



SumZero Top Stocks for 2018

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About the Top Stocks Challenge

Ideas within this report were selected as the 15 Winners/Finalists of the 2nd Annual Top Stocks Challenge. The contest was run within the SumZero platform, an online community of 15,000+ buy-side investment professionals.

All SumZero members are current investment professionals at hedge funds, private equity funds, or mutual funds, or have substantial prior fund experience. The complete research history of individuals featured in this report, as well as bios, and work history can be found on SumZero.

Contest submissions were independently assessed and voted on by a panel of over 40 senior fund professionals and asset allocators. The following, multi-factor criteria was utilized to determine the Winners/Runners-Up:

- Validity of the Thesis;
- Strength of the Supporting Argument;
- Feasibility of the Trade;
- Originality.


The 15 ideas in this report were consensus favorites across 5 thematic categories.

Event Sponsors



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X
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=
ALPHA**



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1 Special Situations

All ideas within this category are special situation theses with a tangible trigger event. Catalysts include bankruptcy, spin-offs, litigation, regulatory changes, etc. About 25% of research on SumZero is Special Situation focused.



Winner

Best Special Situations

🔍 Kyushu Railway Co Ord

Asset Class: **Equity**

Symbol: **9142:JP**

Updated: **1/16/2018**

Submitted: **12/29/2017**

EXPECTED RETURN

40%

COMMUNITY RATING



BY:

Adam Holzman

BADGES:



FORMERLY AT:

Paradigm Capital Management



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Value

MARKET CAP:

570.4B JPY

Recently IPO'd rail business with attractive real estate holdings goes underappreciated due to mediocre rail segment. Business undervalued at current levels even if rail segment is a zero.



About Adam Holzman

Adam was most recently a PhD student in Financial Economics at the University of Chicago Booth School of Business. Prior to pursuing a PhD, he served as an equity analyst on the buy side, covering investment opportunities across geographies and sectors. He focuses on opportunities to purchase shares of companies at a discount to intrinsic value. Adam graduated with honors from Yale University with a BA in Economics and Ethics, Politics & Economics. He has also been recognized for his work in baseball analytics.

Kyushu Railway Co Ord

Asset Class: **Equity** Symbol: **9142:JP** Submitted: **12/30/2017** Updated: **1/16/2018**



BY:
Adam Holzman

BADGES:

FORMERLY AT:
Paradigm Capital Management

Pricing & Return Details LONG	
EXPECTED RETURN	40%
INITIAL PRICE	3,515.00 JPY
TARGET PRICE	4,948.00 JPY

COMMUNITY RATING: ★★★★★

PERCENTILE: 84%

Recently IPO'd rail business with attractive real estate holdings goes underappreciated due to mediocre rail segment. Business undervalued at current levels even if rail segment is a zero.



ASSET CLASS:
Equity



SITUATION:
Value



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
Spin Off and
Dividend
Distribution



TIMEFRAME:
1-2 Years

Investment Thesis

Overview

Kyushu Railway Company ("KRC") is a rail operator on the southern Japanese island of Kyushu with significant real estate holdings in the vicinity of its local rail stations and elsewhere. It was owned by the Japanese government until its IPO in late 2016. Relatively positive local demographic developments, growing tourism, and management initiatives should support measured growth in rail traffic, while cost-cutting efforts (further encouraged by privatization) will improve rail profitability in the coming years. More importantly, KRC's real estate profile – accounting for over 40% of company EBITDA – is highly attractive and superior to those of the other privatized Japanese Railways ("JRs"). However, KRC trades at a multiple similar to those of the other private JRs, and half those of Japanese rail operators with similar real estate

portfolios. As analysts become more familiar with KRC's structure, they should give the company more credit for its real estate, and they should grow more comfortable with the rail business once it demonstrates more consistent operating margins. Post-IPO accounting complexities which cloud the strength of KRC's balance sheet will also dissipate in the coming years, giving analysts better clarity into the value of KRC. Appropriate multiple revisions would result in shares trading ~40% above current prices. Even if we assign KRC's weaker rail business no value, the real estate business alone may be more valuable than the market's valuation of KRC.

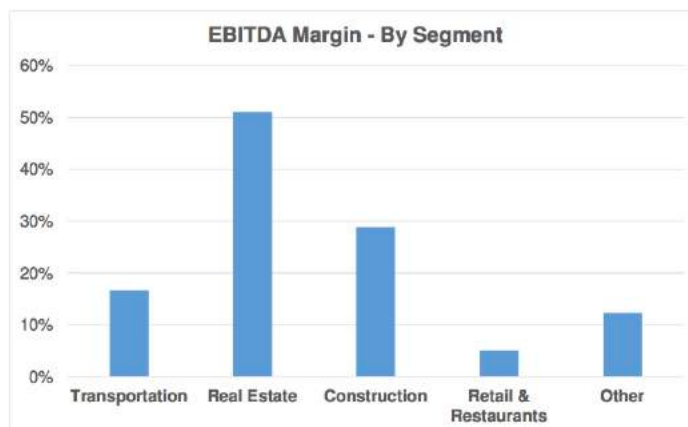
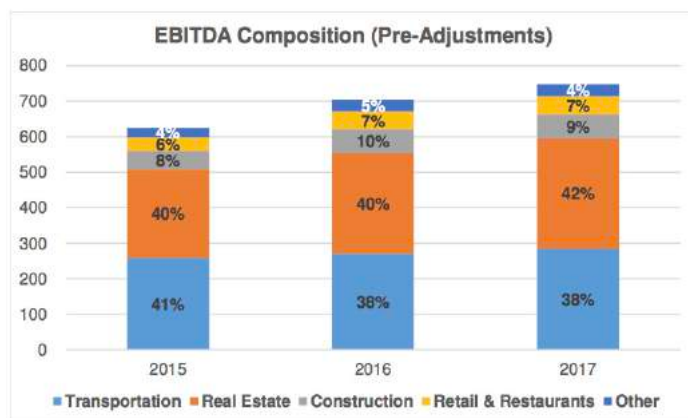
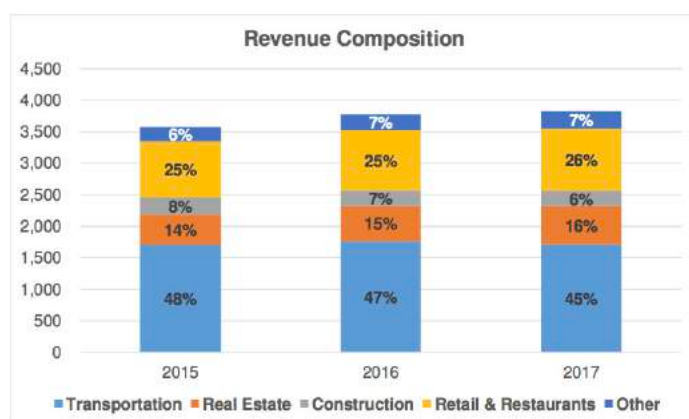
Business History

KRC was created in 1987 with the restructuring of Japanese National Railways (JNR). The system was divided into six

separate JR's – JR East, JR Central, and JR West on the island of Honshu (“mainland Japan”), and JR Hokkaido, JR Shikoku, and JR Kyushu on three of Japan’s smaller islands. The Honshu JR's were gradually privatized through the 1990s until 2006, and are now publicly-traded entities. The “island JR's,” meanwhile, see much lower passenger traffic and were not considered sufficiently profitable to support privatization. However, to make up for weaker rail profitability, JR Kyushu management diversified into a variety of secondary business lines in the years following the JNR breakup – real estate being the most important and most significant – while also successfully improving rail efficiency and managing segment costs. The company was deemed financially self-sufficient and sold to public investors in 2016.

Business History

Real Estate accounts for ~16% of KRC revenue, but ~43% of firm EBITDA. With EBITDA margins of over 50%, it is by far KRC’s best and most profitable business, and much more profitable than KRC’s core Transportation segment (~16% EBITDA margin). In the years following the JNR breakup, JR Kyushu management acquired a portfolio of commercial, retail, and residential real estate in the vicinity of its rail stations (and, eventually, elsewhere). **Rail travel is very popular in Japan, and rail stations are often located in relatively busy regional centers. Accordingly, properties closer to rail centers generally support higher rents and real estate valuations. This gives KRC, most of whose properties are adjacent to rail centers, a particularly valuable real estate portfolio.**

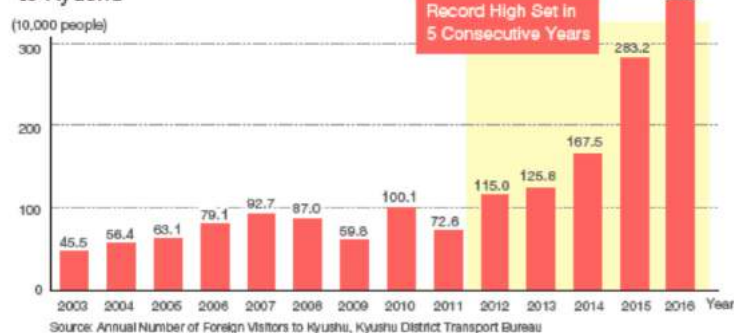


KRC’s land holdings give its Real Estate segment a structural advantage over competing real estate businesses. KRC owns the land on which its rails sit (excluding some Shinkansen rails which it leases from the government) and some of the land surrounding its tracks. It has leveraged these holdings to build out its stations – particularly those in more urban areas – into larger-scale shopping centers (see the appendix for a sample layout of a “station building”), and has developed some of the surrounding areas with offices and residential developments. Again, these locations are very valuable with respect to surrounding real estate by virtue of their proximity to heavily- trafficked city centers, and local development creates a virtuous cycle which increases the value of KRC’s real estate, rail stations, and rail business with increased local traffic. KRC has not yet exhausted its opportunities to develop the areas immediately surrounding its urban stations, where it continues to build both residential and nonresidential buildings (see below). Other real estate businesses generally do not have the advantage of immediate access to highly-valuable land similar to KRC. KRC has also acquired and developed land further away

from its rail stations, but its valuable rail-related land holdings give it a material advantage over competing real estate firms.

Regional trends also make KRC's real estate profile relatively attractive. Unlike the rest of Japan, where the population is shrinking, Kyushu population growth has been closer to break-even, and major population centers on the island (notably Fukuoka) have witnessed slightly positive growth. Local demographics also skew younger than the rest of the country. Further, tourism to Kyushu has grown significantly through the 2010s – increasing by over 30% annually on average since the start of the decade – and is expected to continue to increase annually at near double-digit rates through 2020 with continued economic growth in China and Korea. Kyushu has become an increasingly popular “resort hub” for both foreigners and Japanese, with 75% of cruise ships to Japan stopping in Kyushu, and with the aging Japanese population supporting demand for Kyushu property among retirees. Relatively stronger population dynamics and economic trends have supported strong real estate valuations and low vacancy rates (2-3% in the city of Fukuoka, and ~2% at KRC properties, per management). Continued economic growth in China and Korea could also support Fukuoka real estate markets with increased demand for Japanese properties. Management continues to work to expand its real estate profile alongside the growth of its railway network, in addition to expanding into Tokyo (where it already owns properties) and elsewhere across Japan and Asia.

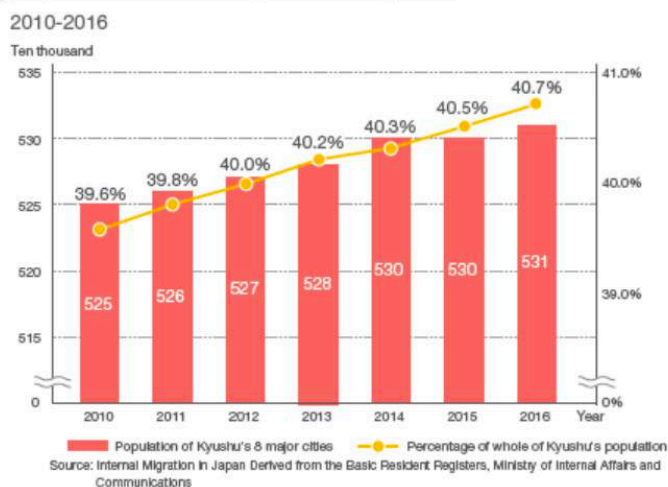
Annual Number of Foreign Visitors to Kyushu



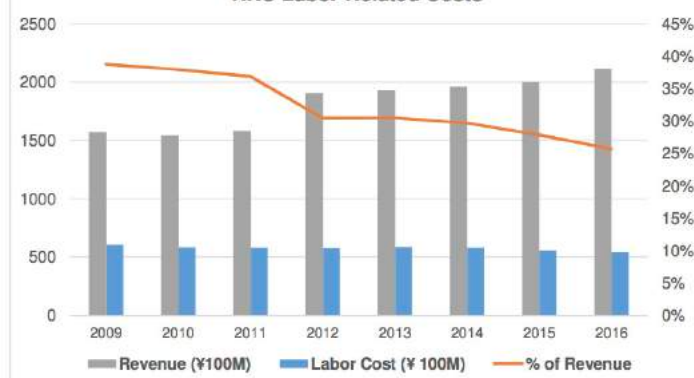
KRC's **Transportation** business accounts for just under 50% of company revenue and ~40% of firm EBITDA. In addition to its core rail business – which includes both regional rails and the high-speed Shinkansen line – KRC operates a number of subsidiary public transport services, including ferries to Busan (South Korea) and both local and long-distance buses.

Though KRC's Transportation business has not been as profitable as more heavily-trafficked rail businesses in other parts of Japan, relatively strong local demographic trends make the business more attractive than other smaller-scale regional rails, and management is working to increase segment profitability through cost-cutting and service change initiatives. For example, KRC has been replacing retiring workers with automated systems, which has kept labor costs relatively flat even as revenue has grown: labor expenses represent 25% of revenue today, versus 40% in 2007-09. Over 30% of KRC employees are 50 years of age or older, giving management further near-term opportunities to cut labor costs.

Population Share of Major Cities in Kyushu



KRC Labor-Related Costs



Management is also working with local governments to replace lower-volume and unprofitable rail lines with cheaper forms of transportation, such as buses and light rail. It's important to remember that, to some extent, the JR Kyushu rail line was effectively run as a subsidized government service until only recently, and that the business continued to operate inefficient and unprofitable transportation routes as a public entity for this reason. Indeed, relatively weak rail profitability was the major source of motivation for management's decision to expand into real estate following the JNR split, as the company was limited in the extent to which it could improve margins by cutting unprofitable transportation services. Segment strategy has already begun to change since the business was privatized, with management now more focused on improving rail profitability. KRC cannot change local service routes without municipal permission, but management expects to reach agreements on service changes for lower-volume routes through the coming quarters and years. Rail business profitability has already seen slight improvement through the company's first year as a private entity, and profitability should continue to strengthen with ongoing cost-cutting initiatives and service changes, alongside improved ridership with relatively positive local demographic trends and increased tourism.

Overall, though KRC's Transportation business is weaker than its Real Estate business, profitability-oriented management initiatives – alongside measured volume growth – should support margin expansion and steady rail profitability.

Longer-term developments in the Transportation business could also boost segment revenues and profitability. The Japanese government is currently constructing a new high-speed Shinkansen line which would connect Nagasaki to the existing Kagoshima Shinkansen Line running north-south across Kyushu. A high-speed line to Nagasaki is expected to cut travel time from the city to the Kagoshima Line by 30-60%, depending on the technology employed (see the appendix for more details on the extension of the Shinkansen to Nagasaki).

When travel times along the Kagoshima Line were cut by similar levels with the completion of the north-south Kyushu Shinkansen artery in 2011, Shinkansen ridership increased in southern Kyushu by over 60% and in northern

Kyushu by ~40%, resulting in an increase in Transportation segment revenue of 20% in 2012. Though the Nagasaki Shinkansen line is not expected to be completed for at least another five years, expansion of the high-speed rail network gives KRC further opportunity to expand ridership and Transportation revenue, along with segment profitability due to the heavy fixed costs involved in the rail business. In the near-term, management is also working to expand its "Seven Stars" luxury train service geared towards tourists, which should support relatively higher margins than the rest of the rail business, albeit as a relatively small part of the segment.

Management

The current management team has been with the company in various roles since the 1987 JNR split. Of the six JRs, JR Kyushu was by far the most ambitious in building out its real estate business, and was the only island JR to achieve sufficient profitability to merit privatization. Further, none of the three private Honshu JRs has amassed as large or as attractive a real estate portfolio as KRC's: real estate generates more than 10% of revenue for only one of the three Honshu JRs, and, while their rail segments are more profitable than KRC's, their real estate operating margins are 700-1500 basis points below KRC's real estate operating margins (37%). Other Japanese rail operators have similarly large real estate portfolios, but few approach the profitability of KRC's real estate segment (see graph on page 6). Overall, management has successfully executed on a differentiated real estate strategy and has demonstrably cut costs in its rail business, and its strategy going forward is largely a continuation of both efforts. Their relative success through the past 30 years – and that they developed the strategy independently of the other JRs – should give investors confidence in their ability to manage the business intelligently and to carry out the strategy effectively going forward.

This isn't necessarily to say that KRC is a tremendous business, nor that management is infallible, but rather that both the business and management's real estate-oriented strategy are proven, and that we can be comfortable valuing the business accordingly.

Financials

An outline of my financial model and forward estimates is on the final page of this report (prior to the appendix). I anticipate measured margin expansion in the Transportation segment with management's ongoing cost-cutting initiatives. Transportation revenue has also grown at a relatively high rate through this year against easy comps from FY 2017, when an earthquake resulted in rail closures and reduced service. Otherwise, my model reflects steady margins across KRC's other business lines and conservative growth estimates across each segment. Revenue growth in the Real Estate segment may be higher than I have modeled, but, as my thesis is not predicated on strong earnings growth – and as I don't consider exceptionally strong earnings growth a likely or necessary catalyst – I have been conservative in forming forward estimates. My estimates do exceed company guidance, but management has been notoriously conservative in its published projections, and it's very plausible that KRC will outperform my estimates as well as management's.

More generally, KRC's real estate-heavy business model should support strong free cash flow. Management completed a period of relatively heavy real estate investment in the years prior to the IPO, which should generate attractive cash flow in the coming years. An increased dividend could make KRC shares particularly attractive in Japan, where low to negative interest rates have increased the demand for income stocks, and could serve as a catalyst for KRC shares.

Also of note are a number of post-IPO accounting complexities which appear to be clouding analysts' understanding of KRC's cash generativity and balance sheet (which is very strong in its own right, even ignoring these complications – KRC is net cash and could very plausibly pursue recapitalization in the near future). Prior to KRC's privatization, the business, along with the two other island JRs, was given a "Management Stabilization Fund" ("MSF") by the state, as it was not believed that KRC maintained sufficient ridership to support profitability. The MSF existed as an asset on KRC's balance sheet and was drawn from each year to support the rail business. When KRC was privatized, management used the MSF – which was, at the time of the IPO, a ¥220.5B asset – to prepay expenses

on its 30-year lease of Japan's Shinkansen rails. The asset was impaired in full with this exchange. As the lease is expensed rather than capitalized, it does not appear on KRC's balance sheet, and creates an annual lease expense of ~¥10B. However, because the lease is prepaid, this expense is effectively non-cash amortization of a hidden asset, and therefore does not affect cash flow (note that KRC paid Shinkansen usage fees even before privatization, but the lease is now prepaid, so lease expenses are now effectively amortization). Earnings-based valuations are therefore formed on a weighed-down earnings number and otherwise do not reflect the value of the off-balance-sheet asset.

KRC accounting complexities also cloud the historical profitability of the Transportation business prior to the company's privatization. From an operating income perspective, the rail business showed negative margins (between -4% and -10%) since its inception in 1987 until JR Kyushu's final year as a state-owned enterprise. The business produced positive operating income for the first time in FY 2017 – KRC's first year as a private business. This was largely due to the write-down of KRC rail assets alongside the Management Stabilization Fund, which relieved the Transportation segment of significant depreciation expenses going forward. Though the rail segment looks like a money-losing business from the perspective of historical operating income, it has shown relatively steady profitability from an EBITDA perspective (~14-17% EBITDA margins). As KRC's Shinkansen lease prepayments will keep this expense from hitting cash flow for the next 30 years with the MSF write-down, EBITDA can be seen as indicative of the segment's cash generativity despite the fact that Shinkansen usage fees are part of the economic cost of operating the rail. Though KRC's rail segment is less profitable than peers, investor beliefs regarding its profitability – best described as skeptical – might have been negatively skewed by KRC accounting and its effect on segment operating income.

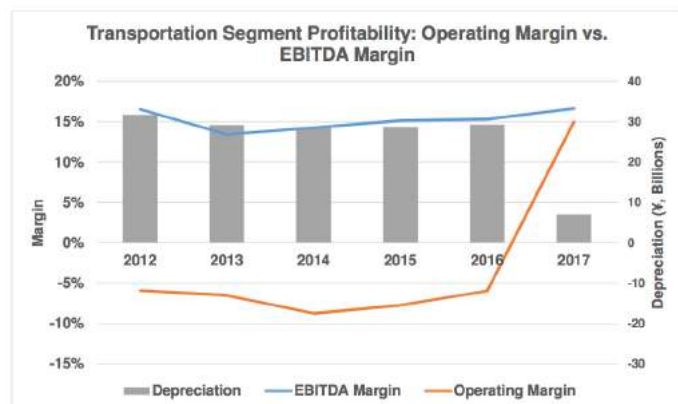
Also note that, while KRC's rail EBITDA margins are lower than those of more heavily-trafficked rail businesses in mainland Japan (which show EBITDA margins of 20-35%), segment EBITDA margins have been quite stable, particularly considering that the fixed cost structure of the business make KRC vulnerable to fluctuations in profitability with changes in ridership volume. Segment operating margins in FY 2017 were also largely in line with

Valuation

There are several reasons to believe that KRC stock is not properly valued by the market. First, at the time of the IPO, three quarters of shares were allocated to domestic investors as part of Prime Minister Abe's policy initiative to encourage retail equity investment. As with Japan Post's IPO in 2015, some have suggested that the KRC IPO was underpriced to encourage investment, as well as to reduce the probability of widespread government criticism from investors in the event of poor post-IPO share performance. Even then, since the IPO, shares have risen by just ~15% while the Nikkei has risen by 30% over the same period. The accounting complexities described above have also complicated analysis of the stock and have obscured elements of the firm's profitability and value to analysts.

Enterprise Value (¥ millions, except share data)	
Share Price	¥3,500
Shares Outstanding (M)	160
Market Cap	560,000
Cash	12,064
Short-Term Securities	69,435
Investment Securities	21,764
Money Held in Trust	56,882
Cash & Cash Equivalents	160,145
Short-Term Debt	1,218
Long-Term Debt	76,637
Total Debt	77,855
Net Debt	(82,290)
Non-Controlling Interests	5,410
Total Net Debt	(76,880)
ENTERPRISE VALUE	483,120

Most importantly, the market appears to value the firm in line with the three other publicly-traded JRs – taking these to be superficial comps for KRC – while applying a slight discount in light of JR Kyushu's lower rail volume and profitability. The business profiles of the other public JRs, however, are very different from that of KRC. None of the other public JRs have invested in non-rail businesses as aggressively as has JR Kyushu since the JNR split in 1987. All three mainland JRs were IPO'd with heavy debt loads under the expectation that they would be sufficiently profitable both to support themselves and to pay down their liabilities over time.¹ Though their rail systems see



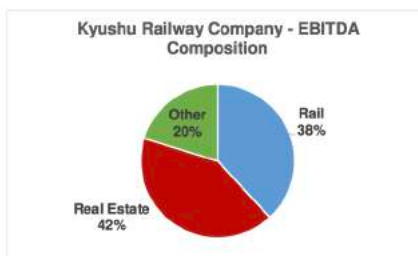
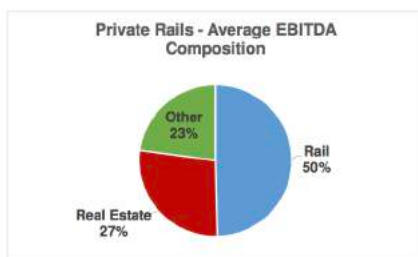
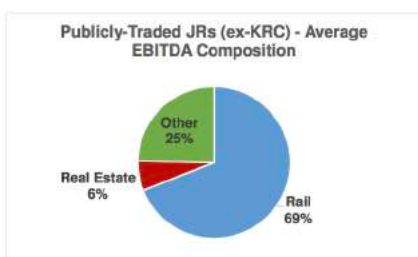
industry averages. Further, note that margins are likely to expand in the coming years, as management is now free to pursue service changes to address less-profitable routes. Investors who attempted to gauge the underlying cash flow potential of the Transportation business using historical operating income without a complete understanding of JR Kyushu's accounting dynamics – or who were otherwise turned off by the stigma of negative segment operating margins – may have underestimated the rail segment's post-IPO cash generativity.

Finally, KRC has ¥57B of prepaid capex “held in trust” dating back to before the IPO to support spending on rail improvements. Management has drawn down on the asset gradually since the IPO to finance capital expenditures. This item sits under the “Investments and Other Assets” section of KRC's balance sheet, but is segregated from the firm's other short-term investment assets, and it appears that some analysts have not been treating it as a short-term asset or cash equivalent. The asset – which will be realized as a material item through the coming years as it reduces the need for capex spending for rail improvements directly out of cash flow – represents a substantive cash-like asset and source of capital for management, as it frees up cash for other uses. Accordingly, it should be treated as cash when calculating enterprise value. All else equal, analysts overestimate firm EV when they ignore this asset, and the company trades at a cheaper Adjusted EV/EBITDA multiple than the market currently recognizes.

¹ JNR operated at a loss through much of the 1960s-70s and incurred heavy debts to support operations during this period. Poor JNR financial performance ultimately motivated the government to restructure JNR in the early 80s and to privatize the mainland JRs later in the decade. Privatization was seen as an avenue by which to improve JR operations and profitability, but also as a route by which to relieve the state of JNR's heavy debt burden.

relatively heavy traffic and have been more profitable than KRC's, their debt burdens prevented them from investing more heavily in non-rail businesses until only recently. Meanwhile, JR Kyushu enjoyed financial support from the government through the same period, and was relatively free to pursue adjacent businesses to make up for poor rail earnings. Though the three mainland JR's have since begun to invest in real estate more aggressively, their portfolios are neither as large nor as attractive as KRC's.

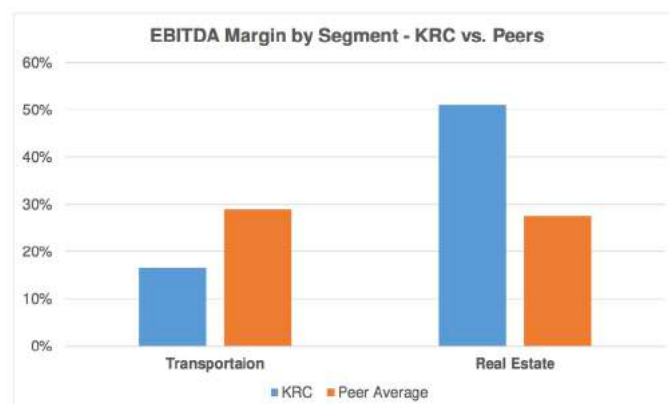
KRC is a rail business in name, but its structure is ultimately very different from that of its superficial peers (see below). KRC is better viewed either as more similar to other private rails with larger real estate portfolios, or as a self-sufficient real estate business with a relatively lower-volume rail business attached, while the mainland JR's are best viewed as rail businesses first and foremost. Accordingly, the mainland JR's are not necessarily good comps for KRC.



KRC currently trades at 6.2x LTM EV/EBITDA, close to but slightly below the mainland JR average of 8.3x. Meanwhile, private railways with real estate profiles more similar to KRC's are twice as expensive or more. Such a disparity in valuation might be a red flag under different circumstances, but it's apparent that investors – most of whom have not

covered KRC for long – are still grappling with how to weigh the weaker Transportation business against the Real Estate business, and perhaps with how to understand the underlying cash generativity of the rail segment. Many analysts continue to use the other JR's as an easy heuristic standard by which to value KRC.

Analysts may also be concerned about the profitability of KRC's rail business, due both to relatively lower ridership compared to other Japanese rails and perhaps to the Transportation segment's poor historical operating margins. However, again, historical EBITDA margins provide a view into the segment's cash generativity going forward, and have been relatively stable even if slightly below industry averages. KRC also continues to shift its strategy away from that of a subsidized government service, and management is pursuing initiatives intended to improve rail profitability. In KRC's first year as a private business, its rail segment achieved operating margins of 15%, in line with average operating margins for the industry (only JR Central – which operates in and around Tokyo, Kyoto, Osaka, and Nagoya – shows operating margins significantly above this level in rail). With rail operating margins at the industry average, but rail EBITDA margins somewhat below peers, KRC's Transportation segment does appear to lag the industry to some extent, but is paired with a relatively large and more profitable real estate segment (see graph below). **If rail profitability at least remains stable – as it has through recent history – it seems inappropriate for KRC to trade at a 50% discount to industry peers on an EV/EBITDA basis given its stronger real estate profile. Even if the rail segment were to experience significant setbacks, KRC's superior and proven real estate segment would nonetheless provide a significant source of value.**



Given KRC's structure and the unique strength of its Real Estate segment over its Transportation segment, it may be best to value KRC on a sum-of-the-parts basis. Japanese REITs generally trade over 20x EV/EBITDA. While many of these have portfolios centered in Japan's larger mainland cities, REITs with portfolios more similar to KRC's Kyushu-focused portfolio also trade in the high teens on an EV/EBITDA basis (see Fukuoka REIT Corp, which describes itself as Japan's first region-specific REIT, and whose portfolio is similarly spread across Kyushu with a focus on Fukuoka – see the appendix for a comparison).

REITs		
Company	Ticker	EV/EBITDA LTM
Fukuoka REIT Corp	8968:JP	18.9x
Ichigo Office REIT	8975:JP	26.0x
NIPPON REIT Investment Corp	3296:JP	27.0x
Premier Investment Co	8956:JP	23.3x
Sekisui House Residential Investm	8973:JP	25.6x
Tokyu REIT Inc	8957:JP	26.3x
MEDIAN		25.8x

In a base case scenario, I value KRC's Real Estate business using an 18.0x FY 2017 EBITDA multiple – in line with, but slightly below local REITs with similar portfolios – and value the non-real estate businesses (the majority of which is in the Transportation segment) at a conservative 3.7x FY 2017 EBITDA multiple (a material discount to the more heavily-trafficked mainland JRs, despite the segment's consistent and expanding profitability levels). Under this scenario, KRC shares would be worth ¥4948, yielding over 40% upside from prevailing share prices, and implying an aggregate 9.3x LTM EBITDA multiple on total firm EBITDA. My bull and bear case scenarios are shown below alongside my base case.

VALUATION - SOTP	Bear Case	Base Case	Bull Case
Real Estate EBITDA Multiple	13.5x	18.0x	20.0x
Rail and Other EBITDA Multiple	0.0x	3.7x	4.5x
EV(M)	¥419,850	¥714,830	¥810,550
Net Debt (M)	-¥76,880	-¥76,880	-¥76,880
Market Cap (M)	¥496,730	¥791,710	¥887,430
Diluted Shares Outstanding (M)	160	160	160
Price per Share	¥3,105	¥4,948	¥5,546
Implied Aggregate LTM EV/EBITDA Multiple	5.4x	9.2x	10.5x
Upside	-11.3%	41.4%	58.5%

Note that, in a heavy bear case scenario in which the non-real estate businesses (rail included) are deemed worthless, and in which the Real Estate business is valued at a heavy discount to similar REITs, the stock would yield only ~11% downside to current levels. **Even if we were to assume a bear case scenario for the Transportation business and attribute no value to the segment, the Real Estate segment – if valued in line with similar REITs – would alone be worth ~14% more than the market's current valuation of KRC (see below). This would appear to suggest A) that analysts have an unduly negative view of the Transportation business, B) that analysts heavily underweight the contribution of real estate to what is nominally a railroad company, or C) that analysts anchor valuation on inappropriate peers with very different business structures (e.g. the mainland JRs).**

VALUATION - SOTP - Rail Worthless	Bear Case	Base Case	Bull Case
Real Estate EBITDA Multiple	13.5x	18.0x	20.0x
Rail and Other EBITDA Multiple	0.0x	0.0x	0.0x
EV(M)	¥419,850	¥559,800	¥622,000
Net Debt (M)	-¥76,880	-¥76,880	-¥76,880
Market Cap (M)	¥496,730	¥636,680	¥698,880
Diluted Shares Outstanding (M)	160	160	160
Price per Share	¥3,105	¥3,979	¥4,368
Implied Aggregate LTM EV/EBITDA Multiple	5.4x	7.2x	8.0x
Upside	-11.3%	13.7%	24.8%

In the near to medium term, as accounting complexities gradually resolve and yield higher than expected free cash flow (e.g. with the write-down of the “money held in trust”), and as analysts become more familiar with the relatively recently IPO'd company, I would expect the market to give KRC more credit for its Real Estate business. Dividend increases or new investments supported by higher- than-expected free cash flow could also serve as catalysts for the stock. However, I would expect analysts to perhaps continue to use the mainland JRs as a heuristic valuation anchor for KRC through the near term. Accordingly, I think it's reasonable to expect KRC to trade at a slight premium to the other real estate-light JRs, but perhaps to continue to trade at a discount to other private rails for at least some time. A 9.3x aggregate LTM EBITDA multiple seems plausible from this perspective. Investors may also remain hesitant to invest until the rail business demonstrates a longer track record of positive operating margins, but positive operating margins – along with the

resolution of the aforementioned accounting complexities – have been and will continue to be observed in due course over the coming quarters. Even in the case that rail profitability suffers, the real estate business once again provides very comfortable downside protection.

It's also plausible that the stock could have even more upside than is suggested by my valuation, as KRC stock would still be valued at a ~25% discount to other real estate-heavy private railways on an aggregate EBITDA basis if trading at 9.3x aggregate LTM EBITDA. Over a somewhat longer horizon, KRC could ultimately trade at par with the other private rail systems, to which it is fundamentally more similar. **If we value the firm at a multiple more similar to those at which other private rails trade, KRC shares would have close to 90% upside to current levels (see adjacent).** There is an argument to be made that this better reflects the true value in the business if we are sufficiently confident in the stability of the rail segment. Should KRC's Transportation business see expanded margins with management's profitability-oriented rail initiatives, the profitability gap between KRC's rail segment and that of peers would be even narrower, while its real estate holdings would both represent a relatively larger share of earnings and support higher margins than peers. Valuing KRC in line with other private rails seems reasonable from this perspective.

VALUATION - Aggregate	
Aggregate LTM EBITDA Multiple	12.5x
EV(M)	¥966,525
Net Debt (M)	-¥76,880
Market Cap (M)	¥1,043,405
Diluted Shares Outstanding (M)	160
Price per Share	¥6,521
Upside	86.3%

RISKS

Failure to Rerate

The thrust of my thesis is that KRC should rerate. It is possible that the market will fail to appreciate KRC's relatively strong real estate portfolio, and that KRC will continue to trade at a discount to peers for any of the reasons described above. However, given the stock's brief

trading history, it's plausible that the market still does not fully appreciate KRC's business profile, but that it will as it becomes more familiar with the company.

Inability to Close Unprofitable Routes

In many instances, KRC cannot close or restructure lower-volume routes without obtaining the approval of local governments. Inability to reach mutual agreements with municipalities on service changes could force KRC to continue to operate unprofitable routes. Further, generally speaking, Japanese companies have historically been less shareholder-friendly than others, and management perhaps may not pursue profitability-oriented service changes as aggressively as shareholders would like. However, service changes are a stated goal of management, and initiatives such as headcount cuts demonstrate management's interest in improving Transportation segment profitability.

Poor Rail Profitability

As discussed, some investors may be hesitant to invest in KRC due to a strongly negative view of its Transportation business. Though margin improvement is likely as management reorients its Transportation strategy as a privatized business to focus on profitability, poor performance in the rail business could continue to discourage investors from valuing KRC at a multiple more similar to industry peers. (See the appendix for longer-term Transportation growth and profitability risks involving the development of the Nagasaki Shinkansen line).

Natural Disasters

As is much of Japan, Kyushu is prone to natural disasters such as earthquakes, which are somewhat frequent in the area, and which can significantly reduce ridership for periods of time depending on their magnitude. This is a particular risk for KRC given its geographic concentration. Though a very material risk, this risk is shared across much of the Japanese rail industry, and should not weight on KRC's valuation any more than it should weigh on other Japanese rail companies. KRC has also been able to weather recent earthquakes of varying magnitudes while maintaining relatively stable rail profitability.

Cost Structure

Along the same lines as above, the rail business involves relatively significant fixed costs, and sizable declines in ridership could compress margins materially.

Expansion Outside Core Geography

Management is beginning to invest more heavily in properties outside of Kyushu, having opened hotels in Tokyo and Okinawa in 2014 and 2017, respectively. KRC also operates restaurants in Shanghai and, in May 2017, opened an office in Bangkok in preparation for expansion into Southeast Asia. Though management has a relatively strong record in building KRC's Real Estate business, extending the company's portfolio further beyond its rail network represents a deviation from its proven strategy, forcing KRC to compete with other real estate businesses in areas in which it does not have a structural advantage in its access to valuable land.

Privatization

Though JR Kyushu was deemed sufficiently profitable to support itself as a private entity, it was able to grow its Real Estate business as effectively as it did in part due to the government's support of its Rail business (whereas the Honshu JRs, for example, were limited in their ability to expand beyond their rail businesses after being burdened with debt upon their privatization in the early 1990s).

KRC's balance sheet is strong, and its Real Estate business is now largely self-sustaining, but KRC no longer enjoys government subsidization and profitability guarantees in support of its relatively lower-volume rail business. Poor rail performance could hurt firm profitability and hinder management's ability to focus on investments in the Real Estate segment, while also discouraging investors who overweight the contribution of the rail business to KRC.

APPENDIX

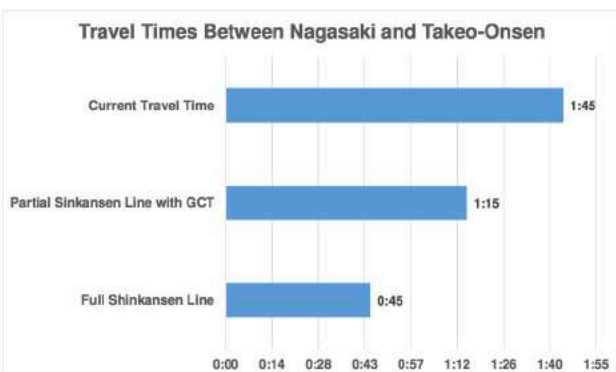
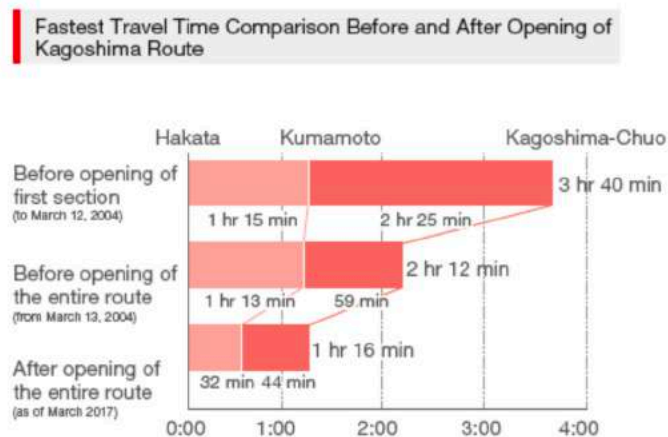
Shinkansen Extension to Nagasaki and Delays in Project

Existing rail routes in and around Nagasaki (the Nagasaki Main Line and Sasebo Line) use narrow gauge rails, whereas Shinkansen trains in Kyushu and the rest of Japan run on standard gauge lines. Initial plans called for the construction of a standard-gauge Shinkansen line between Nagasaki and Takeo-Onsen, and for "Gauge Change Trains" (GCT) with adjustable wheel spacing to allow trains to travel the rest of the route to the Kagoshima Main Line (the primary north-south Kyushu Shinkansen artery – see map below) on existing narrow-gauge rails. However, GCTs, which cost 30% more than fixed-gauge cars, were recently shown to require axle replacements after just 30K km of use, whereas Shinkansen guidelines require trains to run for at least 600K km without overhaul. Building a full standard-gauge line from Nagasaki to the existing Kyushu Shinkansen line (as opposed to building a partial line from Nagasaki to Takeo-Onsen, about halfway to the main artery) would cost hundreds of billions of yen (the partial line alone will cost ¥500B²) and take more than a decade to complete, but waiting for improvements in GCT technology will similarly delay the project. Either way, travelers from Nagasaki will continue to be forced to transfer from high-speed Shinkansen trains to slower trains at Takeo-Onsen en route to the Kagoshima Main Line until the late 2020s, barring advancements in GCT technology (though such advancements could very plausibly occur). The Shinkansen line between Nagasaki and Takeo-Onsen is itself not expected to be complete for another five years.

