## Macroeconomic Overview

#### U.S. Markets

Index	Weekly % Change	YTD % Change
S&P 500	+0.05%	+1.59%
Dow Jones Industrial	+0.28%	+0.14%
NASDAQ Composite	+0.29%	+8.58%
Russell 2000	-1.55%	-1.77%
VIX	-2.05%	-22.86%

The past trading week was characterized by strong volatility, as markets plunged on Wednesday and Thursday, then rallied strongly on Friday to finish close to breakeven. The S&P 500 finished the week just 0.05% higher, after losing more than

2.5% on Wednesday and Thursday alone, and the DJIA climbed back into positive year-to-date territory after a modest 0.28% gain. The NASDAQ Composite didn't perform much better, gaining 14.7 points or 0.29%, while small caps, which had outperformed large caps in the previous week, were hit the hardest as the Russell 2000 lost 1.55% through Friday. The week was off to a good start on Monday and Tuesday, despite sluggish



S&P 500, DJIA, NASDAQ Composite, Russell 2000 5-day chart.

economic data such as the Chicago PMI and ISM manufacturing index which both came in much lower than expected. On Wednesday, a sharp decline in the price of oil sent energy stocks tumbling, which triggered a broader selloff. The selling pressure intensified on Thursday, when the ECB announced it was cutting its deposit rate an additional 10 bps, as well as extending the duration of its bond-buying program. The

measures were seen by investors as not sufficient, and sent the Euro soaring to its biggest one-day gain ever. On Friday, the trend reversed immediately, as investor confidence was boosted by a strong jobs report which showed that unemployment remained steady at 5%, while nonfarm payrolls increased by 211,000 in November. Friday's rally brought a decrease in volatility, as measured by the VIX which lost 2.05% last week despite jumping more than 23% between Tuesday and Wednesday. The increased uncertainty in the markets might have contributed to the late rally in gold, which finally regained ground after hitting historical lows last week. The precious metal finished the week 2.74% higher, after spiking more than 3% on Friday. Silver followed a very similar pattern rising 3.25% to a two-week high of \$14.55/oz. Crude oil finished the week sharply lower again, after OPEC announced it would not cut production. Brent crude lost 4.15% to \$43 a barrel, while WTI lost 4.17% and now trades under \$40 a barrel. In corporate news, 2015 is now the biggest year ever for mergers and acquisitions, as the value of announced deals surpassed \$4.3 trillion. The year also marks a record number of deals over \$10 billion (58 so far) and over \$50 billion (9 so far), as cheap debt and slowing growth force companies to seek inorganic growth. The economic calendar for next week is fairly light, with the Department of Labor's JOLTS report due on Tuesday, jobless claims on Thursday, and retail sales and business inventories on Friday. Those reports will be critical not only for the Federal Reserve but also for investors who are now expecting an interest rate hike on December 16th.

#### **International Markets**

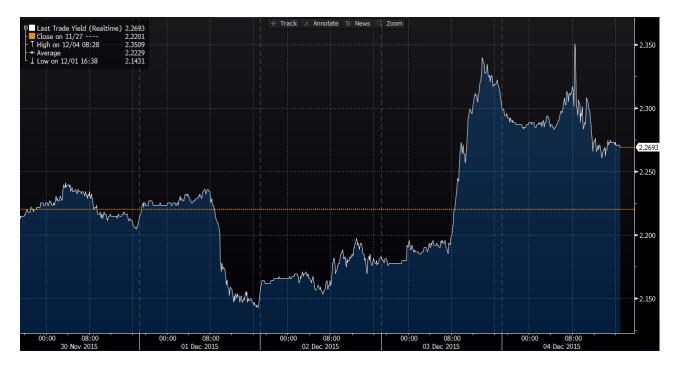
Index	Weekly % Change	YTD % Change
BE 500	-3.32%	+7.2%
Stoxx Europe 600	-3.41%	+8.19%
DAX	-4.8%	+9.65%
FTSE 100	-2.15%	-4.99%
CAC 40	-4.37%	+10.35%
Nikkei 225	-1.91%	+11.77%
Shanghai Composite	+2.58%	+8.98%
Shenzhen Composite	+2.25%	+57.81%

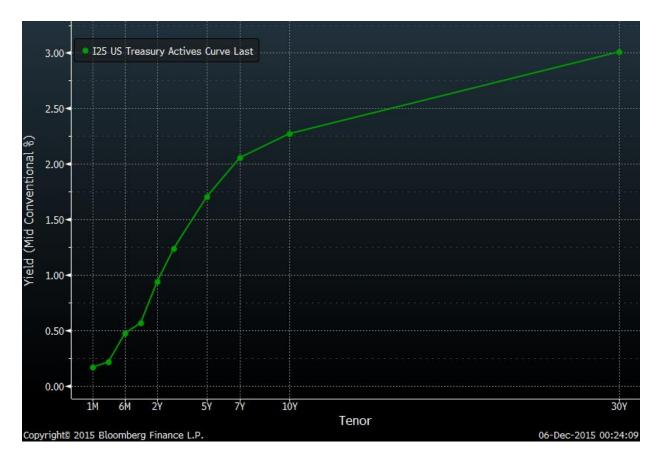
International equity markets had a much worse week, especially European markets which reflected investors' disappointment in Mario Draghi's announcements. France and Germany were hit the hardest by the selloff, with the CAC 40 and DAX losing 4.37% and 4.8% respectively. The Bloomberg European 500 and

Stoxx Europe 600 fell 3.32% and 3.41% respectively, while the U.K's FTSE 100 finished 2.15% lower. Unemployment in the Eurozone fell to 10.7% in October, its lowest level since January 2012. In Asia, Japanese stocks followed the same pattern as European equities, and the Nikkei 225 finished the week 1.91% lower after briefly crossing the 20,000 threshold. China crossed a milestone last week, as the IMF finally approved the country's request to include the Yuan in the SDR currency basket. The decision will take effect on October 1<sup>st</sup>, 2016, and shows that the IMF considers the Chinese currency reliable enough. Chinese equity markets welcomed this long-awaited approval, with the Shanghai and Shenzhen Composite indices posting gains of 2.58% and 2.25% respectively.

## **Bond Report**

This Week, The US Treasury yields have recorded their largest weekly increase in a month after the release of strong economic datas which might favour a rate hike by the end of the year. If there is no bad surprises concerning the expecting economic datas releases, we can be pretty confident to say that there will be a rate hike in December. Indeed, many investors are expecting this rate hike and on Monday, the CME Group's FEDWatch Tool, which tries to estimate future FED-funds prices was calculating the probability of a rate hike at 78%. On Wednesday, treasury yields kept increasing as Janet Yellen, the FED Chairwoman, said that an increase in rates at the December FED meeting is likely to happen, as she expected the U.S. economy to keep growing, pushing inflation toward the 2% annual target. Her comments came after the release of a strong employment report for the private sector. Indeed, 271,000 new jobs have been created in November, beating expectations, which was taken as another indicator of a rate-hike by investors. On Thursday, treasury-yields hit their highest level after Janet Yellen indicated to the Congress that the economic data needed for a ratehike have been met. The two-year yield, which is the most sensitive to rate-hike increased to 0.95%, its highest level in 5 year and a half. On Friday The U.S yields rose again after the release of the most anticipated job report of the year. There was a gain of 211,000 jobs in the U.S. economy, beating analysts' expectations. The unemployment rate remain at 5%. After the release of this good employment situation, there is almost no doubt that we are going to a rate-hike by the end of the year. Overall, the two-year treasury yield rose by 2.4 bps over the week and finish at 0.95%. The 10-year treasury yield was closing at 2.33% on Thursday but lost 5.3 bps on Friday to finish the week at 2.27%. Among longer maturities, the 30-year treasury yield finished the week at 3.01%, a drop of 6.2 bps compare to Thursday's level of 3.07%.





#### What's next and key earnings

On Thursday December 10th, The Import and Export Prices will be released. Both import and export prices have been in contraction lately and it is expected to continue this way. We should see a decrease of 0.8% and 0.3% for import prices and export prices respectively. Contraction on the import prices is the reflection of the strong dollar since buyers could buy more with a dollar while contraction in exports is the reflection of deflationary trends in prices.

On Friday December 11<sup>th</sup>, the PPI-FD report will be released. There was a drop in service prices because of a deflationary pressure on October. Energy prices, food prices, finished good and export prices went down. For this report, no changes are expected in the producer price and a 0.1% increase is expected for the final demand.

Later this day, the Retail Sales report will be released. Vehicle sales are expected to be strong in November keeping the level at a 12-year high. Ex-auto and gas core sales are expected to grow by 0.3% for the month of November despite an unexpected warm weather that might have impact winter sales. Finally, total retail sales are expected to increase at 0.3% rate as well. Then, the Business Inventories report will be released. This report is expected to show an increase in inventories of 0.1% for October, from 0.3% in September. Finally, the Consumer Sentiment report will be released. On the second half of November, it reached a reading of 91.3 against a consensus of 93.1. However, it is expected to rise to 92.0 for the first half of December.



## Cellectis S.A.

NASDAQ:CLLS (ADS)

## BUY

## Key Statistics as of 12/06/2015

Market Price:	\$33.6
Industry:	Biotechnology
Market Cap:	\$1.18B
52-Week Range:	\$23.52-\$50
Beta:	0.5

Analyst:Arthur JeannerotSector:Healthcare

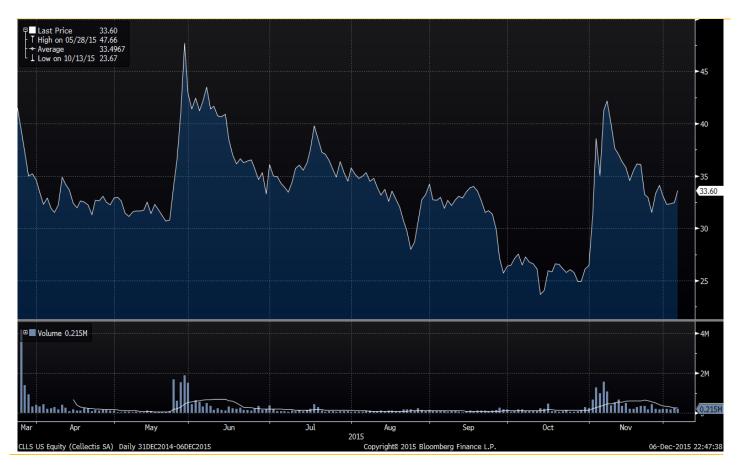
#### Price Target: \$48

## **Thesis Points:**

- Cellectis is a leader in genome engineering, with 16 years of experience and alliances with Pfizer (PFE) and Servier.
- The company's main focus is the development of innovative cancer therapies.
- If early clinical trials are successful, Cellectis could become a prized acquisition target for large pharmaceutical groups.

## **Company Description:**

Cellectis S.A. is a French biotechnology company specialized in gene-editing with the aim to develop innovative immunotherapies for cancer. Specifically, Cellectis uses its proprietary technology to engineer chimeric antigen receptor T-cells (CAR T-cells) that are then able to attack cancer cells. In addition, the company also works on developing healthier crops through its agricultural biotechnology subsidiary Calyxt. Even though all its products are currently in pre-clinical trial, early clinical data as well as the interest of large pharmaceutical companies for Cellectis' pipeline imply a high probability of success.





#### Thesis

Cellectis is a leading developer of innovative immunotherapy cancer solutions using gene-edited CAR T-cells. Thanks to its fifteen years of experience, pioneering discoveries, and strong corporate alliances, the company is well positioned to become a provider of best-in-class solutions for the treatment of various forms of cancer. Immuno-oncology is the latest breakthrough in cancer therapy, which currently consists primarily of chemotherapy, radiation therapy, and surgery. Despite their relative effectiveness, those current methods are very destructive, which explains why companies have shifted their research towards what is known as targeted therapy, where the drugs specifically target and destroy the cancer cells without harming healthy cells. The company's oncology pipeline is currently composed of five product candidates, with the most advanced (UCART19) the subject of an alliance with private French pharmaceutical company Servier. In addition, the company has an agreement with Pfizer to develop nineteen more immunotheraphy targets.

#### Our lead immuno-oncology product candidates

Product name Fargeted Indication	Product development	In Vitro Studies	In Vivo Studies	Manufacturing	CTA/IND filing	Alliance
<b>UCART19</b> Acute Lymphoblastic Leukemia (ALL) Chronic Lymphocytic Leukemia (CLL)					2015	Servier
UCART123 Acute Myeloid Leukemia (AML) / Blastic Plasmacytoid Dendritic Cell Neoplasm (BPDCN)						Wholly-Owned
<b>UCART38</b> Multiple Myeloma (MM) / T-cell Acute Lymphoblastic Leukemia (T-ALL)			Q4 2015			Wholly-Owned
UCARTCS1 Multiple Myeloma (MM)			Q4 2015			Wholly-Owned
UCART22 Acute Lymphoblastic Leukemia (ALL)						Wholly-Owned

September 2015

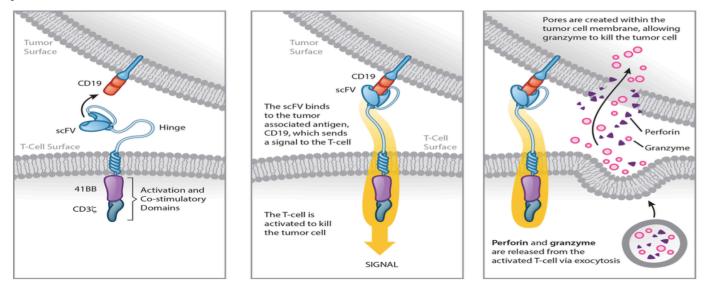
#### History

The company was founded in Paris in 1999 by André Choulika, PhD, who still serves as Chairman and CEO. In 2005, the company's research team established proof of the efficacy of its meganucleases, the molecules used in gene-editing. According to the company, this marked the birth of genome engineering, allowing researchers to industrialize a process that was once manual and very unpredictable. Following this success and realizing the growth potentials, the company raised &21.2 million through an IPO on the NYSE Alternext in Paris. During the following years, the company focused on the pre-clinical development of several candidates for cancer treatments, and the heavy investing paid off with very satisfying results. The company also acquired strategic assets, with the acquisition of CytoPulse Inc. in 2010, and an exclusive license to nuclease-related patents from the University of Minnesota. The same year, the company founded its plants division, Cellectis plant sciences, which is now known as Calyxt and is working on creating the next generation of genetically engineered crops. In February 2014, the company entered into a strategic collaboration agreement with Laboratoires Servier, a privately held French healthcare firm with 2014 revenues of &4 billion. The deal brought the company under the spotlight, and in June that year another strategic partnership was sealed, this time with U.S healthcare behemoth Pfizer. The largest partnership ever sealed by a French biotech startup, it allowed the company to gain exposure to the American market, which eventually led to a \$228 million IPO on the NASDAQ on March 25, 2015.



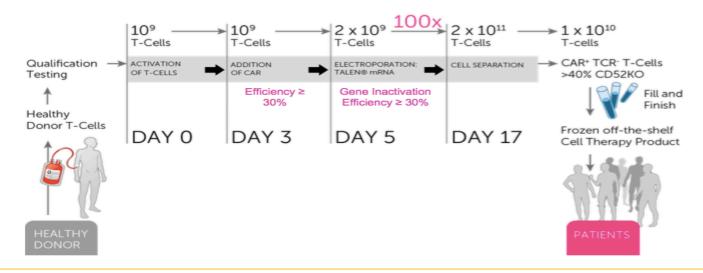
## CAR T-Cells

To simplify, a Chimeric Antigen Receptor (CAR) is a molecule that enables a cell to target specific antigens in a cancer cell. By associating T-cells, which originate in the immune system, with a CAR that targets specific proteins found in tumor cells, CAR T-cells can attack and destroy cancer cells. Thanks to their targeting abilities, CAR T-cells are becoming the next generation of cancer treatments, which researchers have been trying to improve for decades. Current cancer treatments such as chemotherapy are very destructive, and even though they are better than nothing, they are bound to leave the way to targeted therapies such as immunotherapy. As a result, large pharmaceutical companies are eager to secure alliances with biotech startups such as Cellectis, Juno Therapeutics (JUNO), Kite Pharma (KITE), or Bluebird Bio (BLUE), who also work on CAR T-cell oncology solutions. Below is a schema from the company's latest investor presentation, which shows the mechanism of effect of CAR T-cells.



In order to create those cells, the company has established a manufacturing process based on T-cells from healthy donors. Using its proprietary gene-editing technology TALEN, the company can create billions of frozen, ready-to-use off-the-shelf CAR T-cells per batch of donor cells. This allogeneic manufacturing solution is one of the key strengths in Cellectis' technology, as it makes production successfully scalable. Below is a schema that shows the different steps of the manufacturing process, from Cellectis' latest investor presentation.

#### Manufacturing Process Platform: Designed for cGMP Compatibility





## Partnerships

Cellectis has sealed major partnerships with two large pharmaceutical firms, on top of collaboration agreements with universities such as the University College of London or the Weill Cornell Medical College in New York. The first strategic alliance was sealed with Servier in February 2014. Servier is a French pharmaceutical company that employs approximately 20,000 people worldwide and generated sales in excess of €4 billion in 2014. The partnership covers the clinical development and potential commercialization of UCART19, Cellectis' leading drug candidate, as well as five other potential candidates in the treatment of solid tumors. The agreement includes a €7.55 million non-refundable upfront payment, and a maximum of €813.3 million in additional development and commercial milestone payments for the six candidates. The deal also gives Servier the option to acquire exclusive worldwide rights on each of the six drug candidates. Two weeks ago, on November 19, Servier exercised this option for UCART19, which is about to enter Phase 1 clinical trials. Under the terms of the amendment, Servier will pay Cellectis \$38.2 million for exercising the option, and up to \$300 million of additional payments for R&D, development milestones, and royalties on sales. Servier also sealed a collaboration and licensing agreement with Pfizer to develop and commercialize UCART19 together, whereby Pfizer will be responsible for commercialization in the United States. I believe the fact that Servier exercised its option early, and just in time to own the rights to UCART19 before the first clinical trial starts is a strong testament of the company's confidence in the potential for success. It is also very interesting to see Pfizer jumping on the UCART19 bandwagon, since it had missed out on this opportunity in the first place. Instead, Pfizer sealed a partnership with Cellectis for 15 candidates, plus 4 additional candidates for which Cellectis retains worldwide rights. This deal, the largest preclinical alliance obtained by a French biotech, includes an \$80 million upfront payment, the sharing of R&D expenses, and up to \$185 million of milestone payments for each of the 15 Pfizer target, or \$2.8 billion in total, plus royalties on sales. In addition, Pfizer took a 10% equity stake in Cellectis for €25.8 million. The agreement also prevents Cellectis from entering into another preclinical alliance for use of its CAR T-cells in oncology for four years. The scope of this deal, and the fact that it came just a few months after the Servier deal, is a demonstration of the interest of pharmaceutical companies for CAR T-cell-based immunotherapy solutions. Those strategic alliances give Cellectis the necessary resources to advance the development of its drug candidates, and should start generating cash flows in a few years once development milestones are crossed.

