinsic Value: \$77		Lower Bound 1y-Target: \$76.5		Dividend Yield: 0%		24.03%		
General Info				Market Data				Peers								
Sector	Energy	Enterprise value		\$406.81	Symbol	NAME	Market Cap	TEV/EBITDA	P/B	EBITDA Margin	Total Debt/TEV	EBIT/Int. Exp.	Altman Z			
Industry	Oil, Gas and Consumable Fuels	Market Capitalization		\$933.35	NasdaqCM:PEIX	Pacific Ethanol, Inc.	\$269.40	2.4x	1.2x	10%	16%	9.8x	4.92			
Description: REX American Resources Corporation, through its subsidiaries, produces and sells ethanol. The company operates in two segments, Alternative Energy and Real Estate. The Alternative Energy segment is engaged in the production of ethanol, dried and modified distillers grains, and non-food grade corn oil. Its dry distiller grains with solubles are used as proteins in animal feed. The Real Estate segment is involved in leasing real estate properties. The company was formerly known as REX Stores Corporation and changed its name to REX American Resources Corporation in 2010. The company was founded in 1980 and is based in Dayton, Ohio.				Daily volume	0.85851	NasdaqGS:GPPE	Green Plains Inc.	\$1,045.91	3.9x	1.3x	10%	52%	6.9x	3.42		
				Shares outstanding	8.00	NasdaqGM:AMTX	Aemetis, Inc.	\$81.63	5.6x	NM	14%	50%	1.5x	2.47		
				Diluted shares outstanding	8.16	RTS:ORFE	Orsknefteorgsintez Ope	\$205.60	17.4x	1.3x	12%	2194%	23,358.5x	1.55		
				% shares held by institutions	77.0%	SASE:2380	Rabigh Refining & Petro	\$20,323.20	11.7x	2.1x	6%	52%				
				% shares held by insiders	15.8%	WSE:PKN	Polski Koncern Naftowy	\$23,951.71	13.4x	1.3x	2%	34%	1.6x	3.44		
				Short interest	19.1%											
				Days to cover short interest	9.36											
				52 week high	\$110.65											
				52-week low	\$51.12											
				5y Beta	1.52	Peers' Median		\$657.65	8.6x	1.3x	10%	51%	6.9x	3.42		
6-month volatility	51.28%	rex		\$493.63	2.4x	1.5x	23%	8%	45.0x	7.21						
Management				Performance												
Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014	rex		Peers		Industry		All U.S. firms					
Rose, Stuart	Chairman, Chief	\$ 154,500.00	\$ 1,154,500.00	\$ -	Last	10y Med.	Last	10y Med.	Last	10y Med.	Last	10y Med.				
Rizvi, Zafar	President, Chief	\$ 199,270.00	\$ 1,199,270.00	\$ -	ROIC	50.4%	1.9%	2.34%	11.70%	12.68%	11.03%	11.85%				
Bruggeman, Douglas	Chief Financial Officer,	\$ 275,900.00	\$ 863,515.00	\$ -	EBITDA Margin	19.9%	2.2%	1.57%	15.44%	15.66%	13.64%	13.67%				
Kress, Edward	Secretary and Director	\$ -	\$ -	\$ -	Imputed Rev./ Invested cap.	3.15	1.00	3.00	4.76	5.05	1.72	2.02				
					Excess Cash/Total Cash	26.98%	21.30%	4.52%	4.49%	15.74%	10.62%	23.11%	18.48%			
					Total Cash / Rev.	27.81%	21.30%	4.52%	4.49%	23.12%	14.46%	32.95%	30.26%			
Current Capital Structure				Past Earning Surprises				Last Guidance (Invalid Identifier)		Next earnings date 3/26/2015		Last Earning Call Transcript: www.rexamerican.com				
Total debt/market cap	8.23%		Revenue	EBITDA	Norm. EPS											
Cost of Borrowing	4.23%	Last Quarter	-1.6%	0.0%	8.0%											
Interest Coverage	45.02	Last Quarter-1	1.9%	0.0%	20.2%											
Debt Rating	BBB	Last Quarter-2	0.9%	0.0%	19.3%											
5y Beta	2.17	Last Quarter-3	-2.2%	0.0%	17.3%											
WACC (based on market value weights)	7.4%	Last Quarter-4	-4.5%	0.0%	14.4%											
Continuing Period Assumptions																
Money market rate as of today	0.49%	Risk-Free rate	2.6%	LT Op. Costs/Rev	96.0%											
Annual increase (decrease) in interest rates	0.10%	Op. Cash / Rev.	0.00%	LT WACC	8.5%											
Yield Spread acceleration	1.2	Op. Cash/ Cash	0.0%	LT Term ROIC	10.8%											
Marginal Tax Rate	37.5%	LT Growth	3.2%	Growth in PPE	Equals to Maintenance											
LT convergence estimates: weights are either implied from the stability of each time-series"-i.e., median/(max-min), or estimated based on the "uniqueness" of its competitive power"-i.e., buyers power, suppliers power, competitive rivalry, threat of substitution, and threat of new entries.																
Capitalization																
Operating Leases																
100%																
Straightline																
10 years																
R&D Exp.																
100%																
Straightline																
10 years																
Expl./Drilling Exp																
0%																
Straightline																
10 years																
SG&A																
0%																
Straightline																
10 years																
Explicit Period Assumptions																
		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	to ∞			
Growth	1.4%	239.0%	-40.0%	3.0%	3.6%	3.1%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%		
Op.Costs/Rev.	90.4%	89.6%	88.7%	88.5%	88.5%	88.7%	88.9%	89.1%	89.3%	89.3%	89.6%	89.8%	96.0%	96.0%		
WACC	7.38%	7.49%	7.59%	7.69%	7.80%	7.90%	8.00%	8.10%	8.20%	8.30%	8.30%	8.40%	8.5%	8.5%		
Valuation																
		LTM	LTM+1Y	LTM+2Y	LTM+3Y	LTM+4Y	LTM+5Y	LTM+6Y	LTM+7Y	LTM+8Y	LTM+9Y					
NOPLAT	\$106.6	\$41.8	\$34.4	\$34.4	\$34.4	\$34.4	\$33.6	\$33.6	\$33.3	\$33.3	\$33.0					
Invested capital	\$177.1	\$182.8	\$183.3	\$183.2	\$183.1	\$183.0	\$182.8	\$182.7	\$182.6	\$182.5	\$182.5					
ROIC	50.4%	23.3%	18.8%	18.7%	18.7%	18.5%	18.4%	18.4%	18.2%	18.1%	18.1%					
UFCF	\$140.73	\$47.68	\$33.91	\$34.51	\$34.37	\$34.17	\$33.96	\$33.73	\$33.47	\$33.17	\$33.17					
EVA	\$57.98	\$28.62	\$20.41	\$20.14	\$19.82	\$19.45	\$19.06	\$18.65	\$18.21	\$17.74	\$17.74					
Terminal value											\$490.83					
Enterprise value (mid-year adj.)		\$548.70	\$529.53	\$516.77	\$518.87	\$520.95	\$523.82	\$527.61	\$532.41	\$538.35	\$545.31					
Total Debt		\$33.50	\$33.50	\$33.50	\$33.50	\$33.50	\$33.50	\$33.50	\$33.50	\$33.50	\$33.50					
Minority Interest		\$43.95	\$43.95	\$43.95	\$43.95	\$43.95	\$43.95	\$43.95	\$43.95	\$43.95	\$43.95					
Preferred Equity		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00					
Capitalized Operating leases		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00					
PV of Unfunded Pension Plan Liabilities		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00					
Dilutive impact of options,warrants, and converts		\$2.84	\$2.82	\$2.79	\$2.76	\$2.73	\$2.69	\$2.66	\$2.63	\$2.60	\$2.57					
Other claims on operating assets		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00					
Non-operating cash and LT investments		\$164.27	\$160.58	\$191.05	\$222.06	\$253.20	\$284.60	\$316.33	\$348.45	\$380.97	\$413.92					
Equity value		\$632.68	\$609.84	\$627.58	\$660.72	\$693.97	\$728.27	\$763.83	\$800.78	\$839.28	\$879.21					
Shares outstanding		\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00					
Price per share as of 3/19/2015		\$77.97	\$77.25	\$79.98	\$84.13	\$88.33	\$92.93	\$97.18	\$101.87	\$106.74	\$109.86					
Monte Carlo Simulation Assumptions																
		Base	Stddev	Min	Max	Distribution	Monte Carlo Simulation Results									
							Intrinsic Value		1y-Target							
Revenue Variation		0%	10.0%	N/A	N/A	Normal	Mean est.	\$77.97	\$77.25							
Op. Costs Variation		0%	10.0%	N/A	N/A	Normal	σ(e)	\$0.32	\$0.25							
Market Risk Premium		5.5%	N/A	5.0%	7.0%	Triangular	3 σ(e) adjusted price	\$77.01	\$76.50							
Long term Growth		3.20%	N/A	2.2%	10.6%	Triangular	Current Price	\$61.68								
Terminal Value		0%	10.0%	N/A	N/A	Normal	Analysts' median est.	\$104.50								
CGFS																