Failure to offer a faster train to Nagasaki could have serious consequences for ridership along the Nagasaki route, as ridership responds heavily to changes in travel time. With the completion of the southern half of the main Kyushu Shinkansen route (Shin-Yatsushiro to Kagoshima-Chuo) in late 2011, travel time between Hakata (Fukuoka) on the northern coast of the island and Kagoshima-Chuo on the southern coast was cut from ~2:15 hours to ~1:15 hours, and travel time between Hakata and Kumamoto was cut from ~1:15 hours to ~30 minutes. As a result, annual Shinkansen ridership increased by over 60% in southern Kyushu and by ~40% in northern Kyushu. **Transportation segment revenues at JR Kyushu jumped by ~20% in 2012 with the**

²Note however that the Shinkansen line is a public project under jurisdiction of the Japan Railway Construction, Transport and Technology Agency (JRJT), and that the costs involved in building the Nagasaki line are the responsibility of the government, not KRC. KRC operates Kyushu Shinkansen line but leases the rails from JRJT, whereas it owns most of its regional rail networks and the land on which they sit. GCT development is also a public project: the government has spent ¥50B on GCT technology thus far and has allocated an additional ¥900M for it in its most recent budget.

increase in ridership. Along the western Nagasaki route, travel between Takeo-Onsen and Nagasaki currently takes ~1:45 hours, but travel time would be cut to ~1:15 hours with GCTs running between a standard-gauge Shinkansen line and existing narrow-gauge track, or to ~40 minutes with the construction of a standard-gauge Shinkansen line running the full length from Nagasaki to the Kagoshima Main Line. Should KRC fail to offer materially faster travel times due to GCT inoperability (which would force continued transfers between faster Shinkansen trains and slower local trains), ridership along the route – and, with it, route profitability – may not improve as initially expected once the Nagasaki-to-Takeo-Onsen Shinkansen segment is completed in the early 2020s. Successful completion, however, could offer upside to KRC’s rail segment.



Note on Land Values

When the three mainland JRs were sold to the public through the 1990s and into the early 2000s, some investors were attracted to the stocks by their land holdings, which were seen as heavily undervalued. When JNR was split in 1987, the government planned to repay the organization’s heavy debt burden in part by selling JNR land by open bid. However, sale prices were much higher than expected

after the first round of sales in 1987 – towards the peak of the Japanese asset bubble – and the government was criticized for earning heavy profits from the sale and for raising local land prices. The sale process was reformed in following years as a result, and JNR was barred from selling land through open bids. It was instead forced to sell to municipalities at controlled prices, and was later ordered to cease land sales altogether as the asset bubble burst.

For these reasons, when the three mainland JRs were IPO’d, their land was valued based on heavily depressed land prices. Some investors believed that the JRs were undervalued by a significant margin due to the difference between the book value and true value of the land on their respective balance sheets. One could potentially develop a similar thesis for KRC.

However, it’s unlikely that KRC management would monetize much – if any – of its land via sale, as it is primarily focused on developing its real estate, and much of its land is required for the operation of its rail network regardless. It would be inappropriate to value KRC shares through a liquidation value approach. KRC’s attractive land holdings are a major source of value for the company, but they will be realized through the cash flow generated from ongoing real estate development.

Real Estate Details: Comparison with Fukuoka REIT Corporation

- KRC’s Real Estate business and Fukuoka REIT have very similar geographic footprints, and they are generally good comps for each other. In my analysis above, I conservatively value KRC’s Real Estate business using a multiple slightly below that which the market applies to Fukuoka REIT (as well as to other Japanese REITs). However, as discussed below, the differences between KRC’s Real Estate business and Fukuoka REIT can be seen as favoring KRC.
- Both portfolios are focused in the Fukuoka region, particularly the central Hakata and Chuo wards. However, Fukuoka REIT’s footprint is much more concentrated (up to 90% of properties within Fukuoka metro area), whereas KRC has a relatively stronger presence in other cities across Kyushu.

- KRC's properties outside of Fukuoka are almost all located close to the center of their respective cities, as they are generally "station buildings" (extensions of KRC's rail stations, or located immediately adjacent to stations). KRC's retail and commercial properties within Fukuoka are also generally part of station buildings (notably JR Hakata City) and therefore centrally-located. Its premium locations immediately adjacent to heavily-trafficked rail stops support materially higher rents compared to other local properties (see "Real Estate Details: Development Pipeline" for an example of one of KRC's station buildings). By comparison, Fukuoka REIT's Fukuoka properties are relatively more spread out across the city.
- Fukuoka REIT's portfolio is extremely retail-heavy: 60-80% of company properties are retail properties, and 20-40% are offices. Fukuoka REIT has relatively few residential properties (~5%).
- By comparison, residential is the largest category of property for KRC. Residential real estate cash flows are generally seen as being less vulnerable to cycles than commercial real estate cash flows.
- As discussed, KRC has advantaged access to valuable real estate by virtue of its land holdings around its rails and heavily-trafficked rail stations. KRC has further

opportunities to develop this land, and it continues to do so.

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Finalist

Best Special Situations

Liberty Media Corp Cl C Siriusxm

Asset Class: Equity

Symbol: LSXMK:US

Updated: 12/16/2017

Submitted: 12/11/2017

EXPECTED RETURN

66.5%

COMMUNITY RATING



BY:

Albert Luk

CURRENT RANKING:

★ #20 GARP

CURRENTLY AT:

The Cayre Family Office

BADGES:



22 2



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Event / Spec. Sit

MARKET CAP:

22.4B USD

Sirius XM is a “high quality compounder” that is being taken private by Warren Buffet and John Malone; invest alongside them by buying LSXMK for \$67 price target, +65%+ upside



About Albert Luk

Albert is a Portfolio Manager at The Cayre Family Office, a single family office based in New York City. Previously, he was an investor at Privet Capital, a hedge fund within a single family office, and attained his MBA at Columbia Business School. Rather than restricting his investment style to a specific “style box”, Albert is an opportunistic investor focused on high asymmetric risk/reward investments across a variety of asset classes, sectors, and geographies. For more information, please see his [SumZero interview](#).

Liberty Media Corp Cl C Siriusxm

Asset Class: **Equity** Symbol: **LSXMK:US** Submitted: **12/11/2017** Updated: **12/16/2017**



BY:
Albert Luk

CURRENTLY AT:
The Cayre Family Office

CURRENT RANKING:
★ #20 GARP

BADGES:
★ ★
22 2

COMMUNITY RATING: ★★★★★

PERCENTILE: 33%

Pricing & Return Details

↑ LONG

EXPECTED RETURN	66.5%
INITIAL PRICE	42.68 USD
TARGET PRICE	67.00 USD

Sirius XM is a “high quality compounder” that is being taken private by Warren Buffet and John Malone; invest alongside them by buying LSXMK for \$67 price target, +65%+ upside



ASSET CLASS:
Equity



SITUATION:
Event / Special
Situations



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
Insider Buying/
Selling and 1 more



TIMEFRAME:
1-2 Years

Investment Thesis

Executive Summary and Recommendation

Sirius XM is a “high quality compounder” that is being taken private by Warren Buffet and John Malone; invest alongside them by buying Liberty Sirius XM Group (LSXMK) for a \$67 price target, 65%+ upside in two years.

Business Description

Sirius XM Holdings is a satellite radio company with 150+ channels of commercial-free curated sports, music, talk show and entertainment to consumers in the North American via car installed radio devices. Sirius XM primarily earns revenue from subscription fees from its

32 million subscribers whom pay a ~\$13 per month to listen to proprietary content including live sports (Fox, NFL, Barstool), talk shows (Howard Stern), music and live concerts (Bon Jovi, The Killers, Coldplay, Garth Brooks, Coachella), comedy shows (Ricky Gervais, George Carlin), etc. The company's primary expenses are royalties and programming content (29% of revenues), marketing and subscriber acquisition costs (18%) and customer billing (8%). Sirius XM's satellite network includes 8 orbiting satellites and 1,100 terrestrial repeaters for dense urban areas like NYC. As an analogy, Sirius XM is the Netflix for the car.

Over the last five years, the company has significantly grown its subscriber base, monthly subscription fees and profit margins while reducing its number of shares outstanding. See below. Sirius XM is a large cap company with \$25 billion market capitalization.

Supporting Investment Thesis Details

1. The Used Car market is Sirius XM's next leg of growth:

- a) Historically, Sirius XM primarily focused on the New Car market where they partnered with automotive manufacturers (e.g. GM, Ford) to have their satellite radio device factory installed in the cars. Today, 75% of all cars built have a Sirius XM radio factory installed. New car owners are given a free trial and after 90 days, ~40% of them convert to paying subscribers. The new car market is very cyclical as new car sales plummeted during the credit crisis from 16 million cars sold to only 9 million.
- b) Since the recession, Sirius XM decided to diversify its install base by partnering with 30,000+ used car dealerships to install new satellite radio devices and re-market existing ones in its fleet of used cars. Note that the size of the Used Car market is 42 million cars or ~2.5x the size of the New Car market and is less sensitive to the economic cycle, so the Used Car market is much bigger and less volatile. Also note that this is a natural business extension as the average used car is 5 to 7 years old, so new cars with factory installed radios become used cars several years later and the radios still work. Today, only 35% of all used cars sold have a Sirius XM's radio installed, a significant improvement versus 12% in 2012. After the free trial, ~30% of these used car owners convert to paying subscribers.
- c) Due to Sirius XM's relationships in the used and new car market, today, 4 out of every 10 cars on the road have a Sirius XM radio installed in it for a large install-base of 100 million cars. Looking forward, Sirius XM's management team believes that the used car install rate of 35% can continue to rise and catch up with the new car install rate of 75% by 2025 which would grow the install base to 185 million cars, an increase of 85%.
- d) Sirius XM's business model yields very attractive economics as the business is primarily a fixed cost business with low variable costs allowing Sirius XM to earn very high incremental profit margins of 60 to

	2012	2017e	Growth
Subscribers	22,794	31,867	39.8%
Monthly subscription \$	12.00	\$ 13.26	10.5%
Revenues	3,402	5,427	59.5%
Adj EBITDA	920	2,117	130.0%
Margin %	27.1%	39.0%	1,196bps
# shares outstanding (millions)	6,679	4,598	-31.2%
Free cash flow per share \$	0.11	\$0.32	197.5%

**All figures in \$ millions, except monthly subscription and FCF per share*

Investment Thesis

Sirius is a great business that generates recurring subscription-based revenues with high customer retention and high 39% profit margins with a virtual monopoly on premium content in the car. Looking forward, Sirius XM has significant room to grow and compound capital as it continues to grow subscribers in the Used Car market, a market that is 2.5x larger than its core New Car market. In addition, Sirius XM boasts support from two legendary investors Warren Buffet, who needs no introduction, and John Malone, one of the most highly regarded investors and savvy dealmakers in the media industry. Combined, these two titans own over 70% of Sirius XM's stock and their ownership stake is expected to increase as they are directing Sirius XM's CEO to continue to use Sirius XM's cash flows to retire the remaining 30% of stock they don't already own at a rate of 5 to 6% per year. Due to this dynamic, these two titans will take Sirius XM private in a self-directed leveraged buy-out ("LBO") over the next few years. I recommend investing in Sirius XM stock ("SIRI") by buying shares of Liberty Sirius XM ("LSXMK"), a tracking stock that is part of media conglomerate Liberty Media, run by John Malone. LSXMK owns 3.2 million shares of SIRI or 69% of SIRI's stock but is trading at 23% discount to its SIRI stake. As a result, by buying LSXMK, you are effectively buying SIRI at a price 23% lower than its market price. In the next two to three years, I expect SIRI to appreciate to \$7.4 per share causing LSXMK to be worth \$67 per share for a 65% upside.

*Note that we are in good company here as the majority of Warren Buffet's interest in Sirius XM is through LSXMK shares rather than SIRI shares (Buffet owns 14% of LSXMK and only 3% of SIRI).

70% for every additional subscriber. Compared to its current company-wide EBITDA margins of 39%, this dynamic will cause margins to expand dramatically as the company adds these high margin subscribers. Combining these high incremental profit margins with a long runway to grow subscribership, Sirius XM is a “high quality compounder”.

2. Background on Liberty Media and John Malone’s involvement:

2008: Sirius XM merger

In early 2008, Sirius and XM were two separate competing satellite companies but decided to merge and form Sirius XM. This fateful decision resulted in an untimely over-levered balance sheet as the world headed into the financial crisis. Before they had time to swap the deal financing from short-term bank loans to long-term debt, the credit markets collapsed, and Sirius XM found itself in a distressed situation.

2009: John Malone rescue and Liberty stake

In 2009, John Malone came to the rescue with a \$530 million loan shoring up Sirius XM’s balance sheet and preventing a bankruptcy. This loan was lent via John’s publicly traded media conglomerate Liberty Media and was convertible to a 40% stake in Sirius XM’s equity. Since then, the value of this stake has increased to \$17+ billion for a return on investment of over 30-times.

2013 to 2014: Liberty consolidation and attempted acquisition

In January 2013, Liberty Media’s obtained a controlling 50%+ stake and began consolidating Sirius XM on its financial reports. A year later, Liberty offered to buy the remaining shares of Sirius XM for \$3.68 per share but then changed their mind to pursue a tracking stock structure instead.

2016 to today: The creation of Liberty Sirius XM and LSXMK tracking stock

In April 2016, Liberty Media announced a corporate restructuring and created Liberty Sirius XM, an

investment holding company whose primary asset is its 3.162 million shares of Sirius XM, \$160 million in cash and \$250 million margin loan. Adding to the complexity, Liberty Sirius XM issued three different classes of tracking stock: Class A, B and K. Although all three share classes have the same economic interest in Liberty Sirius XM, Class A and B have super voting shares and are primarily owned by John Malone effectively keeping him in control.

As a tracking stock, LSXMA, LSXMB and LSXMK are not widely covered by Wall Street Research Analysts, are not included in any indexes (S&P 500, S&P 400 Mid-cap) and are therefore orphaned by the institutional investment community (neither mutual funds nor index funds own tracking stocks). As a result of this dynamic, there is a high propensity for tracking stocks to be mis-priced. For example, **LSXMK’s stock price trades at a 23% discount to its stake in Sirius XM**. See below.

\$5.48	SIRI stock price
3,162	LSXMK stake of SIRI (million shares)
17,328	Value of stake in SIRI
160	Cash
(250)	Margin Loan
205	Pandora stake
17,443	
348	Diluted shares (A, B and K)
\$ 50.1	Intrinsic value of LSXMK
\$ 40.8	Current price of LSXMK
23%	Discount

As the controlling owner of Liberty Sirius XM, which is the largest shareholder of Sirius XM, John Malone has de facto management control of Sirius XM and has directed the CEO, James Meyer, to deploy 100% of the company’s cash flows to buy back Sirius XM’s own stock causing shares outstanding to decrease from 6.7 billion in 2012 to 4.6 billion today. Because Liberty Sirius XM **did not** sell its shares during this time, its ownership stake of Sirius XM increased from 40% to 69%. Today, less than 1.4 billion shares are not owned by either Liberty or Warren Buffet. Looking forward, Sirius XM is generating ~\$1.5 billion of free cash flow that will be used to retire ~250 to 300 million shares a year or ~20% of this remaining 1.4 billion shares per year. **At this rate, Sirius XM will retire these remaining shares within just a few years.**

In my opinion, what will more likely happen is that once Liberty crosses the 80% ownership threshold, it will make a tender offer to buy the remaining 20%. At 80%, Liberty is legally allowed to consolidate Sirius XM from a corporate tax perspective and therefore have full access to Sirius XM's cash flows which it can then use to pay for the remaining 20%. This is a much cheaper source of acquisition financing than using just Liberty's own cash flows. Based on my projections, Liberty will cross this 80% threshold by the end of 2019. By consolidating Sirius XM and Liberty Sirius XM into one corporate entity, it will convert the tracking stock into a normal corporate stock and therefore close the tracking stock discount from 23% to 0%. Combined, these series of maneuvers will create significant value for shareholders of both entities including Warren Buffet and John Malone himself.

3. Internet radio competition concerns are overblown:

- a) Sirius XM is often compared with terrestrial AM/FM radio and internet radio programs / apps like Pandora, Spotify, Apple Music, etc. However, Sirius XM differs from these competing products in that it is a paid subscription service, does not have ads and most importantly, provides **proprietary and exclusive** content that you cannot listen to on competing platforms. Sirius XM spends ~\$400 million a year to produce exclusive content for its listeners with its own recording studio in both NYC and Washington DC. For example, Howard Stern, the famous talk show host joined Sirius XM in 2004 and has been broadcasting exclusively on Sirius XM only. He recently resigned his contract to December 2020 with an option for another seven years. As mentioned above, Sirius XM has exclusive access to live concert, sports and other shows. On the other hand, Pandora, Spotify, etc. do not create their own content. Instead, they just repackage and redistribute existing content, music, etc. and is a more commoditized product offering.
- b) Ever since the iPhone was introduced in 2007, Sirius XM "Bears" have been concerned about the competition risk from internet or app-enabled radio. However, the evidence is in the results as Sirius XM has been successfully winning against these competitors. Over the last several years, Sirius has

more than doubled its subscribers and only 1.9% of them cancel their subscriptions in any one month.

- c) Sirius XM is the largest shareholder of Pandora Radio (ticker = P) with a 16% strategic stake providing an attractive opportunity for a presence in streaming radio.
- d) Note that most of Sirius XM's paying subscribers listen to more than one program so it's not that they choose one over the other, they listen to both (e.g. 50 to 60% Sirius XM listeners also listen to Pandora). In other words, they're more complements than competition.

Valuation

I first valued Sirius XM (SIRI) using 5-year average EV/EBITDA and P/E multiple for a \$7.4 price target. To be conservative, I valued SIRI as a standalone company assuming no "take-out premium". I then valued Liberty Sirius XM (LSXMK) based on its 3.162 million stake in SIRI for a \$67.3 price target. See below.

	Price Targets	Upside	2-year IRR
SIRI	\$7.4	34.7%	16.1%
LSXMK	\$67.3	65.0%	27.8%

Step 1: SIRI Valuation (\$M)			
2,631	EBITDA (2020)	\$	0.28 EPS (2020)
14.2x	(x) Multiple (5yr avg)		26.6x (x) Multiple (5yr avg)
37,360	(=) Enterprise Value	\$	7.4 (=) Value of business
(7,765)	(-) Net Debt (2019)	\$	0.1 (+) NOL / Pandora
205	(+) NOL / Pandora	\$	7.4 (=) Price Target
29,800	(=) Equity Value		
4,049	FDS		
\$	7.4 (=) Price Target		

Step 2: LSXMK Valuation (\$M)	
\$7.4	SIRI Price Target
3,162	(x) LSXMK stake of SIRI
23,345	(=) Value of stake in SIRI
160	(+) Cash
-250	(-) Margin Loan
205	(+) Pandora stake
23,459	(=) Equity Value
348	Diluted shares (A, B and K)
\$	67.3 Intrinsic value of LSXMK
\$	40.8 Current price of LSXMK
	65.0% Upside

**All figures in \$ millions, except per share data*

Investment Risks

- New car sales: as mentioned above, Sirius XM is sensitive to the US auto industry. SAAR “peaked” at 17.5 million cars in 2016 and I am expecting it to revert to its long-term average of 16.0 million over the next few years. There’s a risk that SAAR could come up short.
- There’s been a lot of talk about the future of autonomous cars (self-driving cars) and the implication is that it would change the car experience including the car listening experience. Based on my conversation with experts at the UBS Tech conference in San Francisco, the technology powering these self-driving cars is still in its infant stages and we’re probably still 7 to 8 years away from commonly seeing them on the streets. By then, Sirius XM would have been taken private by Liberty anyway. In addition, I think Sirius XM could actually be an enabler to self-driving as their devices will be in over half of the cars in this country by then and “owns” the dashboard. In that case, Sirius XM could even be an acquisition target by any company strongly pursuing a strategy towards self-driving cars (e.g. Uber, Google, Apple).

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Finalist

Best Special Situations

💡 Papa John's Intl Inc

Asset Class: **Equity**

Symbol: **PZZA:US**

Updated: **1/2/2018**

Submitted: **12/29/2017**

EXPECTED RETURN

32.3%

COMMUNITY RATING



BY:

Pree Yerramilli

BADGES:



CURRENTLY AT:

Eagle Chase Capital



LONG

ATTACHMENTS:



TIMEFRAME:

6 Mo. - 1 Year

SITUATION:

GARP

MARKET CAP:

2.1B USD

Short-term missteps and headline controversy create entry point in franchise model with substantial growth runway and strong shareholder focus.



About Pree Yerramilli

L/S equity professional with 10+ years of experience investing in TMT and consumer sectors globally. My approach relies on differentiated research to build concentrated positions in growth companies while also being flexible to trade opportunistically around business inflections. Reconciliation of structural business quality with near-term risk/reward is critical to my process.

Papa John's Intl Inc

Asset Class: Equity

Symbol: PZZA:US

Submitted: 12/30/2017

Updated: 1/2/2018



BY:

Pree Yerramilli

CURRENTLY AT:

Eagle Chase Capital

BADGES:



COMMUNITY RATING: ★★★★★

PERCENTILE: 69%

Pricing & Return Details

LONG

EXPECTED RETURN	32.3%
INITIAL PRICE	56.29 USD
TARGET PRICE	80.00 USD



ASSET CLASS:
Equity



SITUATION:
Growth At
Reasonable Price



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
M&A/Buyout
Target and 3 more



TIMEFRAME:
6 Mo. - 1 Year

Investment Thesis

Recommendation: Long

Summary

I am recommending PZZA as a long because I believe the recent slowing in domestic comps, while a messy situation, is temporary and masks the attractive return opportunity from owning a majority-franchised restaurant model. PZZA has a multi-year track record of top-line growth while returning FCF to shareholders through dividends and share buybacks. Street estimates have been revised down following a bad Q317 release where management cut FY17 comp and EPS guidance and declared FY18 an "investment year", implying significant margin pressure. Sentiment is now poor, with a wave of negative sell-side reactions following Q3 and the stock -18% since (-34% YTD). There are several issues with PZZA in the near term, including a promotional competitive environment and political controversy surrounding now-former CEO

John Schnatter. However, PZZA is well positioned overall to continue taking share in a very fragmented market with several self-help initiatives that should reaccelerate comps by H218. With management changes underway, execution of a new \$500mm share buyback program, and lowered earnings expectations while forward P/E sits at the low end of its 3-year range (and a significant discount to direct peers), PZZA has several catalysts that could drive upside to estimates and a multiple re-rating in the next year. While I am positive on the standalone business, PZZA could also see increased M&A interest from both strategic and financial buyers, especially if valuation persists at current levels.

In my base case, I value PZZA at 22.0x my FY19 EPS of \$3.65 for a 12-month price target of \$80, 43% upside from its current price.

Risk/Reward

2.2x; \$45 by \$80 (-20%/+43%)

Sentiment

3 Buy / 5 Hold / 0 Sell; 21.0% SI (overstated due to current ASR), 5.4 days to cover; 5.2% HF ownership

Next Catalysts

Q417 (late Feb), continued share repurchases

Business & Situation Overview

Company Background

PZZA owns, operates, and franchises restaurants under the Papa John's brand, the third largest pizza chain in the world behind #1 Pizza Hut (owned by YUM) and #2 Domino's (DPZ). The company was founded in 1984 by John Schnatter (the real-life "Papa John"), who owns ~25% of the equity and was CEO until recently. ~85% of PZZA's units globally are franchised. PZZA makes money by selling pizza and related menu items through company-owned stores, charging franchisees initial development and ongoing royalty fees (~5% of sales), and selling ingredients to franchisees through company-operated commissaries. Box economics produce cash-on-cash payback of less than 2 years with annual sales of \$1.1mm at a high-teens margin. Central to PZZA's marketing strategy are partnerships with sports leagues, and it has been the official pizza sponsor of the NFL since 2010 and the MLB since 2016.

Industry Context

Pizza is a very large and fragmented space. Industry sources size the market at \$125bn+ globally, with the US accounting for \$40bn+. Competition has been concentrated among only a few scaled players, all household names in the US, with mom-and-pop operators and regional chains dominating the landscape. PZZA's competitive differentiation focuses on using higher quality ingredients vs. its peers, hence the company slogan, "Better Ingredients. Better Pizza." Digital orders are 60% of sales today (70% of which come from mobile), with management guiding to 80% mix over the next few years. Relative to DPZ, considered the leader in digital/app-driven convenience (digital sales mix is similar to PZZA at 60%+), which offers a menu with limited newness, PZZA has increasingly focused on new product introductions and LTOs over time.

In recent quarters, Pizza Hut, which has averaged negative US comps for over 3 years, has announced significant investments in an operational turnaround. Pizza Hut is regarded as more similar to PZZA than DPZ in terms of promotional cadence and product quality. All companies in the space are global players, although PZZA is the most underpenetrated and therefore has the longest runway for incremental unit growth outside of North America.

Growth Algorithm

PZZA's long-term model is primarily driven by domestic SSS and international unit growth, key factors to creating operating leverage. The company targets HSD % operating income growth, but this has been pressured YTD FY17 given slower domestic comps, higher auto insurance costs, and wage pressure.

My estimates for key inputs to "normalized" long-term earnings power:

- Global system-wide unit growth LSD-MSD % (North America LSD-MSD %, International MSD-HSD %)
- Global system-wide SSS LSD-MSD % (LSD-MSD % North America, MSD-HSD % International)
- Total revenue growth LSD-MSD %
- Operating leverage to produce EBIT growth HSD %
- Share buybacks MSD %
- EPS growth DD-teens %

Recent Events / The Opportunity

PZZA is down 34% YTD due to a mix of competitive concerns, execution issues, and negative headlines about the company's association with the NFL and John Schnatter's comments on the league's handling of players taking a knee during the national anthem. Political debate aside, Q317 was a poor showing by PZZA on execution. Domestic company-owned and North America franchise comps slowed to 1.7% and 0.7% respectively, with management citing a second consecutive year of lower NFL TV ratings, increased promotional activity from major competitors, and a headwind from store closures due to recent hurricanes (< 50 bps). The lackluster performance led management to cut FY17 guidance on comps to

“positive up to 1.5%” (down from +2-4%) and EPS growth to +3-7% y/y (down from +8-12%). Management has provided preliminary FY18 guidance calling for various investments in operations, digital, and marketing, all of which are likely to hinder operating profit growth. The main planned investment sounds like it will deemphasize the NFL in PZZA’s marketing mix and instead focus on reaching consumers more organically through digital channels; however, details on magnitude and cadence have not been guided yet. Investors are worried that increased competition is a new problem to deal with, consumer sentiment towards the brand may have been permanently hurt by Schnatter sounding off on the Q3 call, and that incremental investments may not be enough to reinvigorate comps. On 12/21, Schnatter stepped down from the CEO role (he remains chairman) and was replaced by COO Steve Richie.

The opportunity in the stock exists because what was a fairly boring franchise model story is now a more contentious situation given the recent fact pattern, and the number of moving parts simply makes it too hard for most investors to justify spending time on a small/mid-cap stock. PZZA has historically had limited Street coverage, with Jefferies as the only large institutional broker following it for a significant amount of time. In the last three months, Citi and Deutsche Bank have both initiated coverage, but the stock still seems to be relatively overlooked by the buy-side. Hedge funds have also not typically favored PZZA to date because sector specialists have preferred DPZ’s outsized comps and YUM’s activist/turnaround story.

Bear Case — Key Points

- PZZA’s quality positioning is not a competitive differentiator; consumers only care about price/value for pizza. PZZA’s domestic comps will continue to slow as it is caught in an increasingly promotional market where DPZ continues to lead with digital and Pizza Hut is investing aggressively to turn itself around. PZZA must lower menu prices to compete.
- Competitive threats now also exist from substitutes. Other cuisines have historically lagged pizza in making required delivery and digital investments but are now catching up. The rise of online platforms such as GrubHub and investments from players like Panera are

infringing on pizza’s consumer mindshare, and PZZA will suffer relative to DPZ, which has a better app and more digitally oriented advertising.

- FY18 investments will not pay off and will just compress margins. PZZA waited too long to emphasize digital and diversify its marketing mix, so any ROI from new spend will be limited.
- PZZA does not have as high a franchise mix as its peers, so arguing for an in-line/premium multiple is not sensible, especially if domestic comps continue to suffer.

Thesis

1. High-quality business with favorable industry structure, secular tailwinds, and strong shareholder orientation

- Majority-franchised models are great businesses, and PZZA is no different. Unit economics are compelling, and franchisee demand to open new units has been consistently strong globally.
- PZZA operates in a highly fragmented \$100bn+ global industry with few scaled competitors, allowing for share gains to continue accruing to the large chains at the expense of independents, particularly as digital/mobile mix increases.
- The business has reported positive comps both in North America and International for every quarter since Q111.
- PZZA returns virtually all FCF to shareholders. The company bought back 20% of its float since 2013 and initiated a dividend in Q313, which has since grown every year to maintain a payout ratio of 25-30% of net income.
- Even at the low end of FY17 guide, EPS will have doubled since FY12, and the stock has gone up 100% since then. PZZA is a quality compounder.

2. Recent issues are temporary and not structural problems; top-line growth runway remains intact

- PZZA's domestic revenue growth is not permanently downshifting. H216 presented particularly tough laps on top of recent issues. Underlying demand for Papa John's pizza is likely to remain strong while management "rights the ship" on investment spend over the next several quarters, which can drive comps off of a depressed base.
- The International business is very robust. Units should conservatively keep growing HSD % y/y for the next several years with the existing base comping MSD %.
- FY18 and FY19 Street revenue estimates are too low, as they imply a slower path to overall top-line reacceleration by extrapolating YTD FY17 comp trends too far into the future.

3. Earnings growth will resume and current valuation is compelling

- FY18 investments, while likely to be significant, should largely be a one-time step-up in costs, after which operating leverage will again materialize, especially after reaccelerating comps. Returning to HSD % operating income growth is very possible beyond FY18.
- PZZA's capital structure has only been optimized relative to its franchise mix as of its August recapitalization. The new debt deal allows for share repurchases to continue, aggressively if needed, protecting investors' downside.
- A return to teens % EPS growth by FY19 is likely depending on the pace of comp recovery and buybacks.
- PZZA's current valuation is a bargain because an investor is getting a discount to the direct peers of DPZ and YUM (both at high 20s P/E and high teens EV/EBITDA) with valuable embedded optionality from an acquisition.

Differentiated View

Domestic comps will reaccelerate in FY18

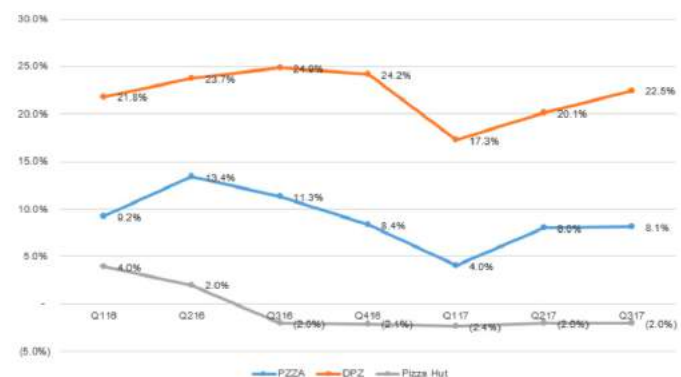
The market is pricing in limited hope for recovery in PZZA's domestic comps. My variant view is that the competitive environment is really nothing new. Below first are reported domestic comp trends for PZZA, DPZ, and Pizza Hut since

Q115, followed by domestic comps on a 2-year stack basis, based on company filings.

Domestic SSS:



Domestic SSS 2-year Stack:



Besides the obvious relative share gain/loss takeaways, the more nuanced point is actually that on a 2-year basis, PZZA comps have remained resilient over the last 2 quarters, even in the face of seeing a heightened competitive environment. Taking management's comp guide cut coupled with the knee-jerk reaction to hate the stock following Schnatter's NFL diatribe, it is easy to overlook the fact that challenging comparisons (shown in the first chart) are a big part of the current issue. PZZA rolled out its pan pizza, the biggest product launch in a decade, in Q416 and offered a promotional price point of \$10, which drove an outsized lift to comps (no specific quantification has been disclosed). While this highlights the obvious risk in owning a business that relies on new product introductions, my view is actually that PZZA is well positioned to adapt to more intense competition. PZZA's critics point out that pricing is at a premium to peers, which management justifies due

to the focus on quality ingredients. However, offering a pan pizza at \$10 was additive to comps, suggesting that PZZA has the ability to drive transactions growth by flexing its pricing lever down as needed to remain competitive with peers. This is one lever I believe that management has as it thinks about its pricing and marketing, particularly as the newly appointed chief marketing officer (as of Q217) realigns the company's strategy over the coming quarters.

Another underappreciated lever is a better digital presence, which should also be very meaningful in reaccelerating comps. I believe PZZA under-monetizes its digital strategy. Despite getting its digital sales mix to 60%, most of which is from mobile, I think PZZA has a poor presence on web/mobile properties that are critical to connecting with consumers in today's environment. As a quick example, at the time of this write-up, I checked the Instagram pages of all 3 major pizza chains to see what each brand had posted recently and whether followers could get any deals. While DPZ consistently posts to Instagram every day (and occasionally offers deals in its photo caption and comments section) and Pizza Hut posts every couple of days, I was shocked to see that PZZA has not posted since late October. Further, while competitor brands' Instagram content is highly focused on product, PZZA's seems to be very haphazard and lacking any real relevance to the product or brand. I have also made similar observations around PZZA's Facebook page and proprietary mobile app versus peers. The quality here could be significantly improved, which should be a priority for the chief information/digital officer (hired Q416) as a part of FY18's investment cycle. Between the ability to flex pricing as the competitive environment dictates, what seems like low-hanging fruit to pick in digital marketing and engagement (especially in conjunction with shifting ad dollars away from the NFL), and easing comparisons in H218, I would be surprised if PZZA could not reaccelerate domestic SSS next year.

New capital structure and aggressive share buybacks enable downside protection

I believe consensus is mismodeling PZZA's EPS growth because analysts do not fully appreciate the debt capacity of the business pro forma for the recap deal done in August. Management revised up its target debt/EBITDA ratio following Q3, guiding to ending FY17 between 2.5-3.5x. PZZA now has a \$1bn facility, of which \$400mm is a term loan (entire proceeds drawn as of Q317) and

\$600mm is a revolver (totally undrawn). This debt matures on 8/30/22, requires only \$5mm of mandatory quarterly amortization, and carries a ~2.5% effective interest rate per my calculations (based on LIBOR spread).

Management has also said the company would complete the \$500mm share repurchase authorization it announced on Q217 by mid FY19. \$485.9mm of the authorization was remaining as of 10/24. Part of this will be in the form of an accelerated share repurchase (ASR) that is happening right now and will show up in Q4 numbers when the company reports in February. The exact amount of the ASR is unknown, but given the weakness in the stock recently, my assumption is management is probably being fairly aggressive with open market purchases. Per my model, assuming PZZA can flex leverage up to the maximum 3.5x from Q417 through Q419 and report numbers even somewhat close to what I am modeling, share count could drop from ~37mm in Q317 to ~29mm exiting FY19. With fundamentals I am forecasting that are ahead of the Street, the buybacks produce even more EPS accretion vs. consensus and provide confidence that in the event of weakness in the stock, management would be a natural buyer. Given the new debt capacity and overall resilience of the franchise model, I would be surprised if PZZA's board did not approve another large buyback authorization once the current one is exhausted (and likely continue doing so well into the future).

PZZA is a strong acquisition candidate

The restaurant space has recently entered a period of increased consolidation, marked by some high-profile public company M&A deals involving both strategics and financial sponsors. Some notable acquisitions in the last year include Restaurant Brands International (QSR) buying Popeyes Louisiana Kitchen, JAB acquiring Panera, and NRD Capital buying Ruby Tuesday. At PZZA's current price, I think an investor gets a valuable call option on the potential for an acquisition. While private equity might be interested, I view the most likely buyer as QSR given its intense focus on majority-franchised models, the associated financial engineering flexibility, and the fact that a major pizza chain would be complementary to the portfolio of cuisines offered by Burger King, Tim Hortons, and Popeyes. Consider that Popeyes was acquired for 21x TTM EBITDA (\$1.8bn valuation) and PZZA currently trades at 11x the same

metric with an enterprise value today not too dissimilar from where Popeyes was pre-deal. The math is pretty simple; I think investors are not paying much today for this embedded call option. While I do not underwrite an acquisition in my valuation, it is just another “way to win”.

Estimates Vs Consensus

ESTIMATES - PKY VS CONSENSUS

	ANNUAL ESTIMATES									
	FY 2017E				FY 2018E			FY 2019E		
	Guide	PKY	Cons	% Δ	PKY	Cons	% Δ	PKY	Cons	% Δ
NAm SSS	+ve <=1.5%	1.0%	1.1%	(0.1%)	2.3%	1.7%	0.6%	2.5%	NA	NA
Total Revenues		1,794.1	1,786.0	0.5%	1,839.3	1,828.0	0.6%	1,911.2	1,885.0	1.4%
% y/y		4.7%	4.2%		2.5%	2.4%		3.9%	3.1%	
% q/q										
Adj EBITDA		200.6	199.4	0.6%	206.3	203.6	1.3%	222.4	213.7	4.1%
% y/y		2.7%	2.1%		2.8%	2.1%		7.8%	5.0%	
% margin		11.2%	11.2%		11.2%	11.1%		11.6%	11.3%	
bps y/y		(21) bps	(23) bps		3 bps	(3) bps		42 bps	20 bps	
Adj EPS		\$2.73	\$2.72	0.5%	\$3.07	\$2.83	8.6%	\$3.65	\$3.16	15.5%
% y/y	3-7% y/y	7.0%	6.5%		12.5%	4.1%		19.0%	11.9%	

Per the above table, I am in-line with the Street on FY17 estimates (with just Q4 remaining) but comfortable enough with my current variance in FY18 and FY19. I believe my variance could get greater as I do further work, but for now I am confident in making an initial recommendation to buy PZZA. One potential issue with my forecast (discussed further later) is that I believe PZZA may report a Q417 domestic SSS that would imply a miss for FY17. However, I also believe the stock is currently pricing this likelihood in. A summary financial model with more detail is included as **Appendix A**.

Valuation

VALUATION - PKY ESTIMATES

	2013	2014	2015	2016	2017E	2018E	2019E
Total Revenues	1,439.0	1,598.1	1,637.4	1,713.6	1,794.1	1,839.3	1,911.2
% y/y		11.1%	2.5%	4.7%	4.7%	2.5%	3.9%
EV/Sales					1.3x	1.3x	1.3x
Adj EBITDA	141.6	157.6	176.6	195.3	200.6	206.3	222.4
% y/y		11.3%	12.1%	10.6%	2.7%	2.8%	7.8%
% margin	9.8%	9.9%	10.8%	11.4%	11.2%	11.2%	11.6%
EV/EBITDA					12.1x	11.7x	10.9x
Adj EPS	\$1.55	\$1.81	\$2.09	\$2.55	\$2.73	\$3.07	\$3.65
% y/y		16.7%	15.4%	22.3%	7.0%	12.5%	19.0%
P/E					20.6x	18.3x	15.4x
FCF	50.6	74.0	121.3	88.5	86.9	96.2	109.8
per share	\$1.14	\$1.77	\$3.03	\$2.35	\$2.37	\$2.97	\$3.72
% y/y		55.0%	71.1%	(22.4%)	0.9%	25.2%	25.3%
EV/FCF					27.8x	25.1x	22.0x
FCF Yield					4.2%	5.3%	6.6%

What Is PZZA Worth?