#### Universal Chimeric Antigen Receptor T-cells (UCARTs)

UCARTs are the ready-to-use, "off-the-shelf" CAR T-cells that Cellectis manufactures. Each one of its UCART product candidates is designed to target a specific tumor antigen, and can be engineered with specific attributes to correspond to the patient. UCART19, the company's most advanced candidate, is aimed at the treatment of acute lymphoblastic leukemia (ALL), a cancer of white blood cells which affected more than 80,000 people (mostly children and young adults) in the United States, and chronic lymphocytic leukemia (CLL), which affects around 14,000 people (mostly adults) every year in the U.S. The development of UCART19 will now be in the hands of Servier and Pfizer according to the terms of the recent agreement, which should result in the launch of a Phase I clinical trial in 2016.

UCART123, Cellectis' second leading candidate, is the subject of a research alliance with Cornell University. UCART123 is aimed at the treatment of acute myeloid leukemia (AML), which kills 10,000 people annually in the U.S and affects approximately 20,000 more, with a 5-year survival rate as low as 26%. Like CLL, AML is predominant among older adults, with a median age of 67 at diagnosis. UCART123 is currently in preclinical development and is still fully owned by



### Siena Market Line 2<sup>nd</sup> week of December 2015

Cellectis. Its properties also make it a potential candidate for the treatment of blastic plasmacytoid dendritic cell neoplasm (BPDCN), a rare, incurable form of AML, which affects the skin and bone marrow.

UCART-CS1 and UCART38 are two other drug candidates, developed for the treatment of multiple myeloma or Kahler's disease. Multiple myeloma is the most common form of myeloma (>90% of cases), a cancer of plasma cells that originates in the bone marrow. There are approximately 80,000 people affected by multiple myeloma in the U.S, and around 24,000 new cases per year. Multiple myeloma is currently incurable and the median survival rate for patients is 8 years, with high chances of relapse and tumor resistance. UCART-CS1 is subject to a preclinical and clinical alliance with the MD Anderson Cancer Center in Houston, TX, while UCART38 is being developed solely by Cellectis. The company is also evaluating its potential in the treatment of T-cell acute lymphoblastic leukemia (T-ALL), which is a rare form of ALL. UCART-22, the least advanced of the company's candidates, is still at the *In Vivo* phase, and is being investigated for the treatment of ALL and B-cell malignancies of ALL (B-ALL).

The decision to focus on acute leukemia is strategic, as it is a very aggressive form of cancer with very low survival rates. Current alternatives, despite being better than having no treatments, still fall short for the tens of thousands of patients who die from a form of acute leukemia every year. The choice of genetically engineered CAR T-cells to treat cancer is showing strong potential, as evidenced by the billions of dollars of investment that have been flowing to companies like Cellectis, as well as the very encouraging publications and enthusiasm from the scientific community. Cellectis is therefore positioned as one of the leaders of potential best-in-class treatments for hundreds of thousands of acute leukemia patients worldwide.

#### Calyxt

Calyxt, formerly known as Cellectis Plant Sciences, is the company's branch that focuses on the development of agricultural biotechnologies, or agbiotech. It was founded in 2010 in St. Paul, MN, based on a platform developed by Cellectis and the University of Minnesota. Calyxt's CEO is Luc Mathis, PhD, who joined Cellectis in 2006 and co-founded Calyxt with Dan Voytas, PhD, who serves as Chief Science Officer (C.S.O). Calyxt's mission is to "develop a novel generation of crops that will help develop food products with more health benefit for consumers" (calyxt.com). The company is currently working on four strategically chosen crops: potatoes, soybeans, wheat, and canola. The company's goal is to develop enhanced crops with particular characteristics, such as low trans-fat soybeans or low gluten wheat. Calyxt's pipeline currently comprises 11 potential products.

#### Pipeline

Product	Trait Discovery Estimated Field Trial					
	Low trans fat	Done	2015			
C	Low linolenic oil	Ongoing		2016		
Soybean	Low transfat/low linolenic oil stack	Ongoing			2017	
	Protein content	Ongoing			2017	
	Cold storage	Done	2015			
Potato	Browning reduction	Ongoing		2016		
Potato	Cold storage/Browning reduction stack (fries variety)	Ongoing				2018
	Cold storage/Browning reduction stack (chips variety)	Ongoing				2018
Canola	Improved oil	Ongoing		2016		
Canola	Nitrogen use efficiency	Ongoing				2018
Wheat	Low gluten	Ongoing			2017	1000000



Even though the work is still in the very early stages, it has attracted the interest of Monsanto (MON), BASF, and Bayer CropScience, a subsidiary of German laboratory Bayer. Those companies have all signed licensing agreements with Cellectis in order to be able to use its genome editing technology in their agricultural products. Because of the very early nature of Calyxt's work, I do not include it in my valuation, but it is important to note that it represents a tremendous opportunity and that Calyxt could quickly become an acquisition target if it were to make a breakthrough discovery.

#### Financials

Thanks to the two partnerships and to the recent IPO on the NASDAQ, Cellectis is in a very comfortable financial position that enables it to continue its intense R&D efforts for several more years, until milestone payments are received. As of September 30, 2015, the company had  $\in$ 279.4 million in cash and equivalents (90% of total assets), up from  $\in$ 112.3 million at the end of fiscal 2014. Operating expenses, including share-based compensation totaled  $\in$ 23.4 million for the quarter and  $\in$ 56.3 million for the first three quarters combined, which implies an annual "burn rate" of approximately  $\in$ 75 million. Research and development accounted for over 50% of operating expenses, at  $\in$ 29.6 million for the nine months ended Sep. 30. For the same period, total revenues were  $\in$ 27.2 million, in comparison with  $\in$ 21.6 million for the 2014 fiscal year. Revenues were primarily derived from the collaboration and licensing agreements with Pfizer and Servier, as well as from government grants and R&D tax credits. This resulted in a quarterly loss of  $\in$ 12.76 million, or  $\in$ 28.6 million for the first three quarters deficit to  $\in$ 165.9 million. The company also has  $\in$ 43.8 million of the contract. Cellectis has no long-term debt, and its book value of debt-to-equity was 0.26 as of the end of the third quarter. There are currently 35.1 million shares outstanding, 76% of which are in the hands of institutional investors, strategic holders, and industrial partners, which leaves around 8.4 million in free float.

#### Conclusion

Cellectis is one of the leaders in CAR T-cell research, and has the resources and potential to bring to market revolutionary treatments that could someday benefit hunderds of thousands of cancer patients. Current cancer therapies, painful and cumbersome, are bound to be replaced by targeted therapies, which are much more effective. Immunotherapy, which refers to the use of the immune system to fight diseases such as cancer, is one of the leading areas of oncology research. Over the last two decades, CAR T-cells have demonstrated impressive abilities in fighting tumors, and as a result several biotechnology companies have focused their research on the development of CAR T-cell-based cancer therapies. In fifteen years, Cellectis has developed an impressive portfolio of intellectual property, including patents, proprietary tools and processes that will allow it to become a full-scale producer of such therapies. Thanks to the strength of its research and commercial partners, the company has the financial, human, and scientific resources to bring its technology to market. However, this will not be the work of a couple years. Like all biotechs, Cellectis does not currently produce or sell anything, and spends significant amounts in research and development, generating losses every year. It will take many more years before the company's products can be brought to market, if they ever reach this stage. It is important to note that despite its promising preclinical results and strategic alliances, the company might never be able to commercialize a single product, and could end up virtually worthless. However, I believe Pfizer's involvement with Cellectis is a vote of confidence in the company's technology, and I think Cellectis could very quickly become an acquisition target, especially for Pfizer, which already owns a 10% stake and would save itself from paying billions in milestone and royalty payments. Like the four analysts who cover the stock, I recommend a buy with a 12-month price target of \$48.

# SIENAcollege

## $Siena\ Market\ Lin\\ 2^{nd}\ week\ of\ December\ 201$

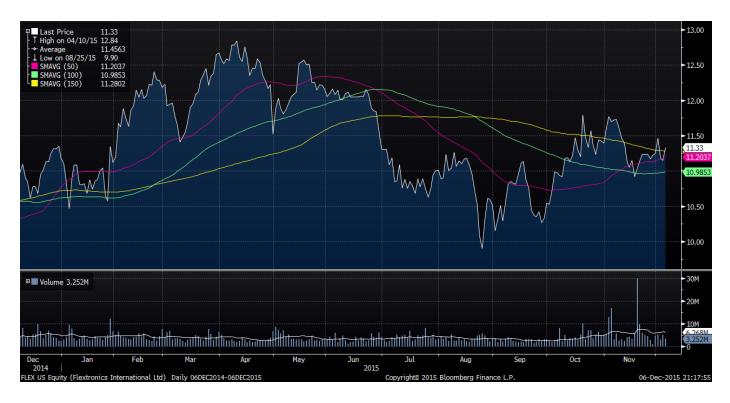
		0						Z <sup>ia</sup> week of December 201
			CENTER	<b>FOR GLOBAL FINA</b>	NCIAL STUDIES			
		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		
Cellectis S.A.	NASDAQ:CLLS				-		1-y Return: 55.79%	BULLISH
		Arthur Jeannerot	\$30.85	\$46.03	\$48.06	0%	2	DOBLIGHT
	General Info	Peers	Market Cap.			Managemen		
Sector	Healthcare	Sangamo Biosciences Inc.	\$640.23	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Biotechnology	Juno Therapeuties Inc.	\$5,327.69	Choulika, André	Co-Founder, Chairman and Chief Executive (	\$0	\$342,400	\$0
Last Guidanœ	N/A	Kite Pharma, Inc.	\$3,112.08	Sourdive, David	Co-Founder, Executive Vice President of Con		\$261,800	\$0
Next earnings date	March 31, 2016	bluebird bio, Inc.	\$3,068.40	Moulin, Thierry	Chief Financial Officer	\$0	\$0	\$0
	Market Data	Intrexon Corporation	\$3,835.31	Simon, Mathieu	Chief Operating Officer, Executive Vice Presid		\$0	\$0
Enterprise value	\$806.82	ImmunoGen, Inc.	\$1,151.68	Duchateau, Philippe	Chief Scientific Officer	\$0	\$0	\$0
Market Capitalization	\$4,449.48	NantKwest, Inc.	\$1,259.73	Harnest, Simon	Vice President of Finance and Investor Relation	\$0	\$0	\$0
Daily volume	0.22	Geron Corporation	\$800.60		Past Earning Surprises			
Shares outstanding	35.10				Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	32.63	PTC Therapeuties, Inc.	\$940.80	Last Quarter	39.45%	0.00%	0.00%	13.15%
% shares held by institutions	26.01%	Current Car	ital Structure	Last Quarter-1	46.79%	0.00%	0.00%	15.60%
% shares held by insiders	15.24%	Total debt/Common Equity (LTM)	0.04	Last Quarter -2	-23.17%	0.00%	0.00%	7.72%
Short interest	0.00%	Cost of Borrowing (LTM)	0.24%	Last Quarter -3	0.00%	0.00%	0.00%	0.00%
Days to cover short interest	0.00	Estimated Cost of new Borrowing	9.56%	Last Quarter -4	0.00%	0.00%	0.00%	0.00%
52 week high	\$45.66	Altman's Z	7.78	Standard error	13.2%	0.0%	0.0%	4.37%
52-week low	\$10.99	Estimated Debt Rating	D	Standard Error of Revenues prediction	13.2%		Industry Outlo	ok (Porter's Five Forces)
5y Beta	0.50	Current levered Beta	0.50	Imputed Standard Error of Op. Cost prediction	NM	Bargaining Power of		g Power of Customers (100th Percentile), Intensity of Existing Rivalry
6-month volatility	66.90%	LTM WACC	5.99%	Imputed Standard Error of Non Op. Cost predicti	io: 0.0%			eat of New Competition (100th Percentile), and Overall (97th Percentil
				Proforma Assumptions				
Convergence Assumptions	General Ass	sumptions		Items' Forecast Assun	nptions			Other Assumptions
	Money market rate (as of today)	0.37%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	Tobin's O	80%
All base year ratios linearly	Risk-Free rate (long term estimate)	2.93%	Operating Cash/Rev.	120.96%	0.00%	-12.1%	Excess cash reinvestment	Cost of capital
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	0.00%	13.35%	-12.17%	Other daims on the firm's assets	\$0.00
0			NPPE/Rev.	13.84%	20.00%		Other damis on the min's assets	Capitalization
	Marginal Tax Rate	38.0%				0.6%	4008/ 6.11	•
explicit period of to years	Country Risk Premium	7.0%	Dpr/NPPE	29.87%	21.05%	-0.9%		lized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	NOPAT MARGIN	59.55%	21.50%	-3.8% -6.9%		alized and amortized 'straightline' over 10 years
LTM	Revenue Growin Forecast	\$39,38	Op. Exp./Rev.	128.93%	60.20% 2.47%	-4.7%	E&P expenses are not capitalized	
FY2015	72.5%	\$39.38 \$74.30	SBC/Rev.	49.87% 10.48%	0.72%	-4.7%	SG&A expenses are not capitalized	Valuation Focus
FY2016	61.7%	\$129.37	Rent Exp./Rev. R&D/Rev.	10.48% 70.29%	0.72%	-5.2%	DCF Valuation	100%
FY2017	52.3%			0.00%	0.00%	-5.2%		0%
FY2017 FY2018	52.3%	\$205.41 \$304.76	E&D/Rev. SG&A/Rev.	0.00% 56.77%	26.80%	-3.0%	Relative valuation Distress Valuation	0%
FY2019	35.9%	\$304.76	ROIC	38%	13.29%	-2.47%		Ionte Carlo Simulation Assumptions
FY2020	24.2%	\$526.21	EV/Rev.	15.79x	2.36x	-2.4776 -1.34x	Revenue Growth deviation	Normal (0%, 1%)
FY2021	16.9%	\$620.21	EV/EBITA	54.78x	2.30x 6.79x	-1.34x -4.80x	Operating expense deviation	Normal (0%, 1%)
FY2022	12.7%	\$706.61	Debt/Equity	4%	22%	-4.80x 1.8%	Continuing Period growth	Triangular (6.79%, 7%, 7.21%)
FY2023	5.9%	\$760.01	Unlevered beta	470 0.49	0.87	0.04	0 0	Triangular (2.91%, 3%, 3.09%)
FY2024	4.8%	\$13.90	Dividends/REV	0.49	1%	0.04	Country risk premium Intrinsic value o(E)	\$0.09
Continuing Period	3.0%	\$862.80	Dividentis/ NE v	U/U	1/0	0.170	1-year target price $\sigma(\epsilon)$	\$0.10
continuing r chou	3.070	2002.00		Valuation			r-year target price 0(8)	20.10
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	38.0%	6.0%	\$289.11	\$1,875.04	-\$56.87	35.10	\$45.69	
FY2015	49.7%	6.4%	\$412.47	\$1,975.16	-\$17.31	35.10	\$47.59	
FY2016	25.9%	7.0%	\$573.42	\$2,166.70	\$54.49	35.10	\$50.16	The 3o(E)-adjusted intrinsic value is \$46.03; the 3o(E)-adjusted
FY2017	28.2%	7.3%	\$775.00	\$2,364.46	\$137.02	35.10	\$52.74	target price is \$48.06; and the analysts' median target price is
FY2018	20.270	7.6%	\$1,013.87	\$2,555.53	\$220.15	35.10	\$55.23	\$49.53
FY2019	29.4%	7.9%	\$1,013.87 \$1,259.55	\$2,555.55 \$2,707.13	\$220.15 \$270.66	35.10	\$55.25 \$57.48	ψτλυθ
FY2020	27.9%	8.3%	\$1,446.72	\$2,767.21	\$279.05	35.10	\$59.29	
FY2020 FY2021	27.9%	8.3% 8.7%	\$1,446.72 \$1,579.99	\$2,750.24	\$279.05 \$228.17	35.10	\$59.29 \$61.44	Sensitivity Analysis
FY2022	27.0%	9.1%	\$1,669.72	\$2,672.38	\$133.17	35.10	\$63.41	Revenue growth variations account for 95.9% of total variance
FY2022 FY2023	26.4%	9.1%	\$1,663.12	\$2,50/2.38 \$2,500.06	\$1.53.17 \$0,00	35.10	\$65.38	Revenue growth variations account for 95.9% of total variance Risk premium's variations account for 2.5% of total variance
			. ,					1
FY2024 Continuing Paris 1	25.0% 13.3%	9.9%	\$1,652.94	\$2,320.46	-\$168.30	35.10	\$68.45	Operating expenses' variations account for 1.4% of total variance
Continuing Period	13.3%	10.1%	\$1,396.28					Continuing period growth variations account for 0.2% of total varian



<b>Flextronics</b> I FLEX: Nasdaq	I <b>nternational Ltd.</b> GS	Analyst: Sector:	Peter Ostrowski Information Technology
BUY		]	Price Target: \$16.01
Key Statistic	<b>S</b> as of 12/3/2015	Thesis Points:	
Market Price: Industry: Market Cap: 52-Week Range: Beta:	\$11.26 Software \$6.2B \$9.55-12.86 .67	<ul> <li>Acquisition of Wink will giv position for the upcoming Inter</li> <li>Capital Allocation will Co Shareholder Value</li> </ul>	net of Things
		<ul> <li>Partnership with Nike</li> </ul>	

## **Company Description:**

Flextronics International Ltd. provides electronics manufacturing services. The Company's customers include original equipment manufacturers in the telecommunications, networking, computer, consumer electronics, and medical device industries.





## Thesis

Flextronics is currently the 2nd largest producer of electronics manufacturing systems. This is a shrinking industry as revenues have slowing been decreasing since 2011; so innovation is key to future growth and success. Flextronics is working towards becoming a big player in the Internet of Things through solutions and sales of sensors. The acquisition of Wink will be strategic for the expansion into the Internet of Things. It is also important to note that focus on capital allocation as well as a recent partnership with Nike will help create long term shareholder value.

## **Industry Outlook**

The Internet of Things is happening and it is important to understand the magnitude and potential effects on the future market that exist. The increase of machine to machine devices is only part of the equation. Sensors are going to be incorporated in order to gather the data that will exist and make these machines more intelligent. The amount of data that will exist because of the Internet of Things is enormous. Cisco estimates there will be 50 billion connected devices by 2020. The technology sector must adapt accordingly to take advantage of this opportunity.

The Internet of Things will ultimately make the marketplace faster which will increase efficiency substantially through innovation. These devices will be able to pick up on trends and stop problems before they even occur. The goal is for everything to be connected to the internet. This brings up the potential for smart cities. Through the Internet of Things; devices and sensors will be able to do more than ever imagined. This includes smart traffic control which is exactly what it sounds like. Traffic lights will be able to detect when accidents occur transmit the data to a processor which will immediately be sent to people's GPS's and reroute them around the accident. Other problems that the Internet of Things will be able to pick up on include air pollution levels, forest fires, electromagnetic levels, water leakages and even item location. In the future if someone misplaces their keys and these keys are connected to the IoT; one can simply ask google where they are. That's innovation. Imagine the amount of time that will be saved.

The forecasts for Internet of Things are just as big as the hype. Janus Bryzek who is a VP at Fairchild semiconductor and known as "the father of sensors"; estimates that the Internet of Things will be responsible for the largest growth in the history of humans. GE even estimates that the IoT has the potential to add \$10 to \$15 trillion to global GDP over the next 20 years. Cisco believes that there will be \$19 trillion of economic value created by 2020.