SunEdison, Inc.

NYSE:SUNE

Analyst: Jarret Reaume

Sector: Technology

BUY

Price Target: \$31.77

Key Statistics as of 3/17/2015

Market Price:	\$24.22
Industry:	Semiconductor Equipment
Market Cap:	\$6.66B
52-Week Range:	\$13.09 – 24.70
Beta:	4.87

Thesis Points:

- Will Control Solar Energy in Emerging Markets
- Planned and Executed Installations
- Acquisition of First Wind
- Opportunity due to Perceived Risk from Financials
- Vertical Integration in Solar Energy

Company Description:

SunEdison, Inc. develops, manufactures, and sells silicon wafers to the semiconductor industry. The company operates through three segments: Solar Energy, TerraForm Power, and Semiconductor Materials. The Solar Energy segment provides solar energy services that integrate the design, installation, financing, monitoring, operations, and maintenance portions of the downstream solar market. It also manufactures polysilicon, silicon wafers, and solar modules. As of December 31, 2014, this segment had interconnected approximately 974 solar power systems representing 2.35 gigawatts of solar energy generating capacity. SunEdison markets its products to corporations, utilities, governments and chip manufacturers.



Thesis

SunEdison, Inc. is the current leader in an industry that has a fantastic outlook for the next several years. The solar and wind energy fields look to experience rapid growth and the companies that take advantage of that will reap the benefits. SunEdison is in position to capitalize on the need for renewable energy and has the infrastructure to meet demand. The market is not pricing in the potential that SunEdison has to take their business to a new level in the next few years. Because of this underestimation, SUNE is underpriced.

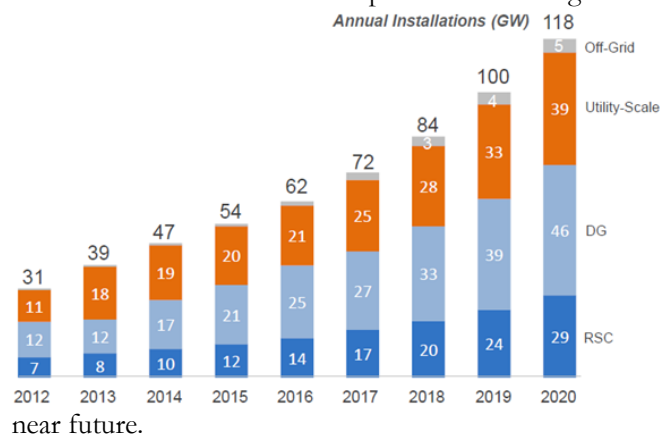
Will Control Solar Energy in Emerging Markets

There are markets in the world that look to need a considerable amount of solar energy between now and 2022. Regions like India, South America, and the Middle East are developing areas that will demand a lot of power in the near future. It also just happens that the geographical location of these regions is very conducive to solar irradiation. These regions are very close to the equator, which will give the areas a good reason to choose solar energy.