In my base case, I value PZZA at 22.0x my FY19 EPS of \$3.65 and get an \$80 stock. PZZA traded at this multiple only a few months ago, and more broadly, the market tends to reward franchise models with 20x+ P/E. Relative to the stock's current 20.8x P/E based on consensus NTM, I believe a 1-turn expansion is prudent and more than realistic to assume in the event the company can execute and deliver numbers in-line with my projections (and this is still a 2-turn discount to DPZ). My upside case uses the same EPS estimate but assumes the 2 additional turns of multiple expansion to trade in-line with DPZ's FY19 P/E of ~24x. This implies PZZA could be worth \$87. If I am wrong, I assume FY18 Street EPS is too high and has to be revised down to \$2.65. I believe the market would de-rate PZZA's P/E down to 17x as a result (conservative and probably too punitive), producing a \$45 stock. Overall, this indicates asymmetric upside with risk/reward of 2.2x between my base and downside cases.

Entry Point

PZZA currently trades at 11.7x EV/EBITDA and 20.3x P/E on consensus FY18. The stock is near its 52-week low (\$55.05). The entry point is solid, both on valuation multiple and technical level.

Sign up for SumZero to for access to tens of thousands of pre-vetted ideas from buy-side analysts, including [the full PZZA:US report](#).

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Winner

Best Small Caps

Andina Acquisition Corp II Com

Asset Class: **Equity** Symbol: **ANDA:US** Updated: **1/1/2018** Submitted: **12/29/2017**

EXPECTED RETURN

112.8%

COMMUNITY RATING



BY:
Eric Gomberg

CURRENTLY AT:
Dane Capital Management



LONG

ATTACHMENTS:



TIMEFRAME:

6 Mo. - 1 Year

SITUATION:

Event / Spec. Sit

MARKET CAP:

50M USD

Andina, soon to merge with Lazydays (6.5x) via SPAC trades at a 5x EBITDA discount to Camping World (12x). Huge growth runway with numerous buyout candidates at 3x. Significant upside.



About Eric Gomberg

Eric Gomberg founded Dane Capital Management in 2014. He has over 20 years' experience in the investment industry, including as an investment banker, 10 years as a sell-side analyst, with his final 6 years spent as the Senior Semiconductor Analyst at Thomas Weisel. He joined a large start-up hedge in 2007, where he was the firm's senior research analyst, responsible for value and special situations investments across a variety of industries. Eric earned a BS in Economics with a concentration in Finance from the Wharton School at the University of Pennsylvania and an MBA with a concentration in Finance from the University of Chicago.



About Dane Capital Management

Dane Capital Management is a value-oriented/special situations long-biased hedge fund that runs a concentrated portfolio, and has a long-term investment horizon. We seek underfollowed, misunderstood situations that are significantly mispriced, offer a strong margin of safety, asymmetric risk/reward and the potential to compound over time. We want to understand why a given opportunity exists, and have found a fertile area of idea generation in corporate change events – spins, restructurings, SPACs, etc., which are frequently misunderstood or ignored. Our philosophy is also informed by behavioral elements and we focus on aligned managements and the potential biases of investors that may create mispricings.

Andina Acquisition Corp II Com

Asset Class: **Equity** Symbol: **ANDA:US** Submitted: **12/29/2017** Updated: **1/1/2018**



BY:
Eric Gomberg

CURRENTLY AT:
Dane Capital Management

Pricing & Return Details

↑ **LONG**

EXPECTED RETURN	112.8%
INITIAL PRICE	10.38 USD
TARGET PRICE	22.00 USD

COMMUNITY RATING: ★★★★★

PERCENTILE: 92%

Andina, soon to merge with Lazydays (6.5x) via SPAC trades at a 5x EBITDA discount to Camping World (12x). Huge growth runway with numerous buyout candidates at 3x. Significant upside.



ASSET CLASS:
Equity



SITUATION:
Event / Special
Situations



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
N/A



TIMEFRAME:
6 Mo. - 1 Year

Investment Thesis

On the road to significant investment returns with LazyDays

- LazyDays is a leading RV dealership trading at a 5x EBITDA discount to Camping World, its closest comp, despite potentially superior growth prospects.
- LazyDays is unknown by most of the investment community since it's going public via merger with SPAC Andina Acquisition Corp II.
- We anticipate strong and sustainable secular trends in the RV industry as aging baby boomers, and increasingly, millennials, purchase RVs.
- Dane's on the ground diligence at the recent National RV

Convention confirm LazyDays' roll-up strategy. There is a massive private/public arbitrage and numerous RV dealers willing to sell.

- With the SPAC transaction fully back-stopped, we view the likelihood of deal closure as exceptionally high. We see 12-month fair value well in excess of \$20 if the company executes.

A lot of stock picking is about pattern recognition. As I frequently like to say about a given situation, "I've seen this movie before." That's the great thing about sequels – you know the characters and you have a pretty good sense of what's going to happen, but it's still very entertaining. In the case of Andina Acquisition Corp II (ANDA), soon to be LazyDays (future ticker: LAZY), we feel like we've seen this movie before and have high conviction the stock will be significantly higher in coming quarters.

LazyDays is one of the leading RV dealerships in the United States and is going public via a SPAC. SPACs are a topic which we've discussed and invested in ad nauseam ([SA Interview: Investing In SPACs With Dane Capital Management](#)). As a company going public via SPAC, with an initial market cap of approximately (\$119mm) we think the company is on few investors' radar screen. We believe that LazyDays is exceptionally positioned to be an industry consolidator and stands to benefit from a significant disparity in public/private company multiples. LazyDays should enjoy continued organic growth given strong RV demand by baby boomers, increasingly from millennials, and from the benefits of ongoing historically low interest rates. Our recent attendance at the National RV Convention in Louisville, Kentucky, confirmed the viability of LazyDays' roll-up strategy. Numerous dealers discussed succession planning as a key concern during a panel discussion organized for dealers. Most dealers are simply too small to IPO and are reliant on being acquired to monetize their years of building their business. We think LazyDays, particularly as a public entity, is exceptionally positioned to benefit from the private/public multiple disparity – much like we've seen with Daseke ([DSKE](#)) (https://seekingalpha.com/article/4100762-daseke-road-continued-growth-discounted-price?source=all_articles_title) except with a potentially even greater public/private multiple disparity.

We generally don't do write-ups on SPACs prior to deal closure, however given the Andina/LazyDays merger is fully back-stopped, barring anything completely unforeseen, the transaction should close in 1Q. Moreover, if the deal falls through, equity can be redeemed at \$10.30 per share (in an escrow account), so there is virtually no risk of permanent capital impairment on account of the transaction not being completed. We suspect that soon after deal closure, LazyDays will begin making acquisitions in the 3x EBITDA range, a steep discount to the 6.3x – 6.9x EV/EBITDA where Andina/LazyDays trades, and an even more pronounced discount to the 12x where Camping World (CWH) trades. Based solely on organic growth and multiple expansion to 10x EV/EBITDA we believe shares should approach \$20. With several tuck-in acquisitions – perhaps \$10mn of additional EBITDA, for \$30mn in cost – we think the upside could be far more substantial over the next 12 months.

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2. 3 Basic Questions
3. Industry Background
4. Company Background and Growth Drivers
5. SPAC Deal Dynamics
6. Quality of Management Team
7. Model Discussion and Valuation Analysis
8. Risks
9. Conclusion

Thesis

1. The RV industry has enjoyed, and is poised to continue to enjoy sustained growth in coming years, driven by both baby boomers retiring and joining the RV lifestyle and a new generation of Millennials and Gen X enthusiastically embracing the RV lifestyle.
2. Attractive business model supported by recurring income from multiple sources, low capex requirements, strong free cash flow generation and strong inventory turnover (5x, compared to industry average of 2.5 – 3x), buttressed by an iconic brand that offers a clear value proposition for both OEMs and customers.
3. Significant opportunity for both organic and inorganic revenue growth – organically, through optimizing existing ancillary revenue streams; inorganically, through highly accretive acquisitions of smaller, “mom-and-pop” dealerships in a highly fragmented dealership industry (we estimate in the range of ~3x EBITDA) – ultimately, bringing benefits of economies of scale and operating leverage. With the closest public comp, CWH trading at 12x (it went public at 7x), there is a significant opportunity for multiple expansion in addition to immediately accretive acquisitions.

4. Strong, value-oriented management team and experienced Board that is fully aligned with shareholders' interests.

Post this acquisition, LazyDays will be listed on NASDAQ under the ticker LAZY and will have greater access to public capital to help put in place its growth plan and create further value. LazyDays' compelling valuation further supports this thesis, given its current trading valuation of 6.3x – 6.9x 2017E Adjusted EBITDA, excluding a \$56mm financing liability due to a prior sale leaseback transaction. This is at a significant discount to its closest public comparable, CWH, which is trading at 12x 2017E Adjusted EBITDA. Note that excluding the \$56mm sale leaseback financing liability allows for an apples-to-apples comparison to CWH, who also excludes such liabilities.

Consider that LazyDays has seen double digit EBITDA growth (16% in 2016), has strong free cash flow conversion of between 40 – 60%, and as a fully taxed domestic entity should benefit from tax reform. Moreover, it has significant room for growth both organically and inorganically in a

highly fragmented industry, and trades at 6.3x – 6.9x 2017E Adjusted EBITDA (excluding the sale-leaseback financing liability) relative to its closest peer Camping World, which trades at 12x, giving us a significant margin of safety. Given all these favorable characteristics, we believe that there is a highly compelling asymmetric risk-reward ratio.

At a 10x EV/EBITDA multiple based on 2018E Adjusted EBITDA of ~\$25mn (management guides \$22 – 24mn EBITDA in 2017 excluding the financing liability), assuming none of the shares currently in escrow are redeemed, shares would be worth ~\$17, representing a ~67% upside. However, we believe the company will likely make several acquisitions in the near-term at prices around 3x EBITDA, resulting in adjusted EBITDA in the high \$30mn – low \$40mn range in 2018, resulting in a possible tripling of equity value, if the share's multiple expands as we expect it to.

We believe shares of Andina/LazyDays are compelling and one of our top ideas for 2018, and note that there are also outstanding warrants. If the underlying stock increases to

Trends Driving RV Industry Growth – Strong Fundamentals

Expanding RV Demographic

34%: New RVs sold in the industry in 2016 were to first time buyers

- **8 in 10** of new buyers were under age 65

26%: Of all campers were minorities, up from 13% in 2012

72%: Of people camping in 2016 were GenX or Millennials

Continued Interest in Outdoors

129M: Consumers identify as “nature lovers” – the most likely to own an RV

37M: North American families go camping at least once a year – 22% of them are RV campers

\$887B: Spent on “outdoor economy” in 2016

Continued Strong Macro Environment

- Strong consumer confidence
- Favorable employment and wage trends
- Wide credit availability
- Low interest rates
- Stable fuel prices

Fundamental Growth

10% CAGR: New RV unit shipments since 2010

49M: Potential buyers visited an RV showroom or dealership in 2016

16.6M: Consumers were interested in new RVs



Source: RVLA, RV Industry Power Breakfast Presentation, May 2017; RVLA Go RV'ing Communications Study 2016; KOA 2017 North American Camping Reports; The Outdoor Industry Association

\$20, warrants should increase to \$5, a more than 3x return.

Three Basic Questions

Before we get into the specifics of the opportunity with LazyDays, there are 3 questions that we want to address. These are questions that inform our thinking when we look at any potential investment:

1. What is the reason for this mispricing (aka why should we be so lucky)?
2. What is our margin of safety (aka what protects us from a permanent loss of capital)?
3. What is the asymmetry of the opportunity (aka what are we playing for)?

What is the reason for this mispricing?

We believe there are several reasons why LazyDays is trading at a discount: first and foremost, LazyDays is coming to the market via a SPAC structure. All SPACs start out with a redemption value of \$10 (in the case of LazyDays it is now \$10.30 per share in trust), regardless of its fundamental value. This pricing differential often persists due to several reasons. For one, as we have written extensively about in our previous articles (Daseke and Playa for example), many investors have had a bad experience with a SPAC, and therefore SPACs frequently,

indiscriminately have a bad reputation and continue to be overlooked by the market. Moreover, as in the case of LazyDays, there is a lack of awareness of this story, with no institutional following/research coverage (for now). The lack of public comparables (the only other publicly listed RV dealership, Camping World, went public in 2016) is another contributing factor. Last but not least, as a microcap security, LazyDays is not accessible to many/most institutions.

What is our margin of safety?

While we are not truly protected, we believe there is limited probability of permanent capital impairment owning shares at current levels. LazyDays is currently trading at a valuation of 6.3x – 6.9x 2017E Adjusted EBITDA, which we think is undemanding for a business that has seen revenue growth of ~10% in 2016 operating in an industry with strong underlying fundamentals (as corroborated by our on the ground checks at the recent National RV Convention in Louisville, Kentucky, Thor's ([THO](#)) recent results, and Winnebago's ([WGO](#)) strong results on December 20th.) Although LazyDays is much smaller than Camping World, we do not think that such a large ~5x discount (Camping World currently trades at 12x 2017E Adjusted EBITDA) is justified. In any case, for anyone more conservative, the stock could be pair traded with a short against Camping World or Thor/Winnebago for instance, although that is not our approach in this case.

RV Wholesale Shipments ('000s)



What is the asymmetry of the opportunity?

LazyDays is playing in a highly fragmented market with many smaller private players too small to go public, including both regional dealerships and “mom & pop” dealerships. LazyDays has indicated that it intends to pursue such acquisitions and we think the private/public multiple arbitrage here is compelling. If LazyDays is able to acquire multiple assets at 3x (give or take – and based on our checks, we believe that is a reasonable multiple) and sees its multiple expand to 10x or even to CWH’s multiple, we are looking at a potential multi-bagger. If we’re wrong, and they simply execute in a mediocre fashion, but have no missteps, the downside appears modest at worst, and there could still potentially be upside to shares. This would seem to be a classic Mohnish Pabrai’s Dhandu’s philosophy fitting the concept of, “heads I win, tails I don’t lost much.” In this case we can see an outcome where we make multiples on our investment, and the potential for only modest losses – although it’s difficult to envision the scenario where our investment is materially impaired.

Industry Background

The RV industry involves several participants, with RV manufacturers like Thor, Winnebago and Forest River selling their products to RV dealerships including LazyDays, Camping World and several thousand other smaller dealerships, who in turn serve as the frontline touchpoint with customers looking to buy RVs. The relationships between manufacturers and dealers are typically governed by dealer agreements, which operate on an individual location basis. In addition to receiving a mark-up for each RV sold, dealers also provide other value-added services, including servicing and repairs, selling parts and accessories, RV rentals, trade-ins and more.

After a particularly painful downturn during the 2008 Financial Crisis, when national RV sales dropped 45% and caused some major RV manufacturers, such as Monaco Coach, Fleetwood and Country Coach, and dealers, including LazyDays, to file for bankruptcy reorganization, the RV industry has recovered strongly, with wholesale shipments growing for 8 consecutive years.

LazyDays was also an unfortunate casualty during the 2008 crisis. The company was substantially overlevered going into the crisis with a debt load of ~4 – 5x EBITDA and subsequently had to file for Chapter 11 bankruptcy protection in 2009. Nevertheless, even during the crisis, LazyDays was still profitable and cash generating, reflecting the underlying strength of the business. If anything, the 2008 crisis has taught the company a lesson and since then, management has been determined to keep debt as minimal as possible – LazyDays currently has a net cash position (\$20mn term loan, \$45mn in cash assuming no redemptions) and management has indicated their intention to refinance and/or pay down the term loan as soon as they can. Management has also indicated to us that the company has made significant improvements in increasing inventory turnover and improving the profitability of their Services and Repairs operation, especially since Services is the most recession proof business segment. With strong industry dynamics, a clean balance sheet and much tighter operational control, we think the situation today is very much different from the times in 2008 – 2009.

Source: RVIA Wholesale RV Shipments Data

Apart from the broader economic recovery, the RV industry is benefitting from two demographic trends happening at the same time – first, baby boomer retirements will provide a wave of new potential customers, with 10,000 baby boomers reaching retirement age (65 years old) each day through 2030 and second, Millennial and Gen X customers (35 – 54 years old) increasingly joining the RV lifestyle and posting large gains in ownership rates. This comes on the back of the trend towards an active, healthy outdoor lifestyle, with camping remaining popular with Americans over time. Both these demographic trends are highly significant as once Americans get started on their first RV, RV owners typically trade-in to buy another RV every 4-5 years and upgrade as they get older. Thus the increasing number of RV owners would portend a significant increase in lifetime sales going forward as they upgrade over time.

LazyDays’ investor presentation released in November 2017 provides more detail.

Source: November 2017 Investor Presentation, Pages 12 and 13

The elephant in the room then clearly is whether RVs could potentially have hit a cyclical peak.

While one can never know for certain, we think that all signs are pointing towards sustainable secular growth. Whereas previous cyclical peaks were supported by people in the 50 – 75 year-old prime RV-owning segment and retirees, this cycle is different in that we see an entire demographic segment, the Millennials and Gen X, creating a new source of demand, in addition to the ongoing demand from the growth in baby boomers. Moreover, macroeconomic conditions continue to show strength, with strong consumer confidence, favorable employment and wage trends and stable fuel prices. While the Fed has recently begun raising interest rates, we believe that interest rates remain at historic lows and credit is still widely available.

Additionally, our channel checks at the National RV Convention in Louisville, Kentucky, this past November indicate that RV manufacturers including Thor and Winnebago remain upbeat about consumer demand and are comfortable with dealer inventories. If anything, dealer inventories were on the low side and dealers have indicated that they would love to get more product on hand if possible (Camping World's CEO on its Q2 2017 earnings call: "there is a lot of pent up demand and backlog and I feel like we've reached the point where quite frankly I wish Thor could make more").

While some have viewed the slowdown in monthly yoy growth rates in SSI retail registration data (especially among Towables) to be reflective as a slowdown in retail demand, it is important to note that SSI data is often revised in later months as additional data (late registrations) from each state's DMV flows in. Our channel checks also pointed out that some large states have had computer glitches from changing computer systems in recent months, causing those numbers to be off. If anything, the manufacturers themselves have the best information on retail sales of their own products and they would not be committing to such significant capex expansion projects if the retail demand was not there. For instance, Thor has recognized that their current production capacity has been insufficient in meeting demand for their products and has embarked on significant expansions to their production facilities,

investing \$115mn in FY2017 and planning an additional \$185mn in FY2018 to expand capacity by ~500,000 square feet.

As the largest RV retailer, Camping World is also a good barometer of the health of retail consumer demand – Camping World's strong quarterly same store sales growth (2017 Q1: 9.6%, Q2: 10.6%, Q3: 9.4%) is further testament to the strength of the current market.

Source: SSI Data

In any case, in the unlikely scenario that we are terribly wrong, and the entire US economy crashes in the near-term bringing down the RV industry with it, we believe that LazyDays' common stock provides a significant margin of safety at its current low valuation of 6.3x – 6.9x 2017E Adjusted EBITDA, relative to its competitor Camping World (CWH) trading at 12x 2017E Adjusted EBITDA. Moreover, should the economy deteriorate, LazyDays could be well positioned to acquire quality assets at fire-sale prices, given LazyDays' solid balance sheet. Finally, while we are not participants in this trade, we suggest a pair trade between LazyDays and Camping World or one of the RV manufacturers like Thor/Winnebago to hedge one's downside.

Based on our conversations with various manufacturers at the National RV Trade Show in Louisville, Kentucky, the current innovation among manufacturers is focused on creating more space to move around within the same floorplan size, as well as designing RVs catered to meet the specific needs of specific target groups.

For instance, Winnebago recently unveiled the Revel, a 4x4 wheel Class B motorhome geared towards active outdoor enthusiasts, featuring a 140-cu. ft. gear garage with a power lift bed as well as an all-in-one gear closet and wet bath.

Source: Dane Capital Management LLC, Winnebago Industries

Jayco (a Thor brand) also recently unveiled redesigned floor plans for their line of travel trailers, including the 2018 White Hawk Trailer and the 2018 Hummingbird,

while Heartland (another Thor brand) has updated its Big Country luxury fifth wheel line, with additional technology amenities to meet modern technological needs, including touch pad controls and more USB ports.

Source: Dane Capital Management LLC, Thor Industries

Company Background

LazyDays is an iconic Recreational Vehicle (RV) dealer with a strong reputation as “The RV Authority” on new and pre-owned RV sales, service, rentals and accessories. It has a national presence with 5 dealership locations across 3 states (1 in Tampa, FL; 3 in CO; 1 in Tucson, AZ), including the largest RV dealership in North America (LazyDays Tampa). LazyDays has a vast product offering of both motorized and towable RVs across more than 25 brands representing all the major RV OEMs. Apart from selling new and used RVs, LazyDays has multiple other high-margin, recurring ancillary revenue streams – namely, Finance & Insurance, Service & Repairs, and Other (Rental, Camping etc.) – that complement its core business.

Source: November 2017 Investor Presentation, Pg 11

LazyDays has an asset-light business model that has low capital intensity, with capex accounting for ~1.2% of revenue

in 2016, which compares favorably to Camping World (~1.6% of revenue in 2016). Apart from its Arizona property, LazyDays leases the real estate properties for all its other dealerships (Florida and Colorado). Consistent with industry standard, LazyDays finances substantially all of its new RV inventory and ~12% of its used RV inventory using floorplan financing. Its low capital intensity together with its low fixed costs (namely corporate overhead) meant that the company was profitable and cash flow generative even during the 2008 – 2009 recession.

With its strong brand recognition (#1 most recognized company among RV prospects) and larger-than-average dealership sizes, LazyDays enjoys inventory turnover higher than industry average. In particular, its Tampa dealership, the largest RV dealership in the world, enjoys an inventory turn of 5.3 – 5.8x, the Colorado and Tucson dealerships having inventory turns of 2.7 – 3.2x, compared to the industry average of 2.0 – 2.5x. Given that inventory turnover is one of the key metrics determining a dealership’s success, LazyDays clearly demonstrates its industry leading capabilities.

LazyDays Acquisition Pipeline

By far the biggest avenue for value creation is the huge potential for public/private arbitrage through the acquisition of smaller dealerships...

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Finalist

Best Small Caps

🔍 Techtarget

Asset Class: **Equity**

Symbol: **TTGT:US**

Updated: **12/28/2017**

Submitted: **12/31/2017**

EXPECTED RETURN

100.1%

COMMUNITY RATING

No Votes

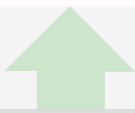


BY:

Michael Ellis

CURRENTLY AT:

Headlands Capital



LONG

ATTACHMENTS:



TIMEFRAME:

2-5 Years

SITUATION:

GARP

MARKET CAP:

406M USD

Poised for substantial FCF growth as legacy business hands the reins to the 40%+ revenue growth IT Deal Alert segment, which now comprises ~50% of total revenue



About Michael Ellis

Michael Ellis, CFA is Principal and Research Analyst at Headlands Capital. Mr. Ellis joined Headlands Capital in May, 2011 after graduating from Columbia Business School. Mr. Ellis conducts equity research across all sectors of the domestic small-cap universe. Prior to business school, Mr. Ellis worked as a Research Associate at Dodge & Cox, where he served on the global equity research team and conducted fundamental research on companies in various industries including chemicals, medical devices, capital goods, healthcare services, household products and real estate. Mr. Ellis began his career as an investment banker, working for Putnam Lovell and Colchester Partners. Mr. Ellis received a BA from Middlebury College and an MBA with Honors from Columbia Business School where he was also a participant in the Value Investing Program.



About Headlands Capital

Headlands Capital seeks to take advantage of inefficiencies in small cap stocks by conducting deep, primary field due diligence and building a differentiated investment thesis through multiple meetings with management, competitors, suppliers and industry participants. Headlands Capital combines qualitative assessments of management ability, competitive positioning and industry growth with a proprietary, quantitative model, developing a picture for the revenue, margin and cash flow outlook for a target business over the next 3-5 years.

Headlands Capital targets businesses where the principals have developed conviction in the investment thesis, in the downside protection in the stock and in management's ability to achieve its vision for the company. Through the due diligence process, Headlands Capital also seeks to develop a relationship with management and a mutual alignment of interests around future initiatives of the portfolio company.

Techtarget

Asset Class: **Equity**

Symbol: **TTGT:US**

Submitted: **12/28/2017**

Updated: **12/31/2017**



BY:

Michael Ellis

CURRENTLY AT:

Headlands Capital

Pricing & Return Details

↑ **LONG**

EXPECTED RETURN	100.1%
INITIAL PRICE	13.95 USD
TARGET PRICE	30.00 USD

COMMUNITY RATING: No Votes

PERCENTILE: N/A

Poised for substantial FCF growth as legacy business hands the reins to the 40%+ revenue growth IT Deal Alert segment, which now comprises ~50% of total revenue



ASSET CLASS:
Equity



SITUATION:
Growth At
Reasonable Price



TARGET ALLOCATION:
10%+



CATALYSTS:
N/A



TIMEFRAME:
2-5 Years

Investment Thesis

Description / History

TechTarget (NASDAQ: TTGT) is a ~\$400 million market cap company based outside Boston, MA. For the past nearly 20 years its portfolio of websites have been the leading destination for IT professionals conducting research on IT products and vendors. With 19 million registered members today it dwarfs all other online competition. Those registered IT professionals go to TechTarget because the content is first class, either authored by a TechTarget editor or an outside expert. The content and categories of the IT world are very deep and constantly evolving as the IT landscape evolves. Try Googling: “hyper-converged data storage” and you will see a TechTarget site as the first result on page 1 of the search results. There are 5,000 such categories where TechTarget is the leading online content provider. Pretend you are in the IT department at JP

Morgan and your boss tells you that you have a \$5 million budget to procure a new “hyper-converged data storage” solution, as an example. You have 3 months to research the topic and then produce a list of final vendor proposals... Go!... And you go to TechTarget to start your research. Because all the IT professionals are on TechTarget sites doing research, IT vendors want to be there to market to them.

Qualitative Thesis

The initial thesis for TechTarget was that it should benefit disproportionately as the IT world migrates from a magazine or trade journal based marketing/advertising model to an online world. TechTarget did indeed capture the lion-share of that shift and grow rapidly through 2014 when the stock got to \$13/share with a very growthy

valuation multiple attached to it... **but then the core business (referred to as “Core Online”) slowed.**

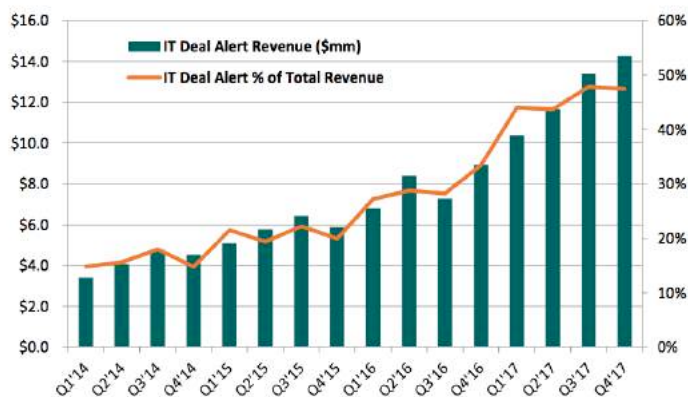
The largest IT vendors in the world (TechTarget’s customers) had 3 bad things happen over the past few years:

1. Corporate IT spending, which had never fully recovered from the Great Recession, started to stagnate and decline a little.
2. IT sales outside the US weakened due to the strong dollar and poor end-market conditions... which is a big problem for companies like Dell that derive as much revenue in the US as they do outside the US.
3. Lastly, Dell/EMC/Symantec/VMware/HP (top 10 customers for TechTarget) have all announced huge M&A deals or spin-offs in the last 2 years. When those announcements happen, the marketing departments at those companies go into paralysis and it takes 12 – 24 months to return to normal... first the deal is approved, then financing arranged, then layoffs happen, then a go-forward strategy is agreed upon... and only then do those companies reignite the marketing engine.

We are seeing the tail end of these three headwinds right now and thus the opportunity to be in front of a recovery for the Core Online segment which represents ~50% of revenue today.

Beneath the surface and woes of the Core Online segment, TechTarget built a SaaS data analytics product called “IT Deal Alert” to deliver purchase intent data to its existing customers. So now IT vendors can be alerted when that IT professional from JP Morgan is doing research on “hyper-converged data storage” and the vendor can insert themselves into that research process, both by doubling down on TechTarget’s Core Online business in a more targeted way, and also by pushing that purchase intent data to the sales & marketing teams through the IT Deal Alert platform. IT Deal Alert started at \$0 revenue in 2013 and should be ~\$50m in 2017, **growing nearly 60% this year.** On a total revenue base of a little over \$100m in 2017 **this is a big deal.** IT Deal Alert is also long-term subscription revenue vs. deal-by-deal or campaign-by-campaign as it is in the Core Online segment. Primary research suggests

IT Deal Alert is a must have for data-driven digital marketers, and that recent growth could continue unabated as marketers roll out TechTarget more broadly within their organizations. Only 600 of TechTarget’s 1,300 total customers use IT Deal Alert today.



Management anticipated this transformation in mid-2016 and purchased ~15% of TechTarget shares outstanding through a tender offer. An additional 10% of the shares outstanding are in the process of being retired through a share repurchase program. Insiders own over 25% of the company and are heavily aligned with shareholders.

Quantitative Thesis

The simple math of this transformation is the crux of the investment thesis. TechTarget is a largely fixed cost business. Expenses are mostly comprised of:

- Content writers, both employed and contracted
- Website development/hosting costs
- A small amount of corporate overhead (management is thrifty)

The above are all fixed costs so as total revenue stagnates or declines, as it did in 2014-2016, it hurts. As total revenue grows again, which should happen through the power of IT Deal Alert alone, then the incremental margins are 60%+ and cash flow growth accelerates. Assume any recovery in the Core Online segment and the math happens more quickly and powerfully. Over 3 – 5 years the output of this transformation is 40% EBITDA margins from ~20% today with the topline growing low to mid-teens. The current

valuation of just over 11x EV/EBITDA is a fair valuation for those only looking in the rear-view mirror. **Fast forward 3 years and you have over 60% of total revenue in a SaaS-based business that is growing over 20% annually. EBITDA nearly triples over the investment horizon.** Those results and the cash flow growth that comes from it are worth substantially more than is reflected by the current share price.

Why So Long Now?

This investment opportunity exists because anyone screening the company on recent annual results will find slow/no growth in total revenue, margin declines and low liquidity. Screening also produces a seemingly rich valuation (note the LTM metrics pulled in by SumZero's database). Combined these are more than enough reason for a short attention span analyst to move onto the next idea. Sell-side coverage is limited and not insightful. There are no public comps or logical industry buckets for TechTarget.

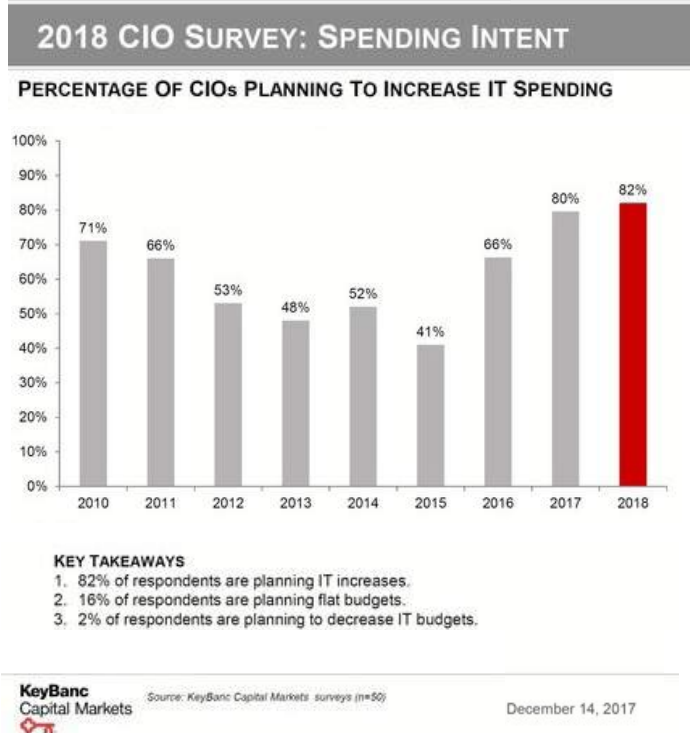
The forecasted free cash flow growth **is the catalyst...** it should awaken new analyst coverage, attention from larger institutional investors and a positive feedback loop in general. There should be a step-function change in investor perception as the SaaS revenue from IT Deal Alert accelerates. While TechTarget's stock price appreciated nicely in 2017, one can still buy ahead of this step-function change.

Bonus Items

Note the following items are all supportive of faster growth and more free cash flow in both the Core Online segment and IT Deal Alert. The above thesis does not rely on any of the following happening. In fact, only 2% revenue growth is forecasted in the Core Online segment. Should the following occur, Core Online would become a double-digit grower and IT Deal Alert would grow even faster:

1. If you get a return to "normal" corporate IT spending the total revenue growth will be faster and 40% margins

will come sooner. IT spending has been in the doldrums since the Great Recession but trends are improving. See the following chart for a recent IT spending survey (Source: KeyBanc). Corporate IT buyers seem to be re-awakening in 2017 with enthusiasm to spend more in the near-term.



2. If/when overseas cash is repatriated through tax reform, a lot of that cash is held by TechTarget's large IT customers who should/could allocate a portion of that repatriated cash to more sales and marketing.
3. Another component of tax reform is accelerated depreciation of capital investment in year 1 of the investment. Historically this reform has jump-started IT spending and been a catalyst for TechTarget's Core Online segment.

Lastly on tax reform, TechTarget is a full corporate tax payer which is forecasted to continue in the financial model. Should corporate rates drop into the low 20% range, **TechTarget will save over \$30 million in cash taxes over the next 4 years – this** compares to 2018 forecasted EBITDA of \$30 million – thus meaningful savings and increases to free cash flow.

Risk Management

The overall risk/reward trade-off from an investment in TechTarget is highly compelling. However, should the thesis as outlined above not play out, TechTarget has ample downside protection owing to the following factors:

1. Leading market position in its industry niche. TechTarget is far and away the leader in online IT research/content. Its leading competitor, IDG, was recently sold and laid off most of its editorial staff. Competitors are exiting the business while TechTarget is reinvesting for growth. There are few worthwhile alternatives to TechTarget.
2. Net cash balance sheet and positive free cash flow even under stress scenarios.
3. High insider ownership and a management team that will back up the truck to buy stock at discounted valuations.

While the above provides comfort, there are real risks to the business:

1. The Google search algorithm is constantly evolving and seems to always disrupt those with any exposure to digital marketing/advertising. TechTarget historically generates nearly 100% of its traffic from organic search, with an estimated \$460 million annual price tag (source: SEM Rush) to replicate that traffic through paid search... however, they are exposed to "Google risk" just like any

other website property.

2. Large/Global IT vendors like Dell, Cisco, HP, etc... could remain challenged. There is a risk these businesses are mature and/or in structural decline, leading to underinvestment in sales & marketing. Some element of this risk has impacted TechTarget for the past few years. While that headwind is forecasted to abate, it may not. TechTarget also has exposure to small and mid-size tech companies, but any pain felt by the large vendors will mean pain for TechTarget.
3. The rapid growth of IT Deal Alert pushes TechTarget into the world of marketing automation – a crowded landscape with a handful of well-funded, VC-backed companies. While competition is scarce in TechTarget's Core Online segment, there is a risk that others are drawn to the fast growth of IT Deal Alert and attempt to compete for TechTarget's customers.
4. Management has been slowly selling shares through 10b5-1 plans.

Model / Valuation

Valuation/return analysis and financial model are included in the supporting materials and below.

See "Quantitative Thesis" section above for description of the financial model and drivers.

TTGT Valuation

\$mm; FYE Dec 31,

		EV/EBITDA					FCF Yield			
		Share Price	2016	2017E	2018E	2019E	2016	2017E	2018E	2019E
Current Price	\$13.00	\$11.50	17.3x	14.7x	10.1x	7.2x	3.9%	4.2%	5.4%	7.8%
Current Shares Out (10/31/17)	27.6	12.00	18.1x	15.3x	10.6x	7.5x	3.7%	4.0%	5.2%	7.5%
Mkt Cap	\$358.8	12.50	18.8x	16.0x	11.0x	7.8x	3.6%	3.9%	5.0%	7.2%
Current Net Debt (Q3'17)	3.6	13.00	19.6x	16.6x	11.5x	8.1x	3.4%	3.7%	4.8%	6.9%
Enterprise Value	\$362.4	14.00	21.0x	17.9x	12.3x	8.8x	3.2%	3.5%	4.4%	6.4%
		14.50	21.8x	18.5x	12.8x	9.1x	3.1%	3.3%	4.3%	6.2%

TTGT Valuation
\$mm; FYE Dec 31,

	2016	2017E	2018E	2019E	2020E	2021E
Sales	\$106.6	\$108.4	\$123.1	\$140.4	\$157.8	\$173.5
Adjusted EBITDA	18.5	21.8	31.6	44.5	56.6	65.2
EPS b4 1x items	0.33	0.39	0.61	0.89	1.15	1.32
FCF	13.8	13.7	17.1	24.8	32.3	37.7
FCF/Share	0.45	0.49	0.62	0.89	1.16	1.34
ROIC	2.8%	4.3%	8.3%	11.7%	13.5%	13.4%
	2016	2017E	2018E	2019E	2020E	2021E
EV/Sales	3.4x	3.3x	2.9x	2.6x	2.3x	2.1x
EV/ Adj. EBITDA	19.6x	16.6x	11.5x	8.1x	6.4x	5.6x
P/E	39.9x	33.2x	21.4x	14.6x	11.3x	9.9x
eFCF Yield	3.4%	3.7%	4.8%	6.9%	8.9%	10.3%
FCF/ EV	3.8%	3.8%	4.7%	6.8%	8.9%	10.4%
IRR Calculation	12/21/17	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
Adjusted EBITDA		21.8	31.6	44.5	56.6	65.2
Multiple (LTM)		11.0x	11.0x	11.0x	11.0x	11.0x
Enterprise Value		240.3	348.1	489.3	622.4	716.7
Net Debt (Cash)		(2.6)	(19.7)	(44.5)	(76.8)	(114.5)
Market Cap		242.9	367.7	533.8	699.2	831.2
Value Per Share		\$8.85	\$13.30	\$19.17	\$24.93	\$29.43
Total cash flows	(\$13.00)	\$0.00	\$0.00	\$0.00	\$0.00	\$29.43

IRR CALCULATION	
Gross IRR 2017-2021	22.5%
Multiple on Capital	2.3x

TTGT Summary Model										CAGR
\$mm; FYE Dec 31,										'17E - '21E
	2013	2014	2015	2016	2017E	2018E	2019E	2020E	2021E	
Revenue										
Core Online	\$75.8	\$80.8	\$82.4	\$70.4	\$58.5	\$58.5	\$59.7	\$60.8	\$62.1	1.5%
IT Deal Alert	3.9	16.8	23.2	31.4	49.7	64.6	80.8	96.9	111.5	22.4%
Total Online	79.7	97.6	105.6	101.8	108.2	123.1	140.4	157.8	173.5	12.5%
Events	8.8	8.6	6.3	4.8	0.2	-	-	-	-	n/a
Total Revenue	\$88.5	\$106.2	\$111.8	\$106.6	\$108.4	\$123.1	\$140.4	\$157.8	\$173.5	12.5%
Gross Profit										
Total Online	\$56.3	\$73.0	\$78.6	\$74.3	\$79.7	\$91.7	\$106.7	\$121.5	\$133.6	13.8%
Events	5.0	5.2	3.3	2.1	0.1	-	-	-	-	n/a
Total Gross Profit	\$61.4	\$78.2	\$81.9	\$76.4	\$79.9	\$91.7	\$106.7	\$121.5	\$133.6	13.7%
margin	69.3%	73.6%	73.3%	71.7%	73.7%	74.5%	76.0%	77.0%	77.0%	
Operating Expenses	(57.6)	(64.9)	(64.4)	(64.7)	(65.1)	(67.2)	(70.1)	(73.2)	(77.1)	4.3%
Stock-Based Compensation	5.6	7.3	6.6	6.9	7.1	7.1	7.8	8.3	8.6	4.8%
Adjusted EBITDA	9.4	20.6	24.2	18.5	21.8	31.6	44.5	56.6	65.2	31.4%
margin	10.6%	19.4%	21.6%	17.4%	20.2%	25.7%	31.7%	35.9%	37.5%	
incremental margin	-91.3%	67.0%	54.1%	-114.7%	190.9%	66.4%	74.1%	69.7%	54.4%	
FCF	\$3.8	\$14.4	\$7.6	\$13.8	\$13.7	\$17.1	\$24.8	\$32.3	\$37.7	
Net Cash / (Debt)	\$33.8	\$38.2	\$34.7	(\$1.2)	\$2.6	\$19.7	\$44.5	\$76.8	\$114.5	
ROIC	-0.9%	3.1%	4.9%	2.8%	4.3%	8.3%	11.7%	13.5%	13.4%	

Alternate Valuation Framework

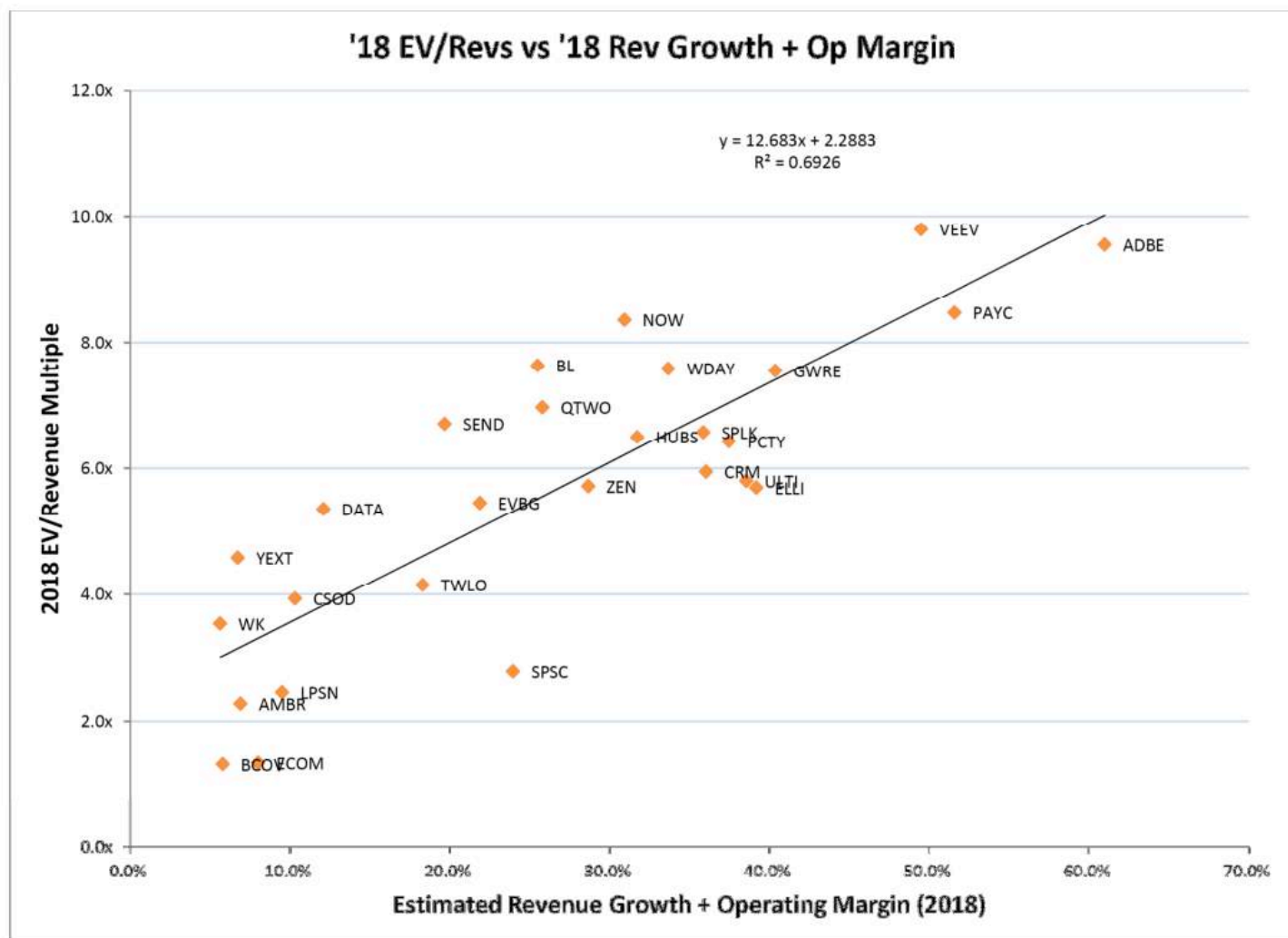
TechTarget management is keenly aware of the multiples awarded to fast growing SaaS companies. Looking at IT Deal Alert revenue in the out years of the forecasted financial model, the company will have over \$100m of SaaS revenue growing at 15% to 20% and an EBIT margin exceeding 30%. Using the scatterplot below (source: Stifel) that sort of financial model could trade at ~7x to 8x EV/Sales. Using that EV/Sales multiple on 2021 IT Deal Alert revenue implies an enterprise value **exceeding \$800 million for the IT Deal Alert business alone...** This compares to a 2021 **total company** enterprise value of ~\$700 million in the prior valuation analysis section. Further support of the asymmetric risk/reward opportunity at TechTarget.