This potential trillion dollar market is impossible to overlook as IoT product and service suppliers as projected to generate incremental revenue of over \$300 Billion in 2020. The amount of devices will continue to increase at exponential rates.

## Wink Acquisition

Wink is a smart home platform that enables smart products to work together, and connect and communicate globally. This acquisition will drive Flextronics to become a top player in the Internet of Things. Flextronics already acted as a partner for Wink as their primary supplier.

This acquisition came about after the parent company of Wink filed for bankruptcy in September. This allowed Flextronics to acquire Wink at a discount of \$15 million.

Flextronics prides themselves in their Sketch to Scale platform. This platform allows customers to purchase solutions specifically tailored to their needs. This includes solutions which are not readily available. Flextronics has the capabilities to develop technologies to each specific need. The acquisition of Wink will improve Flex's ability to design and build devices with integrated connected intelligence. This will also provide customers to very intelligent cloudbased home automation platform. This acquisition will ultimately help Flex achieve their mission of making the smart home available to everyone.



## **Capital Allocation**

In Flextronics most recent earnings call Flextronics announced that they will continue capital allocation to create shareholder value with a long-term commitment. This is directly correlated with their objective of returning over 50% of free cash flow to shareholder returns. Higher margins as well as mergers and acquisitions have also been noted in the past year and continue to generate value for the company.

Margins						
Gross Margin	5.43	5.57	5.17	5.86	5.74	5.91
EBITDA Margin	4.37	4.15	3.79	3.76	3.77	4.62
Operating Margin	1.43	2.49		1.36	1.99	2.56
Incremental Operating Margin		8.32		-4.69	7.88	378.95
Pretax Margin		2.21	1.96	1.40	1.53	2.56
Income before XO Margin	0.08	2.13	1.77	1.28	1.40	2.30
Net Income Margin	0.08	2.09	1.67	1.18	1.40	2.30
Net Income to Common Margin	0.08	2.09	1.67	1.18	1.40	2.30

With decreasing revenues due to the current market for OEM Flex has been able to cut costs faster in order to boost margins which is shown especially with the EBITDA margin growth year over year.

By allocating funds into various projects; Flex has been able to increase profitability as a result which is shown below.

In Millions of USD except Per Share	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
12 Months Ending	03/31/2010	03/31/2011	03/31/2012	03/31/2013	03/31/2014	03/31/2015
Returns						
Marketurn on Common Equity			21.35	12.23	16.58	26.56
🖬 Return on Assets	0.17	5.35	4.31	2.56	3.17	
🖬 Return on Capital		15.28	11.60			15.24
🔟 Return on Invested Capital	5,63	15.69	11.91		11.48	14.33

## Partnership with Nike

Nike and Flex recently partnered to boost innovation. Flex will now be Nike's manufacturing partner for the future. Flex has the ability to provide solutions which will increase product efficiency and bring products to customers at a much faster pace. This also grants Nike the possibility of bringing their products to the Internet of Things. This partnership is very strategic for both parties as Flex will be able to immediately boost revenues with an opportunity for an increased share of the Internet of Things market when it really begins to take off within the next 5 years.

## **Competitive Advantage**

Flex's main competitors for the Electronic Manufacturing services industry include Avnet and Jabil Circuit. Jabil's main source of revenue and value is based on Apple's success as they are Apple's supplier for the iPhone casings. Jabil currently does work with other large name companies; however they do not have contracts with these companies and base their future growth on speculation that Apple will continue to use Jabil as their supplier. Jabil has not shown any signs of expanding into the Internet of Things which leaves a big piece of the market open for Flex.

Avnet also provides solutions but is not expanding into the IoT market at the moment. The problem with these companies avoiding this market opportunity is that technology becomes cheaper every year which is demonstrated in decreasing revenues as the competition increases which drives prices down. Innovation is Flex's competitive advantage and this innovation will be demonstrated through inorganic and organic growth allowing Flex to become a conglomerate with a large growth and market opportunity.

Companies are going to have to work together to fully conquer the Internet of Things and get it installed in devices around the world.

## Conclusion

I recommend a buy on Flextronics. This is due to the extensive market opportunity that exists in the Internet of Things. The macroeconomic factors demonstrate significant growth potential for companies that are attempting to capitalize on this market. As Flextronics is more than capable of becoming one of the big players for the Internet of Things; it is a no brainer that this stock has a bullish future.

# SIENAcollege

14.5%

#### Siena Market Line 2<sup>nd</sup> week of December

Continuing period growth variations account for 0.2% of total variance

			CENTE	R FOR GLOBAL FINA	NCIAL STUDIES			
Flextronics		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		
International Ltd.		Peter Ostrowski	\$11.33	\$14.58	\$16.01	0%		BULLISH
	General Info	Peers	Market Cap.			Management		
ector	Information Technology	Jabil Circuit Inc.	\$4,907.86	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
ndustry	lectronic Equipment, Instruments and Componer	n Avnet, Inc.	\$6,020.87	McNamara, Michael	Chief Executive Officer and Director	\$10,012,726	\$13,442,107	\$14,305,040
ast Guidance	October 19, 2015	Sanmina Corporation	\$1,760.97	Collier, Christopher	Chief Financial Officer	\$1,546,774	\$3,524,715	\$4,808,322
Vext earnings date	January 27, 2016	Plexus Corp.	\$1,253.58	Barbier, Francois	President of Global Operations and Compor	\$3,467,779	\$5,207,806	\$4,543,076
	Market Data	7 -		Hoak, Jonathan	Executive Vice President and General Counse	\$1,628,908	\$2,308,449	\$2,225,181
Enterprise value	\$7,497.61			Humphries, Paul	President of High Reliability Solutions	\$3,007,380	\$4,816,539	\$4,535,985
farket Capitalization	\$6,302.94			Bennett, David	Chief Accounting Officer, Vice President of Fi	\$0	\$0	\$0
Daily volume	3.25				Past Earning Surprises			
Shares outstanding	556.31	Benchmark Electronics Inc.	\$1,083.89		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	578.91			Last Quarter	2.43%	8.78%	8.00%	2.00%
6 shares held by institutions	84.08%	Current Car	oital Structure	Last Quarter-1	-5.47%	-9.10%	0.00%	2.64%
% shares held by insiders	0.58%	Total debt/Common Equity (LTM)	0.66	Last Quarter -2	-4.89%	4.39%	8.00%	3.84%
Short interest	1.23%	Cost of Borrowing (LTM)	3.22%	Last Quarter -3	6.18%	14.45%	15.38%	2.92%
Davs to cover short interest	1.46	Estimated Cost of new Borrowing	5.91%	Last Quarter -4	1.57%	10.90%	8.33%	2.78%
52 week high	\$12.86	Altman's Z	2.24	Standard error	2.2%	4.1%	2.4%	1.86%
52-week low	\$9.55	Estimated Debt Rating	В	Standard Error of Revenues prediction	2.2%			ook (Porter's Five Forces)
5v Beta	0.97	Current levered Beta	1.37	Imputed Standard Error of Op. Cost prediction	3.4%	Barmaining Power of Sur		Power of Customers (100th Percentile), Intensity of Existing Rivalry (
6-month volatility	24.75%	LTM WACC	7.92%	Imputed Standard Error of Non Op. Cost predicts				at of New Competition (83th Percentile), and Overall (92th Percentile)
o monun ( onema)	21.1270	Dim write	1.5270	Proforma Assumptions		reaction, rincer of	oobiatoas (rooarreataas), rina	
Convergence Assumptions	5 General Assun	nptions		Items' Forecast Assum	aptions			Other Assumptions
	Money market rate (as of today)	0.38%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	Tobin's O	80%
All base year ratios linearly	Risk-Free rate (long term estimate)	3.07%	Operating Cash/Rev.	0.00%	0.02%	0.0%	Excess cash reinvestment	Money market rate
converge towards the Sub-		0.1%	NWV/Rev.	1.99%	2.00%	0.0%	Other claims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	20.0%	NPPE/Rev.	8.92%	17.94%	0.9%		Capitalization
explicit period of 10 years		6.0%	Dpr/NPPE	21.21%	19.33%	-0.2%	100% of all contemporar are mait	lized and amortized 'straightline' over 10 years
	Country Risk Premium	0.076	NOPAT MARGIN	2.55%	4.00%	0.1%		talized and amortized 'straightline' over 5 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	2.55% 95.13%	90.00%	-0.5%	E&P expenses are not capitalized	tanzed and amortized straigntime over 5 years
LTM	Activate drown a precisi	\$24,859.66	SBC/Rev.	0.24%	0.87%	0.1%	SG&A expenses are not capitalized	
FY2016	-1.7%	\$24,432.87	Rent Exp./Rev.	0.54%	1.00%	0.0%	SOULY expenses are not capitalized	Valuation Focus
FY2017	3.8%	\$25,354.94	R&D/Rev.	0.00%	6.68%	0.7%	DCF Valuation	100%
FY2018	3.3%	\$26,197,47	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2019	3.2%	\$27,025.69	SG&A/Rev.	3.24%	11.57%	0.8%	Distress Valuation	0%
FY2020	3.1%	\$27,858.28	ROIC	19%	14.47%	-0.46%		Monte Carlo Simulation Assumptions
FY2021	3.0%	\$28,705.27	EV/Rev.	0.26x	0.98x	0.07x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	3.0%	\$29,572.23	EV/EBITA	8.42x	9.30x	0.09x	Operating expense deviation	Normal (0%, 1%)
FY2023	3.0%	\$30,462.38	Debt/Equity	66%	44%	-2.2%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2024	3.0%	\$31,377.79	Unlevered beta	0.90	1.00	0.01	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.0%	\$32,319.91	Dividends/REV	0%	2%	0.2%	Intrinsic value $\sigma(\epsilon)$	\$0.03
Continuing Period	3.0%	\$33,289.51	Dividenda / NEV	070	270	0.270	1-year target price σ(ε)	\$0.04
contailoung r thiot	0.070	400,207.51		Valuation			- year tanget place o(c)	40.01
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	19.1%	7.9%	\$3,697.76	\$10,986.94	\$2,477.40	556.31	\$14.30	
FY2016	21.3%	8.0%	\$4,414.79	\$11,800.98	\$2,308.35	556.31	\$15.72	
FY2017	20.4%	7.7%	\$5,395.74	\$12,785.82	\$2,220.80	556.31	\$17.18	The 3σ(ε)-adjusted intrinsic value is \$14.58; the 3σ(ε)-adjust
FY2018	19.2%	8.1%	\$6,415.99	\$13,800.89	\$2,119.30	556.31	\$18.77	target price is \$16.01; and the analysts' median target price :
Y2019	18.4%	8.4%	\$7,486.16	\$14,848.04	\$1,987.23	556.31	\$20.49	\$13.06
Y2020	17.8%	8.6%	\$8,610.70	\$15,926.02	\$1,824.11	556.31	\$22.35	
Y2021	17.3%	8.9%	\$9,793.48	\$17,034.12	\$1,629.05	556.31	\$24.36	
Y2022	16.9%	9.1%	\$11,037.97	\$18,171.61	\$1,400.36	556.31	\$26.53	Sensitivity Analysis
Y2023	16.6%	9.3%	\$12,347.41	\$19,337.64	\$1,135.89	556.31	\$28.87	Revenue growth variations account for 95.9% of total variance
Y2024	16.4%	9.5%	\$13,724.93	\$20,531.08	\$833.11	556.31	\$31.41	Risk premium's variations account for 2.5% of total variance
FY2025	16.2%	9.7%	\$15,173.65	\$21,750.56	\$489.23	556.31	\$33.59	Operating expenses' variations account for 1.4% of total variance
Continuine Project	14.5%	0.8%	\$0.201.25	424, 50.50	¥103.20	556.61	400.33	Continuing expenses variations account for 1.470 of total variance

\$9,201.35

9.8%

Continuing Period



NASDAQGS: JACK

## **BUY**

## Key Statistics as of 12/01/2015

\$73.66 Restaurants \$2.69 Billion \$63.94-\$99.99 0.72 Analyst: Sector: Dominick Iachetta Consumer Discretionary

Price Target: \$82.16

## **Thesis Points:**

- Rebranding of Jack in the Box and Qdoba through company innovations
- Management's continued dedication to increasing shareholder returns through buy backs & dividends
- Strong 2015 financial performance to continue into 2016

## **Company Description:**

Jack in the Box Incorporated operates and franchises fast-food restaurants Jack in the Box and Qdoba Mexican Grill. Headquartered in San Diego, CA, JACK offers a very diverse menu which includes its famous hamburgers along with specialty sandwiches, finger foods and Mexican food.





## Thesis

I am recommending a BUY on JACK based on the following: menu and infrastructure innovation which will lead to increased brand recognition, a continued share repurchase program which will carry into 2017 and strong historical and forward looking financial statements.

## **Increasing Brand Recognition**

JACK is in the process of implementing changes that will increase overall awareness of both their Jack in the Box and Qdoba franchises. Jack in the Box is the fifth largest hamburger chain in the United States but is ranked number two in the top ten major markets in which it conducts business. In order to further establish its brand nationwide, JACK has recently released a number of high quality menu options. Already famous for its all day menu, which consists of everything from tacos to egg rolls, these new menu items have been a huge success with their customers.

One of the most successful product launches in franchise history, the Buttery Jack platform, was one of the main successes of 2015. In addition to expanding on Buttery Jack, JACK is set to improve the quality of their entire core burger menu. These new items, along with customer favorite limited time offers, are set to be added to the menu by the second quarter in 2016. Along with their burger selection, boosts in late night fare and all day breakfast were catalysts for sales growth. JACK intends to highlight these upgrades to their Jack in the Box brand through television and digital advertising, point of purchase displays, packaging, new uniforms, and updated menu boards.



The overall strength of Jack in the Box's brand is that they consistently deliver exactly what their customers demand. Many of Jack in the Box's competitors are transitioning their menus to offer much healthier options. JACK's management understands that its customers do not eat at their restaurants because of their salads but rather for their famous "buttery" burgers. The Buttery Jack platform is the first of many new menu options that will help them continue their streak of same store sales growth.

Qdoba is the second largest Mexican fast casual food chain in the United States behind only Chipotle. In an effort to further rebrand its well established locations, the franchise plans to officially change the descriptor of the name from Qdoba Mexican Grill to Qdoba Mexican Eats. JACK's management team views this change to better reflect the flavors and variety that the restaurant offers. In October, Qdoba launched Knockout Tacos which feature six different chef inspired, unique recipes. Knockout Tacos represent the first of many new innovations to the menu that are in the pipeline for 2016 and beyond. Along with menu additions, JACK plans to increase the number of Qdoba locations. Currently there are 660 Qdoba restaurants in operation while JACK's management believes that there is potential to reach 2000 in the long term. In 2016 it is projected that 50 to 60 new Qdoba locations will be opened which represents an 8% to 9% growth.



In 2016, along with their traditional channels of advertising, JACK plans to increase its television presence in select markets. The company will also begin testing a digital platform that will incentivize customers with rewards. Additionally, JACK has begun remodeling Qdoba's across the country with new building



designs, fixtures, furnishings, and graphics. Overall, JACK's management team is in the process of enhancing the brand of Qdoba in order for it to increase its market share in the \$38 billion Mexican food industry.

#### **Returns to Shareholders**

The management team at JACK has made increasing returns to shareholders a priority for the company. Since fiscal year 2012, the company has repurchased a total of \$489 million outstanding shares. In 2015 JACK continued this trend by repurchasing about \$317 million worth of shares. Additionally in September JACK's board of directors authorized an additional round of share buy backs that that will total \$200 million and expire in 2017. This repurchase program is telling of JACK's management's goal of constantly seeking to maximize shareholder value.

Along with their consistent stock repurchases, JACK looks to enhance shareholder wealth through the payment of a dividend. The company first started paying dividends in the third quarter of 2014 and recently increased its dividend by 50% in May 2015.

#### **Financial Analysis**

JACK has experienced very strong financial performance for the entirety of fiscal 2015. The firm's operating EPS for the year finished at an even \$3, a 22% increase. Both Jack in the Box and Qdoba experienced strong system wide same-store sales growth for the year. Qdoba finished with 9.3% system wide same store sales growth while Jack in the Box finished with a 6.5% growth. Jack in the Box's same store sales growth exceeded the NPD sandwich category by 4.9%. Along with positive sales growth for the year, JACK's consolidated restaurant operating margins increased by 1.9% from the year prior.

Fiscal 2015 was highlighted by a very strong fourth quarter performance. Operating EPS rose 15% in Q4. Same stores sales for Jack in the Box and Qdoba were 4.1% and 6.6% respectively. Jack in the Box's sales growth outperformed the quick service restaurant segment by 350 basis points. Overall, JACK's strong 2015 will carry over into 2016 due to their menu innovations and increased

#### Summary

I am recommending a BUY on JACK based on its immediate growth trajectory and overall upside potential. Management's continued emphasis on value creation bodes well for all stakeholders. In conclusion, JACK's expansion and innovative changes to their product lines will ultimately increase the recognition of their brand and lead to increased long term success.