SunEdison has plans to invest in these markets that should result in rapid growth. The firm is planning projects in markets such as Brazil, India, and China. None of SunEdison's competitors have similar plans which are the start of a huge competitive advantage for SunEdison. Not only is SunEdison planning its projects in the correct markets, it is making unprecedented investments in these markets that will make returns extremely high. For example, the firm plans to construct a \$4 billion Indian panel manufacturing facility with the capacity to produce 7.5 gigawatts of modules per year. To put this in perspective, this facility would double the current largest solar manufacturing firm's total capacity.¹ This is a great example of the scope and magnitude of SunEdison's future plans. If the company can carry through with these projects in a cost-effective manner, SunEdison will dominate the best markets for solar energy demand.

Planned and Executed Installations

While the firm hasn't yet become profitable, it has set itself up for profitability once demand increases. The company has invested over \$3 billion over the last two years in order to install solar energy panels. The chart below shows how many installations SunEdison has made and also the number it plans on installing in the



The chart shows installations made in gigawatts, which is the capacity of energy created. It is a positive trend with growth increasing each year. Therefore, capital expenditures will have to increase even more for SunEdison between now and 2020. While this will delay free cash flows for the short term, it is necessary for the company to spend in order to meet future demand for solar energy. If the company cannot do so, the aforementioned emerging markets will look elsewhere.

Right now, the market is not taking into account the number of installations SunEdison has made to date. It does negatively affect the companies' financials because ROIC is negative and free cash flows are negative. However, the invested capital is necessary for the firm to be ready to meet future demand. Once SunEdison can slow down its installations, ROIC will increase because the invested capital will decrease greatly.

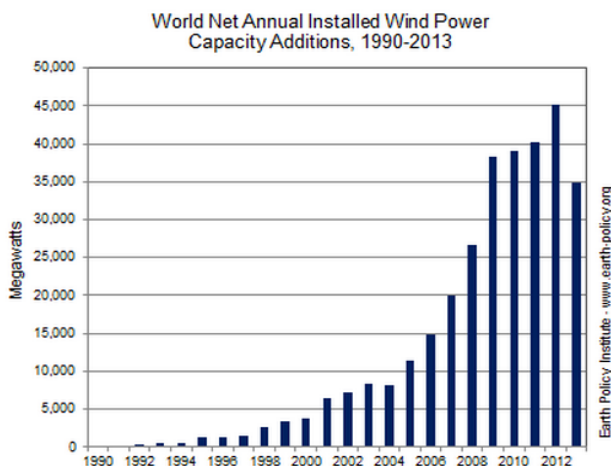
Acquisition of First Wind

¹ "SunEdison's Prospects Remain Bright". *Seeking Alpha*. Accessed March 17, 2015.

Another area that SunEdison is planning to grow is wind energy. The company's acquisition of First Wind Holdings LLC for \$1,898 million is a prime example of the company's desire to diversify its services. The



acquisition was completed on January 29, 2015. The acquisition makes SunEdison the largest renewable energy company in the world. The company knows that solar generation is the more lucrative area in the long-term, wind energy is a growing industry that is worth getting into. This is a smart acquisition for SunEdison because it now holds a leading developer in a different area from its main business. Therefore, the success of First Wind will not hinder the success of SunEdison's solar energy endeavors. The chart below explains the growth in wind energy and the value First Wind will



Source: GWEC, Worldwatch
deliver to SunEdison.

This industry provides existing business with room to grow for expansion. SunEdison CEO, Ahman Chatila, said about the decision to acquire First Wind, "This acquisition enhances SunEdison's global offering and adds a talented wind development and asset management team. By combining SunEdison's leading solar development platform with First Wind's platform, SunEdison is well positioned to drive significant growth in global renewable energy markets, and deliver

immediate shareholder value."² This quote shows the firm's commitment to set itself up to capitalize on growing demand.

Opportunity due to Perceived Risk from Financials

SunEdison's financial statements currently show losses due to where the company is in its life cycle. The firm is nowhere near maturity and is not yet profitable. This is due to the massive installations and other capital expenditures that have been made. These massive investments are far too large to be offset by revenue at this stage because demand is not yet there. This interesting situation can be viewed two different ways.

First, it can be seen as too risky to invest in right now. Although there is reason to believe demand for solar and other renewable energy will increase dramatically, it is not a given. Since a drastic increase in demand is needed for SunEdison's stock price to increase, there is definitely risk involved.

Second, SunEdison's situation can be viewed as an opportunity. The solar and wind energy industry is likely not near its potential. The chart on the second page shows that installations for solar panels will grow even faster in the near future. SunEdison would not be making all of these installations if it did not expect a major increase in demand.

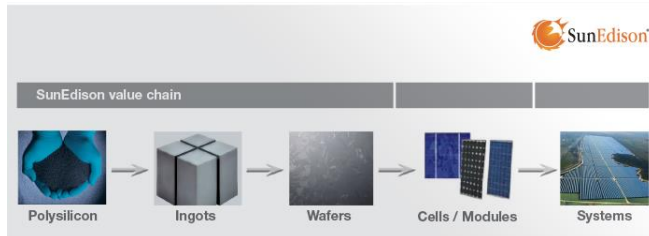
It is a smart idea to get in on SunEdison now because the market is pricing in risk based on where the company is in its life cycle. SunEdison has put itself in great position to capitalize on growing demand. It has already established itself in emerging markets such as India and South America and looks to increase its presence in the United States and Europe.

Once demand increases, revenue should grow rapidly year over year (Refer to pro forma statement at end of report). Once capital expenditures from installing panels slow down, SunEdison will be poised to generate free cash flows at a higher rate than its competitors who lack the foresight to penetrate the emerging markets.