Conclusion

A simple investment thesis is often the most compelling. Through the simple math that results from the continued growth in IT Deal Alert, TechTarget should grow EBITDA 3-fold over the next 3 – 5 years. Investors are not valuing TechTarget today at a level that accurately reflects this forecasted outcome.

As outlined, there are multiple sources of further upside to the investment thesis and ample downside protection should the thesis prove to be overly optimistic or exogenous risks come to fruition.

Considerable primary research was done to test the investment thesis and due diligence TechTarget's offerings.



Source: Stifel

Some notable quotes are included below:

“TechTarget has the highest editorial integrity on the web, vs. the pay-to-play competition. The higher quality content leads to better viewership stats and thus the ability to command premium pricing.”

- Former TechTarget employee

“We are shifting a significant portion of our marketing budget to account based marketing (“ABM”) platforms like IT Deal Alert, in addition to the shift to digital marketing that is ongoing.”

- IT Deal Alert user

“TechTarget provides more real world content to people actually in the IT trenches making complex decisions and choices. Those Director/VP level people in the IT department then have a huge influence over the CIO during the vendor selection process.”

- TechTarget registered user

“I’m not sure what I would do without it (IT Deal Alert).”

- IT Deal Alert user

“Our spending on IT Deal Alert will be growing. We are getting more leads through the platform and we want to keep getting more leads. We want to add additional product segments and additional geographies.”

- IT Deal Alert user

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Finalist

Best Small Caps

Summerset Group Holdings Ltd Ord

Asset Class: Equity

Symbol: SUM:NZ

Updated: 12/24/2017

Submitted: 12/21/2017

EXPECTED RETURN

20.4%

COMMUNITY RATING



BY:

Gokul Raj

CURRENT RANKING:

★ #5 All-Time

CURRENTLY AT:

Bavaria Industries Group

BADGES:



65 80



LONG

ATTACHMENTS:

N/A

TIMEFRAME:

2-5 Years

SITUATION:

GARP

MARKET CAP:

1.2B NZD

SUM is a compounding machine with an unique business model that is a mix of a healthcare operator, real estate developer and timeshare seller, trading @ 1.7X Price/ Book & < 1X on adj P/B !!



About Gokul Raj

I am a multi-dimensional value investor with a special focus on compounders and spin-offs. I currently work as a portfolio manager with a listed Investment holding firm and help it allocate its permanent capital (balance sheet cash) in long-term public equity investments. I have completed my Masters in Finance from London Business School. My investment experience is primarily in Indian small and mid-cap ideas.

Summerset Group Holdings Ltd Ord

Asset Class: **Equity** Symbol: **SUM:NZ** Submitted: **12/22/2017** Updated: **12/25/2017**



BY:
Gokul Raj

CURRENTLY AT:
Bavaria Industries Group

CURRENT RANKING:
★ **#5 All-Time - Jan '18**

BADGES:
★ ★
65 80

COMMUNITY RATING: ★★★★★

PERCENTILE: 65%

Pricing & Return Details ↑ LONG	
EXPECTED RETURN	20.4%
INITIAL PRICE	5.38 NZD
TARGET PRICE	6.50 NZD

SUM is a compounding machine with an unique business model that is a mix of a healthcare operator, real estate developer and timeshare seller, trading @ 1.7X Price/ Book & < 1X on adj P/B !!



ASSET CLASS:
Equity



SITUATION:
Growth At
Reasonable Price



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
N/A



TIMEFRAME:
2-5 Years

Investment Thesis

Summerset Group Holdings

Cash generative compounding machine at attractive valuations !!

* The following investment pitch would be applicable to both Summerset and Ryman Healthcare. We have structured our investments in both these stocks as a single bet which we believe provides us the best Risk-Reward to play the following thesis. All figures in this note are in New Zealand Dollars (NZD).

Elevator Pitch

Summerset (SUM) and Ryman (RYM) have a unique business model that is a mix of a healthcare operator, real

estate developer and timeshare seller. This model helps it to create a Win-Win proposition for all stakeholders in the ecosystem and generate strong shareholder value (20%+ CAGR investor returns since their IPOs in 2011 and 1999 respectively). These compounding machines are now entering a demographic sweet spot that provides massive tailwinds for similar future value creation. SUM is currently trading at around 1.7X Price/ Book and I believe that the true adjusted Price/ Book is less than 1X, providing an attractive entry point for long-term shareholders.

Detailed Investment Rationale

Compounding machines are those businesses that have the unique combination of quality, growth, and longevity. If you're able to buy such businesses at a fair price, you can expect to do well over time. I think both RYM and

SUM fits into the above definition well and provide an asymmetric risk-reward opportunity which is difficult to find at this stage of the bull market. I believe that this investment opportunity exists primarily because of the underappreciation of their unique business model and short-term concerns of most market participants that are clouding its long-term potential (Behavioural Edge).

There are very few business models such as ULCC's (Ultra-low-cost carriers) or Value retailers that when executed in a disciplined manner deliver tremendous shareholder returns because of their highly cash generative model and ability to reinvest capital at attractive rates. I delved deeper into studying New Zealand based retirement operators because of the following amazing value creation statistic:

“RYM raised \$25m in IPO at a valuation of \$135M in 1999. The share count till today continues to be the same with no equity dilution. Since its IPO, the company has paid out \$630 million of dividends and reinvested \$2.9 Billion in its portfolio. The current market cap of the business is \$5.15 Billion.”

The company's business model, growth opportunity, and management culture were the key reasons for this success over the last 2 decades. I would like to detail my investment rationale by explaining that the opportunity for investing in both RYM and SUM is as attractive now as it was then. My key insights and variant perception on the important drivers are highlighted below and then followed by a detailed note:

1.) Valuable Business Model - Creates free call options for real estate price appreciation:-

Important Insight - The ORA model creates a powerful growth flywheel only for operators with a strong development engine like RYM and SUM.

Key Variant Perception - Needs-based demand of 80+ year olds and their key priorities make the full continuum care model very resilient.

2.) Favourable Industry Structure - Long growth runway for integrated operators:-

Important Insights - Demographic sweet spot accelerates growth over the next 15 years; Economies of scale, Size, Location and Portfolio mix are the 3 key profitability drivers for retirement villages; Local network effects and economies of scale help in market share growth.

Key Variant Perception - ORA Model works best for operators with a long-term mindset/ culture; Transactional flexibility in the model protects large integrated operators in an economic downturn Vis-a-Vis marginal operators.

3.) Underappreciated Financials - Recurring and perpetual cash flow stream:-

Important Insight - Model is very tax efficient as fair value change in Investment property is not taxed.

Key Variant Perception - Book value growth of 15 to 20%+ can continue with accelerating build rate.

4.) Attractive Valuations - Book value is skewed by high discount rates and large float:-

Important Insights - SUM will derive significant valuation uplift from development engine and maturing of its portfolio. Both, RYM and SUM are trading at below historic averages on P/ B multiple.

Key Variant Perception - 85% of the assets on SUM's balance sheet is a DCF model in which the net cash flows are discounted at 14-15%. Similarly, 68% of the liabilities is a costless float and not a true economic liability.

5.) Major Risks - Short-term risks remain, but long-term risks are overstated:-

Important Insights - Healthy market conditions with low unsold inventories. Potential short-term liquidity squeeze and CBRE revaluation.

Key Variant Perception - Overbuild risk is minimal.
Demand might outpace supply meaningfully if
penetration rates increase.

Detailed Investment Rationale

RYM and SUM are New Zealand based listed retirement village operators. There are 6 major village operators (Ryman, Metlife, Bupa, Oceania, Summerset, Arvida) and all operators except Bupa are listed on the stock exchanges. The NZ retirement and care home sector are well regulated and have been able to become more mainstream over the last decade. This has resulted in increased popularity and therefore higher penetration rate among the older population.

The industry operates with a creative ORA (Occupational right agreement) system in which the residents buy a right to occupy a unit indefinitely without actually taking title to the underlying real estate (similar to a vacation timeshare). When the resident vacates the unit (usually upon death), the operator repurchases the occupation right at a cost less a deferred management fee (DMF) that varies among different operators. The DMF is an annual, non-cash charge measured as a % of the original purchase price.

The cumulative DMF is capped at 25% (over 5 years) of the purchase price at SUM and 20% at RYM (over 4 years). Most other operators charge a 30% DMF over a 3-5 year period. The deferred management fee (DMF) becomes payable only when the operator re-sells the unit. So if a resident buys an occupation right for \$400,000 and vacates the unit after five years, the resident will receive \$300,000 cash with the operator retaining the difference before remarketing the unit at a higher price (assuming real estate values have increased).

Effectively the operator is a real estate developer that finances development with customer deposits and gets to resell each development every five to seven years in perpetuity. This ORA model enables the operators to generate significant cash flows and profit from the real estate price appreciation without getting their capital locked.

The occupation right is treated as an interest-free loan (occupancy advance on the balance sheet) rather than a sale. Consequently, no revenue is recognized (and no income tax is payable) when an occupation right is sold or even when resold after the first cycle. Instead, the company recognizes changes in fair value of its real estate produced by the development uplift in the first cycle and real estate price appreciation in the subsequent cycles. The DMF is recognized as non-cash revenue. The deferred management fee is amortized over the expected period of tenure. As a result, the income statement does not truly represent the underlying economics.

One of the main attractions for residents at an RYM/ SUM village is the operator's ability to offer a full continuum of care for its residents (Retirement Village -> Rest Home Care -> Hospital Care -> Dementia Care). This allows an elderly couple in which one of them needs the care to stay together in the retirement village. As they continue to get older, they can have a peace of mind that the operator has all the facilities that they would need until death. Only 60% of the villages in the industry have a care facility within them whereas both RYM and SUM have 100% of their villages with care facilities. A lot of the care services are critical in nature and hence attracts needs based demand.

Residents pay a nominal weekly fee to access on-site services on a cost-recovery basis. RYM charges around 129\$/ week and SUM charges around 110\$/ week. This allows the residents to use all the community centers such as Cafe, Spa, Sym, Salon, Theatre, Billiards room, Recreation center etc.

To understand the reasons for the success of the ORA model, it is important to understand the profile of the residents of these retirement villages. The average age of entry for a resident in an RYM/ SUM village is 80+, with the breakup as follows: Independent RUs (82+), Serviced & Care Apartments (86+) and Villas (79). The average tenure is less than 5 years for independent units, 2-3 years for serviced and care apartments and 5 years for Villas.

The independent houses sell for around 75% of the median house prices in that area and serviced apartments at 46% of the median house prices. For example, the median House price in Auckland is 1.2M and an independent unit in the

retirement village in Auckland will cost 0.85M. This allows the elderly to monetize 25%+ real estate value while they sell their home and move to a retirement village. Even when the price differential is not meaningful, the elderly downgrade from a 3 Bedroom home to a 2 Bedroom unit or so to release some equity for their remaining years, thereby making the transaction similar to a reverse mortgage.

Similarly, I believe there is an inherent risk pooling mechanism in these villages just as in insurance. While the average tenure of a resident is 5 years for an operator, the distribution curve varies from 1 year to 10+ years. After the initial 4 or 5 years, there is no DMF fee that is applicable. The priorities for a 80+ year old who is in the last 5-8 years of his life is not exactly to profit from the real estate price appreciation. They are happy to trade that away for good quality of care in an affectionate community.

The primary considerations of the elderly while choosing a retirement village are security, companionship, lifestyle, amenities, maintenance free living etc. The catchment area for most retirement villages are the communities that are within a small 5-7 KM radius of the village. Most people move into villages in which they already have friends. Most people in the industry say that peace of mind for the elderly in knowing their weekly fee commitments will not rise significantly is more important than the 20%/25%/30% deferred management fee cut that applies to the capital that would be returned to their offsprings post their death. Even the young are happy to see their older parents have a good quality of life. Hence, moving to a retirement village is a more emotional transaction for the elderly than just a mere financial transaction.

Hence, the model ensures that the operators and their shareholders are happy with the float and ability to profit from the real estate price appreciation, while the residents are happy with their quality of life. Similarly, Society gets better off as younger families move into established communities once the elderly move into nearby retirement villages. Thus, it is a Win-Win solution for all stakeholders.

Let's understand the underlying economics of the model through a sample. An average retirement village from an integrated operator like RYM/ SUM in Auckland will require something like 200 Million \$'s for land acquisition,

construction of retirement units (RUs), serviced apartments (SAs), Community centers etc. Usually, around 35 Million is required for building community centers. The RUs and SAs get sold at a 20 to 25% development margin, thereby helping the developers net back the 200 Million of invested capital through ORA sales. During strong real estate markets, the real estate price appreciation during the construction period of 3-5 years allows a higher margin and helps developers earn cash surplus.

Hence, during the first cycle, the developers get back their entire development capital and sometimes a higher cash surplus. In the next ORA sales cycle in 5-7 years, assuming there is a 3% house price inflation every year, the developer will give back 150 Million (25% DMF cut) to the first cycle residents and receive 231 Million from the second cycle sales, leading to a 80 Mn+ incremental cash flow that is spread out.

With similar assumptions of 25% DMF fee, 3% house price inflation and a 5-year sales cycle, the float will grow to 311 Million in 15 years. The maintenance CAPEX for refurbishment after every sales cycle is less than 3% of ORA income and there is a village level upgrade CAPEX during the 12th-15th year. This enables the village operator to earn 12.5 Million in DMF (4% net yield post maintenance) and 2-4 Million from care profits every year as the villages mature. Hence, with almost no real equity getting locked, the operator will continue to receive strong cash flows that grows with the underlying real estate value throughout the village lifecycle. Thus the development in the retirement sector can generate high ROIC if the operator is able to sell ORA's to incoming residents and generate a costless float with every sales cycle. The villages will continue to generate aged care fees, deferred management fees and real estate capital gains in perpetuity.

This powerful flywheel is more effective for larger operators with a strong development engine as they can continue to use the float to fund newer working capital intensive developments and diversify the risk of a float drawdown. Retirement village development and operations require two very different skill sets. Developers need to scout for the right land, create good designs and construct efficiently while the operators need to ensure that the village community is happy and vibrant, enabling

continuous resales in every cycle. Care facilities continue to be an important selling point for most integrated operators. Amongst all the operators, only RYM and SUM have both a well-oiled development and operating engine.

Usually, good operators like RYM/ SUM build care facilities with 40% more spare capacity and this allows them to tap other patients from the community as well. RYM especially has large reputed care facilities. The learning curve for operating specialized care facilities like Dementia is not easily replicable. For the large integrated operators, the ability of care facilities to draw ORA sales allow them to cross-subsidize it if necessary. Also, demand for needs-based care tends to be resilient and help operators to perform well irrespective of economic conditions as RYM's track record has shown.

The combination of growing float and increased development allows RYM and SUM to compound at an attractive rate. For example, RYM currently has a gross occupancy advance or float of \$ 2.7 Billion (\$ 1.1 Billion in 2012) and the management expects it to increase to 5.2 Billion by March 2022, allowing it to fund the majority of its growth CAPEX during this period. This powerful flywheel will continue to compound as long as there is strong demand.

Favourable NZ retirement industry structure for RYM/ SUM

In the current disruptive world led by new technologies, there are very few trends or needs that can be projected over a two-decade period. One clear trend that can be predicted with meaningful certainty is the dramatic aging of the population in developed countries over the next 1-2 decades. Similarly, the need for care and compassion in your later stages of life is not easy to disrupt. The core underlying business drivers for RYM/ SUM will continue to be the same even 15 years from now.

As explained before, the average age of a new resident is 75+. Currently, there are around 300K people in NZ who

are over 75 years old. This population bucket is expected to grow to 1 Million over the next 25 years. In fact, the annual growth in the 75+ population is expected to increase from the current 10K/ year to 15K/ year over next 5 years and reach 20K/ year over next 10 years, providing a very favorable tailwind for the NZ retirement sector. The birth rates tripled during the baby boomer generation. In Australia (Ryman made a strong entry into this market recently), the opportunity size is even bigger. The total number of 75+ year olds in Australia are 6 times that of NZ and Victoria state in which Ryman made its Australia entry alone being 1.5 times that of NZ.

The baby boomers who were born following World War 2 would start turning 75 in 2021. Birth rates were actually very low during the 1930s which means that the industry had been fighting a demographic headwind in recent years. Baby boomers are the wealthiest generation and they have the highest homeownership rate. Both of these directly correlate with higher retirement unit penetration rate.

As of 2016, the total number of retirement villages in NZ was around 300 and the total retirement units were 30500 and care beds were 37000. The average resident rate in a retirement unit is 1.3 approximately. The penetration rate of retirement villages among the 75+ population was 6.8% in 1998 and it has grown to over 12.4% by 2016. As the retirement villages have continued to increase in popularity, the penetration rate has grown by 30 bps every year and has accelerated to 40 bps over the last few years. The penetration rates in more urban areas like Auckland have started touching 15%+ and 20%+ in some prosperous sub-regions of Auckland. It is important to note that over 30% of the 75+ population growth in NZ is expected to come from Auckland alone.

In terms of the NZ retirement village market structure - 53% of the market is with the big corporates, 32% with small private players and 16% with not for profit operators. The Top 6 players contribute around 44% of the total market. In terms of sources of planned supply, big corporates contribute 54%, small private operators 41% and not for profit players 5%. In the care beds segment, the industry is far more fragmented. Only 1/3rd of care beds is with the top 6 corporates.

The profitability of the retirement village is dependent on 3 factors - Location, Portfolio Mix, and Size. The larger urban villages in good neighborhoods with the right mix of care and independent units perform the best. RYM is the gold standard here and they got the model right early on. Even though care facilities in isolation are less profitable, the presence of care facilities allows the retirement unit to sell at better rates. SUM is trying to replicate RYM with more large urban development compared with its historical portfolio of regional villages.

The industry's profit pool is continuously getting consolidated among the top operators. Most smaller operators build villages with usually 50 to 100 units and lack the amenities provided by larger integrated operators including good care facilities. The larger villages have over 300 units and have better economies of scale. In key real estate markets such as Auckland and Christchurch, the market share of larger developers is high while the smaller players concentrate on non-urban regions. With small catchment areas, there is definitely local network effects in this business and it is very rare to see a new development that is close enough to another successful village unless there is huge demand growth.

Short term operators are better off playing in the real estate market in which the cash conversion is much easier and there is no recurring servicing need. For subscale operators, the cash flow would be negative on the operating side as the organized players compete on this price aggressively. Also, float becomes valuable only when there is a strong development pipeline. It takes 5 to 8 years from purchase of land to getting back their capital outlay. Banks are not ready to lend to smaller developers. Long gestation projects make retirement villages unattractive to short-term players.

Similarly, the construction timeline for smaller operators is much longer than that for larger operators like RYM and SUM which have a strong development engine. Working capital demand peaks in the year 2 to 3 of the project as the community centers and care centers are built first to generate interest for the development. The care facility mix varies among the top players with companies like Arvida and Oceania skewed more towards care with >70% facilities and companies like Metlife have less than 20%. RYM has the rough mix of 50% each between care and retirement.

SUM is moving towards RYM from its current 33% care mix. Over the last 5 years, there has been a 2.28X growth in care beds compared with 1.72X growth in retirement units at SUM.

The industry is running woefully short for the upcoming care bed demand. The care fees have a government subsidy and the unorganized players have been hit hard by the low profitability in the sector. RYM's management claims that for intensive care units like Dementia or Memory Care, the number of beds has shrunk over the last decade as supply has left the market because of lower profitability. It is not easy to replicate the care units as they require a long learning curve.

There are significant economies of scale on both the development side and operating side of the business. The industry's development engine is skewed very much towards RYM and SUM. For example, the existing stock market share (Retirement Units/ Care Beds) of RYM is 18.5%/ 8.8% and SUM is 10.8%/ 2% respectively, but in terms of planned supply 33% of the incremental market, supply is coming from these two companies alone. SUM is the 5th largest in the industry on existing stock terms but is the 2nd largest in terms of the development pipeline. In the NZ market, both RYM and SUM have over 2500 to 2600 units in pipeline compared with the total industry pipeline of around 15500.

The value creation happens only with a strong development engine that can enable a useful deployment of the float. In terms of 1 year forward build rate, SUM and RYM have a development pipeline of around 14% of their existing portfolio. MET has 5%, while OCE and ARV have 3%. All the other 3 primarily work on brownfield expansions and acquisitions for growth and don't have a strong development engine. SUM and RYM are the only companies that have since inception focused 100% on pure greenfield retirement village development, allowing them to accumulate best development practices in their firms.

SUM and RYM have a land bank that is >60% of their existing portfolio size (SUM has a bigger development engine because of a small existing base and strong ramp up in build rate in recent years). On a pure greenfield development basis, Oceania, Arvida, and Metlife have a land

bank that is less than 5% of their existing portfolio. Hence, these companies tend to have higher dividend payout ratios.

SUM Landbank - 2670 RU's and 412 care beds.
Current Portfolio - 3000 RU's and 748 care beds.
4400 residents.
Build rate - 450 units.
22 Completed Villages.

RYM Landbank - 14 new villages.
Current Portfolio - 5250 RU's and 4000 care beds.
1100 residents.
Build rate - 781 units.
32 Completed Villages.

Even at such a large base, RYM wants to double its size every 5 years. They want to complete 2 new villages in NZ and 2 in Australia every year going forward. SUM has a good development execution engine. It has grown its development portfolio at 18.5% CAGR since inception in 1999, 12% in the last 10 years and 13.6% since its IPO in 2011.

SUM with its increased financial capacity has started to focus on larger urban villages like RYM. For example, 44% of SUM's incremental supply will come from Auckland and around 23% from Christchurch.

RYM has had a strong entry into Australia with its Weary Dunlop Retirement Village in Wheelers Hill. Ryman's first Victorian village, was extremely well received, with the management reporting that sales of the units were the fastest they had ever experienced. The integrated approach to retirement villages and aged care are not common in the Australian market. Based on the success of Weary Dunlop and a strong waiting list for Brandon Park (an upcoming Victorian village set to open in 2018), it appears that Ryman's unique offering is an excellent fit for the market. SUM has informed that they would also like to get into the Australian market in the near future as the quality of competitors there is much lower and size of the opportunity bigger.

The ORA model is ideally well suited for the larger operators. It provides them economies of scale as they reuse designs, procure furniture and fittings at a cheaper rate etc. The scale has also allowed them to invest in technological activities such as the myRyman app to serve the elderly better. For example, as SUM's build rate started to move from 122 in 2011 to 303 in 2015 and 450 now, its development margins have scaled from 6% to 20%...

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3 Mid/Large Caps

All ideas within this category must be associated with companies whose respective market capitalizations were greater than US\$2B at the time of submission. 50% of the research on SumZero is mid/large-cap focused.



Winner

Best Mid/Large Caps

🔍 Tripadvisor Inc

Asset Class: **Equity**

Symbol: **TRIP:US**

Updated: **1/2/2018**

Submitted: **12/29/2017**

EXPECTED RETURN

108.9%

COMMUNITY RATING



BY:

Artem Fokin

BADGES:



CURRENTLY AT:

Caro-Kann Capital



LONG

ATTACHMENTS:



TIMEFRAME:

2-5 Years

SITUATION:

GARP

MARKET CAP:

4.5B USD

While everybody has focused on challenges in Hotels, TRIP has built 2 platform businesses with winner-take-all dynamics—Restaurants & Attractions. They alone will soon justify entire EV.



About Artem Fokin

Artem Fokin is the founder and portfolio manager of Caro-Kann Capital LLC, a hedge fund based in San Francisco. Prior to founding Caro-Kann, he was a principal at Outrider Management LLC. Before entering the investing industry, Artem was an attorney with Greenberg Traurig LLP in New York City. Artem earned an MBA from the Stanford GSB (Arjay Miller Scholar). Artem earned a Master of Laws degree from NYU School of Law (Newman Scholar) and a bachelor of law from the Higher School of Economics (Presidential Scholar) in Russia. Artem is admitted to the practice of law in the State of New York and is a dual citizen of the United States and Russia. Caro-Kann Capital's core investment principles include: (1) concentration when properly compensated, (2) risk is not equivalent to volatility, (3) non-economic selling can lead to attractive opportunities; (4) capital allocation is often underappreciated by the market, and (5) incentives and insider ownership are paramount.

About Caro-Kann Capital LLC

Caro-Kann Capital LLC is an investment manager that focuses primarily on special situations and compounders. Caro-Kann Capital is named after a chess defense that emphasizes building safety and defensible position before contemplating an offensive strategy. The Founder's substantial legal experience brings a greater ability to analyze complex corporate documentation accompanying extraordinary corporate events.

Tripadvisor Inc

Asset Class: **Equity** Symbol: **TRIP:US** Submitted: **12/30/2017** Updated: **1/2/2018**



BY:
Artem Fokin

CURRENTLY AT:
Caro-Kann Capital

BADGES:



Pricing & Return Details ↑ LONG	
EXPECTED RETURN	108.9%
INITIAL PRICE	34.61 USD
TARGET PRICE	75.00 USD

COMMUNITY RATING: ★★★★★

PERCENTILE: 50%

While everybody has focused on challenges in Hotels, TRIP has built 2 platform businesses with winner-take-all dynamics—Restaurants & Attractions. They alone will soon justify entire EV.



ASSET CLASS:
Equity



SITUATION:
Growth At
Reasonable Price



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
N/A



TIMEFRAME:
2-5 Years

Investment Thesis

TripAdvisor: Introduction

Please refer to the attached PDF for a formatted version that contains multiple charts, other visual images, and table of contents.

Yes, we know you have heard TripAdvisor pitched multiple times over the past three years. You have heard pitches \$30, \$50, and even \$70 “ago”. You are probably thinking what new this write up could tell me about Instant Booking, CPC prices next quarter and Priceline’s changes in its bidding strategy and a reallocation of its marketing budget toward non-performance based marketing channels. We will save the suspense here: we do not know the answers to those questions. Here is the good news: we do not need to.

Our thesis is straightforward. While everybody has been myopically focused on the challenges TripAdvisor has faced in its Hotel Business, over the past three and a half years the company quietly and with little fanfare has built two amazing platform businesses (i.e., businesses that bring demand and supply together and benefit from a network effect) – Restaurants and Attractions. Both businesses operate in markets with winner-take-all dynamics, and TripAdvisor has emerged as the winner.

These platform businesses have been losing money because of heavy sales and marketing expenses necessary to build the networks for almost all of their existence and have thus received very little attention from the sellside analysts, who often do not even model the Non-Hotel Business separately. The buy-side professionals have not paid much attention either. TripAdvisor itself has not helped by disclosing as little as possible about these businesses.

However, this is about to change as Restaurants and Attractions are on the verge of becoming massively profitable while continuing to grow their revenue. Vacation Rentals, the third Non-Hotel business, is already a solid profit contributor. LTM revenue of these three Non-Hotel Business businesses is ~\$347M (less than 25% of total TripAdvisor's revenue) while LTM Adjusted EBITDA¹ is mere ~\$38M which means ~11% margin. We expect that by 2022 revenue would increase ~2.5x while Adjusted EBITDA margins will reach 40% to 50% level (~\$450M Adjusted EBITDA). The enterprise value of entire TripAdvisor is less than \$4.4B today. We do not think that 2022 will be the year where the growth story ends since the Non-Hotel Business will be able to grow for many years beyond that. While the Non-Hotel Businesses' moat is already strong, it will get even stronger in a few years as their networks grow.

This massive growth coupled with radical, breakthrough margin expansion may sound hard to believe. That's why we have included a case study of OpenTable and covered its history from 2004 until 2013. We believe that TripAdvisor Restaurants and TripAdvisor Attractions will repeat OpenTable's path from negative ~46% EBITDA margins to positive ~40% EBITDA margins while growing revenue 16x over the same period (2004 – 2013; North American business only).

Our OpenTable case study demonstrates how platform businesses develop, evolve and gain scale on the top line which leads to massive increases in profitability. We also explain the mechanics behind it by analyzing unit economics and increased usage by network members. TripAdvisor Restaurants is pretty much the same business in Europe as OpenTable is in North America. While TripAdvisor Attractions operates in a different vertical, the business dynamics are very similar as well.

TripAdvisor's Non-Hotel Business has shown the same tangible and clearly identifiable signs of inflection over the past three quarters that OpenTable showed immediately before its meteoric rise. By extrapolating evidence and patterns from OpenTable's past, we were able to build conviction about TripAdvisor's future.

We are convinced that most market participants do not appreciate the quality of businesses that TripAdvisor has been building and at best apply linear thinking to non-linear businesses. We have not seen anybody perform the type of analysis we have performed coupled with applying lessons from studying other platform businesses.

In our base case we view TripAdvisor shares as a double in 4 – 5 years even if the Hotel Business performs at the depressed levels of 2016 – 2017. On top of this, there is plenty of open-ended upside optionality that we are not paying anything for.

In our bull case, Restaurants and Attractions will be worth more in a few years than the entire TripAdvisor market cap today. In other words, in our bull case we would get TripAdvisor Hotel Business and Vacation Rentals for free.

We also think that Mr. Market will start paying more attention in late 2018 or 2019. By that time continuous increases in profitability of the Non-Hotel Business will become too hard to ignore. Furthermore, the Non-Hotel Business growing Adjusted EBITDA will make the entire company's Adjusted EBITDA start growing again in 2018 or 2019. We think at that time Mr. Market will start figuring out what it has been missing.

By investing in TripAdvisor shares:

- We are investing in dominant platform businesses hidden in a plain sight.
- We will benefit from a multi-year growth runway.
- We are getting the Hotel Business for (almost) free!
- We see upside of ~100% in 4 – 5 years and 15%+ IRR with plenty of open-ended upside optionality that we are paying zero for.

This investment memorandum may seem long at first, but it is not. We have used lots of graphs, charts, and other visuals to make it flow and improve reader engagement. We think you will like it.

¹The only profitability metric that TripAdvisor discloses for the Non-Hotel Business is Adjusted EBITDA. Thus, for comparability purposes we are using Adjusted EBITDA despite we generally dislike “adjusted” numbers.

Why Does This Opportunity / Mispricing Exist?

Multiple factors contribute to the mispricing of TripAdvisor shares.

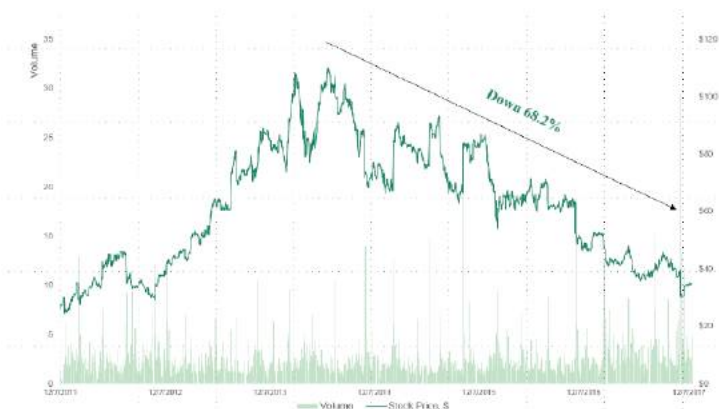
1. Myopic Focus on Challenges in Hotel Business

Both sellside and buy-side professionals are myopically focused on challenges that Hotel Business has faced. They are obsessed with the failed transition to Instant Booking, falling revenue per hotel shopper, and Priceline's reallocation of its marketing budget towards non-performance based channels as announced by Priceline management on 3Q 2017 Earnings Call and 2017-11-07 CEO Glenn Fogel speech at the RBC Capital Markets TMT Conference.

Those challenges and concerns are very real, and we are not dismissing them. However, these concerns have overshadowed the incredible platform businesses with winner-take-all dynamics that TripAdvisor has been quietly building over the past three and a half years.

2. Investor Fatigue

The investor fatigue with TripAdvisor shares is very real. Just look at this graph!



TRIP shares are down ~70% since their top in 2014, and one is hard pressed to find any investor who made money in TRIP shares on the long side over the past few years.

3. Tech Is Often Ignored by Many Traditional Value Investors

With TripAdvisor shares down by ~70% and close to its multi-year low, one would expect that value investors would be bottom fishing. However, we do not think many value investors are looking into TripAdvisor because traditional value investors often shy away from technology stocks and TripAdvisor is a technology company.

As a result, TripAdvisor is in no man's land: growth investors have left disappointed and value investors never came.

4. Limited Disclosure about Non-Hotel Businesses

TripAdvisor provides extremely limited disclosure about its Non-Hotel businesses which prevents them from shining. To fully appreciate the strength on Non-Hotel businesses an investor needs to look intently and know what to look for in advance. Not many people have done this, which is understandable.

5. Linear Thinking in Non-Linear Context

Linear thinking cannot apply to platforms – i.e., businesses that bring together supply and demand and benefit from the network effect. Yet, we believe that most investors approach TripAdvisor with linear thinking. This mismatch is one of the biggest contributors to why TripAdvisor is misunderstood and undervalued.

Where Does Our Variant Perception Come From?

Let's assume that these mispricing factors indeed exist. The question becomes *why we figured out this out*. We believe there were several factors that helped us.

1. We Never Owned TripAdvisor Shares Prior to August 2017

We never invested in TripAdvisor before August 2017 when we established our initial positions. After TripAdvisor released its 3Q 2017 and Mr. Market did not like them (to put it mildly!), we substantially increased our position.

The lack of pre-August 2017 relationship with TripAdvisor allowed us to come with fresh eyes and evaluate the attractiveness of TRIP businesses relative to its share price. This was our advantage over many other prior shareholders of TripAdvisor who lost substantial amounts of money over the past few years.

2. Knowledge of Platform Businesses

We have spent lots of time studying platform businesses (i.e., businesses that bring together supply and demand and benefit from the network effect) and we know how poorly their financials look at the beginning and how lucrative such businesses become once they scale.

Our initial hypothesis was that ***TripAdvisor has a few platform businesses hidden within it. So we knew what to look for before we started looking!***

3. Non-Hotel Business Is the Core of Our Investment Thesis

Only after we have combined our knowledge of platform businesses with studying what TripAdvisor has been doing over the past 3 – 4 years, we have realized what a gem TripAdvisor is!!! As a result, we base our investment thesis on Non-Hotel business while both the sellside and buy-side are myopically focused on Hotel Business and the challenges it has experienced.

Capital Structure at a Glance

Below we provide a snapshot of TripAdvisor's capital structure.

TripAdvisor's balance sheet is incredibly robust with substantial net cash position.

F/D S/O, min	139
Share price, \$	\$35.03
Market Cap, min \$	4,869
Debt, min \$	272
Cash, min \$	750
Short-term marketable securities, min \$	13
Long-term marketable securities, min \$	6
Cash and Cash Equivalents, min \$	769
EV, min \$	4,372

What Does TripAdvisor Do?

Our readers are most likely well familiar with TripAdvisor and its product and services. Hence, we will describe its business only briefly.

TripAdvisor offers a website and an app where users can read and post reviews about hotels, restaurants, attractions (museums, palaces, castles, tours, etc.), and vacation rentals. TripAdvisor features user-created content which means that TripAdvisor itself spends next to nothing to develop the content: it simply provides a platform and infrastructure for its users to share their reviews.

TripAdvisor benefits from a strong network effect and a virtuous cycle. If you want to read reviews when choosing a hotel, you would go to the TripAdvisor website or app because this is where people have posted their reviews and will likely keep posting them. The same logic applies if you want to post a review: why would you post a review on a website other than the one with most viewership (i.e., TripAdvisor)?

In addition, users can compare hotel prices and book hotels, vacation rental properties, attraction, and restaurants on www.tripadvisor.com and through the app.

TripAdvisor Reporting Segments

TripAdvisor has two reporting segments:

- Segment #1: Hotel Business
- Segment #2: Non-Hotel Business.

Importantly, the Non-Hotel Business includes three sub-segments:

- Subsegment #2.1: Restaurants
- Subsegment #2.2: Attractions
- Subsegment #2.3: Vacation Rentals

TripAdvisor discloses revenue and Adjusted EBITDA (i.e., EBITDA plus stock-based compensation (“SBC”)) for each of its two segments – Hotel and Non-Hotel – since 2014.