1st week of December 2015

			CENTEI	R FOR GLOBAL FINA	NCIAL STUDIES			
		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		
Jack in the Box Inc.	JACK	Dom Iachetta	\$73.66	\$82.72	\$82.16	2%	1-y Return: 13.16%	NEUTRAL
	General Info	Peers	Market Cap.			Management	1	
Sector	Consumer Discretionary	Red Robin Gourmet Burgers Inc.	\$915.35	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
Industry	Hotels, Restaurants and Leisure	The Wendy's Company	\$2,838.72	Comma, Leonard	Chairman, Chief Executive Officer and Chairr	\$2,634,017	\$5,500,866	\$0
Last Guidance	November 17, 2015	Domino's Pizza, Inc.	\$5,948.90	Rebel, Jerry	Chief Financial Officer and Executive Vice Pre	\$2,636,655	\$3,725,095	\$0
Next earnings date	February 14, 2016	Chipotle Mexican Grill, Inc.	\$18,111.83	Rudolph, Phillip	Chief Legal & Risk Officer, Executive Vice Pre	\$1,794,347	\$2,315,458	\$0
	Market Data	Buffalo Wild Wings Inc.	\$3,042.83	Blankenship, Mark	Chief People, Culture & Corporate Strategy O	\$1,128,318	\$2,418,042	\$0
Enterprise value	\$3,360.40			Casey, Timothy	President of Qdoba Restaurant Corporation	\$0	\$1,333,326	\$0
Market Capitalization	\$5,961.95	Texas Roadhouse, Inc.	\$2,426.30	Allen, Frances	President	\$0	\$0	\$0
Daily volume	0.80	Panera Bread Company	\$4,853.84		Past Earning Surprises			
Shares outstanding	35.79	The Cheesecake Factory Incorporated	\$2,235.94		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	38.22	Dunkin' Brands Group, Inc.	\$3,863.07	Last Quarter	-0.66%	-5.08%	-4.62%	1.40%
% shares held by institutions	87.98%	Current Cap	ital Structure	Last Quarter-1	0.15%	6.02%	4.11%	1.73%
% shares held by insiders	1.19%	Total debt/Common Equity (LTM)	0.52	Last Quarter -2	0.58%	2.18%	4.55%	1.15%
Short interest	6.55%	Cost of Borrowing (LTM)	3.07%	Last Quarter -3	1.59%	1.70%	6.90%	1.75%
Days to cover short interest	3.87	Estimated Cost of new Borrowing	5.53%	Last Quarter -4	0.63%	-5.62%	1.89%	2.32%
52 week high	\$99.99	Altman's Z	4.54	Standard error	0.4%	2.2%	2.0%	0.98%
52-week low	\$63.94	Estimated Debt Rating	BB	Standard Error of Revenues prediction	0.4%		Industry Outlook (	Porter's Five Forces)
5y Beta	0.55	Current levered Beta	0.59	Imputed Standard Error of Op. Cost prediction	2.2%	Bargaining Power of S	Suppliers (100th Percentile), Bargaining Po	wer of Customers (100th Percentile), Intensity of Existing Rivalry
6-month volatility	29.90%	LTM WACC	4.72%	Imputed Standard Error of Non Op. Cost predicti	o: NM	(100th Percentile), T	hreat of Substitutes (100th Percentile), Th	areat of New Competition (100th Percentile), and Overall (100th
				Proforma Assumptions				
Convergence Assumptions				Items' Forecast Assum	•			Other Assumptions
	Money market rate (as of today)	0.38%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	Tobin's Q	80%
	Risk-Free rate (long term estimate)	2.98%	Operating Cash/Rev.	1.15%	2.21%	0.1%	Excess cash reinvestment	Money market rate
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	-3.33%	1.58%	0.5%	Other claims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	37.5%	NPPE/Rev.	47.28%	44.20%	-0.3%		Capitalization
explicit period of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	12.18%	12.37%	0.0%	100% of all rent expenses are capitalized	and amortized 'straightline' over 10 years
			NOPAT MARGIN	9.95%	8.97%	-0.1%	100% of all R&D expenses are capitalize	d and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	79.79%	82.05%	0.2%	E&P expenses are not capitalized	
LTM		\$1,540.32	SBC/Rev.	0.81%	0.79%	0.0%	SG&A expenses are not capitalized	
FY2016	5.9%	\$1,631.60	Rent Exp./Rev.	4.76%	3.22%	-0.2%		Valuation Focus
FY2017	4.2%	\$1,699.77	R&D/Rev.	0.00%	0.61%	0.1%	DCF Valuation	100%
FY2018	4.7%	\$1,779.92	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2019	3.9%	\$1,848.58	SG&A/Rev.	13.55%	12.92%	-0.1%	Distress Valuation	0%
FY2020	3.4%	\$1,911.97	ROC	10%	15.28%	0.52%		e Carlo Simulation Assumptions
FY2021	3.2%	\$1,973.43	EV/Rev.	2.31x	1.33x	-0.10x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	3.1%	\$2,034.75	EV/EBITA	14.99x	9.24x	-0.58x	Operating expense deviation	Normal (0%, 1%)
FY2023	3.1%	\$2,096.88	Debt/Equity	52%	106%	5.4%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2024	3.0%	\$2,160.35	Unlevered beta	0.44	0.73	0.03	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.0%	\$2,225.45	Dividends/REV	2%	2%	0.0%	Intrinsic value σ(ε)	\$0.09
Continuing Period	3.0%	\$2,292.21		Valuation			1-year target price $\sigma(\epsilon)$	\$0.10

				Valuation				
Forecast Year	ROC	WACC	Total Capital	Implied Enterprise Value	Other Claims on Assets and Dilution C	Costs Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	10.1%	4.7%	\$1,529.14	\$2,890.20	\$52.78	35.79	\$82.81	
FY2016	11.0%	4.9%	\$1,547.33	\$2,882.84	\$53.10	35.79	\$82.27	
FY2017	11.2%	4.3%	\$1,604.17	\$2,889.36	\$53.14	35.79	\$81.68	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$82.72; the $3\sigma(\epsilon)$ -adjusted
FY2018	11.1%	-4.3%	\$1,692.03	\$2,674.14	\$53.32	35.79	\$74.19	target price is \$82.16; and the analysts' median target price is
FY2019	10.8%	10.0%	\$1,789.37	\$2,855.70	\$53.68	35.79	\$77.66	\$92.82
FY2020	10.4%	8.5%	\$1,892.02	\$3,013.03	\$19.07	35.79	\$80.72	
FY2021	10.1%	8.2%	\$1,997.93	\$3,176.43	\$19.64	35.79	\$83.28	
FY2022	9.7%	8.3%	\$2,106.04	\$3,353.24	\$20.21	35.79	\$86.03	Sensitivity Analysis
FY2023	9.3%	8.4%	\$2,215.83	\$3,547.57	\$20.78	35.79	\$89.06	Revenue growth variations account for 95.9% of total variance
FY2024	9.0%	8.6%	\$2,326.98	\$3,762.80	\$0.00	35.79	\$92.46	Risk premium's variations account for 2.5% of total variance
FY2025	8.7%	8.8%	\$2,439.32	\$4,002.28	\$0.00	35.79	\$97.05	Operating expenses' variations account for 1.4% of total variance
Continuing Period	15.3%	8.8%	\$1,346.29					Continuing period growth variations account for 0.2% of total variance



NYSE:LCI

## **BUY**

## Key Statistics as of 12/04/2015

Market Price:
Industry:
Market Cap:
52-Week Range:
Beta:

\$37.45 Drugs - Generic \$1.37 B \$33.13-72.44 2.94 Analyst: Nils Weddig Sector: Healthcare

#### Price Target: \$59.52

## **Thesis Points:**

- Discount on LCI due to the acquisition of Kremers Urban Pharmaceuticals although acquisition will add value to Lannett and further diversify its product portfolio
- Fastest growing company of the year according to Fortune, with ability to create value and a promising product pipeline
- Market overreaction to negative macroeconomic news leading to current undervaluation

## **Company Description:**

Lannett Company, Inc. is a specialty pharmaceuticals firm founded in 1942 and based in Philadelphia. Lannett is in the business of developing, manufacturing and distributing generic pharmaceutical products in the United States. Its products include tablets, capsules and drugs in oral liquid form, topicals as well as parenteral and ophthalmics. The company's more than 100 products are marketed for the treatment of migraine, glaucoma, anesthetic, thyroid deficiency, hypertension, dryness of the mouth, congestive heart failure, gout, bronchospasms and gallstone. In addition, Lannett manufactures active pharmaceutical ingredients (APIs) through its subsidiary Kremers Urban Pharmaceuticals, Inc. The company primarily sells its products to retail drug chains such as CVS, drug wholesalers, distributors and government agencies.





#### Siena Market Line 2<sup>nd</sup> week of December 2015

## Thesis

Lannett Company, Inc. (NYSE: LCI) is a fast growing pharmaceutical firm with a promising product pipeline of 20 drugs pending approval and additional 42 drugs in development. In the past years the company focused on sales growth recently being ranked by Fortune as the fastest growing company in the United States in 2015 based on sales growth as well as earnings per share.

In addition, Lannett is heavily investing into diversifying their product portfolio. The company's recent acquisition of Kremers Urban Pharmaceuticals, Inc. added 18 high margin products to Lannett's product portfolio of now more than 100 products. LCI is currently being discounted in the market. Recent news of Kremers' loss of a customer and a potential loss of revenues for the subsidiary led to a decrease of Lannett's stock price of 34.26% to \$34.38 although management is certain that the acquisition will add value to Lannett even with the loss of the customer. In addition, Lannett's stock price movement has similarities with all its competitors in the pharmaceutical industry. Lannett as well as the pharmaceutical sector have recently been seeing declines due to negative macroeconomic news. A BUY of Lannett Company, Inc. (LCI) is therefore

recommended with a one-year target price of \$59.52. Currently trading at \$37.45, it has an upside potential of 58.92% with a conservative valuation approach.

## **Industry Outlook**

Lannett Company is primarily providing products for the generic drug industry. The outlook for the upcoming quarters and years is very positive and Lannett is expecting strong growth in the upcoming quarters.

As the company states there are many drivers for continued growth in the U.S. generic pharmaceutical industry. Generic pharmaceutical companies are able to produce its products at a cost of 80-85% lower than the brand which enables firms like Lannett to market their products at significantly lower prices. Generic drug companies usually incur lower costs since their main expenses are for the manufacturing process rather than development and testing. Generic drugs are comparable to brand listed drugs in their dosage form, quality, strength and performance as well as the usage of the drug. Generig drugs are usually available once the original patent of the brand drug expired. Therefore, the generic drug industry expects a large potential of growth in the upcoming years since through 2017 \$86 billion of brand drug patents are expected to expire. The demand for generic drugs will continue to increase since aging baby boomers continue to fuel the market.

According to RNCOS "U.S. Generic Drug Market Outlook 2018", the U.S. generic drug market was valued at \$43.5 billion in 2013. The market is expected to grow at a CAGR of 11% until 2018. Especially the market for drugs treating thyroid related illnesses will see significant growth in the upcoming years. Drugs for the treatment of thyroid deficiency currently make up 39% of Lannett's total sales. Currently, generic drugs account for 83% of prescriptions in the United States primarily due to their lower cost while providing the same results as brand products. Further driver of growth in the generic pharmaceutical industry is the advantageous product approval process. Abbreviated new drug applications (ANDAs) are being approved significantly faster compared to new drug applications (NDA). In general, there is no preclinical or clinical data required during the application process. Generic drug companies only need to provide characteristics of bioequivalence. Lastly, Lannett has a strong customer base. The company's generics products are sold through third party distribution channels rather than directly to physicians and hospitals. Third party channels include chain drug stores such as Walgreens, CVS and RiteAid. Wholesale distributors including McKesson, Cardinal or AmerisourceBergen and mail-order pharmacies including Express Scripts/Medco, OPTUMRx and Caremark.

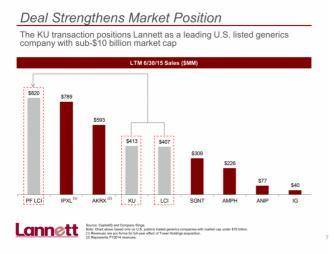
#### Acquisition Leading To Diversification

On November 27, 2015 Lannett Company, Inc. has completed its acquisition of Kremers Urban Pharmaceuticals, Inc. (KU) which is a specialty generic pharmaceuticals subsidiary of the global pharmaceutical firm UCB S.A. (Euronext:UCB). While previously being debt free, Lannett has issued a \$1.16 billion term loan B as well as a \$ 125 million undrawn revolving credit facility by Morgan Stanley and RBC in order to perform the \$1.23 billion acquisition. The company's strong cash flow will enable Lannett to rapidly de-leverage the firm in the upcoming years.

The acquisition of Kremers transforms Lannett to the industry leader and largest company in the below 10 billion market cap range. Management is confident that

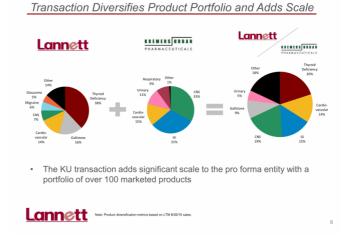


the acquisition provides a broad product portfolio of now more than 100 products that will lead to future growth and an increase in profitability through economies of scale. The acquisition is expected to provide annual cost savings greater than \$40 million after the third year. The acquisition also adds 18



high margin products as well as 28 additional pipeline candidates, of which 11 are ANDAs currently filed with the FDA, to Lannetts product portfolio.

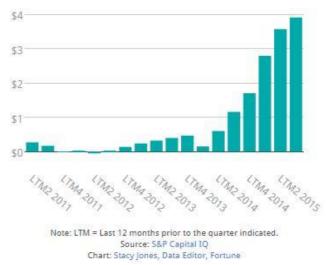
Kremers current strategy of marketing high barrier to entry generic drugs further improves the competitive advantage of Lennett. Especially Kremers product Methylphenidate XR has the potential to majorly contribute to Lannett's sales growth. The product has currently annual sales of approximately \$70 million. The drug is Kremers' largest conbtributor to net sales and provides further upside potential due to the low number of competition in the market. Methylphenidate XR is prescribed for the treatment of several medical include conditions. They postural orthostatic tachycardia syndrome, attention deficit hyperactivity disorder and narcolepsy. The drug is also known under the name Concerta. The market for this drug is expected to further grow since more and more children are being prescribed ADHD and ADD medicine in order to treat hyperactive behavior. Overall, the acquisition of Kremers will significantly diversify Lannett's product portfolio which currently heavily relies on the company's thyroid deficiency and gallstone product segment with combined sales of 58% of Lannett's total sales. Besides improving Lannett's product portfolio, management expects a substantial tax benefit in excess of \$100 million from the acquisition due to 338(h)(10) election.



### Company growth and product pipeline

Fortune lists Lannett Company as the fastest growing company in the U.S. in 2015. The company achieved nine consecutive quarters of record sales combined with a three year annual earnings per share growth rate of 314%. Fortune states rising health care spending, growing prices in the generic pharmaceuticals industry as well as an aging population as the main drivers of Lannett Company, Inc. (NYSE: LCI)

earnings per share



Lannett's growth.

After the acquisition of Kremers, Lannett's product pipeline has further improved. The company currently has 64 products in development of which 39 drugs pending approval. Nine of Lannett's ANDAs have Paragraph IV certifications pending at the FDA and are expected to be accepted shortly to start commercialization. In addition, Kremers adds eleven pipeline products with Paragraph IV certifications. Both



Lannett as well as Kremers have a strong record of regulatory compliance proving their ability to successfully bring new drugs to the market.

#### Substantially Enhanced Pipeline Scale



## Management

Lannett Company is being managed by an experienced management team and run by CEO Arthur Bedrosian.

Mr. Bedrosian has been with the company for 13 years and has 46 years of experience in the industry. Overall, the entire executive team has experience in the industry of more than 20 years.

The management team is heavily invested into the company. Insider ownership ranges around 24%. This clarifies that the company management and shareholders of the company have the same interest of increasing the value of the firm and returning value to the shareholders since a large part of their compensation is coming from stock returns.

#### Financials

Lannett Company has positioned itself among industry leaders in the generic pharmaceutical industry and experienced large growth in the past quarters.

In the last 12 months the company had revenues of \$419 million, net income of \$148 million and EBITDA of \$231 million.

The company's margins have significantly improved in the past years. Since 2012 Lannett's Gross Margin has increased from 31.7% to 74.4%. Lannett's EBITDA Margin has experienced similar growth. It improved from 10.3% to 56.5%. This demonstrates management's ability to improve the profitability of the company's core operations by decreasing the company's operating expenses relative to revenue. Lannett was able to decrease cost of goods sold as a percentage of revenue from 68.3% in 2012 to 25.6% in 2015. In the same period the firm's SG&A and R&D expenses as a percentage of revenue decreased from 16.4% to 12% and 9.6% to 7.3% respectively.

Lannett has had positive cash flow for the past four years. In 2015, cash from operations were \$130 million, while the company has been investing into acquisitions leading to negative cash from investing of (\$70) million, resulting in a net change in cash in 2015 of \$70.4 million. The company's current cash and equivalents amount to \$207 million.

## Why The Market Is Wrong: Overreaction to negative macroeconomic news

Since September, Lannett's stock price has decreased by 70.42% due to a statement posted by Hillary Clinton as well as investors' negative sentiment regarding Lannett's recent acquisition of Kremers Urban Pharmaceuticals, Inc.

On September 21<sup>st</sup> 2015, Hillary Clinton criticized the trend towards high prices in the specialty drugs industry. She announced a plan to fight high prices on drugs which led to a sector wide stock price decrease in the pharmaceutical industry affecting pharmaceutical firms like Lannett. Her reaction was caused by a large price increase of \$736.50 on one of Turing Pharmaceuticals' drugs. This price increase however is just a special case and can currently not be related to the entire pharmaceutical industry. In just one week after Clinton's tweet, the NYSE Arca Pharmaceutical Index (DRG) decreased by 7.33%. In the same time LCI has decreased by 41.16% and has yet to recover from the decline.

In addition, the market is discounting LCI due to issues regarding the recent acquisition of Kremers. Analysts believe that Lannett has overpaid for the acquisition since a key customer of Kremers, accounting for revenues of approximately \$87 million, decided to end its relationship with Kremers. After this announcement LCI decreased by an additional 42.32% in just one week. This stock price decline is not justified since even without the partnership of that customer, the acquisition will still add value to the firm due to significant revenue growth as well as diversification of Lannett's product portfolio. Lannett's management is confident that the company's sales reps will find a customer for the product within 60-90 days due to the high demand for the product. In addition, when modeling the benefits of the deal Lannett's management accounted for a decline in the product segment that has been affected by the loss



of the customer. Therefore, the current discount on LCI is not justified since the acquisition will add value to Lannett Company and provide future growth.

### Valuation

The valuation of Lannett Company, Inc. (LCI) is based on a proforma that values the company with a discounted cash flow model and focus on the company's return on capital. A summary of the outputs of the valuation is attached to this report and can be found on the last page.

When valuing Lannett Company, a conservative approach has been utilized. The revenue growth rates for FY 2016 and FY 2017 are analysts' median estimates of 45.4% and 31.3% respectively. In the following years revenue growth has been set to decline year-over-year at a slow speed of reversion towards LT stability to reach a revenue growth for the long-term of 3%. This is a conservative approach, assuming revenue growth to follow long-term GDP growth.

Historically, the company's operating expenses as a percentage of revenue have been at 41.3%. The company plans to continue with their current strategy of acquiring target firms that they identify of being value adding. Therefore, the assumption of increasing operating costs up to a long-term ratio of 72.5% has been used when valuing Lannett Company. This ratio is in line with the sub-industry's convergence value of 72.5%. Currently, Lannett is not paying a dividend and does not plan to implement dividend payments in the short-term.

#### Summary

The recent decline in stock price caused by negative macroeconomic news led LCI to be undervalued. A BUY of Lannett Company, Inc. (LCI) is therefore recommended with a one-year target price of \$59.52. Currently trading at \$37.45, it has an upside potential of 58.92%.