² "SunEdison's Prospects Remain Bright". *Seeking Alpha*. Accessed March 17, 2015.

Vertical Integration in Solar Energy

Another reason SunEdison is poised to create value in the near future is its position in the value chain of solar energy. SunEdison processes its own silicon, manufactures solar modules, and builds large power plants to house the energy. The image below shows the different aspects of solar energy SunEdison controls.



This vertical integration will cut operating costs for solar energy for the company. According to the pro forma statement, it is estimated that operating costs compared to revenue will fall consistently for the next several years. SunEdison's vertical integration gives it another competitive advantage over its peers. Not only will the firm be able to supply solar power to all the emerging markets, it will do so while cutting costs.

Conclusion

SunEdison, Inc. is a recommended buy based on future revenue potential. The market is currently underpricing the stock because the company has not yet turned profits. However, the semiconductor industry and solar energy industry will grow dramatically in the near future. The company has set itself up for this growth by making more installations in growing markets that its competitors have not. SunEdison will dominate regions near the equator like South America who will be clamoring for solar energy soon. As these areas develop, the demand for power will grow. SunEdison will be the first choice because the energy is renewable and easy to set up considering installations have already been made.

CENTER FOR GLOBAL FINANCIAL STUDIES

SunEdison, Inc.		SUNE	Analyst Jarret Reaume	Current Price \$24.46	Intrinsic Value \$28.42	Target Value \$31.77	Divident Yield 0%	Target Return 29.88%	NEUTRAL
General Info		Peers	Market Cap.		Management				
Sector	Information Technology	SunPower Corporation	\$4,332.28		Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Conductors and Semiconductor Equip	First Solar, Inc.	\$6,066.66		Chatila, Ahmad	Chief Executive Officer, Presiden	\$ 4,237,956.00	\$ 7,077,058.00	\$ -
Last Guidance	May-08-2014	Lam Research Corporation	\$12,582.79		Wuebbels, Brian	Chief Financial Officer, Chief Ad.	\$ 1,449,446.00	\$ 1,521,542.00	\$ -
Next earnings date	NM	Veeco Instruments Inc	\$1,271.00		Ranhoff, David	Senior Vice President and Preside	\$ 1,476,543.00	\$ 1,348,418.00	\$ -
Market Data		Current Capital Structure		Historical Performance					
Enterprise value	\$14,236.45	Total debt/ market cap		51.05%	SUNE		Peers	Industry	All U.S. firms
Market Capitalization	\$6,661.85	Cost of Borrowing		8.33%	Growth		-11.4%	20.7%	8.3%
Daily volume	7.16	Interest Coverage		-94.27%	Retention Ratio		16.2%	154.8%	56.4%
Shares outstanding	272.36	Altman Z		0.21	ROIC		10.5%	22.9%	11.8%
Diluted shares outstanding	269.20	Debt Rating		D	EBITDA Margin		0.6%	23.3%	13.5%
% shares held by institutions	119.34%	Levered Beta		2.38	Revenues/Invested capital		91.0%	103.9%	92.3%
% shares held by insiders	0.55%	WACC (based on market value weights)		10.81%	Excess Cash/ Revenue		31.9%	49.5%	54.7%
Short interest	30.62%	Past Earning Surprises		Non GAAP Adjustments					
Days to cover short interest	8.20	Revenue		EBITDA	Norm. EPS	Operating Leases Capitalization		100%	Straightline
52 week high	\$24.47	Last Quarter		-8.4%	R&D Exp. Capitalization		100%	Straightline	10 years
52-week low	\$13.09	Last Quarter-1		-11.1%	Expl./Drilling Exp. Capitalization		0%	N/A	N/A
5y Beta	2.67	Last Quarter-2		-1.7%	SG&A Capitalization		0%	N/A	N/A
6-month volatility	63.34%	Last Quarter-3		-2.7%					
		Last Quarter-4		-10.6%					
		Proforma Assumptions		Adj. Op. Cost/Rev		Forecasted Profitability			
		Period	Rev. Growth			Revenue	NOPLAT	Invested capital	UFCF
Operating. Cash/ Cash	0.0%	LTM	24%	98%		\$2,484.40	-\$784.01	\$8,238.73	-\$784.01
Unlevered Beta	1.40	LTM+1Y	4%	85%		\$2,583.78	-\$182.57	\$8,637.32	-\$581.16
Rev./Invested Capital	100.0%	LTM+2Y	30%	81%		\$3,358.91	\$48.60	\$8,750.63	-\$64.70
Continuing Period Revenue Growth	10.0%	LTM+3Y	35%	78%		\$4,534.53	\$203.77	\$8,855.03	\$99.37
Long Term ROIC	12.5%	LTM+4Y	40%	78%		\$6,348.34	\$389.61	\$8,948.91	\$295.72
Invested Capital Growth	Equals to Maintenance	LTM+5Y	43%	78%		\$9,046.38	\$656.14	\$9,013.57	\$591.48
Justified TEV/REV	2.0x	LTM+6Y	43%	78%		\$12,891.09	\$1,060.59	\$9,209.21	\$864.96
Justified TEV/EBITDA	12.0x	LTM+7Y	10%	78%		\$14,180.20	\$1,147.38	\$9,303.64	\$1,052.94
Justified TEV/EBITA	15.0x	LTM+8Y	10%	78%		\$15,598.22	\$1,255.22	\$9,374.13	\$1,184.73
Justified TEV/UFCF	20.0x	LTM+9Y	10%	78%		\$17,158.04	\$1,378.09	\$9,430.49	\$1,321.73
		Valuation		Enterprise Value		Monte Carlo Simulation Results			
		ROIC	WACC	EVA	Total Debt	Other claims	Equity	Adjusted Price	
LTM	-9.5%	10.8%	-\$1,674.53	\$15,803.16	\$7,268.40	\$719.27	\$7,815.49	\$29.17	
LTM+1Y	-2.2%	11.0%	-\$1,141.51	\$17,541.51	\$7,268.40	\$1,849.48	\$8,423.93	\$32.52	
LTM+2Y	0.6%	11.0%	-\$913.33	\$20,150.72	\$7,616.43	\$2,167.05	\$10,367.24	\$39.47	
LTM+3Y	2.3%	11.0%	-\$767.85	\$22,442.96	\$7,939.80	\$2,291.63	\$12,211.53	\$46.51	
LTM+4Y	4.4%	11.0%	-\$590.64	\$24,795.48	\$7,963.96	\$2,431.29	\$14,400.23	\$54.91	
LTM+5Y	7.3%	11.0%	-\$330.62	\$27,177.15	\$7,963.96	\$2,145.93	\$17,067.26	\$65.19	
LTM+6Y	11.8%	11.0%	\$70.60	\$29,474.93	\$7,963.96	\$1,360.87	\$20,150.10	\$76.47	
LTM+7Y	12.5%	11.0%	\$135.74	\$31,705.64	\$7,963.96	\$292.93	\$23,448.75	\$88.77	
LTM+8Y	13.5%	11.0%	\$233.57	\$33,961.89	\$7,963.96	-\$990.93	\$26,988.85	\$102.00	
LTM+9Y	14.7%	11.0%	\$349.02	\$36,312.21	\$7,963.96	-\$2,493.96	\$30,842.21	\$113.24	
		Monte Carlo Simulation Assumptions		Distribution		Monte Carlo Simulation Results			
		Base	Stdev	Min	Max	Mean est.	Intrinsic Value	1y-Target	
Revenue Variation	0	10%	N/A	N/A	Normal	\$29.17	\$24.46	\$32.52	
Op. Costs Variation	0	10%	N/A	N/A	Normal	\$0.25	\$24.46	\$31.77	
Market Risk Premium	6%	N/A	5%	7%	Triangular	\$28.42	\$24.46	\$31.77	
Long term Growth	10%	N/A	-11%	21%	Triangular	\$24.46	\$24.46	\$31.77	
Terminal Value	0	0.1	N/A	N/A	Normal	\$30.69	\$24.46	\$31.77	