However, TripAdvisor discloses ***no financial metrics for subsegments within the Non-Hotel Business***: Restaurants, Attractions, and Vacation Rentals. This makes conducting deep analysis more difficult and, as we mentioned before, contributes to mispricing.

Historical Case Study: OpenTable

1. Why Do We Want to Introduce a Historical Case Study of OpenTable?

Before we dive into TripAdvisor and evaluate platform businesses that it has been building, we would like to go back in history and share a case study of OpenTable.

There are a few reasons why we want to do this.



First, OpenTable is a platform business and studying it has helped us develop a better understanding and appreciation of how companies build platform businesses

and how financial characteristics of such platform businesses evolve over time. This background knowledge helped us identify TripAdvisor as a potentially attractive investment and later guided our research efforts which culminated in making an investment in TripAdvisor shares.

Second, OpenTable is extremely comparable to TripAdvisor Restaurants business: the similarities are simply striking!

2. What Is OpenTable and How Will We Conduct Our Case Study?

OpenTable probably needs little introduction as our readers have probably used the OpenTable website or app. We are avid users ourselves. Put simply, OpenTable brings together supply (restaurants’ perishable inventory – i.e., dinner tables on a particular night) and demand (diners) and enables diners to book a restaurant either on its website or via the OpenTable app.

OpenTable was launched in 1998 in San Francisco and went public in 2009. In 2014 Priceline acquired OpenTable (more on this below). OpenTable initially operated only in the United States but later expanded internationally.

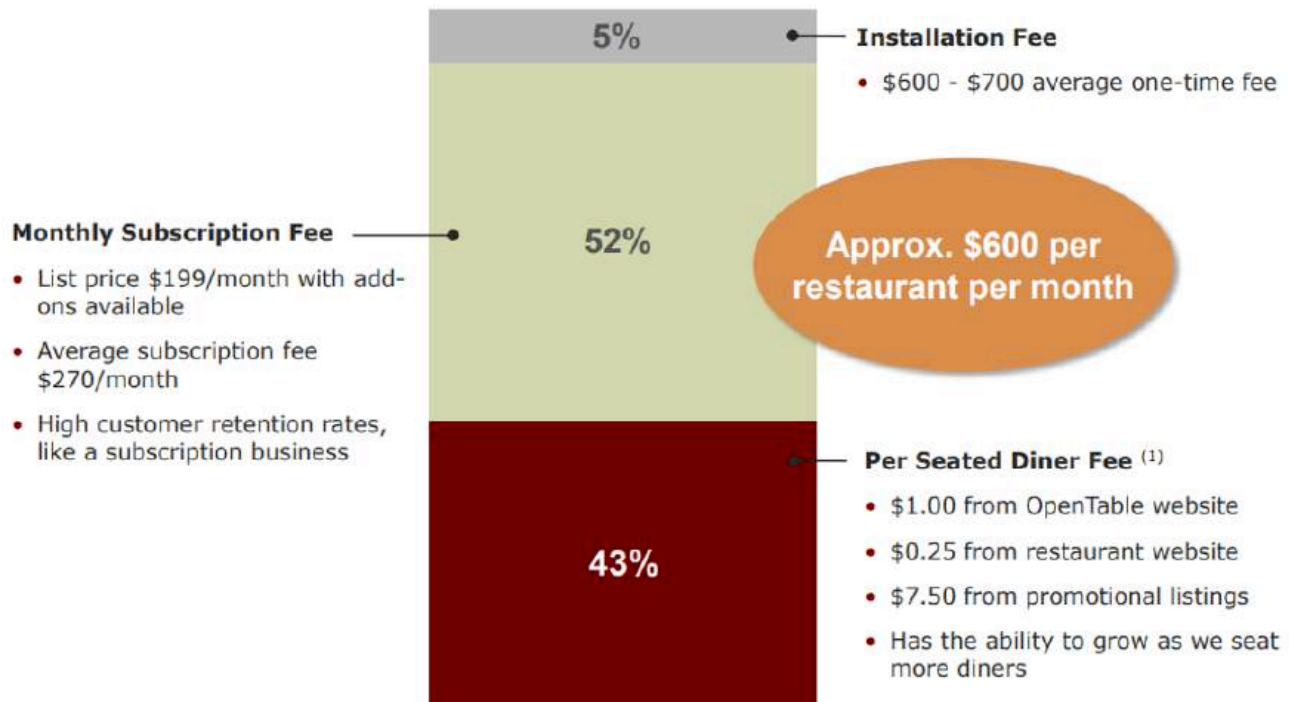
To derive important lessons from a case study we need to follow a platform business from its early days to maturity / reaching scale. OpenTable’s international business did not reach scale by the time when OpenTable was acquired and stopped reporting financial and operating data. As a result, we do not have a sufficiently long history and data for OpenTable’s international business to do an insightful historical analysis. Thus, in our case study we will focus only on OpenTable’s business in North America because it matured and reached scale. Analyzing it provides valuable lessons.

3. How Did OpenTable Make Money?

Let’s go back to 2009 and see how OpenTable generated its revenue and earnings. This is how OpenTable answered this question in its investor presentation.

We Have A Simple, Predictable Revenue Model

Contribution to 2009 Revenue



Source: OpenTable Corporate Presentation 2010 <http://files.shareholder.com/downloads/ABEA-2TKK09/1013420981x0x393323/874d4f1c-9789-470e-8291-ddd314f29ecb/OpenTable%20Corporate%20Presentation%20August%202010%20FINAL.pdf>.

OpenTable derived three revenue streams:

- Subscription revenue (~52% of total revenue in 2009).
- Reservations revenue (~43% of total revenue in 2009).
- Installation fees (~5% of total revenue in 2009).

Subscription Revenue

Subscription revenue was ~52% of total revenue in 2009. Subscription revenue consisted of monthly subscription fees paid by restaurants. OpenTable charged restaurants a monthly subscription fee of \$199 and offered various additional features. Given its success with upselling features, the average subscription fee per month was ~\$270.

To grow its subscription revenue OpenTable had three

options: (1) raise prices, (2) sign up more customers, and (3) come up with more features and upsell them to its customers. Not surprisingly, signing up more customers was the most logical and straightforward way to increase subscription revenue. However, it had two disadvantages: (1) it required investments in sales and marketing and (2) at some point OpenTable could run out of restaurants that would benefit from being on its platform. Thus, subscription revenue stream had somewhat limited scalability.

Reservations Revenue

The second revenue stream is reservations revenue which was ~43% of total revenue in 2009. Reservations revenue consisted of seated diner fees that OpenTable charged restaurants \$1 per person who ate there. So if you made a reservation for a party of four, then

OpenTable would charge a restaurant where you had dinner \$4.

As you can see, this was a **variable revenue stream**, and as adoption of OpenTable grew, OpenTable would grow this revenue stream without signing up any more restaurants and without coming up with any new features. In other words, this revenue stream was **extremely scalable** and required very little incremental costs (if any) to grow.

Back in 2009 it was logical to expect that reservations revenue would outgrow subscription revenue over the next few years.

Installation Fees

Installation fees were revenue stream #3 which constituted ~5% of total revenue in 2009. These fees were one time in nature and as a result were least important for growth of OpenTable.

4. Key Metrics and Growth Drivers

Modeling and projecting top line of OpenTable should have been fairly straightforward (at least in theory) because key metrics were very clear.

- Number of restaurants on the platform.
- Monthly subscription fee that OpenTable was charging restaurants.
- Number of seated diners – either in total or per restaurant.
- Fee per seated diner.
- Installation fees.

As you can see, the key variable metrics are number of restaurants on the platform and seated diners.

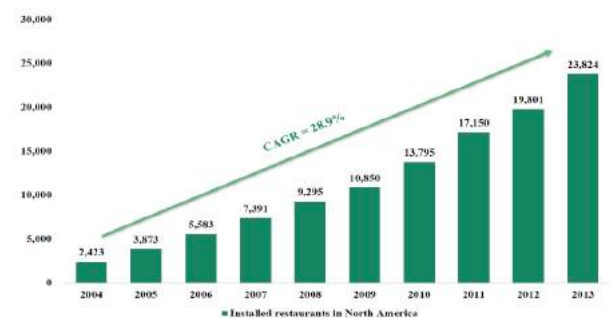
Now we can review how OpenTable performed operationally and financially over its history. We have data going back to 2004 since OpenTable went public in

2009. Our data ends in 2013 because Priceline acquired OpenTable in 1H 2014 and stopped disclosing OpenTable key metrics. Still, we have a long history that allows us to do a good historical analysis.

5. OpenTable North America Grew Installed Restaurants 10x over 9 Years (~29% CAGR)

This is how OpenTable grew its installed restaurants in North America:

OpenTable North America: Installed Restaurants Grew at ~29% CAGR for 9 Years or almost 10x!



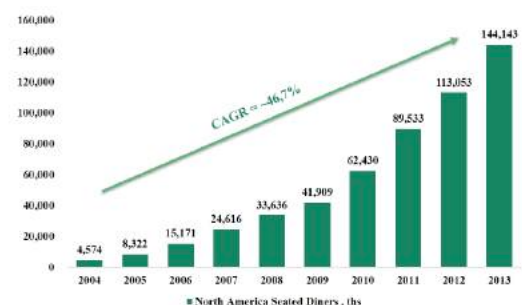
Source: OpenTable filings, Caro-Kann Capital research.

As you can see, installed restaurants grew **almost 10x** from 2004 to 2013.

6. OpenTable North America Seated Diners Grew More Than 31x or 3x More Than Installed Restaurants

If you think growth in installed restaurants was impressive, wait until we discuss growth in seated diners! Seated diners grew more than 31x over the same period which translates into mind-blowing CAGR of ~47%.

OpenTable North America: Seated Diners Grew Even Faster at ~47% CAGR Over 9 Years or more than 31x!

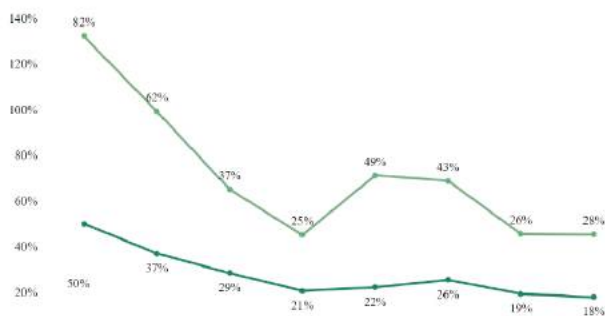


Source: OpenTable filings, Caro-Kann Capital research.

7. OpenTable North America Average Installed Restaurants Growth vs. Seated Diners Growth

To make comparisons between installed restaurants growth and seated diners growth more fair we will use growth in average installed restaurants. We lose a couple of years of data (2004 – 2005) because we cannot calculate growth rates for those years, but our overall comparison will be more robust. The results are below:

OpenTable North America: Seated Diners Grew Faster than Average Installed Restaurants Grew in Every Single Year



Source: OpenTable filings, Caro-Kann Capital research.

Seated diners grew faster than average installed restaurants every single year!

8. OpenTable North America: Seated Diners per Average Restaurant Grew 2.5x

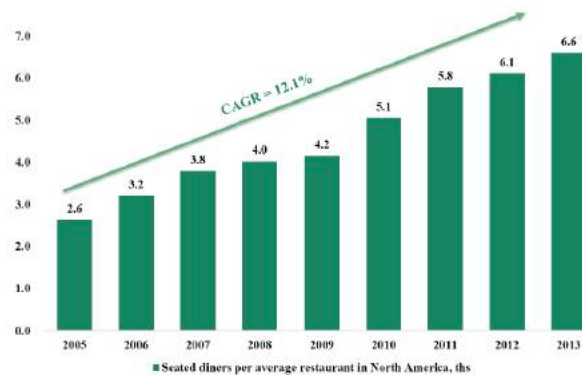
Two conclusions from the data above hold true:

- A massive gap exists between growth in installed restaurants (~10x in 2004 – 2013) and growth in seated diners (more than 31x in 2004 – 2013).
- Seated diners grew faster than average installed restaurants in every single year in 2006 – 2013.

Mathematically, this means only one thing: **seated diners per restaurant increased close to ~3x over the same period of 10 years.**

Indeed, seated diners per average restaurants grew ~2.5x over 2005 – 2013 period (please note that if we were using 2004 – 2013 period and installed restaurants at the end of the period as opposed to the average installed restaurants, the growth factor would be ~3x).

OpenTable North America: Seated Diners per Average Restaurant Grew at ~12% CAGR for 8 years or 2.5x!



Source: OpenTable filings, Caro-Kann Capital research.

9. What Does Growth of 2.5x in Seated Diners Per Average Restaurant Mean and How Should We Model a Platform Business?

How should we interpret growth in seated diners per average restaurant at a CAGR of ~12.1% over 9 years? This is our answer.

User engagement on the OpenTable platform increased substantially as the platform grew. Put simply, **with every new restaurant added to OpenTable's platform, restaurant goers were making online reservations more often at existing restaurants.**

We strongly believe that this dynamic is typical for all successful platform businesses benefiting from the network effect: **as the network grows, the user engagement increases.**

This dynamic has **critical implications for financial modelling** of a platform business which is radically different from modeling a traditional, linear business.

Let's see how we typically model a linear business. We will stay with the restaurant theme. Let's further imagine that we are analyzing a restaurant chain that has an appealing concept and an attractive customer value proposition. Today the company has 200 restaurants.

How would we model revenue of such company 10 years out? First and most importantly we would estimate how

many new units it would be able to open over the next 10 years. We would also model same store growth of a few percentage points per year that consists of price / ticket size growth and traffic growth. However, we would not model a substantial increase in the same store sales of 2x or 3x over 9 – 10 years (let alone traffic per restaurant!). There may have been one or two restaurant chains that successfully increased their revenue per restaurant 2x or even higher over a 10 year period but they are clearly exceptions, and their existence does not negate the broader point that we are making here.

The key point here is that **when a restaurant chain opens more units, it does not make its existing units more attractive and does not radically increase the number of diners at existing restaurants.**

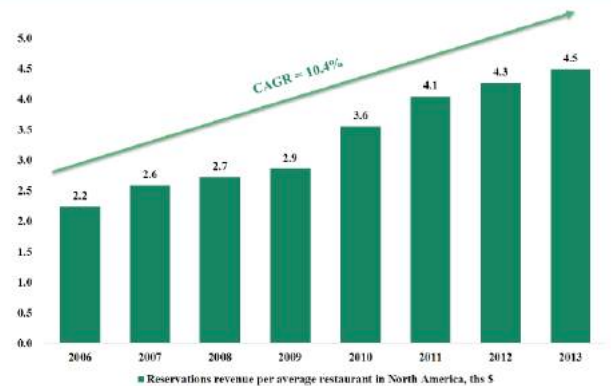
As we saw with OpenTable, **the platform business works differently** and as more and more restaurants joined the platform, **the value of the platform and usage increased dramatically.** In addition, using the OpenTable website or app was habit forming: after you made online reservations a few times, you would keep doing that! There is no attractive alternative unless you want to make your reservations the old-fashioned way – i.e., by calling. As a result, **as more restaurants joined the platform, OpenTable was able to facilitate more “transactions” between its existing restaurants and diners.**

The implications for financial modelling are **paramount**. When we model a successful network business, **we need to model not only the increase in active participants but also their increased engagement.** These two ingredients result in non-linear growth of platform businesses’ revenue which is strikingly different from how we model linear businesses that grow linearly.

10. OpenTable North America: Growth in Seated Diners Fueled Growth in Reservations Revenue per Average Restaurant that Grew at ~10.4% CAGR

Increasing engagement on the platform and rapid growth in seated diners per average restaurant led to reservations revenue per average restaurant growing at ~10.4% CAGR in 2006 – 2013 or ~2x.

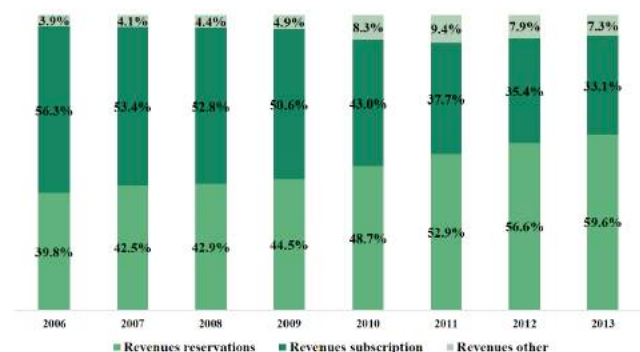
OpenTable North America: Reservations Revenue per Average Restaurant Grew at ~10.4% CAGR for 7 Years or 2x!



Source: OpenTable filings, Caro-Kann Capital research.

Growth in seated diners per average restaurant also led to revenue reservations becoming the largest revenue stream by 2010.

OpenTable North America: Reservations Revenue Grew as % of Total from Less than 40% to Almost 60%



Source: OpenTable filings, Caro-Kann Capital research.

Now when we have analyzed how OpenTable grew its revenue and what that means for how we should think about modelling revenue growth for platform businesses, we can move to OpenTable’s profitability evolution. Our goal is to learn from OpenTable’s profitability evolution over the years and apply those lessons to other platform businesses.

11. OpenTable North America: How Profitability Evolved and What It Means for Profitability of Platform Businesses

OpenTable North American EBITDA margins evolved from **negative ~46% to positive ~41% over the course of 10 years**. This is a **massive change of ~87 percentage points**. We will be hard pressed to find a traditional, linear business that has completed a similar transition.

What makes platform businesses so radically different from linear businesses as far as profitability evolution goes? The answer boils down to unit economics.

Linear Business Profitability Evolution

A typical linear business can start making money from its early days. Maybe not from day #1 but definitely from the early days. This is because each separate unit of a linear business already delivers value to its customers. Think of a grocery store or a pizza place in your neighborhood. As soon as they open, you as a customer can derive value as long as their product offering is robust: a grocery store carries enough SKUs to satisfy your needs and pizza tastes great. You as a customer do not really care how many stores or pizza joints such company has nationwide or even in your state because those aspects have zero implications for your customer experience. This allows each particular unit to derive a profit from the early days. On top of that, the costs of running one pizza joint are commensurate with the revenue that such pizza joint can derive. Once a linear business grows and expands by opening more units, its profit margins improve somewhat but not radically because many costs are still variable and they will grow hand in hand with revenue.

Platform Business Profitability Evolution

Platform businesses operate differently. In the early days the network is small, and the platform business can only bring very limited supply and very limited demand together. Thus, it can deliver only limited value to its customers. As a result, it cannot monetize well. At the same time the costs to operate the platform business are high even at the beginning when the number of network participants is small. Both revenue and costs of a platform business in the early days are radically different from revenue and costs of a linear business.

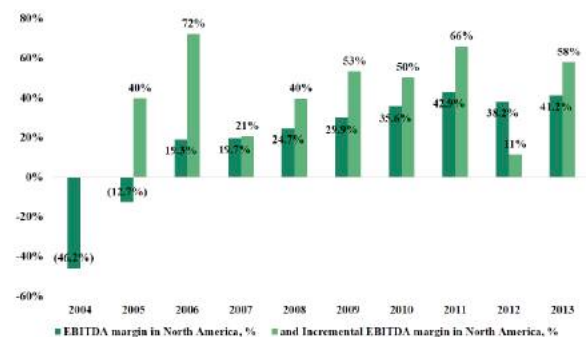
As the network grows, and the platform business brings more and more supply and demand together, its customer value proposition improves drastically. When this inflection point happens, the platform business can monetize well and as a result it becomes profitable. On top of this, once a platform business scales, its costs grow significantly slower than revenue which results in rapid margin expansion. The costs grow significantly slower than revenue because most of the costs are fixed and variable costs are quite moderate.

With this background, we can go back to OpenTable.

OpenTable Profitability Evolution

Below we provide information about how EBITDA margins and incremental EBITDA margins of OpenTable changed in North America.

OpenTable North America: EBITDA Margins and Incremental EBITDA Margins – ALWAYS Watch for Incremental Margins



Source: OpenTable filings, Caro-Kann Capital research.

Incremental EBITDA margins are equal change in EBITDA divided by change in revenue. We use year-over-year changes. We cannot calculate incremental EBITDA margins for 2004 given lack of financial data for 2003.

- These are main lessons from the EBITDA and incremental EBITDA margin analysis.
- Incremental EBITDA margins are massive and generally run at 40% to 50% and often even above that.

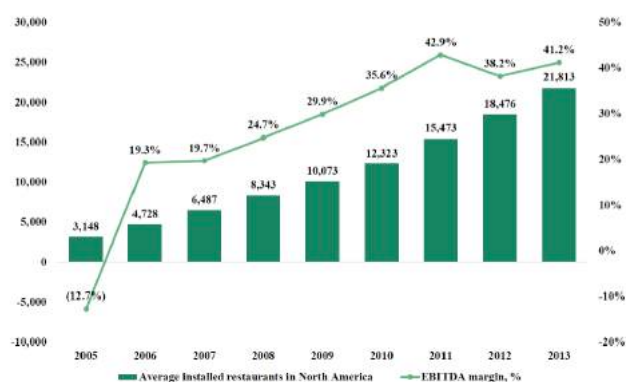
- Radical improvement in incremental EBITDA margins is the best leading indicator of a future significant improvement in EBITDA margins. Please refer to 2004 – 2005 time period. In 2005 EBITDA margins improved from negative ~46.2% to negative ~12.7% which is a substantial improvement. However, incremental EBITDA margins in 2005 were massively positive at 40%. That was a leading indicator of EBITDA margins turning positive soon, which indeed happened in 2006: EBITDA margins were ~19.3% driven by incremental EBITDA margins expanding to ~72%.

- Platform business' margins can improve very quickly.

Please remember these three takeaways as they will be critical for understanding TripAdvisor's platform businesses.

It is also interesting to see how EBITDA margins improved with growth in average installed restaurants.

OpenTable North America: As More Restaurants Join the Platform, Margins Skyrocket



Source: OpenTable filings, Caro-Kann Capital research.

12. OpenTable: What's The Secret?

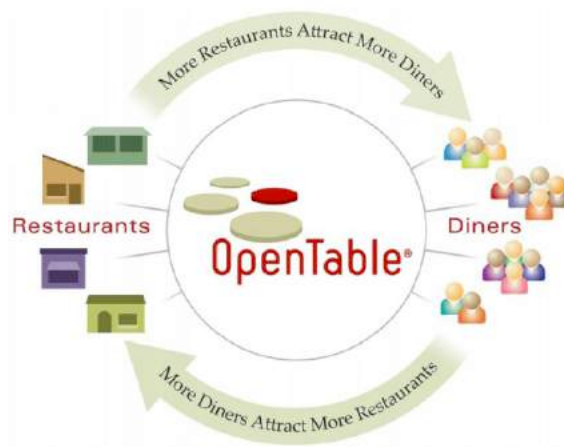
OpenTable's success as demonstrated by rapid revenue growth and a meteoric rise in EBITDA margins begs a question: **what is behind such success and what is the secret recipe?**

The answer is simple: **OpenTable successfully got the virtuous cycle going where more supply brings more demand, more demand brings more supply, and more**

supply brings more ... lather, rinse, repeat.

This is how OpenTable itself described it:

Our Strategy



Our strategy is simple: We grow the OpenTable network by adding restaurants and attracting more diners. The more restaurant selection we offer to diners, the more diners use the system. The more diners use the system, the more value we offer to restaurants.

Source: OpenTable Corporate Presentation 2010

<http://files.shareholder.com/downloads/ABEA-2TKK09/1013420981x0x393323/874d4f1c-9789-470e-8291-ddd314f29ecb/OpenTable%20Corporate%20Presentation%20August%202010%20FINAL.pdf>

Such a virtuous cycle is very hard to start but once it gains momentum, it becomes extremely powerful. On top of this, this type of business is a **winner-take-all** business which has a **very strong moat** and is very difficult to disrupt as any potential entrants would face a chicken-and-egg problem. This highly scalable business model allows businesses to rapidly grow revenue with very modest growth in costs, which results in extraordinary high incremental margins.

13. Priceline Acquired OpenTable at ~48.7x EV/EBITDA

In 2014 Priceline acquired OpenTable for ~\$2.6B or ~\$103 per share.

Below we provide a valuation of OpenTable immediately before the announcement and valuation at the time of the acquisition.

Valuation of OpenTable: Before Acquisition vs. Acquisition Price

	Before Announcement	After Announcement
Share price, \$	70.4	103.0
F/D S/O, ths	23,443	26,121
Market Cap, \$ ths	1,651,090	2,690,460
Cash, \$ ths	\$103,469	\$103,469
Debt & Debt Equivalents, \$ ths	0	0
Enterprise Value, \$ ths	1,547,621	2,586,991
LTM Revenue, \$ ths	198,328	
LTM EBITDA, \$ ths	53,085	
Installed restaurants	31,583	
EV/LTM Revenue	7.8x	13.0x
EV/LTM EBITDA	29.2x	48.7x
EV/Installed restaurant, \$ ths	49.0	81.9

Source: OpenTable filings, Priceline filings, Caro-Kann Capital research.

Priceline paid astonishing ~13x LTM revenue, ~48.7x LTM EBITDA and ~\$82K per installed restaurant. Please note that these are companywide metrics as opposed to North American business only.

It is widely believed that Priceline wanted to fuel OpenTable's growth in Europe where Priceline has a very strong presence through www.booking.com.

"...while OpenTable intends to continue to pursue and invest in international expansion and its other growth initiatives, it intends to do so in a more measured and deliberate manner"

Source: 2016 Priceline 10-K.

14. Priceline Took Almost \$1B Goodwill Impairment on OpenTable Acquisition

In 3Q 2016 Priceline recognized a massive, almost \$1B goodwill impairment for its OpenTable acquisition. It was ~\$940.7M to be precise. The impairment was taken just slightly more than two years after Priceline bought OpenTable.

This is what Priceline filings stated about the goodwill impairment:

"The goodwill impairment is primarily the result of a change in OpenTable's business strategy that occurred during the third quarter of 2016."

Decoding the corporate language of the SEC filings, OpenTable's international expansion strategy failed.

Given such a large goodwill impairment, we would like to adjust OpenTable valuation for what Priceline should have paid for it – i.e., acquisition price minus goodwill impairment.

As you can see, Priceline should have paid pretty much the same price that OpenTable shares were trading at.

Now after we have completed a case study of OpenTable, we are ready to dive into TripAdvisor. OpenTable case study was fairly long, we promise that it will prove invaluable once we analyze and value TripAdvisor.

OpenTable Valuation that Priceline Should Have Paid Given Subsequent Massive Goodwill Impairment

	Before Announcement	Actual transaction
Enterprise Value, \$ ths	1,547,621	2,586,991
LTM Revenue, \$ ths	198,328	
LTM EBITDA, \$ ths	53,085	
Installed restaurants	31,583	
EV/LTM Revenue	7.8x	13.0x
EV/LTM EBITDA	29.2x	48.7x
EV/Installed restaurant, \$ ths	49.0	81.9
What PCLN <u>should</u> have paid (acquisition price minus goodwill impairment)		
Goodwill Impairment in 2016, \$ ths		940,700
EV that PCLN should have paid, \$ ths		1,646,291
EV/LTM Revenue		8.3x
EV/LTM EBITDA		31.0x
EV/Installed restaurant, \$ ths		52.1

Source: OpenTable filings, Priceline filings, Caro-Kann Capital research.

TripAdvisor Restaurants: A Great Platform Business That Nobody Is Paying Attention To



1. Restaurants' History: Evolution from Review Pages with Next to Zero Monetization to a Major Platform Business

Before 2014 TripAdvisor had millions of restaurants reviewed on its website and millions of users were visiting those pages to find a place to eat while travelling. Customers loved it! However, TripAdvisor barely monetized this traffic.

In 2Q 2014 TripAdvisor acquired La Fourchette, which was a game changer. After that TripAdvisor created the "real" restaurant business with huge monetization potential.

2. What Was La Fourchette at the Time of the Acquisition?

At the time of the acquisition La Fourchette was an online reservation restaurant platform with ~12,000 bookable restaurants and a very strong presence in France and Spain. La Fourchette product was very similar to OpenTable's product.

TripAdvisor never disclosed the acquisition price.

Interestingly enough, TripAdvisor acquired La Fourchette around the same time when Priceline acquired OpenTable. Both Priceline and TripAdvisor had

ambitions of conquering online restaurant reservations space in Europe.

This is what TripAdvisor management said about La Fourchette at that time.

“La Fourchette has already achieved scale in these two large markets. They have shown they can operate at a profit while growing at a fast clip, and they are loved by their restaurant partners and diners alike.”

Source: 1Q 2014 TripAdvisor Earnings Call.

3. TripAdvisor Management Clearly Outlined Its Expansion Strategy Once It Acquired La Fourchette

Again it makes sense to go back in time and see what management said at the time of the acquisition about its strategy.

“La Fourchette is growing rapidly, and TripAdvisor can help fuel even faster future growth by turning some portion of our incredible amount of global restaurant traffic into seated diners.”

Source: 1Q 2014 TripAdvisor Earnings Call.

TripAdvisor provided two critical ingredients to fuel La Fourchette's growth:

- Traffic and
- Growth capital.

TripAdvisor management had an ambitious vision for its Restaurants business:

“I am thinking about building the restaurant business to be very meaningful for TripAdvisor over a three to five-plus year timeframe and that's going to take more than a quarter or two of investment dollars”

(3Q 2014 TRIP Earnings Call)

Source: 1Q 2014 TripAdvisor Earnings Call.

As you can see, management also warned that transforming La Fourchette into a major business within TripAdvisor will take 3 to 5 years or even longer and will require investments over a few years.

The core of the strategy was to expand into more international markets either organically or through tuck-on acquisitions. We believe that TripAdvisor management used buy vs. build logic in such situations. For example, TripAdvisor acquired Dimmi in 2Q 2015 to enter Australia.

4. Restaurants: Great Product and User Experience

TripAdvisor did not lose any time and improved the product fast after it acquired La Fourchette.

In 2Q 2014 restaurant goers could make reservations on La Fourchette website and via app. However, in 3Q 2014 TripAdvisor launched its **Instant Reservation feature** for restaurants on its own platform. In other words, visitors of www.tripadvisor.com gained ability to make reservations right on the website or through the app when they read restaurant reviews and found a restaurant at which they wished to dine. Needless to say, this is an amazing customer experience! Think about a typical use case here: you are in a foreign country, you do not speak the language, and you want to have a nice dinner. Your typical route is to go through a hotel concierge and trust their taste and recommendations. But what if you are staying at an Airbnb? Or what if you chose an inexpensive hostel? Now you can just rely on TripAdvisor for both research and reservations!

5. TripAdvisor Restaurants Business Serves Both Locals and Travelers

We also need to address a common misconception as some people believe that TripAdvisor Restaurants business serves only tourists. This is simply not true. TripAdvisor Restaurants business serves *both locals and travelers*. Travelers usually use www.tripadvisor.com or TripAdvisor app while locals use the La Fourchette website or app. In some countries locals will be using another website or app that is still owned by TripAdvisor Restaurants.

6. How Does TripAdvisor Restaurants Make Money?

TripAdvisor Restaurants makes money in a way that has striking similarities to how OpenTable makes money. Let's dive more into this.

Below is a screenshot from La Fourchette website that outlines a product / service offering for restaurants.

Source: <https://www.theforkmanager.com/prices/>

TripAdvisor Restaurants have two important revenue streams:

1. Subscription revenue.
2. Reservations revenue / seated diner fees.

Subscription revenue

Similar to OpenTable, TripAdvisor Restaurants charges monthly subscription fees to restaurants on its platform. It has three tiers of pricing: €0, €59, and €89. For discussion purposes we will use a current FX exchange rate of USD : EUR of 1.20.

We do not know the tier mix among restaurants on TripAdvisor platform because this has never been disclosed. For illustrative purposes we assume that ~55% of restaurants go with €0 pricing, ~35% of restaurants go with €59 offering, and remaining ~15% choose €89 plan. This brings the weighted average monthly subscription fee to ~€30 or \$36 per month.

This compares very unfavorably to what OpenTable was charging back in 2009: \$270 on average. This translates into a 7.5x difference.

Reservations Revenue / Seated Diner Fees

Similar to OpenTable, TripAdvisor Restaurants charges a fee per seated diner. However, unlike OpenTable which...

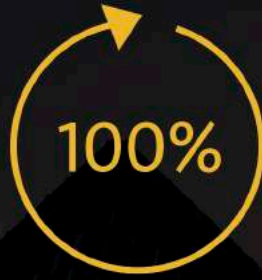
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Best Mid/Large Caps

Walt Disney Co/the

Asset Class: **Equity**

Symbol: **DIS:US**

Updated: **12/31/2017**

Submitted: **12/28/2017**

EXPECTED RETURN

54%

COMMUNITY RATING



BY:

Jonathan Tunick

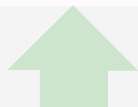
RECENT RANKING:

★ **#19 Long**

CURRENTLY AT:

Vitalogy Capital Partners

BADGES:



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Event / Spec. Sit

MARKET CAP:

166.3B USD

Hedge Fund Hotel formula: i) Merger math ii) incentives iii) strategic value iv) sentiment and v) embedded options creates a “recipe” with explosive earnings power for a beaten up sector



About Jonathan Tunick

Jonathan Tunick is the Founder and Chief Investment Officer of Vitalogy. He is responsible for all portfolio, investment and risk management decisions at the Firm. Previously, Mr. Tunick was Head of Equity Opportunities/Portfolio Manager at Magnetar Capital. Mr. Tunick served on the investment committee of the event-driven fund. Prior to that, Mr. Tunick was Head of the event-driven strategy and Portfolio Manager at Balyasny Asset Management. Before that, he was a Portfolio Manager at Pentwater Capital Management. Mr. Tunick also worked with former investment professionals of the Field and Pritzker families on various special situations including leveraged buyouts. He also held analyst and associate positions at Piper Jaffray as a member of the investment banking team specializing in corporate finance and M&A. Mr. Tunick received a B.S. in finance and management from the University of Colorado, Boulder.

About Vitalogy Capital Partners

Hedge fund partnered with established \$2 billion dollar private equity and credit firm • Extensive corporate action universe examined in the context of both current and historical precedent • Invest selectively in situations where we believe the marketplace has overreacted to a dislocation, or underreacted to a clearing event • Avoid crowded trades that may be subject to the behavioral whims of other investors • Short positions contribute alpha and also serve to balance the portfolio • Utilize entire capital structure • Asymmetrical trade structuring • Continual examination of performance attribution

Walt Disney Co/The

Asset Class: **Equity** Symbol: **DIS:US** Submitted: **12/28/2017** Updated: **12/31/2017**



BY:
Jonathan Tunick

CURRENTLY AT:
Vitalogy Capital Partners

RECENT RANKING:
★ **#19 Long - Dec '17**

BADGES:

15 4

COMMUNITY RATING: ★★★★★

PERCENTILE: 55%

Pricing & Return Details ↑ LONG

EXPECTED RETURN **54.0%**

INITIAL PRICE **108.05 USD**

TARGET PRICE **170.00 USD**

Hedge Fund Hotel formula: i) Merger math ii) incentives iii) strategic value iv) sentiment and v) embedded options creates a “recipe” with explosive earnings power for a beaten up sector



ASSET CLASS:
Equity



SITUATION:
Event / Special Situations



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
**M&A/Buyout
Target & Management Change**



TIMEFRAME:
1-2 Years

Investment Thesis

Diversified Media – Long:

“...it was all started by a mouse” - Walt Disney

[~20% + multi-year IRR potential]

Situation Overview / Why Do We Have This Opportunity?

Legacy diversified media has been a successful secular, funding short vs long FANG (FB, AMZN, NFLX, GOOG) over the last several years. Diversified media companies exhibit all the hallmarks of a secular short:

- M** Merger “math” and momentum
- O** Open-minded and incentivized management teams
- U** Under-appreciated strategic value
- S** Sentiment re-set / pattern recognition / technical factors
- E** Embedded options

**An Explosive Recipe /
The Next Thematic
Hedge Fund Hotel**

1. Industry Headwinds: The near ubiquity of mobile devices and connected TVs, increasing internet access speeds and an explosion of high quality content creation has caused material disruption throughout the media landscape. The proliferation of over-the-top (OTT) media platforms like Netflix, Amazon, Youtube, and others, and the impact it has had on cable networks and diversified media companies is well documented. In the trailing twelve months since 3Q'17, the pay TV market is having its worst year on record, shedding ~3.0MM subscribers mostly due to cord cutting. As a result, diversified media companies and pure play cable networks have experienced material affiliate fee and advertising revenue headwinds

2. Regulatory Pressure: On November 20, 2017, the DOJ officially filed a civil antitrust lawsuit to block AT&T's proposed acquisition of Time Warner as the deal would lessen competition, hamper innovation and result in higher prices for consumers according to the complaint. This represents a departure from precedent in which vertical mergers' were routinely approved by the DOJ and FTC with the presence of various behavioral remedies. Newly appointed antitrust chief Makan Delrahim has emphasized his preference for structural remedies rather than behavioral remedies, which sets the stage for increased regulatory pressure going forward

3. Negative Sentiment: Over the past several years, a once in a generation Long / Short pair trade developed in which hedge funds and other equity investors piled into the "same side of the boat" buying FANG and shorting legacy media (rotten tomatoes).

Regulatory uncertainty as a result of the impending DOJ / AT&T court battle, crowd factor feeding negative, one-sided sentiment and unchallenging forward valuations with "cheap" embedded options have created an attractive entry catalyst in various diversified media companies.

We are LONG a basket of highly liquid diversified media companies, with forgiving reward vs risk profiles, including Disney, Fox and CBS. We believe that due to shifting industry dynamics and one-sided sentiment, these companies have the potential to become the next thematic hedge fund hotels.

We agree with the premise that linear TV viewership is in structural decline and are not combatting the short thesis in this regard. However, we don't believe those who are bearish appreciate how valuable owning content is as viewership habits shift to on-demand OTT platforms. We believe diversified media companies like Disney, Fox, CBS and Time Warner will play a central role in the evolving media ecosystem, and will likely lose less market share than feared and ultimately become key participants in the new "OTT bundle."



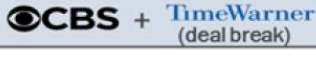

We don't know "who is going to do what to who." However, various speculated and announced transactions including Fox and Disney could be a tell that empire building management teams appear to be willing to merge with other media empires in order to protect against, partner with and or extract value from new entrants such as Apple, Facebook, Google, Amazon and Netflix.

Over the following pages we will present a "recipe" with explosive power that has the potential to create the next thematic hedge fund hotel involving:

Merger math and momentum,
Open-minded and incentivized management teams,
Under-appreciated strategic value,
Sentiment re-set / pattern recognition / technical factors and
Embded options. Now is the time to be long diversified media companies including Disney, Fox and CBS.

Event Path

- **11/6/17:** Press reports indicating that Disney recently held preliminary talks to buy various entertainment assets owned by 21st Century Fox
<https://www.nytimes.com/2017/11/06/business/media/disney-fox-deal.html>
- **11/16/17:** Comcast and Verizon reported to have expressed interest in various 21st Century Fox entertainment assets
<https://www.reuters.com/article/us-fox-m-a-comcast/comcast-verizon-approached-twenty-first-century-fox-to-buy-some-assets-sources-idUSKBN1DG34Z>

Transaction Scenarios	Revenue	EBITDA	EBITDA Margin	Accretion	Cash EPS
	~\$87Bn	~\$26Bn	~29-30%	~(3%) - 0%	~\$8.30
	~\$19Bn	~\$4.5Bn	~23-24%	~(3%) - 0%	~\$6.30
	~\$47Bn	~\$14Bn	~29-30%	~0% - 3%	~\$6.50
	~\$11Bn	~\$4Bn	37-38%	~10-15%	~\$3.00

- 11/18/17:** 21st Century Fox reported to want to retain control of its sports and news operations including Fox News, Fox Sports and the Fox Broadcast network
<https://www.thetimes.co.uk/edition/business/skys-the-limit-as-fox-set-for-break-up-bids-ffdq0sf37>
- 11/20/17:** The DOJ officially filed a civil antitrust lawsuit to block AT&T's proposed acquisition of Time Warner.
Link to DOJ Complaint:
<https://www.justice.gov/opa/press-release/file/1012896/download>
- 12/4/17:** The Financial Times reported that 21st Century Fox revived discussions to sell its international and entertainment assets to Disney. The discussions have reportedly been focused on India-based Star, Fox's 39% stake in Sky, cable network assets including FX and Fox's film studio
- 12/5/17:** CNBC's David Faber reported that an acquisition by Disney of 21st Century Fox could be announced the week of December 10th
<https://www.cnbc.com/2017/12/05/disney-and-fox-are-closing-in-on-deal-could-be-announced-next-week--sources.html>
- 12/14/17:** Disney announced the acquisition of Twenty-First Century Fox in an all stock deal after the spin-off of various Fox TV assets

officially announced a plan to merge in an all stock deal after the spin-off of various Fox TV assets. Empire building CEOs appear to be willing to merge with other media empires to strengthen original content offerings in order to protect against, partner with and or extract value from new entrants such as Apple, Facebook, Google, Amazon and Netflix.