#### Sources:

- Lannett Company, Inc. 10-K
- Lannett Company, Inc. Investor Presentations
- RNCOS Market Outlook
- Capital IQ
- Bloomberg
- SEC
- http://www.lannett.com/

# SIENAcollege

## Siena Market Line 2<sup>nd</sup> week of December 2015

			CENTER	R FOR GLOBAL FINA	NCIAL STUDIES			
		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		
Lannett Company, Inc.	LCI	Nils Weddig	\$37.45	\$52.62	\$59.52	0%	1-y Return: 58.92%	BULLISH
	General Info	Peers	Market Cap.	<i><b>4</b>52102</i>	<i><b>4</b>07102</i>	Managemen		
Sector	Healthcare	Impax Laboratories Inc.	\$3,118.11	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
Industry	Pharmaceuticals	Sagent Pharmaœuticals, Inc.	\$498.37	Bedrosian, Arthur	Chief Executive Officer, Director and Chairma		\$3,134,061	\$3,661,779
Last Guidance	October 28, 2015	Akom, Inc	\$4,097.85	Bogda, Michael	President	\$1,204,994	\$0,154,001	\$2,304,508
Next earnings date	February 3, 2015	Pernix Therapeutics Holdings, Inc.	\$177.07	Galvan, Martin	Chief Financial Officer, Vice President of Finar		\$1,759,287	\$1,522,474
rtext carinigs and	Market Data	The Medicines Company	\$2,789.57	Smith, Kevin	Senior Vice President of Sales and Marketing	\$622,794	\$1,348,416	\$1,421,185
Enterorise value	\$1,166.66	Amphastar Pharmaœuticals, Inc.	\$671.69	Landis, G.	Chief Accounting Officer and Director of Fina		\$0	\$0
Market Capitalization	\$1,387.97	DepoMed Inc.	\$1,098.95	Ehlinger, Robert	Chief Information Officer and Vice President	\$0	\$0 \$0	\$0 \$0
Daily volume	0.91	ANI Pharmaceuticals, Inc.	\$506.33		Past Earning Surprises	7 ·		± *
Shares outstanding	37.06	Allergan plc	\$124,770.37		Revenue	EBITDA	Norm, EPS	Standard Error of "Surprise"
Diluted shares outstanding	37.24			Last Quarter	0.25%	3.55%	0.00%	1.14%
	74.99%	6	ital Structure		1.70%	2.30%		2.02%
% shares held by institutions			1	Last Quarter-1			8.05%	
% shares held by insiders	24.09%	Total debt/Common Equity (LTM)	0.00	Last Quarter -2	-1.75%	-1.42%	2.11%	1.23%
Short interest	30.73%	Cost of Borrowing (LTM)	22.00%	Last Quarter -3	-0.23%	0.00%	10.00%	3.37%
Days to cover short interest	9.87	Estimated Cost of new Borrowing	2.63%	Last Quarter -4	0.16%	15.86%	16.05%	5.26%
52 week high	\$72.44	Altman's Z	32.26	Standard error	0.6%	3.1%	2.9%	1.53%
52-week low	\$33.13	Estimated Debt Rating	AAA	Standard Error of Revenues prediction	0.6%			ok (Porter's Five Forces)
5y Beta	1.82	Current levered Beta	1.97	Imputed Standard Error of Op. Cost prediction	3.0%			over of Customers (100th Percentile), Intensity of Existing Rivalry (67th
6-month volatility	56.09%	LTM WACC	14.90%	Imputed Standard Error of Non Op. Cost predict	ioi NM	Percentile), Threat of	Substitutes (100th Percentile), Threat	of New Competition (83th Percentile), and Overall (90th Percentile).
Commence Assessmentions	Convert Arrest			Proforma Assumptions				Other Assurations
Convergence Assumptions	General Assur		-	Items' Forecast Assun				Other Assumptions
	Money market rate (as of today)	0.38%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year		80%
	Risk-Free rate (long term estimate)	3.07%	Operating Cash/Rev.	0.00%	0.00%	0.0%	Excess cash reinvestment	Cost of capital
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	32.78%	14.66%	-1.8%	Other daims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	37.5%	NPPE/Rev.	23.49%	41.77%	1.8%		Capitalization
explicit period of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	5.96%	15.40%	0.9%		zed and amortized 'straightline' over 10 years
			NOPAT MARGIN	39.13%	19.58%	-2.0%		alized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	41.31%	72.50%	3.1%	E&P expenses are not capitalized	
LTM		\$419.88	SBC/Rev.	2.17%	1.62%	-0.1%	SG&A expenses are not capitalized	
FY2016	45.4%	\$614.39	Rent Exp./Rev.	0.00%	0.83%	0.1%		Valuation Focus
FY2017	31.3%	\$826.45	R&D/Rev.	7.12%	11.33%	0.4%	DCF Valuation	100%
FY2018	9.0%	\$929.48	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2019	8.5%	\$1,049.83	SG&A/Rev.	10.22%	26.42%	1.6%	Distress Valuation	0%
FY2020	8.0%	\$1,186.95	ROC	39%	13.29%	-2.55%		onte Carlo Simulation Assumptions
FY2021	7.0%	\$1,333.97	EV/Rev.	3.10x	2.47x	-0.06x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	6.2%	\$1,490.37	EV/EBITA	5.19x	7.90x	0.27x	Operating expense deviation	Normal (0%, 1%)
FY2023	5.4%	\$1,652.99	Debt/Equity	0%	44%	4.4%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2024	4.6%	\$1,818.10	Unlevered beta	1.97	1.77	-0.02	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.8% 3.0%	\$1,982.41 \$2.145.67	Dividends/REV	0%	0%	0.0%	Intrinsic value $\sigma(\varepsilon)$	\$0.09 \$0.10
Continuing Period	3.0%	\$2,145.67		Valuation			1-year target price σ(ε)	\$0.10
Forecast Year	ROC	WACC	Total Capital	Implied Enterprise Value	Other Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	38.8%	14.9%	\$637.00	\$1,740.74	\$115.39	37.06	\$51.32	
FY2016	39.5%	14.9%	\$889.83	\$1,992.91	\$117.49	37.06	\$58.31	
FY2017	33.7%	13.9%	\$1,242.42	\$2,322.35	\$119.51	37.06	\$64.78	
FY2018	25.6%	13.4%	\$1,575.41	\$2,648.59	\$119.51	37.06	\$71.47	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$52.62; the $3\sigma(\epsilon)$ -adjusted
FY2019	21.4%	12.9%	\$1,933.34	\$3,011.47	\$116.78	37.06	\$78.91	target price is \$59.52; and the analysts' median target price is \$50.6
FY2020	18.4%	12.4%	\$2,315.64	\$3,412.08	\$115.26	37.06	\$87.12	
FY2021	16.0%	11.9%	\$2,716.03	\$3,848.44	\$113.64	37.06	\$96.21	
FY2022	14.0%	11.4%	\$3,129.83	\$4,320.27	\$113.04	37.06	\$106.36	Sensitivity Analysis
FY2023	12.3%	10.9%	\$3,549.66	\$4,825.46	\$35.83	37.06	\$118.88	Revenue growth variations account for 95.9% of total variance
FY2024	10.8%	10.9%	\$3,966.37	\$5,360.70	\$0.00	37.06	\$132.15	Revenue glowin variations account for 9.5% of total variance Risk premium's variations account for 2.5% of total variance
FY2025	9.4%	10.0%	\$4,369.99	\$5,927.27	\$0.00	37.06		Operating expenses' variations account for 1.4% of total variance
Continuing Period	13.3%	10.0%	\$3.160.87	4-3-2-1-21	\$0.00	57100		Continuing period growth variations account for 0.2% of total variance
sommany renou	×J.J.79	* U•U / U	¥3,100.07					Sector a period growth randons adount for 0.276 of total vallance



The Men's Wearhouse, Inc.

## **BUY on MW**

## Key Statistics as of 12/4/15

\$20.95
Specialty Apparel Retailer
\$998 M
\$18.09 - \$66.18
1.11

Analyst: Kyle I Sector: Discr

Kyle Ritchie Consumer Discretionary

## Price Target: \$ 26.28

## **Thesis Points:**

- Stronger Margins than its Competitors
- Increasing Interest by Hedge Fund Managers
- Same Store Sales Growth by Segment

## **Company Description:**

The Men's Wearhouse, Inc. is a specialty apparel retailer that operates in the United States, Puerto Rico, and Canada. The company operates in two primary segments; Retail and Corporate Apparel. The retail segment offers a variety of business casual and formalwear clothing such as suits, sport coats, slacks, dress shirts, dress pants, ties, etc. It also offers a selection of tuxedo rental products. The retail segment operated roughly 1,700 stores under the Men's Wearhouse, Joseph A. Bank, Moores and K&G brands. The Corporate Apparel segment provides corporate clothing uniforms to workforces under the Twin Hill, Dimensions, Alexandra, and Yaffy brands. This segment serves companies in the retail grocery, retail, banking, and postal, healthcare and public sectors. Men's Wearhouse, Inc. was founded in 1973 and is headquartered in Houston Texas.





## Thesis

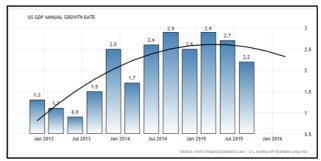
Men's Wearhouse, Inc. is one of the largest retailers of men's apparel in the United States. The company differentiates itself from its competitors with its high quality, professional attire at reasonable prices. Within the past year, Men's Wearhouse completed integrating its acquisition of Joseph A. Bank. Since the acquisition, Men's Wearhouse implemented a major shift in the promotional strategies for Joseph A. Bank. The change in strategies has had a severe impact on store traffic and Joseph A. Bank's sales. However, the synergies that are to be gained from this merger are still underway. In the past, these two companies competed intensely with one another targeting slightly different demographics. Together, Men's Wearhouse and Joseph A. Bank will be able to expand its margins, increase purchasing power and improve sales in the upcoming years. A major recent concern in the retail industry is the competition posed by internet shopping. This will never be an issue for Men's Wearhouse as suit shopping requires fitting and tailoring along with customer interaction; a key essential to the success of this company. Men's Wearhouse stock price has taken a hit over the past few months but there are positive indications that it will recover posing an opportune time to buy for wise investors.

## **Industry Outlook**

The graph below illustrates the industry growth since 2010 for public apparel retailers.



As you can see there has been a decay in growth in the retail industry over the past five years. The primary factors that have influenced this trend include GDP, internet shopping and unexpected seasonal climate changes. The retail industry as a whole has endured a difficult year due to the extended warmer weather. Apparel retailers that have stocked their inventory with winter clothing are unable to meet sales expectations. The continual rise in internet shopping has also drastically affected apparel retailers. Online retailers such as Amazon offer exceptional prices that are difficult to compete with. Lastly, GDP is another primary influence in the retail industry as it directly affects consumer spending. According to Trading Economics, GDP is expected to slightly decline in 2016.



## **Porter's Five Forces**

#### Bargaining power of suppliers: LOW

Men's Wearhouse source their inventory through a number of quality brands. On the supplier side, maintaining a reputable brand image is a vital aspect for its product and there is high competition among these suppliers. There are a number of quality clothing manufacturers such as Calvin Klein that require the distribution capabilities of Men's Wearhouse.

#### Bargaining power of customers: MODERATE

The bargaining power of customers is moderate. The way to perceive this force is by analyzing store traffic and sales. As previously mentioned, the recent change in the promotional strategy has had a negative effect on Bank's store traffic and sales. If sales were to continue to decline, the demand for more store traffic would ultimately increase the bargaining power for customers as Men's Wearhouse would be forced to offer discounts/other marketing strategies.

#### Threat of substitutes: LOW

The threat of substitutes in the men's specialty apparel industry is low. There is really no alternative to formal attire. Professionals can turn to other retailers for button downs and slacks but the clothing line itself is not replaceable. It is not likely that professionals are



going to start wearing collared polo shirts to work every day rather than suits.

#### Existing rivalry: HIGH

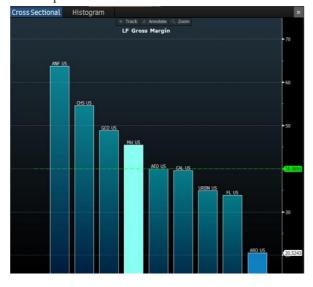
The intensity of competition in the apparel retail industry is high. Competitive pricing will always exist and cutting costs is always a primary focus for companies. Increasing store traffic and improving same store sales is vital to apparel retailers.

#### Barriers to Entry: HIGH

The apparel retail industry is an industry that is made up of mostly chain stores. These stores are wellestablished and the number of independent retailers has been decreasing over the last decade. It is difficult to establish favorable supply contracts and leases for start-up companies. Furthermore, the capability to immediately operate competitively is virtually impossible for a new entrant.

## Stronger Margins than its Competitors

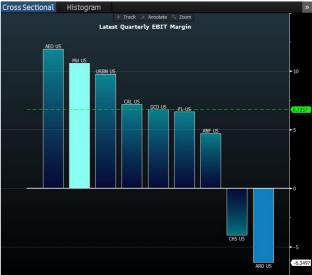
This section includes a cross sectional analysis of Men's Wearhouse compared to its relative peers. The peers have been selected based on other competitors in the retail industry and the companies' market capitalization. These peers include: Abercrombie and Fitch Co. (ANF), American Eagle Outfitters, Inc. (AEO), Genesco Inc. (GCO), Chico's FAS Inc. (CHS), Urban Outfitters Inc. (URBN), Foot Locker, Inc. (FL), Caleres, Inc. (CAL), Carter's, Inc. (CRI), Aeropostale, Inc. (ARO), and Guess? Inc. (GES). The first chart analyzes Men's Wearhouse gross margin (light blue) which is 45% while the median of its chosen peers is 40%.



#### Siena Market Line 2<sup>nd</sup> week of December 2015

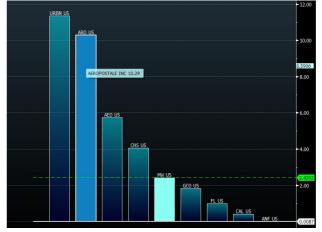
This indicates that Men's Wearhouse is receiving a larger percentage of its net sales in comparison to the relative industry.

The chart below illustrates Men's Wearhouse EBIT margin. This margin demonstrates each company's earnings prior to taking into account interest and taxes.



Men's Wearhouse EBIT margin is 10.6% while the median among its peers is 6.7%. This margin is important when analyzing Men's Wearhouse because the company has just recently incurred a substantial amount of debt. Currently, Men's Wearhouse has a debt to equity ratio of 1.6. Due to the acquisition the company needed a notable amount of extra financing. Historically however, Men's Wearhouse has not had more than \$100 million in total debt.

The next margin to be analyzed is the profit margin.



Men's Wearhouse average historical profit margin is 2.42%. This figure fell directly on the median line. The profit margin tends to be lower due to high operating costs. Selling, general and administrative (SG&A) costs as a percentage of sales in this industry is historically found to be above 30%. The five-year average for Men's Wearhouse SG&A as a percentage of sales is 36.4%.



## Increasing Interest from Hedge Funds

Something to consider when analyzing a company is the ownership summary. The percentage of ownership for Men's Wearhouse is 67% Investment Advisor, 29% Hedge Fund Manager and the remaining 1% consists of a variety of investors which include Insurance Companies, Pension Funds, Government and others. The 29% that is made up of Hedge Funds is a positive indicator in regards to the level of interest in this company. What is even more important is the recent change in this percentage. As you can see from the chart below, on November 5, MW's stock price dropped (43.4%).



Eminence Capital LLC, a \$6 billion hedge fund run by Ricky Sandler, is the largest stakeholder in MW. Prior to the drastic decline on Nov 5, Eminence held just under 10% in MW. Since the decline, Eminence increased their percentage of ownership from 10%-13% on the following day. It is obvious that as a major stakeholder Eminence would be inclined to increase its number shares in order to offset prior losses. However, what is more important to note is the history of Eminence's investment horizon in Men's Wearhouse. According to an article written by James B. Stewart, Mr. Sandler pushed for a merger between the two chains, Men's Wearhouse and Joseph A. Bank. As previously mentioned and spoken by Mr. Sandler, "men's tailored clothing will be relatively insulated from Internet competition, given customers' needs to try on clothing that often requires alterations." Men's tailored clothing is a timeless industry; and Men's Wearhouse along with Joseph A. Bank are two prominently known store chains. The chart below illustrates the five-year graph of hedge fund ownership (%) in MW.



The percentage of ownership prior to the acquisition of Joseph A. Bank was roughly 13.5% which then spiked

to 35%, peaking at roughly 45% and now remains at 29%. The percentage increase since the acquisition has more than doubled (13.5%-29%). Eminence is the only hedge fund stakeholder that increased their share count since the decline in MW's stock price. Lioneye Capital Management, Samlyn Capital LLC, Tourbillion Capital Partners LP, and Pointstate Capital are the next three largest stakeholders in MW respectively. Each hedge fund has also increased their share count on September 30

### Same Store Sales Growth by Segment

despite the recent performance of the company.

Same store sales is a figure used to determine what amount of sales growth is attributable to new store openings, based on sales made by stores that have been open for more than a year. This figure tells us how strategically and productively the company is growing. Men's Wearhouse revenue by measure includes the following percentages: MW makes up 52%, Joseph A Bank 21%, K&G 10.3%, Moores at 8% and Dimensions and Alexandra at 6.7%. In 2015, Moores same store sales grew at 8.6%, Men's Wearhouse grew 3.9%, K&G grew 3.7% and Joseph A. Bank fell 2.5%. As previously mentioned, Joseph A. Bank's sales suffered as a result of the change in promotional strategy. However, the other major segments in regards to total revenue each had positive growth. Joseph A. Bank's sales are also likely to recover whether management revives the old promotional scheme or offers additional discounts as a result of the recent decline. The positive growth in each segment aside from Joseph A. Banks is a positive indicator of how this company operates.

#### Valuation

The valuation of Men's Wearhouse. is based on a valuation computed by a pro forma using a discounted cash flow method with a main focus on return on invested capital. Attached is an overview of the inputs, assumptions and results used in valuing this company.

When valuing MW given its current state, a conservative approach has been applied. In consideration of the recent sales decline at Joseph A. Bank, a 10-year period to convergence has been used. The average target price among the analysts



who consider MW a buy is \$30.80. The financial metrics of the company were made to converge to the sub-industry. A 7% market risk premium was used in this valuation given the stability of the industry along with a fast decay in revenue growth for its reversion to the continuing period. The pro forma calculated a lower-bound intrinsic value of the stock price to be \$25.24 with a 1-year target of \$26.28.

## Conclusion

After a thorough analysis of Men's Wearhouse it is clear that this company is undervalued. What cannot be emphasized enough is the fact that this company operates in a timeless industry. The retail industry itself has endured a difficult which was strongly influenced by internet shopping. Men's Wearhouse and Joseph A. Bank will certainly be able to recover sales growth as well as improve promotional strategies. Together, the companies have gained purchasing power to suppliers and can continue to improve its margins. Despite the drastic decline in MW's stock price, the analysis only points to one direction, BUY.