MannKind Corporation

MNKD: Nasdaq

Analyst: Skyler Scavone

Sector: Consumer

Discretionary

BUY

Price Target: \$8.4

Key Statistics as of 3/19/2015

Market Price:	\$7.55
Industry:	Integrated Telecommunications
Market Cap:	\$2.1b
52-Week Range:	\$3.80-11.48
Beta:	1.33

Thesis Points:

- Massive potential of Afrezza and Sanofi partnership
- Applicability of Technosphere technology
- Unfair current market pricing

Company Description:

MannKind Corporation is a biopharmaceutical company that focuses on the discovery, development, and commercialization of therapeutic products for diseases such as diabetes. It's main product, Afrezza, gained U.S. Food and Drug Administration (FDA) approval on June 27, 2014. Afrezza is a rapid-acting, inhaled insulin used to control high blood sugar in adults with type 1 and type 2 diabetes. The product consists of a dry formulation of human insulin delivered from a small and portable inhaler. Administered at the beginning of a meal, Afrezza dissolves rapidly upon inhalation to the lung and delivers insulin quickly to the bloodstream. Peak insulin levels are achieved within 12–15 minutes of administration. On August 11, 2014, a license and collaboration agreement (the "Sanofi License Agreement") with Sanofi-Aventis Deutschland GmbH, to which Sanofi is responsible for global commercial, regulatory and development activities for Afrezza. Afrezza was brought to market on February 2, 2015.



Thesis

MannKind Corporation is at a turning point and the market is not correctly valuing the potential. With recent advancements in its flagship product Afrezza including approval and partnership, MannKind will finally see revenue streams in FY 2015. Coupling the momentum gained by Afrezza and the groundbreaking Technosphere technology the diverse market available MannKind implies long term growth potential. Furthermore, recent coverage has sent the share price to pre-approval levels leading to a BUY under \$6 with a price target of \$8.4 (rose to \$11 upon approval).

Management History

The company, while founded in February 1991, took its present form in 2003 as a merger of three companies owned by Alfred E. Mann, named after its founder. Mann has invested approximately \$900 million into the company and has founded and largely funded 14 companies in his career of which 9 were acquired at an overall total of almost \$8 billion, and three companies became public. His companies have created a rechargeable pacemaker; an implant that enables deaf people to hear; a prosthetic retina that helps blind people see; an insulin pump that transformed the treatment of diabetes; a device that enables amputees to control prosthetic fingers with their brains. On January 12, 2015, Mann (89) transitioned from CEO to Executive Chairman.

Moving from President to CEO is Hakan Edstrom who served on the Board of Directors since 2001. Mann, however, will remain engaged with the company in business matters, including those relating to development and financing (net worth over \$1B) of MannKind's future therapies. He had the following to say about the company's future outlook, "I have the upmost confidence in Hakan and the entire executive team who have already made great strides in achieving key milestones in bringing Afrezza through development and into commercialization. Hakan's ability to manage and grow actively marketed products while guiding the development of potential blockbuster therapies make him an ideal fit for MannKind's next chapter of success."

It seems as if the heavy lifting for Afrezza has been done

hence why Mann states, "With the commercialization of Afrezza well underway and the future potential of the Technosphere platform being actively explored for additional products, the timing is right for me to step back from CEO." With the majority of the process remaining relative to Afrezza being the commercial aspect, and with Sanofi, who Mann "long considered as the best of all potential partners for Afrezza" the timing of this decision is logical. Though his first time dealing directly with healthcare and FDA related material, like most all he has done, Mann has succeeded in the difficult task of approval and commercialization of a medicinal product in the United States. It seems as if he is certain of Afrezza's success having come this far, and is switching to a less hands on position as the waiting game of mass adoption begins.