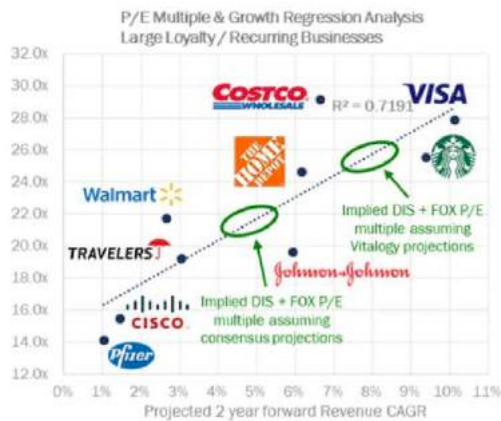
On the surface, M&A merger “math” appears uninteresting assuming consensus sell side projections for a Disney + Fox combination as well as other transaction scenarios (see appendices A-D for merger models in attached write up).

Direction of Fundamentals: Street merger models fail to account for the potential transformative power of a Disney + Fox transaction given the value of the combined company's content assets, top line opportunity within OTT, licensing synergy, theme park integration and international scale. A Disney + Fox OTT offering alone may be worth an incremental \$1.00-2.00 per share (refer to appendix E in attached write up for Vitalogy merger model). Refer to the attached write up for a pro forma EPS and target price comparison between Vitalogy and the street.

merger “math” and momentum

Beginning in early November, Disney, Comcast and Verizon were all reported to be interested in various Twenty-First Century Fox assets. On December 14, 2017, Disney and Fox





We struggle to name 10 companies in the S&P 500 that have a better equity story than pro forma Disney + Fox over the next several years. As a result, we believe the pro forma company should trade at a ~22x P/E multiple based on a regression analysis including other loyalty based / recurring revenue businesses. Assuming our blended fiscal year 2021/2022 EPS estimate of ~\$9.50 at a 22x P/E multiple implies a target price of \$210 per share (~20% multi-year IRR / ~100% total return). At Disney's current 24-month forward P/E multiple of 16x implies a target price of ~\$155 per share (~10% multi-year IRR / 40% total return).

Open-minded and incentivized management teams

Diversified media company CEO's have never been more incentivized to explore alternatives in order to gain negotiating leverage against new digital media entrants (Apple, Facebook, Google, Amazon, Netflix et al) as content is increasingly consumed via OTT platforms. TV viewership is not dead, it has shifted. Media CEO's are becoming increasingly open-minded about various transaction scenarios that strengthen content assets and increase scale in order to win market share in the new "OTT bundle." Recent public comments by CBS CEO Les Moonves and the announced Disney + Fox transaction indicate that media CEOs are looking to "skate to where the puck is going."

Les Moonves, CEO of CBS Corp:

Les Moonves has historically been a very promotional CEO, however, his tone has shifted recently and last month went

as far as admitting that CBS will likely need to explore various "partnerships" with other content and distribution companies to survive.

"Now we're competing against monstrous companies. Disney is six times as big as we are. Comcast is six times as big as we are. Netflix market cap is huge. Now Amazon, the number one company in the world, is producing content. We're sort of like an old-fashioned production company. We're a small guy. Eventually are we going to need to do partnerships with other content companies and distribution companies? The answer is probably yes" – **Les Moonves**, CEO of CBS Corp, November 2017

Additionally, ~46% and ~37% of Les Moonves' option awards vest at ~\$59.50 and ~\$67.00 per share respectively.

<https://www.sec.gov/Archives/edgar/data/813828/000119312517116304/d368348ddef14a.htm>

Rupert Murdoch and Family, Twenty-First Century Fox

The announced sale of Twenty-First Century Fox's entertainment assets to Disney suggests that Rupert Murdoch recognizes the power of a combination as he will own a material amount of the pro forma company. Additionally, a transaction allows him to reshape his remaining media empire around his passion, "The news." Finally, Murdoch appears to be focused on his "legacy" and setting up his family for the future given press reports speculating his son James may join pro forma Disney / Fox and report to Disney CEO Bob Iger.

https://www.cnn.com/amp/2017/12/08/why-the-murdochs-might-prefer-bob-iger-stay-at-disney.html?_twitter_impression=true

Bob Iger, CEO of Walt Disney:

Around the same time The Financial Times reported that Twenty-First Century Fox revived discussions with Disney, various press reports including the Wall Street Journal indicated that Bob Iger was likely to extend his tenure as Disney chairman and CEO if the company succeeded in acquiring 20th Century Fox. Contingent upon the transaction closing, Bob Iger's contract will be extended through 2021.

“Disney’s aim is to use all those assets (Fox) to transform itself into a powerhouse in the online, direct-to-consumer media business capable of taking on rivals like Netflix Inc. Mr. Iger has staked his legacy as CEO on leading that transformation” – **Wall Street Journal**

<https://www.wsj.com/articles/robert-iger-likely-to-extend-tenure-as-disney-ceo-past-2019-1512592562>

Under-appreciated strategic value

We agree with the premise that linear TV viewership is in structural decline as viewership habits shift to on-demand OTT offerings. However, the value of various diversified media company’s strategic content assets, specifically, Disney, Fox, CBS and Time Warner are under-appreciated. Original content creation capabilities, sports programming and international exposure are key to acquiring subscription video on-demand customers.

The analysis in the attached write-up attempts to rank the strategic assets of various diversified media and pure-play

cable companies based on content creation capabilities, sports programming and international exposure.

Disney, Fox, Time Warner and CBS have the most valuable collection of content, sports programming and international assets and will ultimately become an important part of the new OTT ecosystem / bundle. Discovery, Lionsgate and Viacom are likely “tier 2” content owners followed by pure play cable network AMC.

Viewership habits are shifting but **content will remain King..**

Sentiment re-set / pattern recognition / technical factors

There is currently ~\$7.5Bn of diversified media “short” market value (see attached write up for detail). Long FANG and short legacy media has created a once in a generation pair trade the past several years in which hedge funds and other equity investors piled into the “same side of the boat.”

Company	Strategic Content Assets	Sports Programming	International Exposure	Strategic Val.
Time Warner	HBO WB TNT tbs truTV CNN TURNER SPORTS	<ul style="list-style-type: none"> NBA (2024-25 season) MLB (2021) NCAA Tournament (2032) PGA (2019) 	<ul style="list-style-type: none"> ~30% international rev #1 multichannel provider in LatAm OTT int. soccer offering 	●
CBS	CBS TELEVISION STUDIOS CBS INTERACTIVE CBS FILMS CBS SPORTS	<ul style="list-style-type: none"> NFL (2022 season) NFL Super Bowl (2019, 2022) NCAA Tournament (2032) PGA / The Masters (2021) 	~15% international rev	◐
Discovery Scripps	TLC HGTV OWN EUROSPORT travel Discovery CHANNEL food ANIMAL PLANET	Eurosport (sports programming provider across Europe incl. the Olympics)	<ul style="list-style-type: none"> ~45% international rev Eurosport leading sport provider across Europe 	◐
LIONSGATE starz	LGF LIONSGATE TELEVISION starz encore	Partnership with the E-Sports League (ESL)	~25% international rev	◐
VIACOM	Paramount nickelodeon MTV VH1 COMEDY CENTRAL	Combat sports programming on Spike (Bellator MMA, Premier Boxing Championship)	~30% international rev	◐
AMC	AMC NETWORKS WE BBC AMERICA	N/A	~20% international rev	◐
Disney	WALT DISNEY PICTURES P X A R MARVEL abc studios LUCASFILM ESPN	<ul style="list-style-type: none"> \$45Bn in sports programming rights (NCAA, NFL, NBA, MLB, NHL, PGA, SEC Network) 	~25% international rev	●
21ST CENTURY FOX	20th CENTURY FOX FOX TELEVISION STUDIOS FOX FS1 FOX STAR INDIA FOX NEWS CHANNEL	<ul style="list-style-type: none"> \$54Bn in sports programming rights (NCAA, NFL, MLB, NBA, Soccer, UFC, Big Ten Network) 	~25% international rev	●

Media - Short Market Value

12/28/17

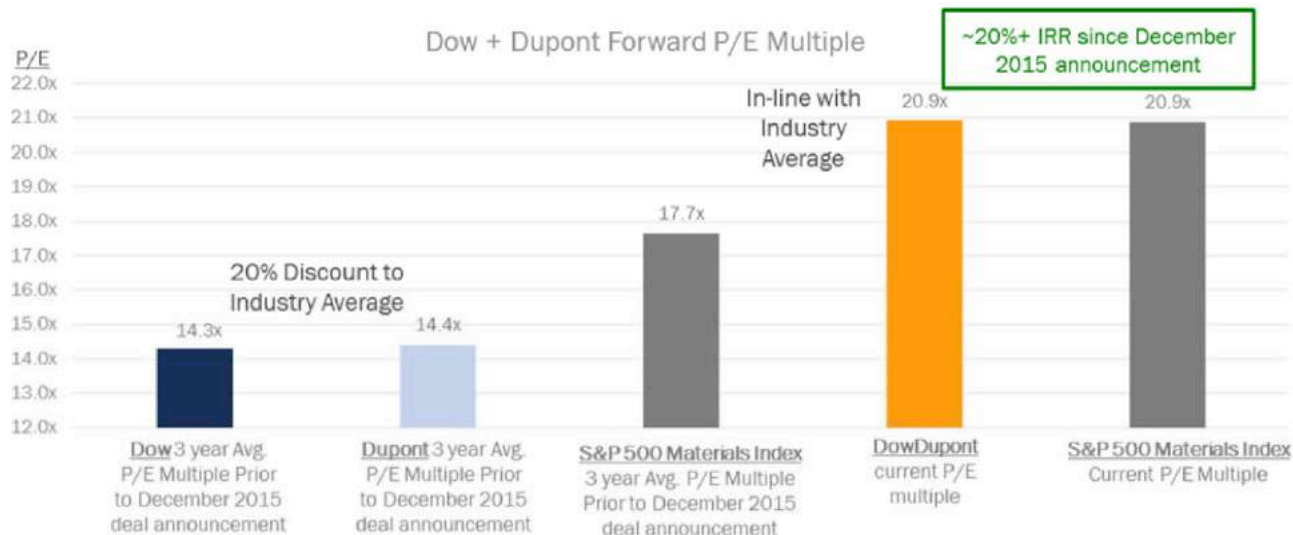
Ticker	Name	Current Price	Shares Short (000s)	Short Market Value (\$000s)
FOXA	Twenty-First Century Fox Inc	\$34.52	20,071	692,838
FOX	Twenty-First Century Fox Inc	\$34.12	9,365	319,548
DISCA	Discovery Communications Inc	\$22.38	37,208	832,704
AMCX	AMC Networks Inc	\$54.28	8,366	454,101
VIA	Viacom Inc	\$34.48	937	32,286
VIAB	Viacom Inc	\$30.50	27,268	831,659
LGF/A	Lions Gate Entertainment Corp	\$33.40	3,136	104,747
CBS	CBS Corp	\$59.09	13,997	827,111
TWX	Time Warner Inc	\$91.60	15,905	1,456,872
DIS	Walt Disney Co/The	\$107.53	18,876	2,029,747
Total				7,581,613

We have identified a handful of standout strategic mergers to serve as precedent for a Disney + Fox combination including: Dow and Dupont's merger of equals, Chase Bank's acquisition of J.P. Morgan and Citi's acquisition of Travelers Insurance. As was the case with DowDupont, J.P. Morgan Chase and Citi + Travelers, once market participants begin to recognize the transformational power of a Disney + Fox combination, the entire media industry may begin to outperform. This could create a media sentiment re-set as short sellers cover their positions and may have an impact on the long FANG trade as well.

Historically, successful acquirers in merger scenarios have been rewarded for below the line financial transformation (EPS accretion) as it became a straight forward "math exercise" for investors (capitalizing synergies). Platform company "roll ups" resemble compounders until the merger formula hits a wall. There is ample precedent for transactions that involved the combination of two large players in a sector with material cost synergies and little top-line transformation that turned out to be levered flops (Men's Wearhouse + Joseph A Banks, Anheuser-Busch + SABMiller, Newell + Jarden et al).

The most sustainable multi-year IRR transactions not only lead to below the line EPS accretion but also create top line transformation as a result of new product introductions, enhanced pricing power and expanded market opportunities. Dow and Dupont's merger of equals, Chase Bank's acquisition of J.P. Morgan and Citi's acquisition of Travelers Insurance were all transformational in nature and as a result, the pro forma company outperformed the broader market (see appendix F in attached write up).

Dow + Dupont: In the several years prior to the merger announcement in December 2015, both Dow and Dupont traded at a ~20% discount to the broader S&P 500 materials index given portfolio mix issues (natural gas liquids at Dow and agriculture at DuPont) and ongoing restructuring efforts yet to produce shareholder value which translated into low EPS growth. Sentiment shifted post the transaction announcement as the deal not only created cost saving benefits, but also top-line transformation (portfolio rationalization opportunities via spin-offs). As a result, pro forma DowDupont's P/E multiple closed the valuation discount to the S&P 500 materials index and outperformed the broader market.



Much like DowDupont, a Disney + Fox combination would be transformational as it would create arguably the most valuable collection of content in the world with massive scale to compete in the evolving media landscape. The transaction would open-up new market opportunities within OTT, enhance negotiating leverage with new entrants like Apple, Facebook, Google, Amazon and Netflix and materially increase international scale. Like DowDupont, we believe a similar shift in sentiment may result from a Disney + Fox transaction not only for the pro forma company but the entire media industry.

Various other technical screening factors are important to consider as well, including but not limited to: liquidity measured by market capitalization and average daily trading volume, debt to capital ratios and net leverage ratios.

Embedded options

Wall Street research models are currently not ascribing much or any value to diversified media company's future OTT opportunity. For example, various street merger models for a Disney + Fox combination yield accretion...

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Finalist

Best Mid/Large Caps

🔍 Micron Technology Inc

Asset Class: **Equity**

Symbol: **MU:US**

Updated: **1/2/2018**

Submitted: **12/18/2017**

EXPECTED RETURN

127.3%

COMMUNITY RATING



BY:

Eric Gregg

RECENT RANKING:

★ **#12 LTM**

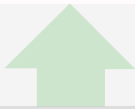
CURRENTLY AT:

**Four Tree Island
Advisory LLC**

BADGES:



7



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Event / Spec. Sit

MARKET CAP:

51.2B USD

Micron Technology - Changing JV Dynamic Major Catalyst, Hedge
Against Potential Conflict on Korean Peninsula, Fundamentally
Inexpensive Stock



About Eric Gregg

Eric is the founder and Principal of Four Tree Island Advisory LLC. He was formerly CEO of Oto Technologies LLC and a Director in the Investment Banking group at Credit Suisse. His professional experience ranges from money management to technology entrepreneurship to institutional investment banking. In the financial services industry for over 15 years, Eric worked at Goldman Sachs, Deutsche Bank, DLJ and Credit Suisse. His investment approach is grounded on "value" and "growth at a reasonable price" (GARP) metrics.



About Four Tree Island Advisory LLC

Four Tree Island Advisory (FTIA) is a registered investment advisor that stewards separately managed accounts. FTIA manages three distinct strategies; Capital Appreciation, Total Return, and an out-of-the money put selling strategy called Cash Yield. FTIA is a fundamentals driven, value based money manager that is market cap and sector agnostic.

Micron Technology Inc

Asset Class: **Equity** Symbol: **MU:US** Submitted: **12/18/2017** Updated: **1/2/2018**



BY:
Eric Gregg

CURRENTLY AT:
**Four Tree Island
Advisory LLC**

RECENT RANKING:
★ **#12 LTM - Nov '17**



COMMUNITY RATING: ★★★★★

PERCENTILE: 28%

Pricing & Return Details

↑ **LONG**

EXPECTED RETURN	127.3%
INITIAL PRICE	44.09 USD
TARGET PRICE	100.00 USD

Micron Technology - Changing JV Dynamic
Major Catalyst, Hedge Against Potential
Conflict on Korean Peninsula, Fundamentally
Inexpensive Stock



ASSET CLASS:
Equity



SITUATION:
**Event / Special
Situations**



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
**M&A/Buyout
Target**



TIMEFRAME:
1-2 Years

Investment Thesis

Micron Technology

**Changing JV Dynamic Major Catalyst, Hedge Against
Potential Conflict on Korean Peninsula, Fundamentally
Inexpensive Stock**

This Report Will Cover:

- Special situation scenario analysis associated with the Intel/Micron Flash Technologies JV (IMFT).
- Event driven analysis of how Micron should fair in the event of the Korean peninsula devolving into a military conflict.
- Fundamental analysis of Micron.

Scenario analysis around Intel/Micron Flash Technologies JV

Something potentially game changing occurs come January of 2019 that could compel Micron to be put into play in 2018. As of January 2019 Micron gains the right (for the first time since the JVs formation in 2006) to buy out Intel's 49% interest in IMFT.

Before going further on this event driven/scenario analysis - some background on Intel's Non-Volatile Solutions group and IMFT specifically, the outlook for 3D NAND and 3D Xpoint, and why Intel may be compelled to get out in front of 2019 with a bid to acquire either IMFT or Micron outright.

Valuation & Important Metrics				
Price	\$42.40		IBES Consensus	Fair Value
Shares	1,153	2017	\$4.96	\$50
Market Cap	\$48,898	2018	\$7.87	\$79
Net Debt	\$3,998	2019	\$6.77	\$68
Enterprise Value	\$52,896	2020	\$6.45	\$65
TTM EBITDA	\$9,747			
Last Q EBITDA Annualized	\$14,212	10 Year Median EV/EBITDA		6x
EV/TTM EBITDA	5.4	MU Stock Price at 6x		
EV/Last Q Annualized EBITDA	3.7	Last Q Annualized EBITDA		\$70
Note: Fair value arrived at by using either 10x P/E or 6x trailing last q annualized EBITDA				

MU vs. Peers P/2018 IBES Consensus EPS	
P/2018 IBES EPS	
Intel	13.6
Samsung	7
Western Digital	6.1
Micron	5.4
SK Hynix	4.4

IMFT was formed back in 2006 as a way for Micron and Intel to jointly address the flash memory market – which was growing substantially at the time on the back of consumer electronics like the iPod. While IMFT had varied results over its first few years in existence, it has turned into a juggernaut with the acceleration in demand of a unique memory that they produced called 3D Xpoint and firm NAND pricing. 3D Xpoint (pronounced 3D cross point) is 10x+ faster than NAND, less expensive than DRAM and a data center oriented product (an area of particular focus for Intel). For more information on 3D Xpoint read this article by Lucas Meariean from Computerworld: <https://www.computerworld.com/article/3194147/data-storage/faq-3d-xpoint-memory-nand-flash-killer-or-dram-replacement.html>

Even though revenues related to Intel's Non-Volatile Memory Solutions Group ("NSG" – which houses all NAND and 3D Xpoint products) account for only 6% of Intel's total revenues, NSG has been far-and-away the fastest growing segment in Intel's portfolio. See the table on the following page.

Intel's revenue growth in the first nine months of 2017 would have been a full 2% lower (4% instead of 6%) without Intel's NSG.

Product's sourced for NSG come from three facilities: IMFT's Utah plant (which produces planar NAND and 3D Xpoint), Intel's Dalian China plant (which produces 3D NAND), and additional NAND supply that Intel purchases from Micron's Singapore operation (which Intel purchases under a cost plus arrangement). I have been able to find no clear indication of how much of the NSG's supply comes from IMFT specifically (which has an enormous facility in Lehi, Utah) vs. its Dalian facility (which Intel is still retrofitting and building out capacity in). That said I believe it fair to estimate that a majority of NSG's revenues (75%?) is attributable to memory coming from IMFT because 100% of NSG's 3D Xpoint (the most strategic and differentiated memory product for Intel and Micron) supply is sourced from IMFT. Additionally, 3D Xpoint is meaningfully more expensive than 3D NAND. I've seen indications that it can be as much as 10x more expensive than 3D NAND per bit.

Micron provides enlightening disclosure on IMFT in its 10-K (bolding and underlining is my emphasis)

"Since 2006, we have owned 51% of IMFT, a joint venture between us and Intel to manufacture memory products exclusively for its members, who share the output of IMFT in proportion to their investment under a long-term supply agreement at prices approximating cost. In 2017, IMFT began to transition its manufacturing from NAND to 3D XPoint

	1st 9mo	1st 9mo				
Intel Segment Revenues	2017	2016	YoY Growth	Q3 2017	Q3 2016	YoY Growth
Client Computing Group	\$25,049	\$23,779	5%	\$8,860	\$8,892	0%
Data Center Group	\$13,482	\$12,568	7%	\$4,878	\$4,542	7%
IoT Group	\$2,290	\$1,912	20%	\$849	\$689	23%
Non-Volatile Memory Solutions Group	\$2,631	\$1,760	49%	\$891	\$649	37%
Programmable Solutions Group	\$1,334	\$1,249	7%	\$469	\$425	10%
All Other	\$922	\$1,745	-47%	\$202	\$581	-65%

memory products. We generally share with Intel the costs of product design and process development activities for NAND and 3D XPoint memory at IMFT and our other facilities. IMFT is governed by a Board of Managers for which the number of managers appointed by each member varies based on the members' respective ownership interests. The IMFT joint venture agreement extends through 2024 and includes certain buy-sell rights. Through December 2018, Intel can put to us, and **from January 2019 through December 2021, we can call from Intel, Intel's interest in IMFT, in either case, for an amount equal to the noncontrolling interest balance attributable to Intel at such time either member exercises its right.** If Intel exercises its put right, we can elect to set the closing date of the transaction to be any time within two years following such election by Intel and can elect to receive financing of the purchase price from Intel for one to two years from the closing date."

Annualizing the first nine months of Intel's NSG revenues sums to approximately \$3.5bn and appears to be growing at a ~50% clip as per the table at the top of this page. If we assume that 75% of those revenues are realizable because of supply that comes from IMFT, that suggests that ~\$2.7bn of this year's revenues will be attributable Intel's portion of supply from IMFT. Assume a 40% growth rate on those revenues in 2018, that takes that \$2.7bn to \$3.8bn. The non-controlling interest balance for Intel's investment is \$855mm per Intel's disclosure as of September 30, 2017 and that number has moved very little from quarter to quarter. Based on these high level numbers, it appears that come January 2019 Micron will have the ability to buy out the rest of the IMFT business from Intel for less than 0.23x trailing sales!

As Micron and Intel each trade at vastly higher valuations (MU trades at 2.5x ttm sales while Intel trades at 3.3x ttm sales) and Micron has exhibited an historical penchant towards consolidating the memory industry (Elpida 2013) and particularly partially owned subs (Inotera 2016), it would seem all but inevitable that Micron will exercise its highly attractive right to buy-in Intel's 49% minority stake in IMFT.

Outlook for the memory markets and strategic value of high exposure to leading edge memory technology

While there is debate about how pricing will evolve for NAND over the next 12-24 months (get your hands on recent MS research on Samsung entitled "Time for a Pause" and rebuttal research from a number of other Wall Street houses about trends in memory pricing), there is little debate about the near and long term demand outlook for non-volatile memory. Demand is expected to be robust to the tune of approximately 40%¹ per year bit demand growth through at least the rest of the decade. Between the rapid transition from HDD to all flash storage arrays (better performance, dramatically lower maintenance and energy costs, significantly smaller hardware footprint), moves to memory centric computing, high memory intensity associated with AI computing, and the transition to smarter and ultimately driverless cars, it is expected that demand growth for non-volatile memory will continue to be explosive for the better part of the next decade. DRAM is expected to grow at a 20+% CAGR for the foreseeable future with the biggest drivers being increasing need for mobile DRAM and high end DRAM for leading edge servers. While I haven't been able to uncover growth forecasts for 3D Xpoint memory specifically, given its performance benefits (vs. NAND) and price benefits (vs. DRAM) I believe that reasonable growth forecasts are likely to at least meet or in all likelihood exceed those of NAND (or 40%+ CAGR for at least the next few years).

In terms of strategic value of leading edge memory broadly, it is all but universally accepted that current trends in mobile, AI, cloud, big data, IoT, and other sectors are leading to much more memory intensity. 3D Xpoint is highly strategic for both Intel and Micron because it is so data center oriented. Further for Micron, it could be a real problem for Micron to not have 3D Xpoint in its product set if 3D Xpoint continues to make inroads to the detriment of 1x node DRAM or 64/96/or higher layer count 3D NAND.

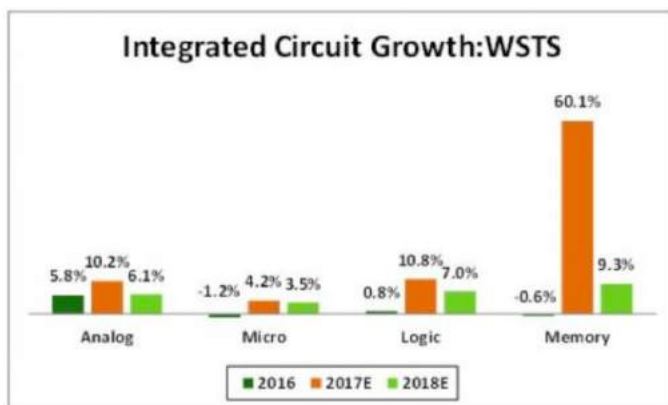
¹ Applied Materials has indicated in recent investor presentations that NAND bit demand growth could range between 40-60% over the medium term. They have specifically indicated that demand would be likely to track towards the higher end of that range if there's any meaningful penetration of autonomous vehicles due to high non-volatile memory intensity.

Motivations for Intel

Big picture, it could easily be argued that Intel has three imperatives:

- Top line growth
- Diversification
- Margin improvement

84% of Intel's YTD revenues were generated from its client computing and data center groups, which grew at a combined 6%. According to WSTS (World Semiconductor Trade Statistics), global memory revenues will grow at 60% in 2017 and over 9% in 2018 vs. inferior logic growth of 11% in 2017 and 7% in 2018.



Given that the lion's share of Intel's logic business is growing at a rate that's inferior to WSTS's estimates and given how much more robust the outlook is for memory vs. logic, it could credibly be argued that Intel is underexposed to memory and also underexposed to the segments of logic that are driving double digit global logic revenue growth in 2017.

There's also something that Intel will be battling come early 2018 that will be both a psychic and marketing blow. For the first time in history, Samsung is all but assured to become the largest global semiconductor manufacturer by revenues. Even more impressive, Samsung will assuredly have posted the highest level of profitability ever for a semiconductor company. Intel has held the perch of top global semiconductor manufacturer by revenues since 1993. Samsung has surged on the strength of its memory semiconductor revenues, which make up more than 82% of Samsung's semiconductor sales.

In terms of Intel's diversification imperative, Intel has evidenced that imperative by virtue of all the sizable acquisitions it has done this decade. This diversification strategy is very much in keeping with Andy Grove's "Only the Paranoid Survive" ethos.

Crystallizing all of the above, I've put together the following exhibit that lays out some core numbers for Samsung, Intel and Micron.

					Assume No Synergies	Assume \$3Bn in Synergies
	<u>Samsung Semiconductor</u>	<u>Intel</u>	<u>Micron</u>	<u>Intel+Micron</u>	<u>Intel+MU Difference vs. Samsung</u>	<u>Intel+MU Difference vs. Samsung</u>
<u>In billions of USD</u>						
<i>Trailing Twelve Months</i>						
Sales	\$61.9	\$62.1	\$20.3	\$82.4	\$20.5	\$20.5
Operating Profit	\$26.6	\$16.1	\$5.9	\$21.9	-\$4.7	-\$1.7
Operating Margins	43%	26%	29%	27%	-16%	-13%
<i>Last Quarter Annualized</i>						
Sales	\$72.5	\$64.4	\$24.6	\$89.0	\$16.5	\$16.5
Operating Profit	\$36.3	\$20.4	\$10.0	\$30.4	-\$5.8	-\$2.8
Operating Margins	50%	32%	41%	34%	-16%	-12%
% of Last Q Sales from Memory	82%	6%	100%	29%		

The above highlights:

1. How much more memory centric Samsung is vs. Intel (82% vs. 6% of revenues)
2. How much more profitable Samsung is than Intel (Samsung's operating margins currently run 1800bps higher than Intel – Micron's are 900bps higher)
3. How much of a difference an acquisition of Micron would make in terms of re-establishing revenue leadership, improving memory exposure and improving profitability/margins for Intel

In terms of the technological motivations, there are many industry experts that are increasingly subscribing to the view that we are moving towards a more memory centric computing model. That a number of the major growth vectors in semiconductors (IoT, mobile, big data, cloud, AI) will require dramatically more memory. Intel is a) underexposed to memory and b) at risk by virtue of the contractual arrangement in the IMFT JV of being compelled to sell the only manufacturing capacity/exposure the company currently has for 3D Xpoint. Intel has to be particularly sensitive to dramatically higher memory intensity in both the data center (a core focus area for the company) and looking out a couple years increasingly in the automobile (Mobileeye). Applied Materials has been highlighting at recent investor presentations that if even only 1% of automobiles become Level 3 or 4 autonomous vehicles, that there will be a need for 7x+ the total current amount of NAND production in the marketplace just to satisfy the memory intensity of autonomous driving. Intel announced in the context of the Mobileye deal that the Company “estimates the vehicle systems, data and services market opportunity {related to autonomous vehicles} to be up to \$70 billion by 2030.” Intel's purchase price for Mobileye represented 31x estimated 2017 sales!

Additionally, as attractive as the growth outlook for NAND and 3D Xpoint may be, what should be just as, if not even more, interesting for Intel is Micron's DRAM exposure. The DRAM market is currently more than 20% larger than the NAND market by total revenues and growing in excess of 20% (vs. single digit growth rates for the bulk of Intel's logic chips). The DRAM market is even more tightly controlled than the NAND market with only two

other competitors of significance (Samsung and SK Hynix) other than Micron. There are six major players in the NAND market (Samsung, SK Hynix, Toshiba, Western Digital, Micron and Intel). DRAM seemingly has higher technological barriers to entry than NAND especially at the leading edge nodes. Finally, China is expected to start competing in memory semiconductors in the coming years and current industry thinking is that China will be focusing more on NAND than DRAM because of the higher expected growth profile and seemingly lesser barriers to entry.

How this could play out

As alluded to earlier, Micron has a) been a consistent consolidator in the memory industry b) got to be eagerly awaiting its opportunity to buy in Intel's minority IMFT stake at less than 0.25x trailing revenues and c) plenty of capacity to buy-in that ~\$900mm stake. Micron delivered ~\$2bn of free cash flow last quarter alone and this quarter should be better.

It could easily be seen how Micron could make its intentions known to Intel at any point in the latter half of 2018. Beyond the points noted above, the primary drivers of Micron's decision are likely to be informed by a) Micron's outlook for the NAND and 3D Xpoint markets (the more optimistic they are the greater the motivation to exercise their option) b) memory pricing (if memory pricing and more importantly memory profitability hold up well, that should be another catalyst) and c) probably most importantly how much does Micron want to put itself in play? On this last point it should be recognized that Micron's relatively new CEO Sanjay Mehrotra (been at MU for seven months) came to Micron by way of being the former Sandisk CEO. Sanjay sold Sandisk to Western Digital and made himself (calculating from public disclosures) ~\$40mm in that process. I believe he would stand to make that much again in the event of a Micron change of control based on public disclosures. In my experience there are CEOs that are willing to sell at a reasonable price and there are CEOs that are basically unwilling to sell at any reasonable price. We know from past experience that Sanjay Mehrotra isn't the latter. There could be an argument that one of the reasons the board hired Sanjay is precisely because of his experience with Sandisk in its

sale process and how he managed a company with a very important JV.

One has to imagine that if Intel believes it as likely that Micron will exercise their purchase option, that Intel will have a decision to make and it could go one of four ways:

1. Decide to do nothing and let Micron effectively steal Intel's stake in IMFT (seems highly unlikely in my opinion).
2. Offer to buyout Micron's controlling stake in IMFT.
3. Offer to renegotiate the IMFT JV such that Intel offers to pay Micron some significant consideration (maybe as an upfront consideration, better contract pricing on flash, or some combination of the two) to push off Micron's purchase right.
4. Offer to buy Micron outright.

Discussing the latter three alternative

If Intel were to go down the path of making a bid for Micron's controlling stake in IMFT, it is likely that Micron would demand a premium valuation for its stake. Micron would presumably do this for three reasons:

1. Need to be compensated for giving up its assets associated with 3D Xpoint memory which is a threat to Micron's DRAM and NAND businesses.
2. Recognition of the strategic nature of IMFT for Intel.
3. If Micron wishes to compel an offer for the whole company, going the route of "we can sell you IMFT at 6x revenues or all of Micron for 4x revenues" may be an effective strategy.

Employing the assumptions established on page two, at 6x revenues Micron's IMFT stake is worth anywhere from \$16.2bn (6x an estimated \$2.7bn of 2017 revenue) to \$22.7bn (6x an estimated \$3.78bn of 2018 revenues). \$16.2-\$22.7bn would be a whopping price for an asset on Micron's books

valued at ~\$900mm. That purchase price range equates to 33%-47% of Micron's market capitalization.

Even though this scenario is a possibility, I do not think it the likely outcome. 3D Xpoint is a strategic asset for Micron arguably just as much as for Intel. And there's no doubt that even though Micron may be based in Idaho, they surely know the cautionary tale of the Red Sox trading Babe Ruth to the New York Yankees (and if they want to discuss over a beer I'd also be willing to lament how the Red Sox made the same mistakes with Roger Clemens, Wade Boggs, Jacoby Ellsbury, Johnny Damon . . .). Further, I do not think that just buying the 51% controlling stake in IMFT is enough of a needle mover for Intel. That all said, Intel did pay 31x revenues for Mobileye so who knows.

In terms of the logic of renegotiating the JV agreement, I see that as a more likely outcome. But it wouldn't come, presumably, without a significant cost to Intel. One could easily envision a scenario where Intel negotiates to delay Micron's 2019 buy-in option on Intel's stake for five or more years (which would provide Intel more time to build out 3D Xpoint and 3D NAND capacity elsewhere). In such a scenario, Intel would presumably have to come up with a significant payment to Micron and potentially renegotiate in Micron's favor the cost+ pricing arrangement that Intel has with Micron for flash memory outside the JV. One of the reasons that Micron has lower EBIT margins than Samsung is they are known to have a proportionally larger number of lower priced wholesale memory contracts than Samsung. Intel most certainly is one of the beneficiaries of those lower priced memory contracts. While I think this is the most likely outcome, a) I'm not sure what the total consideration would have to be for Micron to consider it (\$5bn+) and b) such a deal wouldn't impact addressing Intel's significantly undersized exposure to memory.

In terms of logic and likelihood of an offer for all of Micron, I think it would make a lot of sense and is a more likely outcome. Buying Micron would provide Intel scale in memory semis. It would improve Intel's margins. It is likely to improve Intel's organic growth rate. And there are likely to be abundant synergistic and strategic benefits by combining the leading logic with one of the top three memory semi manufacturers. Also, Micron is arguably the only actionable asset of scale in the memory

semiconductor sector. What I mean by actionable is there is no conceivable way that Intel could pick up either of the Korean companies. Samsung is too big and SK Hynix is part of the SK Group Chaebol – just not happening. Western Digital (not likely Intel would want HDDs) and the Toshiba situations (maybe new ownership group could do a quick flip?) are messy situations not least of all because Intel would be putting itself into a new JV situation.

At any reasonable price I think an acquisition of Micron would be financially attractive for Intel. Intel trades at 13.6x 2018 IBES consensus and 8.6x TTM EBITDA. Micron trades at 5.4x 2018 IBES consensus and 5.4x TTM EBITDA. Even without reasonable synergies an acquisition of Micron by Intel at any reasonable price is likely to be meaningfully accretive. And synergies should be significant.

I would expect that Intel could credibly offer, and Micron would be likely to take, an offer of anywhere from 4x last quarter annualized sales to 6x last quarter annualized EBITDA. I used last quarter annualized because I think that Micron would be unwilling to accept reasonable multiples off of trailing twelve months as things have improved so much over these last twelve months. Intel may be unlikely to put forth a 4x FY 2018 sales or 6x FY 2018 EBITDA because the sales and EBITDA growth outlook are so robust for 2018 that the price that Intel would have to pay may be hard for Intel to digest. 4x last quarter

annualized sales or 6x last quarter annualized EBITDA suggests a takeout price for MU stock between \$70.5-\$85 per share (or an enterprise value range of \$81-\$98 billion).

In terms of timing of a bid (either for IMFT or for all of Micron) it would make a lot of sense for it to happen in 2018. While I feel pretty confident that Micron is likely to advise Intel in the latter half of 2018 of its intention to purchase Intel's IMFT stake, if/when Intel approaches Micron about buying Micron's IMFT stake or Micron outright is another matter. When Micron makes its IMFT intentions known is a major catalyst. That said, it could be argued that the sooner Intel tries to preempt things the better as:

- Micron is lining up to have a remarkably profitable 2018 and it is a very cheap stock. Doing something now before Micron's stock potentially runs away from Intel would be advisable.
- Every quarter that goes by for the next five quarters, Micron's liquidity will be building meaningfully. I anticipate that Micron will deliver well in excess of \$10 billion of FCF over the next five quarters. Not only will it pay down leverage to negligible levels, they could continue to buy other assets (while reserving room for the minority stake in IMFT). If Intel wants a) to limit the increased confidence that comes for Micron...

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🔍 Ddr Corp Com

Asset Class: **Equity**

Symbol: **DDR:US**

Updated: **1/2/2018**

Submitted: **12/29/2017**

EXPECTED RETURN

44.4%

COMMUNITY RATING



BY:
Bryce Webster

CURRENTLY AT:
HGI Capital Management, LLC



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Event / Spec. Sit

MARKET CAP:

3.1B USD

\$3Bn shopping center REIT recently announced a spinoff of its lower-quality assets into a separate REIT that will liquidate those assets; private-market value (NAV) is \$12/share, 30%+ upside



About Bryce Webster

Bryce is a Senior Analyst at HGI Capital (an affiliate of Harbor Group), a long/short hedge fund with a focus on REITs and real-estate related securities. He tends to focus on small- and mid-cap ideas in the REIT space that are somewhat unique and nontraditional. Prior to HGI Capital, Bryce worked at Gramercy Property Trust, a publicly traded REIT, in a capital markets and CMBS investing role. Bryce began his career at Moody's Investors Service in the structured products group. Bryce has an undergraduate degree from Cornell University and an MBA from NYU Stern.



About HGI Capital Management, LLC

HGI Capital Management, LLC is an affiliate of Harbor Group International, a \$4.2 bn Real Estate investment firm that was founded in 1985. We believe that the combination of a real estate operating platform with a large national footprint in the private markets coupled with a talented public securities markets investment team provides powerful investing synergies.

Ddr Corp Com

Asset Class: **Equity** Symbol: **DDR:US** Submitted: **12/30/2017** Updated: **1/2/2018**



BY:
Bryce Webster

CURRENTLY AT:
**HGI Capital
Management, LLC**

COMMUNITY RATING: ★★★★★

PERCENTILE: 63%

Pricing & Return Details ↑ LONG	
EXPECTED RETURN	44.4%
INITIAL PRICE	9.00 USD
TARGET PRICE	12.00 USD

\$3Bn shopping center REIT recently announced a spinoff of its lower-quality assets into a separate REIT that will liquidate those assets; private-market value (NAV) is \$12/share, 30%+ upside



ASSET CLASS:
Equity



SITUATION:
Event / Special
Situations



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
Spin Off & M&A/
Buyout Target



TIMEFRAME:
1-2 Years

Investment Thesis

Buy DDR – long-term price target is \$12/share (30%+ return), near-term price target is \$10 (10%+ return)

“DDR is a \$3Bn shopping center REIT that recently announced a spinoff of its lower-quality assets into a separate REIT that will liquidate those assets over time; private-market value (NAV) is \$12/share while the stock trades at \$9/share, a 25% discount”

One-Page Summary *

*For those that don't have time to read the full write-up this section should give you the gist (80% of the way there)

DDR is an out-of-favor shopping center REIT with 88% exposure to U.S. retail assets and 12% exposure to Puerto

Rico retail assets. DDR is out of favor with investors for three primary reasons, 1) DDR has the highest exposure to non-grocery anchored power centers among shopping center peers (considered to be the most at risk for future “de-retailing” in the U.S.), 2) DDR's Puerto Rico assets were recently hit by Hurricane Maria which has caused significant investor uncertainty, and 3) DDR has among the highest leverage among shopping center peers (REIT investors generally have an aversion to leverage).