Siena Market Line 2<sup>nd</sup> week of December 2015

The Men's		Analyst	CENTER Current Price	FOR GLOBAL FINA	NCIAL STUDIES Target Value	Divident		
Weathouse, Inc.	MW	Kyle Ritchie	\$20.31	\$25.24	\$26.28	3%	1-y Return: 32.82%	BULLISH
	General Info	Peers	Market Cap.			Managemen		
Sector	Consumer Discretionary	Abercrombie & Fitch Co.	\$1,713.07	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
Industru	Specialty Retail	American Eagle Outfitters, Inc.	\$2,993,98	Ewert, Douglas	Chief Executive Officer, Director and M	\$3.622.131	\$9,672,031	02
Last Guidance	November 5, 2015	Genesco Inc.	\$1,242.54	Blake, Mary	President and Chief Merchandising Off	\$307,076	\$2,326,148	\$0
Next earnings date	December 9, 2015	Chico's FAS Inc.	\$1,645.00	Kimmins, Jon	Chief Financial Officer, Executive Vice F	\$2,055,778	\$2,488,276	\$0
	Market Data	Urban Outfitters Inc.	\$2,550.03	Souvenir, Carole	Chief Legal Officer and Executive Vice I		\$1,317,903	10
Enterprise value	\$2,565.21	Foot Locker, Inc.	\$8,907.87	Neutze, Mark	Executive Vice President of Store Oper	\$0	\$1,607,107	02
Market Capitalization	\$4,449.48	Caleres, Inc.	\$1,253.22	Thorn, Bruce	Chief Operating Officer and Executive V	\$0	\$0	02
Daily volume	0.22	Carter's, Inc.	\$4,478,45		Past Earning Surprises		•	•
Shares outstanding	48.36	Aéropostale, Inc.	\$35.82		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	48.12	Guess? Inc.	\$1,606.73	Last Quarter	-2.82%	-0.55%	1.90%	1.36%
% shares held by institutions	26.01%	Current Capi	tal Structure	Last Quarter-1	3,19%	2.64%	3.85%	0.35%
% shares held by insiders		Total debt/Common Equity (LTM)		Last Quarter -2	0.77%	10.44%	NM	4.84%
Short interest	11.19%	Cost of Borrowing (LTM)	6.26%	Last Quarter -3	-2.57%	-2.57%	-4.60%	0.68%
Days to cover short interest		Estimated Cost of new Borrowing		Last Quarter -3 Last Quarter -4	-2.514 -5.46%	-3.83%	-4.604	2.85%
52 week high	\$66.18	Altman's Z	2.34	Standard error	1.5%	2.5%	2.0%	1.16%
52-week low	•	Estimated Debt Rating	BAA	Standard Error of Revenues prediction	1.5%	6.24		(Porter's Fire Forces)
5y Beta	1.11	Current levered Beta	1.12	Imputed Standard Error of Op. Cost predicti		Barazisina Damara		argaining Power of Customers (100th Percentile), Intensity of
6-month volatility	87.15%	LTM WACC	4.65%	Imputed Standard Error of Non Op. Cost predict				itutes (100th Percentile). Threat of New Competition (100th
o-month volatinty	01.04		4.00%	Proforma Assumptions		Existing Privary In	John Percentile], Thread of Subst	rates (rootil Percentile), Threat of New Competition (rootil
onvergence Assumptio	General Assu	ptions		Items' Forecast Assu				Other Assumptions
All base year ratios	Money market rate (as of today)	0.37×		Base year (LTM)	onvergence period (Sub-industri	diustment per ver	Tobin's Q	80%
linearly converge	Risk-Free rate (long term estimate)	2.93%	Operating Cash/Rev.	0.00%	0.02%	0.0%	Excess cash reinvestment	Money market rate
towards the Sub-		0.1%	NWV/Bey.	20.24%	7.32%	-1.3%	Other claims on the firm's asset	
industry ratios over	Annual increase (decrease) in interest rates		NPPE/Rev.	20.244	1.324		Other claims on the firm's asset	Capitalization
an explicit period of	Marginal Tax Rate	37.5%	Dpr/NPPE	20.67%	20.54%	0.2%	100% of all cost expenses are ca	pitalized and amortized 'straightline' over 10 years
10 years	Country Risk Premium	7.0%	NOPAT MARGIN	5.58%	6.67%	0.0% 0.1%		apitalized and amortized "straightline" over 10 years
Forecast Year	<b>Revenue Growth Forecast</b>	Revenue (\$) Forecast	Op. Exp./Rev.	5.564 83.74%	0.014 86.80%	-0.3%	E&P expenses are not capitalize	
LTM	nerene alora i orcast	<u></u>	SBC/Rev.	0.43%	0.55%	0.0%	SG&A expenses are not capitali	
FY2016	1.0%	\$3,624.16 \$3,660.40	SDU/Rev. Rent Exp./Rev.	6.44%	0.00%	-0.6%	source expenses are not capital	Valuation Focus
			Rent Exp./Hev. R&D/Rev.	0.44%	0.42%	0.0%	DODUUL II	100%
FY2017	1.0%	\$3,697.00	E&D/Rev.	0.00%	0.42%		DCF Valuation	
FY2018	-1.0%	\$3,661.15	SG&A/Rev.		32,45%	0.0%	Relative valuation	0%
FY2019 FY2020	1.0% 2.0%	\$3,698.32 \$3,772.57	SURATHEY. ROIC	36.70%	32.45% 25.47%	-0.4% 1.77%	Distress Valuation	0% Carlo Sinulation Assumptions
			EV/Bev.	8% 1.24x	25.414 0.21x	-0.10x		Normal (0%, 1%)
FY2021	2.5%	\$3,867.02	EV/EBITA	1.24x 14.78x	0.21x 1.98x	-0.10x -1.28x	Revenue Growth deviation	Normal (04, 14) Normal (02, 12)
FY2022	2.8%	\$3,973.44		14.1 ox 122%	21%		Operating expense deviation	
FY2023	2.9%	\$4,087.71	Debt/Equity	0.63	214	-10.1%	Continuing Period growth	Triangular (6.79%, 7%, 7.21%) Triangular (3.94%, 2%, 2.09%)
FY2024	2.9%	\$4,207.81	Unlevered beta			0.06	Country risk premium	Triangular (2.31%, 3%, 3.03%) \$0.03
FY2025 Continuing During	3.0%	\$4,332.74	Dividends/REV	12	12	0.0%	Intrinsic value o(a)	\$0.09 \$0.10
Continuing Period	3.0%	\$4,462.72		Valuation			1-year target price o(z)	\$0.10
Forecast Year	ROIC	ACC	Invested Capital	Implied Enterprise Value	Claims on Assets and Dilution C	hares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	7.8%	4.6%	\$2,915.17	\$4,087.00	\$3,482.55	48.36	\$25.05	
FY2016	7.5%	4.64 4.9%	\$2,725.70	\$4,007.00 \$3,878.66	\$3,240.71	40.36	\$25.05	
FY2016 FY2017	1.5% 8.2%	4.3% 5.3%	\$2,725.70 \$2,532.13	\$3,818.66 \$3,688.22	\$3,240.11 \$2,976.41	48.36 48.36	\$25.58 \$27.57	The 3o(c)-adjusted intrinsic value is \$25.24; th
F 12017 FY2018								So(z)-adjusted intrinsic value is \$25.24; to So(z)-adjusted target price is \$26.28; and the
	8.9%	6.1%	\$2,284.25	\$3,438.28	\$2,658.67	48.36	\$30.88	
FY2019	10.12	6.2%	\$2,086.56	\$3,223.84	\$2,381.23	48.36	\$34.19	analysts' median target price is \$30.8
FY2020	11.5%	6.3%	\$1,305.44	\$3,006.55	\$2,110.02	48.36	\$37.54	
FY2021	13.0%	6.2%	\$1,725.61	\$2,763.80	\$1,829.41	48.36	\$40.84	0
FY2022	15.0%	5.7×	\$1,539.73	\$2,476.99	\$1,535.10	48.36	\$43.79	Sensitivity Analysis
FY2023	17.5%	4.5%	\$1,344.03	\$2,122.72	\$1,220.41	48.36	\$45.83	Revenue growth variations account for 35.3% of total variations
FY2024	20.3%	0.8%	\$1,136.43	\$1,651.47	\$882.44	48.36	\$45.27	Risk premium's variations account for 2.5% of total variance
FY2025	25.8%	-25.3×	\$915.62	\$719.91	\$519.33	48.36	\$28.68	Operating expenses' variations account for 1.4% of total var
112025	25.5%	30.3%	\$1,168.54	******	*210.00	40.00	\$20.00	Continuing period growth variations account for 0.2% of to



## Sabre Corp.

SABR

## **BUY on SABR**

## Key Statistics as of 12/02/15

Market Price:	\$29.75
Industry:	IT Services
Market Cap:	\$8.3 B
52-Week Range:	\$18.15 - \$30.45
Beta:	0.93

Analyst: Sector: Nicolas Morand Information Technology

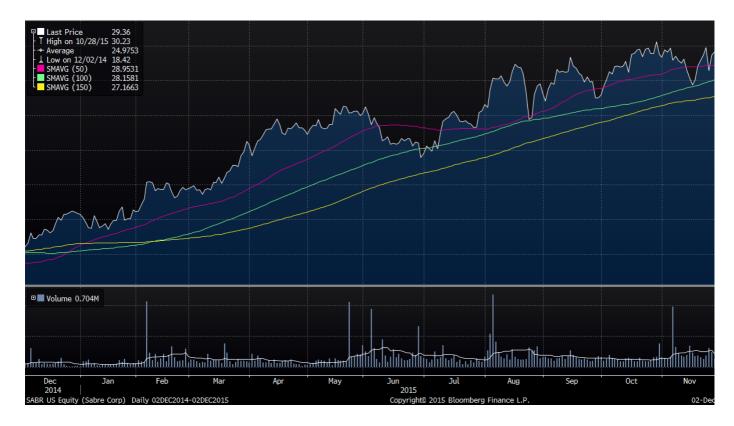
## Price Target: \$38.06

## **Thesis Points:**

- Sabre is a leader in the travel solution industry.
- Acquisitions reinforced their position and should allow them to gain market share.
- High revenue growth expectation.

## **Company Description:**

Sabre Corp is an American technology provider to the global travel and tourism industry worldwide. It has been created in 1960 by American Airlines, was spun off back in 2000 and has its headquarters based in Southlake, Texas, USA. The company offers a broad range of technology solutions that includes tours and travel services, data-driven business intelligence, software as a service solution for travel suppliers such as airlines, cruise, car rental companies, railways, hotels and tour operators and for travel buyers such as travel agencies, travel management companies and corporate travel department. The company operates under two segments: Travel Network and the airline and hospitality solutions.



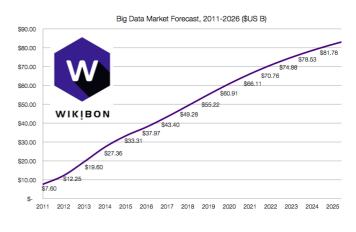


## Thesis

Sabre Corp is among the leaders in the Global Distribution System (GDS) industry, and has been providing solutions for the travel industry for more than 50 years. Sabre's software, data and distributions solutions are used by more than thousands of hotel properties and hundreds of airlines to manage their from guest registration to staff operations, management and serves customers in more than 160 countries. On November 24 2015, Sabre Corp acquired the Trust Group, a central reservation, revenue management and hotel marketing supplier well established in Europe, Middle-East and Asia Pacific, in order to consolidate its presence in these area and grow faster. Companies around the world are more and more trying to improve both their efficiency and their competitive advantage through the investment in new technologies. As a result, Sabre's revenue should keep increasing. Besides, growth in revenue is expected to be higher in the coming years than it was the last few years because of the expansions of new information technology system. Furthermore, Sabre managed to efficiently decrease their operating cost so as to increase their net income overtime. The macroeconomic environment, the good strategic decision for expansion, and the expected growth in the information technology sector for 2016 led me to believe that acquiring Sabre's stock might be a good investment in the medium and long-term.

## **Industry Outlook**

The Information Technology industry is central to nation's security, safety and economy. Businesses, citizens, governments and universities are more and more dependent on information technology. As the technology sector is moving faster every year, 89% of business leader believe that the Big Data will revolutionize our way of doing business operations. Within the travel and tourism industry, Global Distribution System platform are computing with each other to provide travel providers a lot of new expertise. There is a battle of gaining information on customers and their needs to best simplify the sales process. According to Wikibon, the Big Data market is expected to see an annual increase of 17% until 2026. In 2015, the market reached \$33.31B, up from 27.36% in the previous year and is expected to reach \$84.69B in 2026. Sabre Corp understands that and introduced its Marketplace Analytics for Sabre Airline solutions, which will allow airlines to view shopping activity and traveler's demand so that they can adjust their product offering to convert demand into more bookings. Sabre's products are used by more than 200 airlines companies worldwide, which is why investing on Big Data will allow them to provide a strong portfolio of software to better serve their customers. According to the World Travel Tourism Council, the industry is again growing strongly with a contribution of \$7.58 trillion in GDP back in 2014. According to them, the travel and tourism sector will continue to grow at an annual rate of 3.8% for the next 10 years to reach \$11.4 trillion. Sabre is the world's leading provider of solution for the travel industry and should grow accordingly with these coming movements.



## **Porter's Five Forces**

#### Bargaining power of suppliers: HIGH

Sabre Corp, as many technological solutions companies, mostly relies on third party provider such as software companies to provide them new expertise that they can sell to their customers, or international telecommunication companies which allow them to provide support to their customers. If any contract had to be terminated, Sabre would not be able to find an alternative source of technology to replace the previous one in a reasonable amount of time which would cause severe damage to the company and additional costs.

#### Bargaining power of customers: HIGH

Sabre Corp customers are travel providers such as airlines, hotels, car rental brands, rail carriers, cruise



lines, tour operators and travel agencies. Sabre Corp profit came almost exclusively from the fees they charged for the use of their Global Distribution System. In a time where the low cost is growing, many travel providers are looking for ways to decrease their costs to keep a high margin of return, which could result in actions to decrease their fees toward the IT solutions system.

#### Threat of substitutes: LOW

There is only two substitute possible to Sabre's product and services. The first one could be that travel providers companies deciding to sell their trip in a direct way to avoid third-party costs. The second one is travel providers deciding to launch their own software to replace the services even if this would be expensive.

#### Existing rivalry: MEDIUM

Like many other businesses, the success depend on the ability to both attract and keep existing customers. The key is to be competitive and to find way to increase market share. The Global Distribution System market is huge and about 4 international GDS provider dominate the market. Amadeus, Travelport and Sabre are dominating 95% of the market and the remaining 5% are owned by Abacus, a strong regional competitor in the APAC area (which has been acquired by Sabre Corp on July 1<sup>st</sup>).

#### Threat of new entrance: LOW

To enter this industry, a new company would have to spend a lot of money for maintenance and the development of the platforms so as to be able to compete with existing competitors. As explained above, Sabre Corp, Amadeus and Travelport share 95% of the market which make competitions even harder for new companies.

## **Product Portfolio**

Sabre Corp provides technology services to the travel and tourism industry worldwide. It operates under two segments: Travel Network and Airline and Hospitality Solutions. The Travel Network segment work as a business to business model. It offers expertise such as inventory, prices and availability from a wide panel of

#### Siena Market Line 4<sup>th</sup> week of November 2015

travel suppliers such as airlines, car rental companies, hotels, rail carriers, tour operator and cruise lines with a vast network of travel buyers. One type of customer which need this solution are agencies and travel management companies. By using Sabre's product, they would be able to have access to Sabre global distribution system of more than 400 airlines, 175,000 hotels, 17 cruise lines and 36 car rentals agencies. Having access to the huge database is just the beginning of the experience as customers will have access to various services provided such as online help, workbooks, training tutorial, consulting services to achieve revenue goals or hardware/software assistance. Another type of client is suppliers. Sabre manages to grow its customer's revenue and customer base thanks to both its global network of 425,000 agents around the world and its industry experts and services that it provides with its products. Sabre also provides services to corporations to help them maximizing the value of their trip by providing three main solutions to corporations. These three solutions allow travelers to create a single itinerary to create a complete view of the travel (including car rent, hotels, air planes, cruises...) using a shared graphical itinerary that allow both traveler and the firm to have easy access to these information. It also allows professionals to deal with last minute changes and receive notifications when the company wants to send a message to its employees in a specific area. It provides an effective booking experience online or through mobile applications and others services that will add value to the traveler's journey. Another client for this segment is the U.S. government. Indeed, more than 70% of the federal trips are planned using Sabre global distribution system as it allows the government to manage its military support logistic, to integrate military housing reservation and to beneficiate from exclusive access for air space, hotel and more. With over 1,000 employees dedicated to the customer service speaking ten different languages, its unique expertise, its advanced portfolio of products, its relationship with customers and the service it provides with its product, Sabre Corp is creating value for its customer, which has allowed them to gain new customers and to increase their revenue from \$2,631.4 million in 2014 to \$2,848.6 million LTM for a segment that represents 70% of their revenue. The Airline and Hospitality segment includes a portfolio of software technology product and solutions that helps managing sales and customers services. For example, in the hospitality business, SynXis, a cloud base system, helps the front office of a hotel by distributing



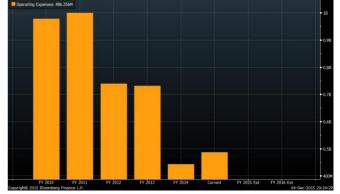
automatically room rates and inventories to online travel agencies, helps to collect data to manage reports, helps to manage accounting, includes online training so that employees could use the system efficiently and provide support and services to deliver their customers the best experience of the system. By adopting this system, professionals from the hospitality industry managed to improve their efficiency, increase their profit per reservation and save time by eliminating manual data entry. On the Airline industry side, Sabre provides a portfolio of solution to help its customer better market, sell, serve and operate their business. Sabre's products are designed to help cargo management, planning and schedule management, fares management and revenue management. The solutions provided help them to increase the number of ticket sold whether it is online or in agencies. Sabre Airline Management is use by more than 200 airlines worldwide and nearly one out of five passengers in the world is boarded using these solutions tools. Another tool provided is a checking tool that allows passengers to receive trip notifications and alerts for any change, including last minute changes that might simplify their travel. The last tool provided helps to manage airport's daily operations efficiently. This includes the management of airport staff and led to improve performance which benefits their customers. Sabre Airline Solutions provide a panel of solutions for the millions of activities that are necessary from the booking process to the travel itself. The Airline and Hospitality Solutions segment represents the other 30% of Sabre's revenues.

#### Financials

	Year Ended December 31,							
2014	2013	2012	2011	2010				
\$ 2,631,417	\$ 2,523,546	\$ 2,382,148	\$ 2,252,446	\$ 2,105,81				
421,345	380,930	(6,586)	331,112	340,03				
110,873	52,066	(215,427)	113,477	81,90				
(38,918)	(149,697)	(394,410)	(193,873)	(365,90				
69,223	(100,494)	(611,356)	(66,074)	(268,85				
57,842	(137,198)	(645,939)	(98,653)	(299,6				
	\$ 2,631,417 421,345 110,873 (38,918) 69,223	2014         2013           \$ 2,631,417         \$ 2,523,546           421,345         380,930           110,873         52,066           (38,918)         (149,697)           69,223         (100,494)	2014         2013         2012           \$ 2,631,417         \$ 2,523,546         \$ 2,382,148           421,345         380,930         (6,586)           110,873         52,066         (215,427)           (38,918)         (149,697)         (39,410)           69,223         (100,494)         (611,356)	2014         2013         2012         2011           \$ 2,631,417         \$ 2,523,546         \$ 2,382,148         \$ 2,252,446           421,345         380,930         (6,586)         331,112           110,973         52,066         (215,427)         113,477           (38,918)         (149,697)         (394,410)         (193,873)           69,223         (100,494)         (611,356)         (66,074)				

Looking at LTM, it has been a very profitable year for Sabre Corp. The company managed to increase its revenue from \$2,631.4 million in 2014 to \$2,848.6 million for the last twelve months based on September, which represents an increase of 8.25% for the year. Sabre's analyst are expecting a growth of 13.8% in revenue for the coming year with expected revenue around \$3.37 billion .On July 1<sup>st</sup>, Sabre acquired

Abacus, a leading company in the Asia-Pacific market, which is right now the world's growing region for travels with an expected annual growth rate between 6% and 9%. Sabre sees opportunities to increase their market share in this area as the Sabre Asia pacific booking tool increased by 6% even if the Chinese slowdown have impacted some markets. Middle-East, Africa, South-America and Asia area represents 25% of Sabre's revenue and is expected to continue to grow in the future. Recently, Sabre also Acquire the Trust Group on November 24th. The Trust Group provide central reservation services, revenue management, and marketing in the hotel industry and is well establish in the EMEA and APAC area. Such an acquisition will reinforce Sabre's presence in both the EMEA and APAC which would enable Sabre to grow quicker. The Travel network segment saw an increase of nearly 30% in the quarter driven by a global bookings increase.