Sanofi Partnership Outlined

A logical place to start when understanding the company moving forward is the Sanofi License Agreement for Afrezza. MannKind received an upfront cash payment of \$150m in Q3 of 2014, and two additional \$25m of specified manufacturing milestones. Up to \$725m in additional milestone payments are available requiring other specified sales, development, and regulator milestones. Worldwide profits and losses, which are determined based on the difference between the net sales of Afrezza and the costs and expenses incurred by MannKind and Sanofi that are specifically attributable or related to the development, regulatory filings, manufacturing, or commercialization of Afrezza, will be shared 65% by Sanofi and 35% by MannKind. A \$175m line of credit was also extended from an affiliate of Sanofi to Mannkind. Also, required FDA post-marketing studies are now the responsibility of Sanofi, allowing MannKind to shift focus to other the many additional opportunities for the Technosphere technology which will be discussed later. Afrezza will be manufactured by MannKind of which currently the only approved source of insulin for Afrezza is manufactured by "Amphastar". A four year minimum total purchase dollar amount has been set and management is working with Sanofi to qualify its insulin for Afrezza, reducing the risk of supplier power. Sanofi is already in the diabetic sector with Lantus the globe's bestselling diabetes drug, with over \$7.5b in revenue in 2013. However the patent on this drug expires in 2015 and Sanofi is already switching efforts to an improved version of this basal insulin called "Toujeo". Sanofi is coupling this product with the fast acting Afrezza, which as a package reduce the risk of hypoglycemia. The synergistic benefits here are large, with Sanofi looking to shift its 20% of revenues from

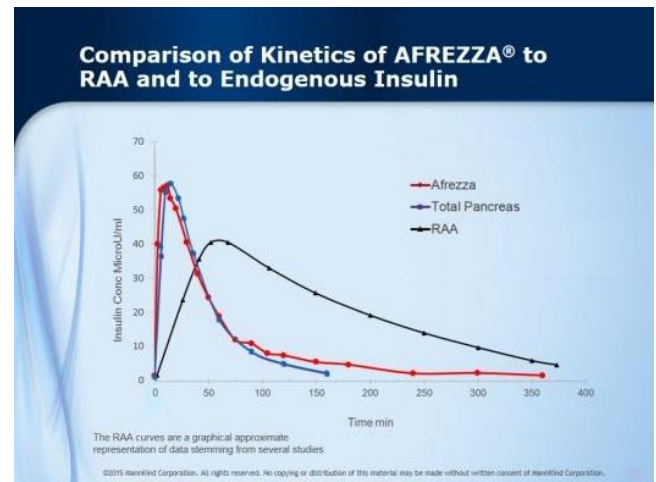
Lantus to Toujeo. With over 35,000 sales professionals and \$7.5B of customers who trust Lantus, Sanofi is in a prime position to bring these two products to market.

Massive potential of Afrezza and Sanofi

The major value driver for MannKind Corporation in the near future is Afrezza. At a glance, the diabetic market for Afrezza seems to be promising: Investopedia reports, “According to the International Diabetes Federation, the number of people globally with diabetes will soar by 205 million, to 592 million people, over the next 20 years.” Furthermore, the average amount being spent for diabetes medication is more than double the amount spent on the next highest category. This trend is not showing a reversal with diabetes spending increasing 18% in 2014, coupled with utilization of diabetes medicine growing by 1.7% compared to a decrease of 0.1% for all traditional disease classes. This price hike, then, flows logically with the increasing demand of diabetes medicine. Afrezza, through convenience, hopes to improve upon the estimated 39% of patients who fail to take their diabetes medication as prescribed. Afrezza was approved in the summer of 2014 (13-1 Type I, 14-0 Type II). As previously stated, soon after approval MannKind partnered with Sanofi to take the product to market. During the most recent earnings call Sanofi VP discussed why the company felt Afrezza shows value going forward: “we know by market research not less than 40% of patients actually are not going into insulins, because of the fear of the injections and the hassle of injections. So, I think it does respond to an interesting segment in the market. So, we'll have more insulin naïve or at least short acting naïve patients in the first step. So, you will see a building up, a new paradigm and we do think there is an interesting opportunity.”

Following clinical trials in 2013, “no clear advantage” was seen for Afrezza against other methods of receiving insulin. Because of this neither MannKind nor can Sanofi make this claim of superiority “on the label”. These trials and this bearish argument, however, are off base. These tests were done by measuring blood sugar levels over a period of several months and looking for an average reading below a certain target level. However, now diabetics can actively monitor themselves in real-time basis through which personal experiences regarding the quality of Afrezza can be shared. The following chart shows a comparison of Afrezza (red) and “existing

insulin products” (black), to actual non-diabetic levels (blue).



As one can see Afrezza much better emulates the body's normal pancreatic function as compared to traditional methods, without a needle. No, they can't put this on the label, but if doctors and patients are seeing improvements (high social media presence, see: <http://afrezzauser.com/>, <http://www.tudabetes.org/forum/topics/i-started-on-afrezza-last-night>), nothing stops them from telling people and trending towards this groundbreaking product. Upon a short amount of research I found many blogs, websites, and Twitter accounts surfacing in the past month documenting experiences as they adopt Afrezza. Most everything I am seeing online, the first sources of review since the clinical trials and the only real life reviews, are very optimistic. The buzz in the online diabetic community for Afrezza is vast.