That said, DDR has a solid management team and the stock is extremely cheap. As of mid-December there's a hard catalyst in the form of an upcoming spinoff – DDR recently announced a planned spinoff of its Puerto Rico assets and other lower quality assets into a separate REIT (Retail Value Trust) that will sell those assets over time to realize private-market value. This will both

reduce Puerto Rico exposure and lower leverage for New DDR at the same time.

Just prior to the mid-December announcement of the spin DDR reached a low of \$740/share, or 8.5x consensus AFFO (adjusted funds from operations, a proxy for free cash flow in REIT-land). Compare this to shopping center REITs which trade at an average of 16.5x AFFO and direct peers (KIM, BRX) which trade at an average of 13x AFFO (KIM at 14x, BRX at 12x). DDR lost approx. \$2/share of value directly tied to Hurricane Maria (stock went from \$10 to \$8 while peers were largely unchanged), despite the Puerto Rico assets only being worth about \$1.50/share to begin with. In other words, post-Hurricane Maria the market assumed that DDR's Puerto Rico exposure was worth zero and then took off another \$0.50/share just to be conservative. DDR has made some of this back post-spin announcement (currently trades at ~\$9/share) though we believe there's more to go. Prior to the spin, other investors we spoke with tended to agree with us that DDR was cheap, though were usually unwilling to step in absent an identifiable catalyst. With the recent spinoff announcement we now have an upcoming catalyst. Yes, the stock is more expensive, though we think it's a better risk-adjusted return post-announcement.

The management team is headed up by CEO David Lukes, COO Michael Makinen, and CFO Matt Ostrower. This trio all came over from Equity One, another shopping center REIT which they ran for three years from June 2014 through March 2017 before selling it to Regency Centers at a small premium to NAV. When David Lukes took over Equity One the stock traded at \$22, or a 7%-8% discount to NAV. Less than three years later Lukes agreed to sell the company to Regency for \$31.44/share, more than 40% higher. During Luke's tenure as CEO, Equity One produced a total return of 53% for investors (~16% annualized), more than double that of shopping center peers (peers produced a total return of 23% or ~7% annualized over the same period). Lukes achieved this through a combination of superior NAV growth through solid leasing & re-development and closing the NAV discount through good capital allocation. Judging from past precedent at a similar company, we think you're getting with DDR a highly capable team both in terms of operational execution and capital allocation that is focused on maximizing shareholder value.

Timeframe/Price Target

Near-term price target \$10 (6 months)

Long-term price target \$12 (12-18 months)

Hedge idea for long/short investors

Short Kimco Realty Corp. (KIM)

Kimco has the most similar portfolio to DDR among shopping center peers, is large (\$14Bn EV) and thus has a lower risk of takeout, and lastly KIM's '18 consensus AFFO/share numbers are likely coming down further due to more than originally expected asset sales (or the company will just miss consensus numbers when the guide with the Q4 earnings report in February '18).

*Note that this hedged trade will hedge out some of the sector upside (shopping centers are generally cheap as a sector), though would allow for a fairly low risk-way to capture ~1,000 bps of near-term return (6 months)

Why does this opportunity exist?

We believe this opportunity exists because DDR is an out of favor company in an out of favor sector. Dedicated REIT investors had entirely given up on DDR post-Hurricane Maria and prior to the recent spin announcement, and we think they'll take a little while to get back in. That said, we think event-driven investors and value investors will support the stock and drive the price higher toward fair value before REIT investors get back in once the uncertainty further dissipates.

So what's it worth?

Given the recently announced spinoff including some disclosure around the parameters of each new REIT ("New DDR" and "Retail Value Trust"), we think that a sum-of-the-parts valuation makes sense here. We calculate a private-market value for each new REIT based on the

NOI (net operating income, or EBITDA plus G&A) and an assigned cap rate based on the quality of the respective portfolios. **We think New DDR is worth approximately \$9/share and Retail Value Trust is worth \$3/share, for a combined value of \$12/share.**

For the spinoff REIT, Retail Value Trust, we split the valuation further into Puerto Rico and U.S. Mainland assets. For Puerto Rico, we apply a 15% cap rate which equates to a value of \$120 psf. We think a 15% unlevered return is a fair number given the uncertainty post-Hurricane Maria – at this level investors would get their money back on an unlevered basis in 6-7 years, or the approx. average lease term for a shopping center tenant, with the upside being the terminal value. We assign a 7.25% cap rate for the remaining U.S. assets in Retail Value Trust. This is based on the fact that the company has recently sold lower quality assets than those in Retail Value Trust at mid-to-high 7 cap rates. We think the U.S. assets in RVT will do slightly better. Overall this blends to a 8.95% cap rate for Retail Value Trust.

For New DDR, we grow the NOI by 1.5% and apply a cap rate of 6.50% to arrive at a value of \$220 psf. This cap rate is based on current private-market values for mid-to-high

quality shopping centers (Class A to B+) representative of New DDR's portfolio. After effectuating the spinoff the key portfolio metrics of New DDR (average household income, average base rent psf, Green St. TAP score) will move from below-average to above-average within the public shopping center peer group. Keep in mind that the public REITs tend to hold some of the highest quality retail shopping centers among the overall shopping center stock in the U.S. **Bottom line – we don't think these are heroic valuation assumptions and we get to a value of approximately \$12/share. This is roughly inline with the current "consensus" NAV for DDR of \$11.70/share. Below is a summary of our sum-of-the-parts valuation.**

Where should it trade?

In the long-term (12-18 months) we think the stock will trade to \$12/share on a combined basis. However, we're also realistic about where the stock should go in the near-term (6 months). To arrive at a near-term price target we take our NAV for New DDR and apply a 15% discount, which is inline with the current valuation of comparable shopping center REIT peers. We take our NAV for Retail Value Trust

Valuation	New DDR	Retail Value Trust	Combined
Ann. 3Q17 NOI (\$M)	436	220	656
NOI growth	<u>1.50%</u>	<u>0.00%</u>	-
Forward NOI	443	220	663
% of NOI	66.5%	33.5%	100.0%
Cap rate	<u>6.50%</u>	<u>8.95%</u>	<u>7.32%</u>
Value (\$M)	6,808	2,458	9,266
Total SF	31.0	16.4	47.4
Value psf	\$220	\$150	\$195
% of value	73.5%	26.5%	100.0%
Debt	(3,124)	(1,350)	(4,474)
Cash	18	0	18
Pref. equity	(525)	0	(525)
Curr. Assets - liabilities	(2)	0	(2)
Dev. value	<u>89</u>	<u>0</u>	<u>89</u>
Net asset value	3,265	1,108	4,373
NAV/share	\$8.86	\$3.01	\$11.87

and also apply a 15% discount, which equates to a 9x AFFO multiple and 11% dividend yield (100% payout ratio) based on our estimates. We think that over time this discount will dissipate as Retail Value Trust liquidates its assets. Below is a summary of our estimated near-term price target.

Catalysts

• Successful closing of spinoff mortgage loan

As part of the spinoff DDR has indicated they'll take out of mortgage loan in the amount of \$1.35 billion on Retail Value Trust. These proceeds will go to pay down existing debt at DDR and result in a lower-leveraged New DDR. DDR has received a commitment letter from a syndicate of banks including Credit Suisse, JPMorgan, and Wells Fargo, but the loan has not yet closed and the rate has not been finalized. This is expected to happen in January or early February.

• Execution of spinoff

The spinoff is expected to be executed in the summer of '18, at which point dedicated REIT investors will be able to buy New DDR without having to own Retail Value Trust. We think the bid for New DDR will get stronger post-spin, and while Retail Value Trust may experience a rotation in shareholder base, it will ultimately retain its value.

• Additional asset sales

DDR currently has assets out in the market for sale that are intended to go into Retail Value Trust. Once DDR

starts printing some sales at reasonable cap rates the market will 1) become more comfortable around the valuation of Retail Value Trust and 2) apply a lower discount to NAV for this piece of DDR.

• Sale of Retail Value Trust

It is entirely possible that Retail Value Trust could be sold as a portfolio prior to the spin. Keep in mind that this management team is an opportunistic bunch and will take any chance they get to maximize shareholder value.

Risks/Mitigants

• Retail real estate / power centers

Retail real estate has been under pressure in the last year as a large number of retailers have declared bankruptcy or experienced material sales declines.

Mitigant: in the spectrum of retail real estate B and C malls are subject to the greatest risk of obsolesce due to struggling anchor stores (Sears, Bon-Ton, JCP) and changing consumer behavior (teenagers don't hang out at the mall anymore, and adults are shopping more online). However, even A malls were recently proved to be oversold in the public markets with Brookfield putting out a bid for GGP and several well-known activist investors buying stakes in Macerich and Taubman. Shopping centers are both less exposed to department store closures and less prone to disruption from e-commerce due to their more convenient locations and "everyday" retailers. Approximately 70% of New DDR's portfolio will be anchored by traditional grocers, specialty grocers, or mass

NAV/share	\$8.86	\$3.01	\$11.87
Near-term price target			
Applied NAV discount	(15.0%)	(15.0%)	(15.0%)
Implied UAV discount	(7.1%)	(6.8%)	
Near-term PT	\$7.53	\$2.56	\$10.09

merchants with a grocery component (Walmart, Target, Costco). While cap rates for shopping center assets have expanded in the past year, this has been most pronounced in B-quality properties in Tier II and Tier III markets and to a lesser extent in Power Centers. Lastly, this retail risk can be fully or partially hedged by shorting a comparable shopping center peer, Kimco Realty Corp. (KIM).

- **Puerto Rico exposure** – DDR derives 12% of its NOI from 12 assets in Puerto Rico, which was recently hit by Hurricane Maria. This has led to a lot of uncertainty for both public and private-market investors.

Mitigant: We don't think you're paying much (if anything) for Puerto Rico at the current stock price. Even if you assume that Puerto Rico is worth nothing, Retail Value Trust is worth \$1.50/share and New DDR is \$9/share for a combined value of \$10.50/share, well above the current stock price. If you further apply a 15% discount to each piece, you'll get a combined value of \$8.85/share, or approximately equal to the current stock price. In our valuation we assign a relatively conservative 15% cap rate to the Puerto Rico assets. Moreover, as of the 3Q earnings call in early November 75% of DDR's gross leasable area was open for business, less than two months after Hurricane Maria made landfall on September 20th. Lastly, DDR has \$330 million of Property, Casualty, and Business

Interruption insurance coverage that will cover lost rents from the time it takes to make the assets in Puerto Rico habitable, plus one year.

- **Interest-rate risk** – all REITs are subject to some element of short-to-medium term interest rate risk due to their high dividend yields and relatively low fixed growth profiles.

Mitigant: Given DDR's low multiple and high dividend yield (we estimate high 7s dividend yield on a combined basis going forward), DDR has a lower duration than most REITs and thus will be less interest-rate sensitive than most REITs. This risk can also be hedged by either shorting the REIT index (and maintaining shopping center exposure) or shorting KIM to hedge out REIT + shopping center exposure.

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Finalist

Best Yield-Payers

🔍 Boc Aviation Ltd Ord

Asset Class: Equity

Symbol: 2588:HK

Updated: 12/24/2017

Submitted: 12/21/2017

EXPECTED RETURN

24%

COMMUNITY RATING



BY:

Anand Ramachandran

CURRENTLY AT:

River Valley Asset Management



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Deep Value

MARKET CAP:

31.2B HKD

Growth stock with consistent track record of delivery, trading at deep value, run by conservative management, exposed to a secular theme – signs of a multibagger with wings & its set to fly.



About Anand Ramachandran

Anand is a fundamental investor with over two decades investment experience across Asian, other emerging and Global equity markets. He is a Partner with River Valley Asset Management, a Singapore based boutique focused on delivering consistent absolute returns to its clients. Before this he spent a significant part of his career in various global locations with Legg Mason, Citigroup Asset Management and AllianceBernstein.

Boc Aviation Ltd Ord

Asset Class: **Equity** Symbol: **2588:HK** Submitted: **12/21/2017** Updated: **12/24/2017**



BY:
Anand Ramachandran

CURRENTLY AT:
River Valley Asset Management

Pricing & Return Details ▲ LONG	
EXPECTED RETURN	24.0%
INITIAL PRICE	40.75 HKD
TARGET PRICE	55.20 HKD

COMMUNITY RATING: ★★★★★

PERCENTILE: 42%

Growth stock with consistent track record of delivery, trading at deep value, run by conservative management, exposed to a secular theme – signs of a multibagger with wings & its set to fly.



ASSET CLASS:
Equity



SITUATION:
Deep Value



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
Dividend
Distribution



TIMEFRAME:
1-2 Years

Investment Thesis

Summary

Based in Singapore, listed in Hong Kong, BOC Aviation Limited (BOCA) is a global top 10 aircraft-leasing company operating in an industry which is seeing secular growth dynamics. Its business model has three key drivers (a) purchasing new, fuel-efficient, in-demand single aisle aeroplanes at competitive prices directly from aircraft manufacturers, leveraging on its scale and size, (b) cheaply financing those purchases and placing them on attractive long-term operating leases with a globally-diversified customer base, thereby generating a steady spread (margin) and (c) recycling capital by selling planes after they have an established operating track record halfway into their lease term, at market prices, thereby locking in significant capital gains as well as keeping the existing fleet young.

Aircraft leasing Industry

The global passenger airline industry is going through a secular growth phase driven by two key drivers, rising prosperity in emerging markets which is increasing the pool of global airline travellers and secondly the emergence of low cost carriers in every corner of the world which is expanding the pie by making travel more affordable. Playing this theme has been a challenge for investors as the obvious plays, airlines, have a poor track record of delivering value in the long run due fragmentation of the market (786 airlines globally), serving a price sensitive customer on one end, with high fixed cost and capital intensity on the other. Add to that lack of control over the biggest input cost, volatile oil prices, one can easily fathom why the industry has not been able to deliver consistent returns.

While passenger travel demand continues to exhibit secular growth trends, historically low profitability of airline industry has resulted in weak balance sheets making it a struggle for players to find capital to grow their fleet size to capture the growth opportunity. This has provided space for aircraft leasing companies. Over the last few years more and more aircrafts are being procured through leases with nearly 43% of the global fleet currently being financed by an operating lessor. Unlike the fragmented airline industry, the top ten lessors control about 70% of the leasing market. The rapid growth of Low Cost Carrier (LCC)'s has played into the strength of lessor's as these players follow an asset light strategy and look to third party source for financing their aircraft needs. While Asia is the fastest growth market for overall airline industry as well as LCC's, the share of LCC's (left graph) is not uniform across the region providing additional penetration opportunities.

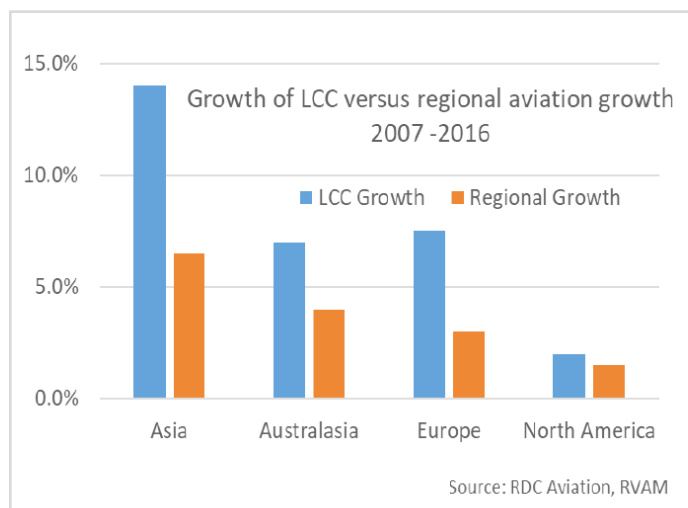
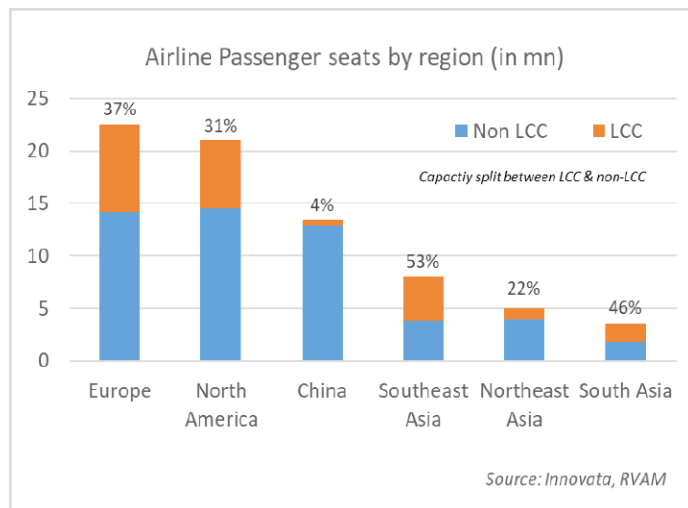


BOC Aviation

The company was founded in 1993 as a JV by Singapore airlines and changed its name to BOC Aviation after it was acquired by Bank of China in 2006. It listed in Hong Kong stock exchange in mid 2016, raising equity capital putting it in a very strong position to deliver robust growth over the next five years. The company has a well experienced team of professional managers who have consistently delivered profit growth across multiple industry cycles. The current CEO Robert Martin has been managing the affairs of the company since 1998.

The core business drivers

BOCA's primary source of revenue is from long term, US dollar-denominated leases contracted with a globally diversified customer base financed by US dollar denominated debt. The company buys aircrafts directly from manufacturers in bulk and gives them out on long term lease to a select group of higher quality customers. It currently has a fleet of 302 owned and managed aircraft, which has grown at a CAGR of 15.1% over the last decade. In addition, it has 197 aircrafts on firm order with Boeing & Airbus which are likely to be delivered over the next 5 years giving it a minimum 10%+ pa growth visibility over the next few years. More than 80% of the fleet is made up of single Aisle A320 or B737 workhorses which are preferred by LCC's as well as being easy to resell in the secondary market. Among the leasing companies it has one of the youngest fleet with an average age of 3.2 years with one of the longest weighted average remaining lease life of 7.8 years.



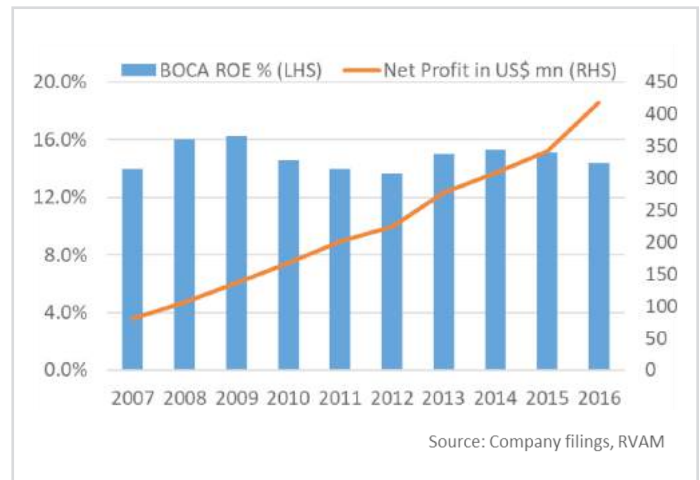
The company negotiates aircraft purchases directly with Boeing and Airbus giving them bulk orders deliverable over a multi-year horizon, thereby getting attractive bulk discounts (estimated at 18-20% of market price) as well as locking in delivery schedules in advance. The company locks in leases about a year before delivery thereby helping lock in rates close to funding costs, helping maintain steady spreads. The company does carry some order book risk, but its historic track record of fleet utilization close to 100% is impeccable (a function of its diversified and higher than average quality customer mix). The chart below shows the current market value premium of aircraft over book value of acquisition, highlighting the attractive price at which BOCA is able to purchase aircraft thereby locking in a rate of return higher than what is available on the market.



While the global airline industry has gone through multiple boom-bust cycles over the last two decades, BOCA has an enviable track record of consistently growing profits right through this period as shown in the chart below. Net profit in US\$ terms has grown at a CAGR of 20% over the last decade driven by a consistent growth in fleet with steady ROE of 14-16% over the period.

Funding & Balance sheet

The company has an under levered balance sheet with leverage of 2.7x (against management comfort range of 3.5-4x) and it is the only leasing company with a credit rating of A- from both S&P Global Ratings as well as Fitch, thereby providing it with a significant funding cost advantage in the market place. Its primary source of debt funding is from unsecured bonds and unsecured and secured third-



party commercial bank debt. In addition to its rating, the implicit backing provided by parent, Bank of China (70% shareholder) ensures that BOCA has one of the cheapest funding cost in the industry.

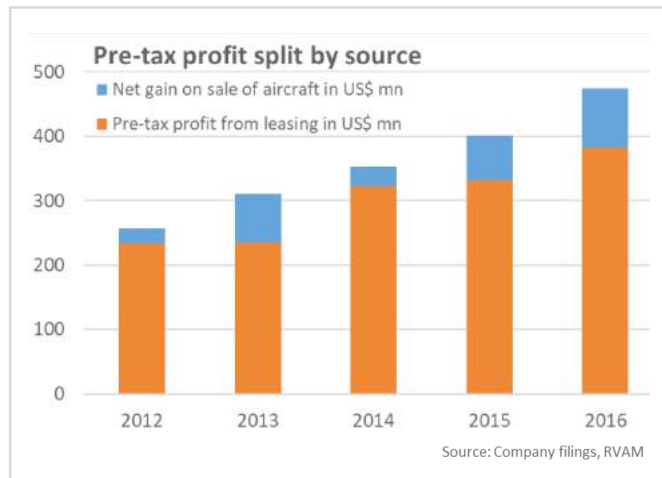
The liquid balance sheet and ample lines of credit provide the management with an ability to accelerate growth faster than current order book (implied 10%), if inorganic opportunities arise.

BOCA enters into both fixed and floating rate leases, though the demand in recent past has been to write more of fixed term lease. At the end of 1H 2017, 60% of the book was on fixed lease versus 26% at the end of 2013. The company tries to match the sources of funding with the terms of leases it signs to ensure a steady net yield. Over the last 5 years the net lease yield has hovered in a tight range of 8.1-8.5%. At the end of 1H 2017, 45% of the company's debt was fixed with the balance floating. In addition, the company has hedged about 70% of the mismatched floating interest rate exposure.

Ability to crystallize value

BOCA typically enters into 11-12 year lease with its airline customers before deploying the planes. But, many a times 5-6 years into the lease term, when the aircraft has sufficient operating and maintenance history, the company looks to sell the asset in the market at full market value with the balance of lease intact. It allows the company to crystallize the gain in value between a discounted purchase price and current market price of a mature operating asset.

The typical customer for these transactions are Asian banks looking for avenues to deploy their capital into a derisked assets. The transaction allows BOCA to crystallize the value of risk for shareholders at the same time keeps the fleet young, current and relevant to the market place. It also provides the management ability to enter into fresh long-term leases in line with prevalent financing conditions helping duration and Asset-Liability management (ALM).



Valuation

BOCA is currently trading at a P/E multiple of 6.4x 2018 Bloomberg consensus estimated earnings and 0.88x book value for a 14.5% ROE. The company in its last interim earnings release had telegraphed an increase in dividend payout ratio to at least 35%, thereby putting the company on a 4.6% dividend yield on FY17 earning and 5.4% yield on FY18 DPS. The company is cheap not only on an absolute basis but also when compared to its Global peers as shown in the table below. BOCA has better operating metrics versus its global peers but trades at a significant discount.

Our target price is based on a P/B multiple of 1.2x which will bring it in line with its peers. At target price, stock

will be trading only at just 8.6x forward earnings with an expected 18% 3 year CAGR in EPS. We expect the share price to over time reflect this growth and in the long run deliver performance in line with EPS growth with a third of the return coming back through dividends. This is a stock for the long run, to buy and forget. Over a 5 year horizon we expect a 20% compounded US\$ total return from the company partly through rerating and significantly from consistent year after year topline and bottomline growth function of a great business model in a growing industry.

While BOCA stock in our view is a very compelling investment idea, there are a few risks which can make the stock price volatile to market sentiment in the short term.

Interest rate risk

While company has over the long term managed its spreads within a tight range, ALM mismatch does expose it to short term interest rate risks. According to management a 25bp across the board move up in interest rates will have a negative impact on net profit of \$1.2mn (i.e. < 0.3%). Given management track record, we are not overly concerned about rate risk, but the stock price gyrations many a times reflect market worries about impact of interest rate moves.

Competition

BOC Aviation operates in Asia which has one of the strongest demand but also high level of competition from Chinese lessors who are all looking to deploy their balance sheet. The key differentiating factor for BOC Aviation is its history with Aircraft manufacturer's and ability to directly procure aircraft and manage the inventory on order risk, instead of operating in the sale and leaseback market where most of the peers operate. The latter segment is purely an opportunistic commodity market where there are no barriers to entry other than ability to provide financing.

	Fleet Age (years)	Avg remaining lease (years)	P / E	P / B	Net Margin	Net Debt / Equity	Dividend Yield
BOC Aviation	3.2	7.8	6.38	0.89	33.9%	330%	5.40%
Air Lease	5.1	6.9	11.47	1.23	26.2%	342%	0.85%
AerCap	11.6	6.4	8.33	0.85	21.2%	317%	-
Aircastle	7.9	5.1	9.80	0.94	22.6%	324%	4.79%

Source : Bloomberg, RVAM - numbers are one year forward estimates

Airline Industry downturn

BOCA's earnings depends on growth in the passenger airline industry, especially the LCC market over the next few years. We have seen a lot of new players enter the market in the recent past, attracted by strong growth and relatively low entry barriers to starting a new airline. While BOCA does not serve new upstart airlines, capacity growth faster than demand could impact the whole industry including BOCA's customers. With planes on order for next five years of growth, inability to lease out new deliveries could negatively impact BOCA's spreads and profitability in the future.

Why is BOCA cheap ?

There are a couple of reasons why we are guessing the stock is attractively valued. A) It is a recent IPO and not well known and understood in the market place. B) For a stock of this size, the liquidity seems low as a significant chunk of the IPO placement was done to cornerstone investors in HK/China who are not trading the position at this price. C) The stock is covered mainly by financial analysts in Hong Kong who compare it with large cap banks in China which have different business issues and D) potentially it gets clubbed with other leasing companies from China which have a riskier business model. That said, we think the

earnings report in March 2018 could present the market an opportunity to understand the potential of BOCA's business model and catalyse the rerating.

BOCA is a great way to play the aviation-growth story with far fewer and more manageable risks than an airline investment. Stock is a consistent compounder with a visible growth pipeline of aircraft deliveries, generates good ROE, is run by a well-respected team of conservative managers, trades at attractive valuations, pays out a good dividend, has a well-funded balance sheet with liquidity which provides it an option to accelerate growth inorganically if opportunities arise.

In summary, BOCA has all the signs of a multi-bagger with wings and it is all set to fly.

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Finalist

Best Yield-Payers

Eastman Kodak Company

Asset Class: **Corporate Debt** Symbol: **277473AN4** Updated: **1/1/2018** Submitted: **12/28/2017**

EXPECTED RETURN

17%

COMMUNITY RATING

No Votes



BY:
Jen Ganzi

CURRENT RANKING:

★ #4 All-Time

CURRENTLY AT:
The Credit Junction (TCJ)

BADGES:



LONG

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Event / Spec. Sit

MARKET CAP:

N/A

Eastman Kodak 1L has a 20%+ yield to takeout on a debt refi with decent downside protection.



About Jen Ganzi

Jen Ganzi is currently a Director of Underwriting at The Credit Junction (TCJ). TJC provides asset-based growth and turnaround capital to small / mid sized businesses, typically in the \$1-5mn range, with expected IRRs of 15-20%. Prior to TCJ, Jen had been a Senior Analyst at NewMark Capital, a CLO manager, where she generated investment ideas for stressed, distressed, and par leveraged loans, focusing on the Media, Telecom, Publishing, Paper and Forest Products, and Shipping sectors, and was responsible for a portfolio of over \$200mn in loans. Before that, Jen was the sole Analyst at distressed hedge fund Hain Capital, where she was instrumental in the firm outperforming the S&P 500 index, hedge fund index, and distressed index during her tenure by investing throughout the capital structure. Upon graduation from Columbia Business School, she became an Equity Research Analyst at Gabelli Asset Management, and later worked for a provider of private junior capital.

Eastman Kodak Company • 7.6% • 2019

Asset Class: Corporate Debt Symbol: 277473AN4 Updated: 1/1/2018 Submitted: 12/28/2017



BY:
Jen Ganzi

CURRENTLY AT:
The Credit Junction
(TCJ)

CURRENT RANKING:
★ #4 All-Time

BADGES:
★ 47 ★ 65 💡

COMMUNITY RATING: No Votes

PERCENTILE: N/A

Pricing & Return Details

↑ LONG

EXPECTED RETURN	17.0%
INITIAL PRICE	Pending...
TARGET PRICE	100.00 USD

Eastman Kodak 1L has a 20%+ yield to takeout on a debt refi with decent downside protection.



ASSET CLASS:
Corporate
Debt



SITUATION:
Event / Special
Situations



TARGET ALLOCATION:
1.5% - 2%



CATALYSTS:
Debt Refinancing
and 2 more



TIMEFRAME:
1-2 Years

Investment Thesis

Kodak L+625 (1% floor) 1st Lien Term Loan due Sept 2019

Trade Recommendation and Summary

LONG Kodak L+625 1st Lien Term Loan @ \$85.5 for Yield-to-Maturity of 18.1%

The 1st Lien TL (rated Caa1/CCC+) of Kodak is likely to be either refinanced within the next 1.25 years (after which the company would get a going concern warning in its FY 2018 10K, which is an event of default for the loan), for a yield to takeout of ~21% (assuming the loan gets paid down in full on 3/31/2019), or the company will liquidate in bankruptcy with the next 1.5-2 years, likely paying off the 1L in full for an IRR over 12% (assuming only one more full year of interest payments, and then a lump sum par payout in two years from now). However, given the equity holders want to extend their option for some of the operational improvements to bare fruit, they will be incentivized to take out the 1L even if it proves expensive, given their cash

stock pile and improvements in working capital and other cash flow metrics. If the loan remains outstanding through maturity, then the yield compresses to 18.1%. The 1st Lien TL has leverage of 6.8x (4.3x net of US-based cash) through the security and overall. The 1st Lien TL was part of the Exit Facility during the reorganization of Kodak in 2013.

Eastman Kodak, founded in 1888, is a global commercial printing and imaging company with proprietary technologies in materials science, digital imaging science and software, and deposition processes (methods whereby one or more layers of various materials in gaseous, liquid or small particle form are deposited on a substrate in precise quantities and positions).

Risks (Investment Negatives)

- Largest contributing segment (Print Systems) is facing secular decline and pricing pressure as demand declines more quickly than supply comes out.

- The rate of decline in the core plates business could further accelerate, as it did in 2017, with growth and profitability in its Packaging and Enterprise Inkjet businesses potentially failing to offset this decline in a meaningful way.
- Company could issue weak 2018 guidance, leading to higher net leverage.
- Kodak failed to hit its 2017 target, making hitting 2018 goals that much more important in order to keep the company out of a BK restructuring.
- The development of two new inkjet systems PROSPER and ULTRASTREAM will likely become major profit drivers going forward, as the former is supposed to break even in FY 2017 and the latter in FY 2019; both could potentially grow to contribute more than 10% of earnings (however we do not incorporate this potential value into our analysis, for the sake of conservatism, although in a liquidation it would likely provide incremental value).
- Management will likely continue to reduce corporate costs through research & development cuts as more of their products become commercial.

Upside Levers (Investment Positives)

- The 1L appears covered in terms of valuation on a sum of the parts basis (on a market price basis in the downside case as well).
- Substantial liquidity with large cash stockpile.
- Seasoned leadership team that has navigated adversity.
- Cost cuts in the form of headcount reduction should total \$45mn, giving a boost to EBITDA in 2018.
- Increased market share in Print Systems through more efficient plate production and aluminum hedging, as well as a reduction in industry capacity, which could create a more stable pricing environment.

- Potential additional value in real estate owned patents held in order to further cover the 1L.

Company Overview

Kodak is historically a photography business that has recently shifted its current focus to commercial printing, packaging, and other advanced technologies. While in the past Kodak has been consumer facing, it has now 100% focused on commercial print clients such as RR Donnelly for their aluminum plate and flexographic packaging businesses. This business is contract-based, with a recurring cash flow generative business model with an average duration of 2 years for customer contracts. Kodak also offers brand licensing and intellectual property opportunities, provides products and services for motion pictures and other commercial films, and sells ink to its existing installed consumer inkjet printer base.



Kodak has seven reportable segments: Print Systems (PSD), Advanced Materials and 3D Printing Technology (AM3D) (which also includes Intellectual Property Solutions and serves as their R&D arm), Packaging (FPD), Software and Solutions (SSD), Consumer and Film (CDF), Enterprise Inkjet Systems (EISD), and Eastman Business Park (EBPD). The balance of Kodak's continuing operations, which do not meet the criteria of a reportable segment, are reported in All Other. Kodak had planned to sell PROSPER business (part of Enterprise Inkjet Systems) in 2016 as planned, and thus will likely need to show it can hit its 2017 guidance (inclusive of PROSPER) in order to be able refinance its TL at optimal interest rates.

Print Systems: (62% of Revenues)

The Print Systems segment is comprised of Prepress Solutions, which includes Kodak's digital offset plate offerings and computer-to-plate imaging solutions, and Electrophotographic Printing Solutions, which offers high-quality digital printing solutions using electrically charged toner based technology. The Print Systems segment provides digital and traditional product and service offerings to a variety of commercial industries, including commercial print, direct mail, book publishing, newspapers and magazines and packaging.

Flexographic Packaging: (8% of Revenues)

The Flexographic Packaging segment consists of flexographic imaging equipment, printing plates, consumables and related services, which enable graphic customization of a wide variety of packaging materials. The FLEXCEL NX system provides imaging devices to deliver high productivity and consistency, as well as a full tonal range for flexographic printing. The industry is highly competitive.

Enterprise Inkjet Systems: (10% of Revenues)

The Enterprise Inkjet Systems segment contains the Prosper business and the Versamark business. The Enterprise Inkjet Systems products include production press systems, consumables (primarily ink), inkjet components, and services. The markets that the Enterprise Inkjet Systems segment serves are highly competitive in

variable printing applications like direct mail, newspapers and books. Key competitors are Canon, Ricoh, Domino and Screen.

Software and Solutions: (5% of Revenues)

The Software and Solutions segment is comprised of Unified Workflow Solutions and Kodak Technology Solutions, which includes enterprise services and solutions. Unified Workflow Solutions is an established product line whereas Kodak Technology Solutions includes businesses that leverage existing Kodak technologies and intellectual property in new applications.

Consumer and Film: (14% of Revenues)

The Consumer and Film segment is comprised of three lines of business: Consumer Products, Industrial Film and Chemicals, and Motion Picture. This segment includes the motion picture film business serving the entertainment and advertising industries. Motion picture products are sold directly to studios, laboratories and independent filmmakers. The Consumer and Film segment is experiencing rapid rates of declines, as Kodak has largely exited to the former (it is now in run-off mode) and the latter is in secular decline as most films are now digital.

Advanced Materials and 3D Printing: (0% of Revenues)

The Advanced Materials and 3D Printing Technology segment contains the Kodak Research Laboratories and associated new business opportunities, touch sensor films with copper mesh technology and intellectual property licensing not directly related to other business divisions. Kodak conducts research and files patent applications with fundamental inventions from the Kodak Research Laboratories. Additionally, Kodak continues to file new patent applications in areas aligned with its core businesses. Via these core business patent applications along with the research inventions, Kodak maintains a large worldwide portfolio of pending applications and issued patents. Because product solutions in Advanced Materials and Micro 3D Printing are in the process of being commercialized or are new business opportunities, a higher degree of investment is required. Kodak is now planning to invest less in this business, focusing on areas where the

company has existing proven commercialization or supply agreements.

Eastman Business Park: (1% of Revenues)

The Eastman Business Park segment includes the operations of Eastman Business Park, a more than 1,200-acre technology center and industrial complex in Rochester, New York and the leasing activities related to that space. A large portion of this facility is used in Kodak's own manufacturing and other operations, while the remaining portion is occupied by external tenants or available for rent to external tenants.

Segment Analysis

Kodak is a leader in the Print Systems business, which includes both plate-based and digital printing solutions, where it is one of the top 3 players, along with Fuji and Agfa, in a fairly consolidated industry; in 2015 it was a \$6.1bn addressable market, of which Kodak had ~\$1.1bn. Kodak's more environmentally friendly SONORA digital offset process free plates are lower cost to both Kodak and its customers, and have allowed Kodak to take share. PSD is Kodak's largest business line and top EBITDA contributor.

Kodak has also been gaining share in FPD, its second-highest EBITDA contributor, with its Flexcel NX flexographic printing offering, which delivers higher quality at lower cost. Additionally, Kodak is a leader in the rapidly

declining Film sub-segment of its CDF business. The remainder of its business lines are fairly competitive and not well concentrated.

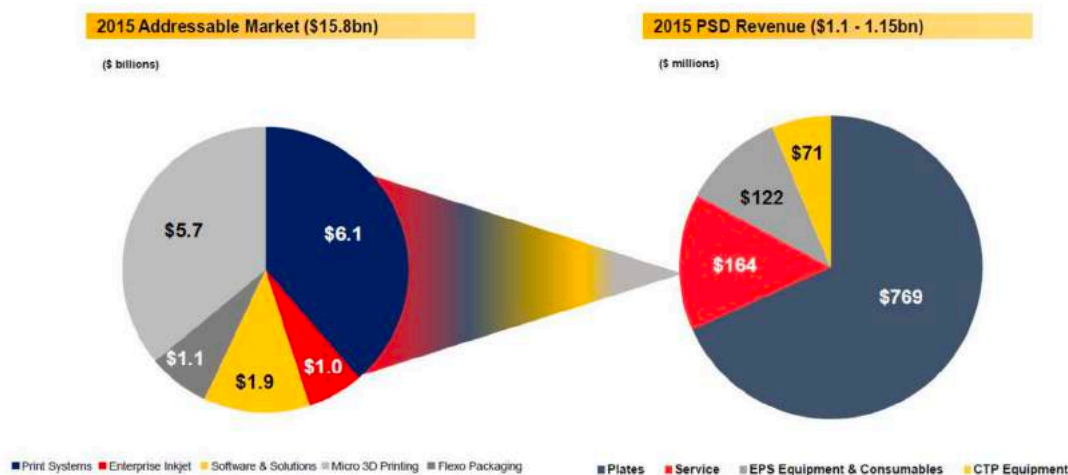
Capital Structure and Leverage

As of 9/30/2017, using the low end of the 2017E EBITDA of \$60mn:

	Amount	Price	Yield to Maturity	Leverage	Net Leverage
Cash (in US)	\$154mn				
1st Lien Term Loan (L+625, 100bp floor)	\$410mn	85.5	18.1%	6.8x	4.3x
5.5% Convertible Preferred Stock	\$200mn			10.2x	7.6x

As of 9/30/2017, the ABL is undrawn and has availability of \$20mn, which, in addition to \$154mn of US- based cash, results in \$274mn of total liquidity. There is an additional \$188mn of cash that resides outside of the US (but is subject to repatriation taxes). However, with the new tax law enacted, it may be easier to bring over the cash, as it would now receive only a 15.5% tax rate upon repatriation.

The company expects total cash to rise to \$360-370mn by 12/31/2017 from current levels.