The above graph shows Sabre managed to constantly decrease its operating expenses through the years from \$1,000.1 million back in 2011 to \$486 million in the last twelve months while increasing its revenue. As a result, Sabre's Income from Continuing Operation increase by 122% compare to 2014 from \$110.9 million to \$246.3 million for the LTD. This year, Sabre manage to record positive extraordinary gains that drove the Net Income higher at a level of \$462.4 million which represents an increase of 700% compare to 2014 Net Income of \$57.8 million as computed in the last 10-K report above. On the downside, Sabre Corp have a lot of debt which increase their riskiness. They manage to decrease their long-term debt, which is exclusively long-term borrowing, from \$3.6 billion in 2013 to \$3.06 billion in 2014. This amount is still very high and increases their vulnerability to general adverse industry and economic condition in general.

## Valuation



The valuation of Sabre Corp is based on a proforma that values the company with a discounted cash flow and focuses on Sabre's return on invested capital. You will find a summary of the outputs used for the valuation attached at the end of this report. An average decay growth rate has been utilized to determine the speed of reversion toward long term stability. The intrinsic value of the stock is extremely sensitive to risk premium and a 1% risk premium has been added to the United States 5.5% because 25.6% of Sabre's revenue came from outside of the United States and Europe. The revenue growth estimates for FY 2015, 2016, 2017 are based on the twelve analyst estimates growth. Following years have been compute to decline so as to reach a 3% growth in revenue in the long run, which is the long term GDP growth.

## Conclusion

Management is very confident in the firm's ability to increase its sales. The firm stated that they are gaining market shares around the world as their customer base is increasing faster than the rest of the market. They do believe that sales are going to keep following an increasing trend as their Travel Network segment is expected to grow by 13% or more for the coming quarter thanks to both their position toward the market and their new acquisitions. They do believe in the fact that their business is global enough to be able to absorb some potential shock that might happen and to record positive return if an area grow at a softer rate than expected. The historical performance of the company and the economic outlook led me to believe that this company has room to grow. They are undoubtedly one of the leader of a growing market and provides value to their customers. I recommend a buy on Sabre Corp with a 12-month price target of \$38.06, which represents an increase of nearly 36%.



#### Siena Market Line 1<sup>st</sup> week of December 2015

				R FOR GLOBAL FINA		<b>D</b>		
Sabre Corporation	SABR	Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield	1-y Return: 35.93%	BULLISH
		Nicolas Morand	\$29.75	\$38.06	\$40.08	1%	•	DOLLIOIT
	General Info	Peers	Market Cap.			Management		
Sector	Information Technology	Global Payments Inc.	\$9,202.28	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	IT Services	Travelport Worldwide Limited	\$1,643.83	Klein, Thomas	Chief Executive Officer, President, Director, N	\$0 \$0	\$5,119,312	\$7,122,675
Last Guidance	October 29, 2015	Vantiv, Inc.	\$7,528.03	Gilliland, Michael	Chairman Emeritus and Adviser	\$0	\$3,133,518	\$2,366,624
Next earnings date	February 18, 2016 Market Data	Total System Services, Inc.	\$10,296.05	Simonson, Richard Kerr, Deborah	Chief Financial Officer and Executive Vice Pre	\$0 \$0	\$6,288,881	\$2,353,658
Enterprise value	\$11,021.18	Fiserv, Inc.	\$21,994.59	Gonzalez, Rachel	Chief Product & Technology Officer and Exec Executive Vice President and General Counse	\$0 \$0	\$5,191,004 \$0	\$2,048,926 \$1,961,986
Market Capitalization	\$11,021.18 \$4,449.48	FleetCor Technologies, Inc.	\$14,166.10	Webb, Gregory	Viæ Chairman	\$0 \$0	\$0 \$0	\$1,960,960
Daily volume	0.22	Fidelity National Information Services, 1	. ,	webb, Giegory	Past Earning Surprises	<b>3</b> 0	<u>30</u>	\$1,000,205
Shares outstanding	273.97	Black Knight Financial Services, Inc.	\$2,359.10		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
0				L . O	0.23%			· · · · · · · · · · · · · · · · · · ·
Diluted shares outstanding	277.39	WEX Inc.	\$3,642.81	Last Quarter		1.33%	0.00%	0.41%
% shares held by institutions	26.01%	Current Capi		Last Quarter-1	3.77%	5.89%	12.50%	2.63%
% shares held by insiders	0.39%	Total debt/Common Equity (LTM)	0.47	Last Quarter -2	1.86%	8.84%	8.00%	2.20%
Short interest	1.42%	Cost of Borrowing (LTM)	5.82%	Last Quarter -3	-0.08%	-1.83%	0.00%	0.60%
Days to cover short interest	2.10	Estimated Cost of new Borrowing	9.56%	Last Quarter -4	-0.59%	1.32%	4.00%	1.33%
52 week high	\$30.46	Altman's Z	1.11	Standard error	0.8%	1.9%	2.4%	1.06%
52-week low	\$18.15	Estimated Debt Rating	D	Standard Error of Revenues prediction	0.8%		Industry Outlo	ook (Porter's Five Forces)
5y Beta	0.00	Current levered Beta	0.92	Imputed Standard Error of Op. Cost prediction	1.7%			g Power of Customers (100th Percentile), Intensity of Existing Rivalry
6-month volatility	27.17%	LTM WACC	7.76%	Imputed Standard Error of Non Op. Cost prediction	01 1.5%	(100th Perœntile), T	hreat of Substitutes (100th Percentile	), Threat of New Competition (100th Percentile), and Overall (100th
				Proforma Assumptions				
Convergence Assumptions	General Ass	umptions		Items' Forecast Assum	ptions			Other Assumptions
	Money market rate (as of today)	0.37%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	Tobin's Q	80%
All base year ratios linearly	Risk-Free rate (long term estimate)	2.93%	Operating Cash/Rev.	4.66%	4.66%	0.0%	Excess cash reinvestment	Money market rate
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	-2.29%	-2.29%	0.0%	Other daims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	37.5%	NPPE/Rev.	20.49%	20.49%	0.0%		Capitalization
explicit period of 10 years	Country Risk Premium	6.5%	Dpr/NPPE	33.43%	33.43%	0.0%	100% of all rent expenses are capital	lized and amortized 'straightline' over 10 years
	county how remain	01370	NOPAT MARGIN	15.12%	15.12%	0.0%		talized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	71.83%	71.83%	0.0%	E&P expenses are not capitalized	
LTM		\$2,848.58	SBC/Rev.	1.04%	1.04%	0.0%	SG&A expenses are not capitalized	
FY2015	4.2%	\$2,968.12	Rent Exp./Rev.	1.09%	1.09%	0.0%	· · · · · · · · · · · · · · · · · · ·	Valuation Focus
FY2016	13.8%	\$3,378.77	R&D/Rev.	0.00%	0.00%	0.0%	DCF Valuation	100%
FY2017	7.2%	\$3,621.57	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2018	6.5%	\$3,856.55	SG&A/Rev.	16.97%	16.97%	0.0%	Distress Valuation	0%
FY2019	5.9%	\$4,084.36	ROIC	44%	43.86%	0.00%	N	Ionte Carlo Simulation Assumptions
FY2020	5.4%	\$4,305.83	EV/Rev.	3.53x	2.49x	-0.10x	Revenue Growth deviation	Normal (0%, 1%)
FY2021	4.9%	\$4,518.46	EV/EBITA	16.41x	10.51x	-0.59x	Operating expense deviation	Normal (0%, 1%)
FY2022	4.5%	\$4,719.69	Debt/Equity	47%	103%	5.7%	Continuing Period growth	Triangular (6.305%, 6.5%, 6.695%)
FY2023	4.0%	\$4,907.01	Unlevered beta	0.71	0.76	0.00	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2024	3.5%	\$5,078.00	Dividends/REV	3%	0%	-0.3%	Intrinsic value σ(ε)	\$0.09
Continuing Period	3.0%	\$5,230.34					1-year target price σ(ε)	\$0.10
		- /		Valuation			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	0.0%	7.8%	\$610.66	\$14,263.60	\$4,221.09	273.97	\$0.00	
FY2015	64.4%	7.4%	\$598.08	\$14,919.54	\$4,329.20	273.97	\$0.00	
FY2016	88.0%	7.8%	\$686.21	\$15,652.18	\$4,200.69	273.97	\$0.00	The 3σ(ε)-adjusted intrinsic value is \$38.06; the 3σ(ε)-adjusted
FY2017	81.8%	7.8%	\$740.36	\$16,360.16	\$4,023.06	273.97	\$0.00	target price is \$40.08; and the analysts' median target price is
FY2018	80.4%	7.9%	\$798.00	\$17,111.20	\$3,822.04	273.97	\$0.00	\$33.18
FY2019	78.7%	8.0%	\$856.50	\$17,908.77	\$3,587.74	273.97	\$0.00	
FY2020	77.1%	8.1%	\$914.70	\$18,758.12	\$2,541.13	273.97	\$0.00	
FY2021	75.6%	8.1%	\$971.21	\$19,644.31	\$2,219.23	273.97	\$0.00	Sensitivity Analysis
FY2022	74.2%	8.2%	\$1,025.01	\$20,592.90	\$1,853.11	273.97	\$0.00	Revenue growth variations account for 95.9% of total variance
FY2023	72.9%	8.3%	\$1,075.24	\$21,612.27	\$1,441.76	273.97	\$0.00	Risk premium's variations account for 2.5% of total variance
FY2024	71.8%	8.5%	\$1,121.16	\$22,712.21	\$984.94	273.97	\$0.00	Operating expenses' variations account for 1.4% of total variance
Continuing Period	71.8%	8.5%	\$1,814.20	, , , , , , , , , , , , , , , , , , ,	\$70 HZ I	21007	40.00	Continuing period growth variations account for 0.2% of total variance
containing r chou	/ 1.0 / 0	0.570	91,017.20					continuing period growth variations adount for 0.270 or total variance



## Sonic Corp.

SONC: NASDAQ

## BUY

## Key Statistics as of 11/19/2015

Maulast Duisse	фЭ
Market Price:	\$2
Industry:	Le
Market Cap:	\$1
52-Week Range:	\$2
Beta:	1.3

528.36 Leisure/Restaurants 51.4B 522.72 - \$36.73 ..39 Analyst: Matthew Schilling Sector: Consumer Disc.

Price Target: \$34.00

## **Thesis Points:**

- Macroeconomic Tailwind for Restaurant Industry
- Same Store Sales Growth Mixed with Inorganic Growth is an Ideal Combination
- Competitive Advantage in Highly Competitive Market

## **Company Description:**

Sonic Corporation is primarily a franchising corporation of drive in eateries. They currently have 3,526 locations in the United States and have been in business for over 60 years. They provide consumers with what is considered to be American classics, in hotdogs, burgers and fries. They have a variety of products that range from lunch to dessert and operate in 44 states across the United States.





## Thesis

Sonic Corporation has the perfect economic tailwind brewing that will propel its revenue growth. GDP growth has stabilized, disposable income has increased and consumer confidence in the United States economy has increased. This situation will generate revenue in the form of more traffic in locations and more franchisees. In addition, they have seen consistent same store sales growth while exhibiting an ability to continue opening up new locations. This will continue to stabilize their revenue growth going forward. They currently operate in a highly saturated and competitive market but they have a unique advantage over their competitors in the fast food industry.

## Macroeconomic Industry Tailwind

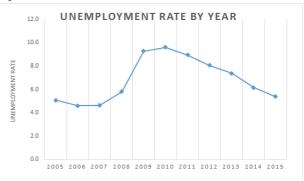
Over the past few years the perfect consumer spending storm has been brewing. Growth in GDP has resulted in more employment and higher wages for employees, increasing the amount of disposable income consumers have to spend. Since 2009, the United States has recovered greatly from economic recession from 2007 to 2009. The real growth rate in GDP has consistently stayed around 2% since 2009 and indications point to that number continuing to hover around the 2% growth rate.

Date	US Real GDP Growth Rate
Sep 30, 2015	2.03%
Dec 31, 2014	2.47%
Dec 31, 2013	2.45%

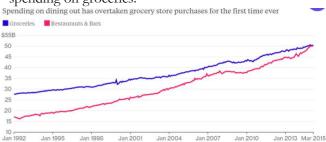
GDP growth is a critical statistic in assessing the health of a country's economy. A healthy GDP leads to other positive macroeconomic factors such as, lower unemployment rates and higher amounts of disposable income.



The graph above shows the growth in average real disposable income between 2008 and 2015. Real disposable income has increased by approximately \$1,000 since 2013 and will continue to increase into 2016. Such increases allow consumers to spend more money on leisurely items such as dinning out. Another crucial macroeconomic factor is the unemployment rate within the United States. In 2009, the tail end of the recession, unemployment more than doubled from where it was in 2007 (4.6% to 9.3%). Since 2009, the rate has gradually decreased, reaching the current September rate of 5.1%.



The more people that are employed, the more people there are to spend money on food in restaurant's. All of these macroeconomic factors have been improving over the past few years and caused spikes in consumer confidence. 2015 is the first time in United States history that spending on dinning out has surpassed spending on groceries.



This trend hints that spending on dining out will continue to grow, leaving a revenue growth potential for Sonic. Confidence in the market has increased the amount of franchises that are opening every year.

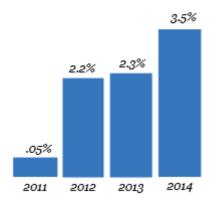




New store commitments have increased every year as a result of the positive macroeconomic outlook. This number is expected to increase further and provide Sonic with additional revenue growth in the future.

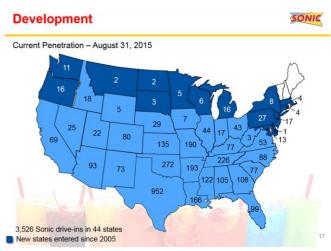
#### Same Store Sales Growth

For most fast food style restaurants, revenue growth can become dependent on new store sales growth. In the case of Sonic Corporation they experienced a mix of the two.



Same-store Sales

Same store sales growth within the fast food industry is an important factor in accessing a company's direction. Big companies like Panera and Chipotle have seen their same store sales growth drop significantly in the past few years. As for Sonic, their same store sales growth have been increasing much faster than competitors.



Sonic is still at in early stage in expansion with only 3,526 locations. Major consumer states, such as New York, only have 8 locations within the state. This leaves them a platform for future revenue growth through inorganic new stores growth. The combination of same store sales growth and inorganic growth will lead to consistent revenue growth every year.

# Market Overview and Competitive Advantage

The fast food industry has become a highly competitive and crowded industry. Demographic switches have allowed more fast-casual restaurants to slide into positions of higher market share. This is where Sonic has an advantage. Sonic is the biggest drive in, old school style fast food player. They have the ability to play in the normal fast food game with their drive thru and seating area but have the same ambiance as fastcasual restaurants. Their unique operations and lesser penetration gives the company a competitive advantage.

#### Valuation

SONC is currently trading at \$28.36 and after a conservative return on equity valuation approach, an intrinsic value of \$32.16 has been calculated. Keeping the margins the same as they currently are and continuing to keep their operating costs proportionally constant. This added with a fast revenue decay projects a target price of \$34. (Other projections are on the attached proforma)

#### Conclusion

I am recommending a buy on SONC due to multiple factors. There is an ideal macroeconomic tailwind that will propel Sonic's future revenues. With spending on



eating out sky rocketing, Sonic will have more in store customers and franchisees. In addition, they have strong same store sales growth and an ability to continue inorganic new stores growth. They also have a competitive advantage in the fact of their unique style of operation. As a result of all three of those factors I expect a target price of \$34 and recommend a buy.