Technosphere Potential

While Afrezza is the main value driver in the near term (NTM), the potential of the Technosphere technology as a whole is not to be disregarded. This technology allows the pulmonary administration of therapeutics currently requiring administration by injection and offers several competitive advantages over other pulmonary drug delivery systems. These advantages include potential applicability to a wide variety of drugs, rapid absorption, and improved convenience without a needle. While management has said it most likely won't bring another product to market in 2015, news regarding Technosphere developments or even a partnership is definitely possible and certainly a potential price driving catalyst in the next year. Management said the following at the last earnings call: “At this point, we have identified

a small portfolio of potentially exciting products on which to focus our efforts. These potential new products have in common the following characteristics. First, they all address serious unmet medical need. Secondly, they have comparatively relatively short development times or low cost of development. Third, they all take advantage of the unique benefits of our proprietary drug delivery technology. And finally, they all address large markets". They say further, while trying to be vague as to not tip a competitor, these three fields include pulmonary disease, pain, and oncology support. An analyst guessed an antimitotic (think inhaled Ibuprofen), to which management didn't answer but instead stressed that it would be pursuing less regulatory stringent, faster to market opportunities. This is speculation but an everyday pain reliever that does not stress the liver such as those currently on the market has vast potential, while also not being something people take each day for the rest of their life implying a faster approval process. Also, MannKind is in a perfect position to couple Technosphere with additional Sanofi products current and future. While these drugs probably won't come to market in the next twelve months, MannKind will release information regarding developments, and a partnership(s) could follow suit.

Improper market valuation

To put the current market valuation of MannKind into perspective: as of Q4 2013, 369m shares were outstanding with a market capitalization of 1920m, implying a price per share of ~\$5.20. As of Q4 2014, MNKD had 406m shares outstanding and a market capitalization of 2117m, implying ~\$5.20 price per share. Over the course of that year MannKind achieved FDA approval of Afrezza and obtained its ideal partner in Sanofi, and since filing Q4 numbers has brought the product to market, while today still trading at only \$5.26. For the same price as a year ago an investor gets MannKind, now with an FDA approval, a partnership, and a revenue stream, with a product that does not have a direct competitor, in terms performance levels or by type. Leading up to, and following, the approval in Summer of 2014, share prices climbed to a peak of almost \$11. With no catalysts after approval shares faded until the partnership with Sanofi in August which also sent the share price to levels lower than before the approval, most likely due to investors hoping for a different partnership. As milestones were met and

progress was made with Sanofi, share prices rose from December 2014 to a peak of 7.58 on 2/10/2015, a week after Afrezza was brought to market.

It was on 3/3/2015, potential investors were given a gift courtesy of Jay Olsen and Goldman Sachs. Goldman downgraded MNKD to a SELL with a price target of \$3, cut in half from the previous price target. This downgrade was based on Olsen's article and a few weeks of prescription data that fell short of Goldman's estimates in Q4 2014. This article has resulted in a 20% loss since the downgrade. This downgrade is curious because Goldman had actually increased its position on MannKind by 176% in Q4 2014. Also over this span institutions added a net 10,208,339 shares, new positions came in at 7,690,822 shares, while institutions that exited their positions entirely was represented by only 878,623 shares.

This \$3 price target was based on a DCF analysis using a 15 year model which seems to be a bit off base as these numbers can change drastically having only a few weeks of data. Management has said adoption will be slow and steady, and marketing for the product will not commence until the second half of 2015. This valuation, spanning to 2030, also does not recognize revenue contributions from any products other than Afrezza, but still expenses research and development. Revenue projections for 2018 imply 197,000 of 30 million diabetics in the United States will have adopted the product, perhaps a bit understated considering the marketing capability of Sanofi and the innovation of Afrezza. Again these projections are based on a few weeks of data, when simply getting a non-urgent appointment at a doctor could take longer than this time frame. Not to mention the 2-4 week supply of insulin most diabetics keep in storage, coupled with the free samples given away by Sanofi that last 2 weeks both delaying the incentive to explore Afrezza at least a month. Most diabetics have monthly appointments with endocrinologists so if they heard about Afrezza they might simply wait for the next scheduled appointment before inquiring. Also, doctors are generally conservative when prescribing a new product and wait for positive reviews before prescribing. In his Seeking Alpha article titled "Mannkind: Is there value in a Goldman Sachs "SELL" recommendation", published on 3/19/2015, "TheLinchScale" cites 3 case studies following Goldman Sachs's downgrades of which each 18 months later, were up 133%, 27%, and 42%. With massive short interest

logically this downgrade makes sense. Obviously it can't be confirmed but Goldman Sachs knows it price driving potential and a negative article or downgrade (like the cases cited by Linch) gives many shorts the opportunity to cover, as well as Goldman (+176% in Q4) the opportunity to get cheaper shares. It should be noted that Jay Olsen was at Pfizer when Sanofi's new CEO worked there, bad blood perhaps?

CENTER FOR GLOBAL FINANCIAL STUDIES

MannKind Corp.		MNKD	Analyst Skyler Scavone	Current Price \$5.26	Intrinsic Value \$6.90	Target Value \$8.42	Divident Yield 0%	Target Return 60.1%	BULLISH
General Info		Peers	Market Cap.		Management				
Sector	Healthcare	ZIOPHARM Oncology, Inc.	\$1,610.25		Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Biotechnology				Mann, Alfred	Founder and Executive Chaima	\$ 2,261,098.00	\$ 5,612,670.00	\$ -
Last Guidance	(Invalid Identifier)				Edstrom, Hakan	Chief Executive Officer, Presiden	\$ 2,301,552.00	\$ 7,425,744.00	\$ -
Next earnings date	NM				Pfeffer, Matthew	Chief Financial Officer, Principal	\$ 939,498.00	\$ 4,484,181.00	\$ -
Market Data		Seattle Genetics, Inc.	\$4,831.04		Martens, Juergen	Chief Operating Officer	\$ 993,166.00	\$ 5,034,707.00	\$ -
Enterprise value	\$2,251.52	Keryx Biopharmaceuticals Inc.	\$1,482.46		Thomson, David	Corporate Vice President, Gener	\$ 892,051.00	\$ 4,399,985.00	\$ -
Market Capitalization	\$933.35				Easley, Todd	Vice President of Marketing	\$ -	\$ -	\$ -
Daily volume	0.86				Historical Performance				
Shares outstanding	408.84				MNKD		Peers	Industry	All U.S. firms
Diluted shares outstanding	385.23	ACADIA Pharmaceuticals Inc.	\$3,450.93		Growth	0.0%	15.9%	6.0%	
% shares held by institutions	77.02%	Current Capital Structure		Retention Ratio			107.9%	61.6%	
% shares held by insiders	34.19%	Total debt/market cap	9.85%	ROIC			17.0%	11.8%	
Short interest	22.19%	Cost of Borrowing	9.00%	EBITA Margin	-198836.7%	-150.2%	19.2%	13.7%	
Days to cover short interest	15.97	Interest Coverage	-878.67%	Revenues/ Invested capital	0.0%	55.5%	64.4%	202.3%	
52 week high	\$11.48	Altman Z		Excess Cash/ Revenue	#DIV/0!	397.1%	82.9%	18.5%	
52-week low	\$3.80	Debt Rating	D	Unlevered Beta	0.77	2.07	1.08	0.95	
5y Beta	1.25	Levered Beta	1.07	TEV/REV	17069.9x	22.8x	6.2x	2.4x	
6-month volatility	51.17%	WACC (based on market value weights)	8.33%	TEV/EBITDA			16.1x	11.3x	
Past Earning Surprises				TEV/EBITA			18.9x	15.4x	
	Revenue	EBITDA	Norm. EPS	TEV/UFCF			43.3x	26.8x	
Last Quarter	-100.0%	0.0%		Non GAAP Adjustments					
Last Quarter-1	-100.0%	0.0%		Operating Leases Capitalization	100%	Straightline		10 years	
Last Quarter -2	0.0%			R&D Exp. Capitalization	100%	Straightline		10 years	
Last Quarter -3	0.0%	0.0%		Expl./Drilling Exp. Capitalization	0%	N/A		N/A	
Last Quarter -4	-100.0%			SG&A Capitalization	0%	N/A		N/A	
Proforma Assumptions		Period	Rev. Growth	Adj. Op. Cost/Rev	Forecasted Profitability				
					Revenue	NOPLAT	Invested capital	UFCF	
Operating Cash/Cash	0.0%	LTM	0%	1023%	\$10.00	-\$238.58	\$677.38	-\$7.58	
Unlevered Beta	1.00	LTM+1Y	2%	-516%	\$10.25	-\$20.54	\$651.95	\$235.89	
Rev/ Invested Capital	65.0%	LTM+2Y	1149%	33%	\$128.00	-\$1.86	-\$36.59	\$686.69	
Continuing Period Revenue Growth	5.0%	LTM+3Y	76%	53%	\$225.00	\$7.73	-\$470.63	\$441.76	
Long Term ROIC	12.0%	LTM+4Y	58%	66%	\$355.00	\$10.57	-\$970.49	\$510.43	
Invested Capital Growth	Equals to Maintenance	LTM+5Y	39%	74%	\$494.00	\$8.53	-\$1,477.18	\$515.21	
Justified TEV/REV	5.0x	LTM+6Y	31%	80%	\$645.00	\$3.89	-\$1,899.14	\$425.85	
Justified TEV/EBITDA	13.0x	LTM+7Y	32%	84%	\$852.41	-\$1.25	-\$2,118.73	\$218.34	
Justified TEV/EBITA	14.0x	LTM+8Y	35%	88%	\$1,148.14	-\$5.61	-\$2,204.11	\$79.77	
Justified TEV/UFCF	25.0x	LTM+9Y	6%	89%	\$1,222.40	-\$8.96	-\$2,283.78	\$70.71	
Valuation									
ROIC		WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price	
LTM	-26.3%	8.3%	-\$234.33	\$3,388.78	\$221.87	\$57.61	\$3,109.31	\$7.86	
LTM+1Y	-3.0%	8.4%	-\$74.25	\$3,673.62	\$221.87	-\$129.29	\$3,581.04	\$9.17	
LTM+2Y	#VALUE!	8.5%	#VALUE!	\$3,719.36	\$221.87	-\$799.06	\$4,296.55	\$10.50	
LTM+3Y	#VALUE!	8.5%	#VALUE!	\$3,262.14	\$221.87	-\$1,243.17	\$4,283.44	\$10.65	
LTM+4Y	#VALUE!	8.6%	#VALUE!	\$3,045.16	\$221.87	-\$1,783.79	\$4,607.09	\$11.41	
LTM+5Y	#VALUE!	8.7%	#VALUE!	\$2,733.71	\$221.87	-\$2,357.55	\$4,869.39	\$12.03	
LTM+6Y	#VALUE!	8.8%	#VALUE!	\$2,391.32	\$221.87	-\$2,859.59	\$5,029.04	\$12.32	
LTM+7Y	#VALUE!	8.9%	#VALUE!	\$2,121.68	\$221.87	-\$3,164.90	\$5,064.70	\$12.45	
LTM+8Y	#VALUE!	9.0%	#VALUE!	\$2,065.57	\$221.87	-\$3,338.78	\$5,182.48	\$12.82	
LTM+9Y	#VALUE!	9.1%	#VALUE!	\$2,163.12	\$221.87	-\$3,509.61	\$5,450.86	\$13.33	
Monte Carlo Simulation Assumptions						Monte Carlo Simulation Results			
Base		Stddev	Min	Max	Distribution	Intrinsic Value		1y-Target	
Revenue Variation	0	10%	N/A	N/A	Normal	Mean est.	\$7.86	\$9.17	
Op. Costs Variation	0	10%	N/A	N/A	Normal	σ(e)	\$0.32	\$0.25	
Market Risk Premium	6%	N/A	5%	7%	Triangular	3 σ(e) adjusted price	\$6.90	\$8.42	
Long term Growth	5%	N/A	0%	16%	Triangular	Current Price	\$5.26		
Terminal Value	0	0.1	N/A	N/A	Normal	Analysts' median est.		\$7.78	