			CENTER	R FOR GLOBAL FINA	NCIAL STUDIES			
		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		
Sonic Corp.	SONC	Matthew Schilling	\$29.75	\$32.16	\$34.00	2%	1-y Return: 15.75%	NEUTRAL
	General Info	Peers	Market Cap.		·	Managemen		
Sector	Consumer Discretionary	Dunkin' Brands Group, Inc.	\$3,852.88	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
ndustry	Hotels, Restaurants and Leisure	Fiesta Restaurant Group, Inc.	\$996.89	Hudson, J.	Chairman, Chief Executive Officer and Presid	\$2,167,851	\$2,470,294	\$0
Last Guidance	October 19, 2015	Buffalo Wild Wings Inc.	\$3,040.73	Budd, John	Chief Development & Strategy Officer and Se	\$40,859	\$928,099	\$0
Next earnings date	NM	Bojangles', Inc.	\$614.04	Miller, Craig	Chief Information Officer of Sonic Industries	\$501,272	\$867,665	\$0
	Market Data	DineEquity, Inc.	\$1,588.73	San Pedro, Claudia	Chief Financial Officer and Executive Vice Pre	\$0	\$0	\$0
Enterprise value	\$1,916.21	Denny's Corporation	\$785.33	Britten, Michelle	Principal Accounting Officer, Vice President as	\$0	\$0	\$0
Market Capitalization	\$1,480.94	The Cheesecake Factory Incorporated	\$2,225.53	Horsch, Corey	Vice President of Investor Relations and Trea	\$0	\$0	\$0
Daily volume	0.85	Noodles & Company	\$307.28		Past Earning Surprises			
Shares outstanding	49.78	BJ's Restaurants, Inc.	\$1,135.96		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	53.95	Chipotle Mexican Grill, Inc.	\$17,922.21	Last Quarter	0.00%	-2.38%	2.38%	1.37%
% shares held by institutions	98.94%	Current Ca	pital Structure	Last Quarter-1	0.50%	-1.81%	0.00%	0.70%
% shares held by insiders	4.41%	Total debt/Common Equity (LTM)	0.39	Last Quarter -2	1.28%	1.39%	8.33%	2.33%
Short interest	14.13%	Cost of Borrowing (LTM)	5.51%	Last Quarter -3	4.90%	9.23%	12.50%	2.20%
Days to cover short interest	6.02	Estimated Cost of new Borrowing	6.36%	Last Quarter -4	2.10%	1.50%	0.00%	0.62%
52 week high	\$36.73	Altman's Z	5.02	Standard error	0.9%	2.1%	2.5%	1.10%
52-week low	\$22.72	Estimated Debt Rating	ccc	Standard Error of Revenues prediction	0.9%		Industry Out	look (Porter's Five Forces)
5y Beta	1.39	Current levered Beta	0.85	Imputed Standard Error of Op. Cost prediction	1.9%	Bargaining Power of S		ing Power of Customers (100th Percentile), Intensity of Existing Rivalry
6-month volatility	38.03%	LTM WACC	6.00%	Imputed Standard Error of Non Op. Cost predict				ile), Threat of New Competition (100th Percentile), and Overall (100th
•		•	•	Proforma Assumptions				
Convergence Assumptions	General Ass	sumptions		Items' Forecast Assur	nptions			Other Assumptions
	Money market rate (as of today)	0.32%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	Tobin's Q	80%
All base year ratios linearly	Risk-Free rate (long term estimate)	2.91%	Operating Cash/Rev.	2.66%	2.66%	0.0%	Excess cash reinvestment	Money market rate
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	0.00%	0.00%	0.0%	Other claims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	37.5%	NPPE/Rev.	69.53%	69.53%	0.0%		Capitalization
explicit period of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	10.68%	10.68%	0.0%	100% of all rent expenses are capi	talized and amortized 'straightline' over 10 years
	·		NET MARGIN	10.19%	10.19%	0.0%	100% of all R&D expenses are car	pitalized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	72.40%	72.40%	0.0%	E&P expenses are not capitalized	
LTM		\$606.09	SBC/Rev.	0.58%	0.58%	0.0%	SG&A expenses are not capitalize	ed .
FY2016	5.0%	\$636.39	Rent Exp./Rev.	1.75%	1.75%	0.0%		Valuation Focus
FY2017	4.7%	\$666.30	R&D/Rev.	0.00%	0.00%	0.0%	DCF Valuation	100%
FY2018	4.5%	\$696.29	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2019	4.2%	\$725.53	SG&A/Rev.	14.84%	14.84%	0.0%	Distress Valuation	0%
FY2020	3.9%	\$753.83	ROE	-313%	-313.15%	0.00%		Monte Carlo Simulation Assumptions
FY2021	3.5%	\$780.21	P/E	22.70x	22.70x	0.00x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	3.3%	\$805.96	P/BV	NA	NA	0.00x	Operating expense deviation	Normal (0%, 1%)
FY2023	3.0%	\$830.14	Debt/Equity	39%	39%	0.0%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2024	3.0%	\$855.04	Unlevered beta	0.68	0.68	0.00	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.0%	\$880.69	Dividends/REV	3%	3%	0.0%	Intrinsic value $\sigma(\epsilon)$	\$0.09
Continuing Period	3.0%	\$907.11					1-year target price $\sigma(\epsilon)$	\$0.10
Forecast Year	ROE	Ke	Common Equity	Valuation	Other Claims on Assets and Dilution Costs	SI 0	D :	Monte Carlo Simulation Results
LTM				Implied Equity Value			Price per Share \$31.73	Monte Carlo Simulation Results
	-313.1%	8.0%	-\$64.14	\$1,702.01	\$87.15	49.78		
FY2016	-106.2%	8.1% 9.7%	-\$25.45	\$1,810.14	\$86.31	49.78 49.78	\$33.38	
FY2017 FY2018	-285.1% 322.7%	9.7% 4.6%	\$23.77	\$1,962.67	\$85.68 \$85.95	49.78 49.78	\$35.76	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$32.16; the $3\sigma(\epsilon)$ -adjusted
FY2018 FY2019	322.7% 107.5%	4.6%	\$75.04	\$2,026.76		49.78	\$36.42 \$38.61	target price is \$34; and the analysts' median target price is \$33.
FY2019 FY2020		6.5% 7.0%	\$128.69 \$184.85	\$2,131.83	\$5.27	49.78 49.78	\$38.61 \$40.21	
	65.7%			\$2,252.20	\$5.47			
FY2021	47.7% 37.6%	7.2%	\$243.48	\$2,385.54	\$5.66	49.78	\$41.99	Sensitivity Analysis
FY2022		7.4%	\$304.60	\$2,531.90	\$5.85	49.78	\$43.94	· · · · · · · · · · · · · · · · · · ·
FY2023	31.2%	7.6%	\$368.11	\$2,692.07	\$6.03	49.78	\$46.07	Revenue growth variations account for 95.9% of total variance
FY2024	26.7% 23.5%	7.7%	\$434.11	\$2,867.10	\$0.00	49.78	\$48.39	Risk premium's variations account for 2.5% of total variance
		7.8%	\$502.70	\$3,058.31	\$0.00	49.78	\$50.91	Operating expenses' variations account for 1.4% of total variance
FY2025 Continuing Period	-313.1%	8.0%	-\$37.95					Continuing period growth variations account for 0.2% of total variations

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## The Gap, Inc.

NYSE: GPS

## **BUY**

## Key Statistics as of 12/02/2015

Market Price:
Industry:
Market Cap:
52-Week Range:
Beta:

\$26.23 Apparel Retail \$10.60B \$24.70 - 43.90 1.09614 Analyst: Sector: Ryan Burke

Consumer Discretionary

Price Target: \$36.72

## **Thesis Points:**

- Investments in Supply Chain Technologies will yield increases in operating margin
- Growth opportunities from expansion in Asia, Athleta, and Franchises
- "Rightsizing" store base and expanding online presence positions Gap for profitability in the future of retail.

## **Company Description:**

The Gap, Inc. operates as an apparel retail company worldwide. It offers apparel, accessories, and personal care products for men, women, and children under the Gap, Banana Republic, Old Navy, Athleta, and Intermix brand names. The company provides apparel, handbags, shoes, jewelry, personal care products, and eyewear for men and women; and performance and lifestyle apparel for use in yoga, strength training, and running, as well as seasonal sports, including skiing and tennis. It offers its products through company-operated stores, franchise stores, Websites, e-commerce and social sites, and catalogs. The company has franchise agreements with unaffiliated franchisees to operate Gap, Banana Republic, and Old Navy stores in Asia, Australia, Europe, Latin America, the Middle East, and Africa. As of January 31, 2015, it operated 3,280 company-operated stores. The company was founded in 1969 and is headquartered in San Francisco, California.





## Thesis

The Gap, Inc. has invested in powerful cost saving supply chain technologies that will drive operating margin up, and wasted inventory costs down. The Gap proforma boasts an ROIC of 10.4% and a WACC of 5.14% which implies value creation. Gap intends on shrinking its brick and mortar stores and investing in E-commerce. Gap's growth initiatives in Asia, growing product line Athleta, and franchising endeavor will lead to growth and value creation in the future.

### Leadership

Art Peck became CEO of Gap in February of 2014. From 2012 to January 2015, Art served as President of the company's Growth, Innovation and Digital (GID) division, with responsibility for the digital strategy of our more than \$2 billion e-commerce business across the 80 countries where the company serves customers online. He drove the innovation agenda for the company across its digital platforms and more than 3,000 stores around the world. Ultimately, Art and his team developed and deployed the industry-leading, omni-channel platform for consumers to bridge the physical and digital shopping experience. His primary concerns as of the earnings report 11/19/2015 gravitate around keeping inventory low and expense control to drive margins up.

## Changes in Gap over the years

Gap was founded in 1969, when malls were being built, real estate was coming available, and consumer shopping patterns were being trained. The brand enjoyed a 15-year reign over classically cool, affordable American style, but it has spent the past decade-plus struggling with an identity crisis while new retailers have colonized much of its domain. The iconic brand slept through the fast-fashion revolution fueled by the likes of European labels H&M and Zara; got lost amid competitors such as Uniqlo and Target, who offered basics and denim at higher and lower price points; over expanded; and became too ubiquitous for today's niche-minded fashion crowd. Art Peck believes the company's future will depend not just on delivering better product but on radical experimentation. Gap thrived in the heyday of the mall-what Peck calls Retail 1.0—and floundered in the fast-fashion wave he

#### Siena Market Line 1<sup>st</sup> Week of December 2015

calls Retail 2.0. Gap's hope, he explains, is to leapfrog ahead to win in the Retail 3.0 era: a mobilefueled future in which physical stores will have an entirely new role. Peck hints that the number and size of the company's 3,680 stores will inevitably shrink. He plans to make mobile the central point of all customer interactions.

### Porter's 5 Forces

#### **Competitive Rivalry: HIGH**

The advent of Fast Fashion makes apparel retail a highly competitive field. Fast Fashion is a contemporary term used by fashion retailers to express that designs move from catwalk quickly in order to capture current fashion trends. Fast fashion clothing collections are based on the most recent fashion trends presented at Fashion Week in both the spring and the autumn of every year. Popular brands and competitors to Gap are H&M, Uniqlo, and Inditex.

#### Threat of Substitute Products or Services: HIGH

Best Cost retailers are becoming increasingly popular. Substituting products is as simple as walking into a different store or typing in a different URL. However, Gap has a competitive advantage with the ubiquity of their brick and mortar stores.

#### **Bargaining Power of Buyers: HIGH**

Customers have high bargaining power when it comes to the fashion industry. One of the reasons is the low switching costs from one store to another. When a customer becomes dissatisfied with the quality or pricing of a certain store's clothes, the consequence is that they will switch to a rival store. Therefore, if a store desires to retain its customers, it is imperative that it offers them the best in terms of quality, price and trend.

#### **Bargaining Power of Suppliers: HIGH**

Like Gap Inc., most companies in the fashion industry do not manufacture their own clothing but rather acquire them from suppliers whom they give instructions regarding style and/or design. Because of the large number of textile manufactures across the world, bargaining power is weak. Consequently, the suppliers are unable to charge high prices for fear of losing contracts to competitors who may offer the same goods and services at a cheaper price.



#### Threat of new entrants: HIGH

In the fashion industry, the barriers to entry are low. Therefore, it is of utmost importance for a corporation to have high brand perception because to the low switching costs. It may be easy to enter the market, however to compete on the scale of Gap, Inc. is difficult. Brand loyalty is a narrow moat for fashion companies because the fashion trends and preferences change so frequently.

## Supply Chain Investments

The Gap Inc. has invested in a responsive supply chain, seamless inventory, international expansion and Omni channel capabilities. Over the past five years Gap has increased net sales by \$1.6 Billion dollars and expanded operating margin by 260 basis points.

## **Responsive Supply Chain**

The Gap, Inc. has invested in a responsive supply chain. This involves systems that implement fabric platforming, vendor-managed inventory, rapid response, and test and respond.

*Vendor-managed* inventory is when key merchants keep a pool of finished goods they can draw on for replenishment, but is targeted for longer-life products and enables better in stock levels.

*Rapid Response* is aimed at seasonal products. It allows companies to read demand and react to color, size and silhouette, volatility. And allows companies to adjust to the most popular styles in a season.

*Test and Respond* fashion items allow the retailer to assess customer style preferences so it can buy into known demand.

These components are underpinned by *fabric platforming*, which allows Gap to leverage its scale and drive average unit cost savings. Gap anticipates that 50% of its product assortment will be on the responsive supply chain model by 2016. This supply chain is driving Gap to the frontier of Retail 3.0.

#### **Seamless Inventory**

Gap has been working to better match its inventory allocations across channels, geographies, distribution centers and stores. Once in place Gap will use sophisticated predictive analytics to assess real-time data that will allow it to get product to its customers when and how they want it. This will make Gap more competitive with the likes of Zara, H&M and Uniqlo.

## **Omni-channel Capabilitities**

Through their online platform, Gap has included options in its supply chain such as: ship from store, find in store, reserve in store, and order in store. This is designed to drive customer engagement and loyalty as well as again new customers.

### **International Expansion**

Gap intends on rapid international growth through franchising all of its brands. Gap has 75 stores planned to open by the end of 2015. The Gap, Inc. has high growth potential in China and throughout Asia with its mobile platform.

#### Summary

Gap has invested in the future of retail, a phase of shopping CEO Art Peck has coined Retail 3.0. Their investments in modernizing their supply chain are aimed at reducing the amount of inventory and operating expenses. By decreasing expenses, margins and profitability will increase. Gaps intends on rightsizing their brick and mortar stores and using that capital to expand and their E-commerce and digital identity. As retail becomes progressively more digital, the Gap brand will resurge as a powerhouse of apparel retail.



#### Siena Market Line 1<sup>st</sup> Week of December 2015

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						207020-020729-0		
The Can Inc.	GPS	Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield	1-y Return: 43,43%	BULLISH
The stop, thus		Ryan Burke	\$26.23	\$30.47	\$36.72	3%	and become the offer	DULLISH
	General Info	Peers	Market Cap.			Managemen	t	
Sector	Consumer Discretionary	L Brands, Inc.	\$27,905.39	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
Industry	Specialty Retail	Nordstrom Inc.	\$10,408.77	Peck, Arthur	Chief Executive Officer and Director	\$5,713,019	\$3,510,012	\$0
Last Guidance	November 19, 2015	The TJX Companies, Inc.	\$47,355.79	Simmons, Sabrina	Chief Financial Officer and Executive V	\$3,603,435	\$4,342,907	\$0
Next earnings date	February 25, 2016	Ross Stores Inc.	\$21,840.04	Fisher, Doris	Co-Founder and Honorary Lifetime Dir	\$0	\$0	\$0
	Market Data	Urban Outfitters Inc.	\$2,728.70	Calandra, Jack	Vice President of Corporate Finance a	\$0	\$0	\$0
Enterprise value	\$11,306.92	Abercrombie & Fitch Co.	\$1,694.94	Banks, Michelle	Chief Compliance Officer, Executive Vi	\$0	\$0	\$0
Market Capitalization	\$4,449.48	American Eagle Outfitters, Inc.	\$3,089.74	Adams, Paul	Vice President and Deputy General Cor	\$0	\$0	\$0
Daily volume	0.22	V.F. Corporation	\$27,910.45	- reacting to seat	Past Earning Surprises			**
Shares outstanding	404.00	Coach, Inc.	\$8,569.76		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	419.75	Aéropostale, Inc.	\$46.70	Last Quarter	-1.97%	0.94%	0.00%	0.86%
		12111110000000000000000000000000000000	NO-ODITARIN				0.000	
% shares held by institutions	26.01%	Current Capi		Last Quarter-1	-1.70%	-2.12%	0.00%	0.65%
% shares held by insiders	21.46%	Total debt/Common Equity (LTM)		Last Quarter -2	-2.51%	0.63%	1.82%	1.29%
Short interest	6.78%	Cost of Borrowing (LTM)	3.83%	Last Quarter -3	0.13%	3.05%	1.35%	0.84%
Days to cover short interes	4.77	Estimated Cost of new Borrowing		Last Quarter -4	-1.86%	-2.43%	1.37%	1.18%
52 week high	\$43.90	Altman's Z	NA	Standard error	0.4%	1.0%	0.4%	0.46%
52-week low	\$24.70	Estimated Debt Rating	A	Standard Error of Revenues prediction	0.4%		Industry Outlook	(Porter's Five Forces)
5y Beta	1.25	Current levered Beta	0.86	Imputed Standard Error of Op. Cost predictio	0.9%	Bargaining Power o	f Suppliers (100th Percentile), Ba	argaining Power of Customers (100th Percentile), Intensity of
6-month volatility	27.21%	LTM VACC	5.14%	Imputed Standard Error of Non Op. Cost pred	NM .	Existing Rivalry (10	0th Percentile), Threat of Subst	itutes (100th Percentile), Threat of New Competition (100th
and the second			5	Proforma Assumptions	in interest of	States and a state of the		
onvergence Assumptio	General Assur	nptions		Items' Forecast Assu	mptions			Other Assumptions
All base year ratios	Money market rate (as of today)	0.37%	-572	Base year (LTM)	onvergence period (Sub-industry	djustment per <b>q</b> ea	Tobin's Q	80%
	Risk-Free rate (long term estimate)	2.93%	Operating Cash/Rev.	0.00%	0.02%	0.0%	Excess cash reinvestment	Cost of capital
a second s	Annual increase (decrease) in interest rates		NWV/Rev.	6.03%	7.32%	0.1%	Other claims on the firm's asse	
<ul> <li>Second states and states in the second states</li> </ul>		35.0%	NPPE/Rev.	17.46%	17.08%	0.0%	Other Gallins On the firm's asse	Capitalization
	Marginal Tax Rate	5.5%	Dpr/NPPE	20.93%	20.54%	0.0%	100% of all cost outpotters are as	apitalized and amortized 'straightline' over 10 years
10 years	Country Risk Premium	0.0%	NOPAT MARGIN					apitalized and amortized "straightline" over 10 years
Forecast Year	<b>Revenue Growth Forecast</b>	Revenue (\$) Forecast		8.44%	6.67%	0.2× 0.1×	E&P expenses are not capitaliz	
LTM	nevenue Growin Polecast	\$16,120,00	Op. Exp./Rev.	85.33%	86.80% 0.55%		SG&A expenses are not capital	
FY2016	-1.1%	\$15,971.99	SBC/Rev.	0.62%		0.0%	Scia A expenses are not capital	Valuation Focus
			Rent Exp./Rev.	8.18%	0.00%		DOD NUMBER	
FY2017 FY2018	1.0%	\$16,267.17	R&D/Rev.	0.00%	0.42% 0.00%	0.0%	DCF Valuation	100% 0%
	1.8%	\$16,725.50	E&D/Rev.	0.00%		0.0%	Relative valuation	0%
FY2019 FY2020	2.3% 3.8%	\$17,312.21 \$18,209.09	SG&A/Rev.	26.44%	32.45%	0.6%	Distress Valuation	Carlo Simulation Assumptions
			ROIC	10%	25.47%	1.50%	32	
FY2021	3.6%	\$19,159.58	EV/Rev.	0.71x	0.80×	0.01x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	3.5%	\$20,168.51	EWEBITA	5.58x	7.78×	0.22x	Operating expense deviation	Normal (0%, 1%)
FY2023	3.4%	\$21,241.14	Debt/Equity	111%	21%	-9.0%	Continuing Period growth	Triangular (5.335%, 5.5%, 5.665%)
FY2024	3.3%	\$22,383.14	Unlevered beta	0.50	1.18	0.07	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.1%	\$23,600.70	Dividends/REV	2%	1%	-0.1%	Intrinsic value $\sigma(z)$	\$0.09
Continuing Period	3.0%	\$24,882.11		Valuation			1-year target price σ(ε)	\$0.10
Forecast Year	BOIC	VACC	Invested Capital		Claims on Assets and Dilution C	harac Outstandin	Price per Share	Monte Carlo Simulation Results
LTM	10.4%	5.1%					\$29.88	
			\$14,392.00	\$24,331.53	\$11,960.28	404.00		
FY2016	10.0%	5.5%	\$15,120.21	\$24,963.17	\$8,956.73	404.00	\$36.59	The O ( ) adjusted intelliging upday is and 47 star
FY2017	9.1%	5.7%	\$14,682.11	\$24,576.28	\$7,731.27	404.00	\$38.03	The 3o(z)-adjusted intrinsic value is \$30.47; the
FY2018	9.4%	6.3%	\$14,316.08	\$24,364.16	\$6,548.06	404.00	\$39.91	3c(z)-adjusted target price is \$36.72; and the
FY2019	9.8%	6.8%	\$13,975.62	\$24,279.85	\$5,354.53	404.00	\$42.32	analysts' median target price is \$27.92
FY2020	10.3%	7.3%	\$13,726.92	\$24,375.96	\$4,185.77	404.00	\$45.03	
FY2021	10.7%	7.9%	\$13,411.38	\$24,506.05	\$2,911.67	404.00	\$48.19	
FY2022	11.3%	8.4%	\$13,021.93	\$24,668.47	\$1,504.46	404.00	\$51.86	Sensitivity Analysis
FY2023	11.9%	9.0%	\$12,550.60	\$24,861.05	-\$39.71	404.00	\$56.05	Revenue growth variations account for 95.9% of total varian
FY2024	12.7%	9.5%	\$11,988.36	\$25,080.93	-\$1,738.37	404.00	\$60.79	Risk premium's variations account for 2.5% of total variance
FY2025	13.6%	10.1%	\$11,324.98	\$25,324.38	-\$3,607.13	404.00	\$66.69	Operating expenses' variations account for 1.4% of total variations
Continuing Period	25.5%	10.4%	\$6,515,24					Continuing period growth variations account for 0.2% of tota