Investment Thesis

- Even with weaker profits, the 1Ls should be largely covered by the PSD and FPD businesses, at least in terms of trading value.
 - Even in the downside case, where valuation falls short, the company has assets like its EISD business, patents, and real estate that could help bridge the difference.
 - Cash interest payments also mitigate downside and help avoid a negative IRR.
- The company has to either refinance this debt before 3/31/2019 (when FY 2018 financials are due, which would result in a going concern opinion, an event of default for the loan), or else it will likely liquidate and/or reorganize around the more successful parts of the business (i.e. PSD, FPD).
 - Given that the equity holders do not want to lose the upside option of growth in FPD, EISD, and even some remaining in the scaled down AM3D, they would be incentivized to get a deal done that pays 1L's down at par or par equivalent (i.e. new debt that would trade below par plus cash).
- Given the 1Ls are the only debt in the structure, they could even be refi'd in a 1L / 2L structure, to allow for different risk tolerances and potentially better pricing for the company.
- Assuming the 1L's are refinanced by 3/31/2019, the yield to takeout is ~21%.
- The PSD business operates in oligopolistic market with high barriers to entry, and FPD has an interesting niche product that is growing and gaining share.
- The expected IRR of over 12% in the downside (restructuring) scenario is also fairly attractive.
 - Even in the downside case, assuming no value to any businesses other than PSD or FPD (unlikely), the trade would still generate slightly positive returns on a total return basis (i.e. after accounting for a year of interest payments).
- Given simplicity of the capital structure, any likely restructuring would be fairly straightforward and likely not strain time or (cash) resources too dramatically.

Financial Summary

FY 2016 Actuals	PSD	EISD	MPPD	SSD	CFD	IPSD	EBPD	Total EK
Revenue	\$ 1,018	\$ 76	\$ 132	\$ 86	\$ 216	\$ -	\$ 15	\$ 1,543
Operational EBITDA b/f corp costs	151	23	20	11	26	(14)	2	219
Corporate SGA	46	4	8	7	10	-	-	75
Operational EBITDA	105	19	12	4	16	(14)	2	144

FY 2015 Actuals	PSD	EISD	MPPD	SSD	CFD	IPSD	EBPD	Total EK
Revenue	\$ 1,106	\$ 84	\$ 128	\$ 112	\$ 265	\$ 1	\$ 13	\$ 1,709
Operational EBITDA b/f corp costs	148	23	18	16	63	(22)	3	249
Corporate SGA	49	3	7	7	11	-	1	78
Operational EBITDA	99	20	11	9	52	(22)	2	171

Note: Segments for 2015 differ slightly from those of 2016.

(\$ millions)

YTD 2017 Actuals	PSD	EISD	FPD	SSD	CFD	AM3D	EBPD	Total EK
Revenue	\$ 681	\$ 105	\$ 104	\$ 64	\$ 151	\$ -	\$ 12	\$ 1,117
Operational EBITDA b/f corp costs	78	8	26	5	-	(21)	4	100
Corporate SGA	36	6	5	5	10	-	1	63
Operational EBITDA	42	2	21	-	(10)	(21)	3	37

YTD 2016 Actuals	PSD	EISD	FPD	SSD	CFD	AM3D	EBPD	Total EK
Revenue	\$ 739	\$ 123	\$ 98	\$ 66	\$ 174	\$ -	\$ 11	\$ 1,211
Operational EBITDA b/f corp costs	103	(10)	22	4	26	(20)	2	127
Corporate SGA	36	8	5	5	8	1	-	63
Operational EBITDA	67	(18)	17	(1)	18	(21)	2	64

(in millions)	Year Ended December 31,	
	2016	2015
Cash flows from operating activities:		
Net earnings (loss)	\$ 16	\$ (75)
Adjustments to reconcile to net cash used in operating activities:		
Depreciation and amortization	105	145
Pension and other postretirement income	(147)	(107)
Non-cash restructuring costs, asset impairments and other charges	20	9
Loss on deconsolidation of RED	15	—
Stock based compensation	8	18
Non-cash changes in employee benefit reserves	(8)	(25)
Net gains on sales of businesses/assets	(9)	(4)
Gain on assets acquired for no monetary consideration	—	(3)
Foreign exchange loss from remeasurement of Venezuela monetary assets	—	—
Reorganization items:		
Payment of claims	—	(10)
Other non-cash reorganization items, net	(7)	4
Loss on early extinguishment of debt	4	—
Provision for deferred income taxes	15	6
Decrease in receivables	37	15
Decrease in inventories	16	12
Increase (decrease) in trade accounts payable	13	3
Decrease in liabilities excluding borrowings	(74)	(104)
Other items, net	(17)	21
Total adjustments	(29)	(20)
Net cash used in operating activities	(13)	(95)
Cash flows from investing activities:		
Additions to properties	(41)	(43)
Net proceeds from sales of businesses/assets, net	13	2
Release (funding) of restricted cash	8	(10)
Reduction in cash due to deconsolidation of RED	(3)	—
Marketable securities – sales	2	—
Marketable securities – purchases	—	—
Net cash (used in) provided by investing activities	(21)	(51)
Cash paid for interest and income taxes was:		
Interest, net of portion capitalized of \$0, \$2 and \$3 as of December 31, 2016, 2015 and 2014, respectively	\$ 58	\$ 60
Income taxes (net of refunds)	24	12

Industry Overview

Offset printing (PSD business) appears to be experiencing a low-single digit rate of decline as publications slowly stop offering print versions and go exclusively online. However, 2017 seemed to result in a more dramatic decline than in the past, although some years see greater acceleration than others (given the nature of plates being affected more by number of publications than number of issues, it can be more of a step-down affect as print editions turn off, making decline rates more lumpy year to year). Indeed, IBIS World expects a 1.6% annual rate of decline in the US Commercial Printing market from 2016-2021 (although there could be some lumpiness in this estimate). Given Kodak's leadership with products like SONORA, which continues to grow at a double-digit rate, the company should be poised to do at least as well as, or even outperform, the market here.

Packaging printing (FPD) should be growing at or slightly above GDP, as the shift to online ordering should increase the demand for packages (and thus printing on them). According to Markets and Markets, the packaging printing industry is expected to grow at a 5.3% CAGR from 2016-2026, from \$342.5bn to \$574.5bn. Given Kodak's ramping of its new customers, Kodak should be poised to outperform the market over the next several years.

Covenant / Collateral Overview

- Maintenance covenants of maximum Secured Leverage Ratio (net of domestic cash) of 2.75x and minimum Fixed Ratio of 1.0x.
- Limitation of \$50mn of "free and clear" incremental debt (must be of same or later maturity), anything above that subject to a Secured Leverage Ratio maximum of 2.5x.
- Limitations of \$150mn of debt at foreign subsidiaries that are not subsidiary guarantors.
- Limitation on unsecured and vendor equipment financing of greater of \$80mn and 2.59% of assets.
- Incurrence covenant of 2.5x Secured Leverage and 4.5x Total Leverage.
- Restricted payments subject to 2.5x maximum PF Secured Leverage Ratio and \$100mn US liquidity test, with a carve-out for \$5mn "free and clear" restricted payments.
- Collateral consists of substantially all US assets, guarantees on substantially all US subsidiaries, and 65% equity pledge of first tier foreign subs...

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5 Shorts

All ideas within this category must be directionally short bets against a company's stock. Factored into consideration is the availability of shares to short (i.e. borrow), as well as the cost to short. Roughly 20% of research ideas on SumZero are short-focused.



Winner

Best Shorts

💡 Tactile Systems Technology Inc Com

Asset Class: **Equity** Symbol: **TCMD:US** Updated: **12/27/2017** Submitted: **12/24/2017**

EXPECTED RETURN

51.9%

COMMUNITY RATING



BY:
David Hughes

CURRENTLY AT:
Port Square Capital



SHORT

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Growth

MARKET CAP:

524M USD

Low-tech, niche medical equipment company with overstated addressable market, expiring patents, onerous reimbursement policies, insider selling, and expensive valuation.

Tactile Systems Technology Inc Com

Asset Class: **Equity** Symbol: **TCMD:US** Submitted: **12/24/2017** Updated: **12/27/2017**



BY:
David Hughes

CURRENTLY AT:
Port Square Capital

Pricing & Return Details

↓ **SHORT**

EXPECTED RETURN	51.9%
INITIAL PRICE	29.90 USD
TARGET PRICE	15.00 USD

COMMUNITY RATING: ★★★★★

PERCENTILE: 57%

Low-tech, niche medical equipment company with overstated addressable market, expiring patents, onerous reimbursement policies, insider selling, and expensive valuation.



ASSET CLASS:
Equity



SITUATION:
Growth



TARGET ALLOCATION:
1%-1.5%



CATALYSTS:
N/A



TIMEFRAME:
1-2 Years

Investment Thesis

Based in Minneapolis, TCMD is a medical equipment company that was founded in 1995 went public in July 2016. TCMD manufactures and distributes pneumatic compression pumps that help patients cope with lymphedema and chronic venous insufficiency.

Lymphedema is a condition where one or both arms or legs swell up because of damage to your lymph nodes that prevents lymph fluid from draining properly. There is no cure for lymphedema, but it can be managed with diligent care of the affected limb.



TCMD sells three products: Flexitouch, Entre, and ACTitouch. Flexitouch is TCMD's main product. Of the \$86mm in revenue that TCMD generated in 2016, Flexitouch generates 85%+ of total revenue.

- Flexitouch is TCMD's main product and was launched in 2003. It is a device that consists of an electronic controller unit and garments which are worn on the trunk and/or upper and lower affected extremities. The garment consists of inflatable chambers that sequentially inflate and deflate at various intervals. The purpose of the device is to massage and drain the excess lymph from the trunk and extremities, thereby reducing swelling in the affected limb. Flexitouch costs around \$5,000 per unit.
- Entre launched in 2013. Entre is a basic version of Flexitouch. It is sold to patients where a basic pump is suitable or who do not yet qualify for insurance

reimbursement for an advanced compression device like Flexitouch. Entre costs around \$1,000 per unit. TCMD is now de-emphasizing Entre.

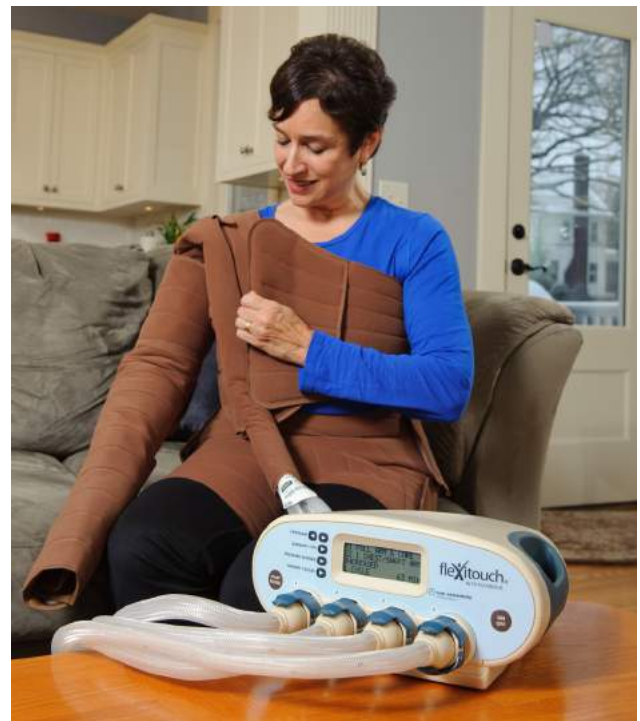
- ACTitouch launched in 2013. address the many limitations of non-removable multilayered bandages that are worn by patients suffering from venous leg ulcers. ACTitouch costs are \$1,000 per unit.

I recommend shorting TCMD for the following reasons:

1. TCMD is a niche product with a total addressable market that is much smaller than management purports it to be.

TCMD estimates that there are 5mm people in the U.S. who are living with lymphedema. Many people who have lymphedema do not actually know it. According to the company, which they commissioned themselves, there are 1mm people in the U.S. today who were diagnosed with lymphedema over the past 1.5 years, as of June 2017. Management likes to tout this number in their presentations when they talk about its addressable market, growing from 700,000 in mid-2014 to 820,000 by the end of 2015. At an average ASP of \$5,000, TCMD claims that its addressable market is roughly \$4bn+.

The problem with researching the lymphedema industry is that it is extremely difficult to locate industry data. However, in 2013, there was an academic research study put out by a group of lymphedema experts. In this study, they researchers were able to gain access to the health claims data from UnitedHealth Group from 2007 to 2013. The study said: “Our study provides the first reliable estimate of the population-based prevalence of lymphedema in cancer-related settings.” The reason the study focused on the cancer population is that most lymphedema cases arise as a consequence of cancer treatment, in particular from breast cancer but also from prostate cancer, pelvic-area cancers, lymphoma, melanoma, and head and neck cancers. During cancer therapy, a cancer patient’s lymph nodes either get removed through surgery or damaged through radiation treatment. The damage caused to patient’s lymphatic system leads to lymphedema.



According to the study, the UnitedHealth Group database had around 35mm people in it. In 2013, within this population, 1.2mm people were diagnosed with cancer, reflecting a prevalence rate of 3.40%. 14,775 of the 1,188,860 cancer patients had lymphedema, reflecting a prevalence rate of 1.24%. The study then used the prevalence rates from its sample population and applied it to the overall U.S. population: “Based on estimates of the US Census and Current Population Survey, there were 165mm privately insured, and 13mm Medicare Managed Care enrollees in the US in 2012. Inclusion of the Medicare Fee for Service enrollees (29mm), the Medicaid and other public insurance enrollees (54mm), and the uninsured as of 2012 (48mm), increases the estimated annual prevalence estimates for lymphedema among approximately 10mm patients with primary cancer diagnosis to more than 121,000.” According to the study, around 121,000 people in the U.S. were diagnosed annually with lymphedema in 2012.

However, the prevalence of lymphedema has been increasing. In the study, from 2007 to 2013, the number of patients with lymphedema within its population increased from 9,025 in 2007 to 14,775 in 2013. This comes out to be an annual CAGR of 8.6% (refer to table). If we assume that the number of people with lymphedema has continued to grow by 8.6% annually

	2007	2008	2009	2010	2011	2012	2013
# of Patients with Cancer in Sample Population	950,333	1,005,372	1,078,822	1,092,067	1,135,156	1,156,326	1,188,860
% Y/Y Growth		5.8%	7.3%	1.2%	3.9%	1.9%	2.8%
# of Patients with Lymphedema	9,025	9,827	11,165	12,029	12,806	13,985	14,775
% Y/Y Growth		8.9%	13.6%	7.7%	6.5%	9.2%	5.6%
% Prevalance of Lymphedema in Sample Cancer Populatio	0.95%	0.98%	1.03%	1.10%	1.13%	1.21%	1.24%

from 121,000 in 2012 to 2017, then that suggests around 183,000 new people are diagnosed with lymphedema in 2017 ($= 121,000 \times 1.086^5$). To account for higher growth, let's assume that the number of people diagnosed with lymphedema from the cancer population is around 200,000 annually.

As mentioned, cancer is the predominant cause of lymphedema (this is known as secondary lymphedema). There are people who have also have non-cancer related secondary lymphedema as well as people who are born with lymphedema (which is considered a rare disease). Even if non-cancer-related secondary lymphedema and primary lymphedema comprised 15-20% of overall cases, then this means that there are 235,000 to 265,000 people diagnosed annually with lymphedema, compared to the 1mm figure that management points investors to. Furthermore, the Flexitouch is aimed at patients suffering from moderate/severe lymphedema. Lymphedema can be broken down into three stages. Distribution of severities is approximately around 75% mild (Stage 1), 22% moderate (Stage 2) and 3% severe (Stage 3). Therefore, TCMD's addressable population in the U.S. is actually closer to 65,000-75,000 annually.

2. TCMD sells a low-tech hardware device with no follow-on revenue streams, has expiring patents on its main product which generates nearly all of its revenue, and competes against other manufacturers offering similar products.

TCMD generates its revenues from the sale of these devices, which are one time in nature. Following a sale, TCMD does not have additional revenue streams that it can generate from its customers. TCMD products are also low tech (even one sells-side analyst wrote: "TCMD is unlike most other companies in our current coverage in that the technological aspect of the device itself is relatively low-tech."). Because of this, there are

no frequent product upgrades that drive replacement demand. The current version of Flexitouch was released eight years ago in 2009 and they are finally enhancing some of the product features today – in fact, a TCMD customer service representative told me that many customers were still using the prior version of Flexitouch from 10 years ago.

All four patents protecting Flexitouch, which generates the majority of TCMD's revenue, are expiring at the end of this year. The patents are for the garment and compression chambers. It is unclear if the expiration of TCMD's patents will lead to a flurry of existing competitors copying its product or new competitors entering the space. But it is safe to conclude that any competitive advantages that TCMD might have sustained from these patents over the past 10+ years will officially be gone by the end of this year.

On January 30, 2001, our first patent, directed to our unique wrap structure, was issued (U.S. Pat. No. 6,179,796). This patent is specifically directed to an arcuate design and other features of a garment for wrapping about a patient. This arcuate design is one of the keys to the success of our Flexitouch System, as it facilitates the movement of the lymph fluid from the damaged lymph node area to other functioning lymph node areas. Similar patents have been issued in Europe and Canada.

- On November 11, 2003, a patent directed to our preparation and drainage methodology was issued (U.S. Pat. No. 6,645,165). This second patent is directed to body preparation for receipt of lymph fluid via pressurization and depressurization of chambers, and the subsequent lymph drainage from a body extremity via select pressurization and depressurization of chambers. This preparation and subsequent drainage of the lymph fluid is another key

to our Flexitouch System, as it allows stimulation of the lymphatic system to promote reabsorption of the lymph fluid.

- On March 1, 2005, a patent directed to our wrap structure and fabrication was issued (U.S. Pat. No. 6,860,862). This third patent is directed to the unique aspects of the fabrication of our wrap. In particular, a “four way stretch” and “axial stretch” of our garment allow us to stretch the patient’s skin in the same manner as manual lymphatic drainage therapy.
- On November 22, 2005, a patent directed to our preparation and drainage methodology was issued (U.S. Pat. No. 6,966,884). This fourth patent is directed to a lymphedema treatment methodology, entailing optimum sequencing of air chamber inflation/deflation.

Even if the patents for Flexitouch did not expire, TCMD says in its 10-K that it faces “significant competition... and we expect the intensity of competition will increase over time.” There are seven competitors in the U.S. that make similar compression pumps. The main difference is the number of chambers in the garment for air sequencing. There is no reason that competitors could not create a device that replicates TCMD’s product, to the extent the patents had been preventing them from doing so. Another sell-side analyst at the time of coverage initiation estimated that TCMD has 60% market share, followed by Lympha Press at 18%, Bio-Compression at 16%, and Wright Therapy at 5%. Competitors could be looking to take share from TCMD’s leading market position following this year.

3. TCMD’s products are not easy to sell due to onerous insurance reimbursement policies, as they are considered a treatment of last resort. Furthermore, rather than use traditional medical equipment distributors, TCMD has chosen to sell its products by building its own direct sales platform. Because of this, TCMD is labor intensive and has generated no operating leverage despite its rapid revenue growth.

TCMD’s products are also expensive and difficult to sell. Flexitouch costs around \$5,000. It is expensive for most

people, so patients require private insurance or Medicare to cover the cost of the device. However, insurance companies and Medicare make it extremely onerous to get the device reimbursed, because they are expensive and their efficacy is debatable (opinions by doctors vary widely).

Private insurance companies say that patients must meet varying requirements to demonstrate need before the insurance will cover the cost of the device and even send them a device, which includes spending four weeks under a physician’s supervision exhausting other conservative treatments. Even after the insurance company approves, this would still cost patients \$500-\$1,000 out of pocket due to co-pays and deductibles requirements.

Medicare, which comprises around 15% of TCMD’s revenue, is even more stringent than private insurance. Recently, TCMD said that it is de-emphasizing its Entre product, which suggests that it is essentially giving up on the Medicare channel: 1) documented diagnosis of lymphedema; 2) objective findings that establish the severity of the condition (Medicare specifically says that Stage 1 and/or mild lymphedema is not sufficient); 3) the patient has completed at least four weeks of conservative therapies (compression bandaging or garment, elevation, exercise); 4) the patient continues to exhibit significant symptoms following conservative therapies; 5) the patient has undergone a trial of a less costly, basic pump, for another month (Flexitouch is not considered a basic pump); 6) demonstrate unique characteristics that prevented satisfactory treatment with a basic pump; and 7) have clinical records to justify the patient has a medical need for a more advanced pump. Even after Medicare approves, this would still cost patients \$1,000 out of pocket.

Because the reimbursement process is onerous, TCMD needs a team of 102 employees (out of 335 employees) that specifically work with customers to help them with the reimbursement process and also work with the insurance companies to educate them on the product. Further adding to the labor intensity, TCMD has chosen to sell its products by building its own direct sales platform rather than using traditional medical equipment

distributors. TCMD believes that this provides them with high gross margins. Even though TCMD does generate 70%+ gross margins, its EBIT margins were 5-6%, as of the end of 2016. TCMD has 125 direct salespeople across the U.S. knocking on physician office doors, treatment centers, etc. S&M as a percentage of revenue is around 40%. Therefore, even though revenue has grown from \$48mm in 2014 to \$103mm in 2017 YTD, TCMD's EBIT has not benefited from operating leverage because operating expense has increased in-line with revenue due to increased headcount. This also suggests that TCMD needs to continue to grow its sales force to continue growing its top line. TCMD can hire aggressively to drive revenue growth in the short run, but this is simply not sustainable.

4. TCMD's two largest institutional investors have sold down their ownership from a combined 40% to 10%, as well as resigned from the Board, in less than 12 months following the TCMD's IPO. Senior executives at TCMD have also been selling.

TCMD's two largest institutional investors are venture capital firms, Galen Partners and Radius Ventures. Galen and Radius have been investors in TCMD for 10 years and 5 years, respectively. Galen and Radius owned

around 40% of the company (Galen: 28.4%; Radius: 11.8%). However, following the IPO and the run-up in the share price, Galen and Radius both started to sell their positions. In mid-September, Galen and Radius sold their shares through a secondary offering and reduced each of their ownership positions down to around 5%. Galen and Radius sold at \$31.

This was the second attempt by Galen and Radius to sell their shares following the IPO. Prior to this secondary offering, they tried to execute a secondary offering in November 2016 at \$17-18. This secondary offering was withdrawn after two weeks for unknown reasons but most likely due to lack of demand. Furthermore, both Galen and Radius resigned from TCMD's board, which is unusual given that it had been less than 12 months since TCMD's IPO.

These facts seem to suggest that Galen and Radius have been looking to get out of TCMD unusually quickly. I can only speculate what those reasons are, but it seems clear that these are not actions that would suggest that things are going well at TCMD. In addition, senior executives across TCMD have also been selling following the IPO, particularly recently (refer to table).

X	Filing Date	Trade Date	Ticker	Insider Name	Insider Title	Trade Type	Share Price	Shares Traded	Shares Owned	Own chg	Value Traded
	2017-09-19 17:01:39	2017-09-15	TCMD	Galen Partners V LP	10%	S - Sale	\$31.02	-2,794,500	907,736	-75%	-\$86,685,390
	2017-09-15 16:30:19	2017-09-15	TCMD	Radius Venture Partners Iii, LLC	10%	S - Sale	\$31.02	-1,000,500	1,000,798	-50%	-\$31,035,510
	2017-06-29 16:53:40	2017-06-28	TCMD	Galen Partners V LP	10%	S - Sale	\$28.85	-200,000	3,702,233	-5%	-\$5,770,000
	2017-06-22 17:10:14	2017-06-21	TCMD	Galen Partners V LP	10%	S - Sale	\$26.45	-83,000	3,902,233	-2%	-\$2,195,350
	2017-06-14 16:31:39	2017-06-13	TCMD	Galen Partners V LP	10%	S - Sale	\$25.00	-295,455	3,985,233	-7%	-\$7,386,375
	2017-06-02 16:09:00	2017-06-01	TCMD	Galen Partners V LP	10%	S - Sale	\$25.00	-200,000	4,280,688	-4%	-\$5,000,000
A	2017-05-16 10:04:31	2017-05-11	TCMD	Galen Partners V LP	10%	S - Sale	\$21.25	-325,000	4,480,688	-7%	-\$6,906,250

In addition, senior executives across TCMD have also been selling following the IPO, particularly recently:

X	Filing Date	Trade Date	Ticker	Insider Name	Insider Title	Trade Type	Share Price	Shares Traded	Shares Owned	Own chg
	2017-12-22 16:25:08	2017-12-20	TCMD	Rishe Bryan	SVP, Sales	S - Sale	\$29.54	-1,500	100,807	-1%
M	2017-12-15 16:18:51	2017-12-13	TCMD	Davis Jordan	Dir	S - Sale	\$29.52	-40,000	965,804	-4%
	2017-12-14 17:42:52	2017-12-12	TCMD	Pegus Cheryl	Dir	P - Purchase	\$27.86	+1,000	2,184	+84%
	2017-12-12 16:09:22	2017-12-08	TCMD	Roche Kevin H	Dir	S - Sale	\$27.49	-14,600	111,784	-12%
	2017-12-08 16:36:03	2017-12-06	TCMD	Folkes Robert J.	COO	S - Sale	\$27.08	-1,500	127,337	-1%
	2017-12-06 17:14:47	2017-12-04	TCMD	Roche Kevin H	Dir	S - Sale	\$28.60	-400	126,384	0%
	2017-12-06 17:14:33	2017-12-04	TCMD	Rishe Bryan	SVP, Sales	S - Sale	\$29.34	-1,500	102,307	-1%
	2017-12-05 17:25:23	2017-12-01	TCMD	Burke William W	Dir	S - Sale	\$28.86	-2,000	6,306	-24%
D	2017-12-05 17:22:42	2017-12-01	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$28.92	-2,955	128,837	-2%
AD	2017-12-05 17:21:00	2017-10-02	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$30.81	-2,955	131,837	-2%
	2017-11-24 09:15:42	2017-11-20	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$28.51	-1,500	103,807	-1%
DM	2017-11-21 15:51:21	2017-11-17	TCMD	Mattys Gerald R.	CEO	S - Sale+OE	\$27.00	-40,000	312,400	-11%
	2017-11-07 16:35:19	2017-11-03	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$27.21	-1,500	105,307	-1%

	2017-11-03 17:20:35	2017-11-01	TCMD	Blake Lynn Larson	CFO	S - Sale	\$28.63	-682	64,767	-1%
D	2017-11-03 17:19:20	2017-11-01	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$28.32	-4,455	125,882	-3%
	2017-10-24 16:43:54	2017-10-20	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$31.87	-1,500	106,807	-1%
	2017-10-06 16:14:56	2017-10-04	TCMD	Folkes Robert J.	COO	S - Sale	\$31.73	-1,500	127,382	-1%
	2017-10-05 16:22:08	2017-10-03	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$31.56	-1,500	108,307	-1%
	2017-10-04 17:50:58	2017-10-02	TCMD	Folkes Robert J.	COO	S - Sale	\$30.81	-2,955	128,882	-2%
	2017-09-22 17:00:25	2017-09-20	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$32.86	-1,500	109,807	-1%
	2017-09-19 17:01:39	2017-09-15	TCMD	Galen Partners V LP	10%	S - Sale	\$31.02	-2,794,500	907,736	-75%
	2017-09-15 16:44:27	2017-09-15	TCMD	Davis Jordan	Dir	S - Sale	\$31.02	-1,000,500	1,005,804	-50%
	2017-09-15 16:30:19	2017-09-15	TCMD	Radius Venture Partners Iii, LLC	10%	S - Sale	\$31.02	-1,000,500	1,000,798	-50%
	2017-09-08 17:13:29	2017-09-06	TCMD	Folkes Robert J.	COO	S - Sale	\$33.67	-1,500	131,837	-1%
	2017-09-07 16:53:08	2017-09-05	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$32.77	-1,500	111,307	-1%
D	2017-09-06 16:38:56	2017-09-01	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$32.46	-2,955	133,337	-2%
M	2017-08-29 17:36:33	2017-08-25	TCMD	Roche Kevin H.	Dir	S - Sale	\$32.37	-25,000	126,784	-16%
	2017-08-23 16:27:23	2017-08-21	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$33.57	-1,500	112,807	-1%
DM	2017-08-15 17:32:24	2017-08-11	TCMD	Mattys Gerald R.	CEO	S - Sale+OE	\$31.47	-30,000	312,400	-9%
	2017-08-11 17:21:13	2017-08-09	TCMD	Folkes Robert J.	COO	S - Sale	\$32.54	-1,500	133,337	-1%
	2017-08-07 16:35:34	2017-08-03	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$28.29	-1,500	114,307	-1%
D	2017-08-03 17:41:23	2017-08-01	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$29.43	-2,955	129,837	-2%
	2017-08-03 17:27:26	2017-08-01	TCMD	Blake Lynn Larson	CFO	S - Sale	\$29.55	-682	62,213	-1%
	2017-07-24 21:17:20	2017-07-20	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$30.41	-1,500	110,807	-1%
	2017-07-14 17:01:04	2017-07-12	TCMD	Folkes Robert J.	COO	S - Sale	\$29.49	-1,500	129,837	-1%
D	2017-07-06 17:30:02	2017-07-03	TCMD	Folkes Robert J.	COO	S - Sale+OE	\$28.16	-2,955	131,337	-2%
	2017-07-06 17:26:44	2017-07-03	TCMD	Rishe Bryan	VP, Sales	S - Sale	\$28.44	-1,500	112,307	-1%
	2017-06-29 16:53:40	2017-06-28	TCMD	Galen Partners V LP	10%	S - Sale	\$28.85	-200,000	3,702,233	-5%
	2017-06-22 17:10:14	2017-06-21	TCMD	Galen Partners V LP	10%	S - Sale	\$26.45	-83,000	3,902,233	-2%

5. TCMD is trading at 3.7x revenue and a PE of 145x on 2018 consensus estimates. Aside from growth, TCMD does not seem to exhibit the same positive business characteristics that would warrant these multiples.

At a current price of \$30, TCMD has a market cap of around \$525mm (\$41.6mm in cash and no debt). Based on consensus estimates for 2018 and 2019, TCMD is trading at an EV/Revenue of 3.7x and 3.1x and a PE of 145x and 65x.

From a high level, companies that usually trade at these types of multiples usually exhibit some combination of positive characteristics such as: open-ended market opportunity (as opposed to a limited one), recurring revenue (as opposed to a one-time sale), or strong technology IP (as opposed to being low-tech with expiring patents). To TCMD's credit, it does exhibit high growth and does have a dominant market position with leading market share.

Risks

- If TCMD continues to grow revenue quickly, the market may only be focused on its growth pushing the stock up.
- TCMD is the only competitor that has a direct sales force. Other competitors use medical equipment distributors.

Because of that, TCMD has more control over its sales process and can be a lot more proactive than its competitors in getting in front of physicians, therapists, clinics, etc. This could lead to TCMD growing sales rapidly, taking additional share from competitors, etc. However, I imagine that the distributors who are selling competitor products also have large sales teams and will not sit idly on the sidelines.

- TCMD could be an acquisition candidate for a larger healthcare company. I do not believe that a larger company would be interested in acquiring TCMD for TCMD's products, since it could probably create a similar product fairly easily given its low-tech nature and lack of patent protection. However, if it turns out that TCMD's direct sales approach is successful, an acquirer might find that attractive and could look to acquire TCMD for its direct sales team.
- Insurance coverage policies can change. It is possible that insurance coverage, either at private insurance companies or Medicare, becomes more favorable to TCMD. Insurance companies or Medicare might determine that compression pumps are effective and could make reimbursement less onerous. For example, insurance companies or Medicare could open up reimbursement to patients with mild lymphedema, or get rid of the requirement where patients need to prove that other solutions are not effective.

Sign up for SumZero to for access to tens of thousands of pre-vetted ideas from buy-side analysts, including [the full TCMD:US report](#).

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Finalist

Best Shorts

🔍 Xxl Asa

Asset Class: **Equity**

Symbol: **XXL:NO**

Updated: **12/30/2017**

Submitted: **12/27/2017**

EXPECTED RETURN

45.7%

COMMUNITY RATING



BY:

Carl Rydin

CURRENTLY AT:

Origo Capital AB



SHORT

ATTACHMENTS:



TIMEFRAME:

6 Mo. - 1 Year

SITUATION:

Contrarian

MARKET CAP:

12.7B NOK

Sports retailer with aggressive like-for-like accounting at an unreasonable price. Several insiders selling shares!



About Carl Rydin

Swedish Portfolio Manager with a long/short equity mandate. Origo Capital is an investment firm based in Stockholm with a focus on long-term, active ownership in Nordic equities. We are value investors and manage a concentrated portfolio with a private equity mindset to investing. Our short positions consist of companies with accounting irregularities, balance sheet risk, and/or operating in industries with structural declining characteristics.

Xxl Asa

Asset Class: **Equity** Symbol: **XXL:NO** Submitted: **12/27/2017** Updated: **12/30/2017**



BY:
Carl Rydin

CURRENTLY AT:
Origo Capital AB

Pricing & Return Details SHORT	
EXPECTED RETURN	45.7%
INITIAL PRICE	84.50 NOK
TARGET PRICE	50.00 NOK

COMMUNITY RATING: ★★★★★

PERCENTILE: 71%

Sports retailer with aggressive like-for-like accounting at an unreasonable price. Several insiders selling shares!



ASSET CLASS:
Equity



SITUATION:
Contrarian



TARGET ALLOCATION:
2% - 5%



CATALYSTS:
Accounting
Irregularities/
Fraud and 1 more



TIMEFRAME:
6 Mo. - 1 Year

Investment Thesis

Company Overview

XXL is a Norway-based sports retailer with high growth ambitions across the Nordic region and Austria. The company focuses on selling apparel and equipment at low prices from its large physical stores as well as selling online. The company started in 2001 with store openings in Norway and followed with new stores in Sweden, Finland and Austria (online in Denmark). XXL's strategy has been based on operating with low OpEx and therefor allowing low prices to consumers. XXL's EBITDA margin has been around 10% and is very dependant on keeping the OpEx low. Its Nordic expansion took place while its competitors struggled to manage costs, leading to XXL gaining market share.

In 2010, the Swedish PE-firm, EQT, bought 65% of XXL. They managed to further streamline the cost structure and investing heavily in new store growth. XXL went public

in 2014 and EQT subsequently sold part of its ownership and later all of its stake in a placing. Today, the largest shareholder is founder, Øivind Lønnestad Tidemandsen (24%).

XXL has grown from NOK 4bn in sales in 2013 to over NOK 8.5bn in 2017. Current market cap is NOK 11.8bn with NOK 1.9bn in net debt.

According to XXL's 2016 annual report, it's mission and strategy are: "XXL's mission is to be a leading European sports retailer for branded sports, outdoors and wilderness products at the best prices. XXL expects to sustain continued like-for-like growth and believes in a potential to grow further in Norway, Sweden, Finland and Denmark".

"XXL believe we may increase the store base in the Nordics to around 85 stores in total in the coming years. With the Group's cost control, uniform store layout and broad product ranges, XXL is able to take advantage of synergies

during roll-outs with minimal incremental investments and costs at headquarters and central warehouses”.

Financials

NOKm	2012	2013	2014	2015	2016
Revenues	3,107	4,010	5,215	6,487	7,812
Gross margin (%)	39.4	40.2	40.8	39.8	39.9
EBITDA	371	460	600	726	823
EBITDA margin (%)	11.9	11.5	11.5	11.2	10.5
Change in WC	-184	-55	-198	-214	-588
Operating cash flow	114	211	448	350	31
Capital Expenditures	-138	-152	-152	-169	-239
Free cash flow	-24	59	296	181	-217
Dividend paid	0	0	0	-277	-277
ROIC (%)	6.6	7.5	12.3	10.4	11.3

NOKm	2015	2016	Q1 2017	Q2 2017	Q3 2017
Cash	87	115	46	292	95
Bank loan	1,100	1,044	1,110	1,096	1,082
Total long term debt	1,094	1,038	1,110	1,096	1,082
Short term debt	0	549	710	1,099	918
Total debt	1,094	1,587	1,820	2,195	2,000
Total net debt	1,007	1,472	1,774	1,903	1,905
12m trailing EBITDA	726	823	756	745	783
Net debt / EBITDA	1.4x	1.8x	2.3x	2.6x	2.4x

Competitive Landscape

Competition includes primarily traditional local sport retailers and online retailers. As E-commerce is becoming a more important channel, XXL – and other retailers – also compete the owners of the very brands they sell. XXL sells 90% branded goods, and for the most part XXL only sells the low-end products from brands such as Nike, Adidas etc.

In Norway, XXL is on average 8% cheaper than its competitors. Price competition primarily comes from the pure e-commerce players, Boozt, Zalando and Sportamore.

XXL is also the cheapest chain among the Swedish sports retailers, with an average price difference between XXL and a sample of competitors of 8% according to ABGSC. The only retailer with lower prices than XXL in Sweden is Boozt.com. In Sweden, the biggest threat is most likely if and when Amazon will push into the market. Amazon has recently bought the domain amazon.se and is also expanding fast within its AWS platform in the region.

Short Case - Highlights

The XXL short case is based on several different issues. First, the company suffers from short-term issues including high inventory levels as last winter was warmer than expected, leading to slow seasonal sales. For six straight quarters the inventory to 12m trailing sales have been above 30% (35% as of Q3 2017). The gross margin will suffer as XXL aims to lower this inventory level via major promotions. Also, the expansion outside of the Nordic region will require more capital and be more costly than previous growth within the Nordics.

On a more longer view, a structural shift within consumer shopping behavior from traditional physical stores to higher portion E-commerce will have an effect on XXL given its core focus on large store locations. Its competitive advantage will diminish over time as the best-in-class online retailers such as Zalando and Amazon eventually will take market share in XXL's core markets.

As for the capital structure, the Net Debt to EBITDA is at high levels (2.4x), which puts the future dividend at risk. The dividend has recently been debt financed as the free cash flow is not sufficient to cover the dividend payments. XXL's asset-light model via leased real estate will disappear as IFRS 16 accounting will move off-balance-sheet leases amounting to approximately NOK 4bn onto the balance sheet from 2019.

In XXL's IPO prospectus the accounting methodology for like-for-like growth calculation was very aggressive as it excluded any cannibalization effects from new store openings, refurbished, or moved stores. It basically showed, like-for-like growth without anything negative based on management's opinion. The following is a definition from XXL's IPO prospectus: "Like-for-like growth represents the percentage change in same-store sales in the period presented compared to the same period in the prior year. Same-store sales exclude the total operating revenue of a store for a period if the store was not open for the full period and the entire corresponding period in the prior year. The stores included in the like-for-like growth in total operating revenue are redefined every year. Management excludes stores from like-for-like growth figures for a period if the Company considers the figures to be disrupted during the relevant periods, for example if the stores were moved or were refurbished during the period. Like-for-

like growth (excluding cannibalisation) presents figures on the same basis as described above, but excludes from the calculation stores that the Company believes were “cannibalised” as a result of new XXL stores opening nearby.

Another concern regarding XXL is that insiders have recently been net sellers of shares. The CEO decided to take a few minutes of Q3 2017 earnings call to verbally criticizing short sellers although he decided to sell 665,000 shares the same day.

Overall, XXL has been a darling among sell-side community since its IPO and forward consensus figures have not taken into account tougher competition or any additional costs associated with a European expansion and IT infrastructure related to larger portion online sales.

Relative Valuation

XXL trades at multiples more than double of international peers. US sporting goods retailers, such as Dick's Sporting Goods and Foot Locker, with a branded goods product offering are trading at 5x 2018 EV/EBITDA. Applying a more reasonable EV/EBITDA multiple of 8x on 2018e consensus figures implies more than 40% downside to current share price.

Risks

In addition to the obvious risks of shorting a stock, there are company- specific risks associated with the XXL short case:

Consolidation: XXL could become a takeover target for a European consolidator looking to gain market share in a specific region (Nordics) as well as operation know-how into OpEx efficiencies.

Lowest price could win the game: Some competitors, such as the incumbent sports retailers, have stopped trying to compete on price as they have a hard time maintaining profitable with a lower gross margin caused by discounts. Unless large online retailers, such as Amazon and Zalando, take customer traffic from XXL, customers could view XXL as the best shop for bargain prices.

European expansion successful: If management manage to execute a perfect expansion into central Europe XXL would prove its growth success was not limited to its home market in the Nordics.

Justified relative valuation: If XXL manages to maintain its growth at double digits as it expands outside of Europe, investors could view the case as a long-term growth story and therefor justify the significant multiple to international

XXL versus International Peers

Company	P/E					EV/Revenue					EV/EBITDA					P/Book		
	Last	LTM	NTM	2017e	2018e	Last	LTM	NTM	2017e	2018e	Last	LTM	NTM	2017e	2018e	Last	2017e	2018e
XXL ASA	22.85	25.25	16.66	23.07	16.59	1.70	1.59	1.26	1.52	1.26	16.13	16.94	12.17	16.05	12.12	3.27	3.09	2.77
Peer Median	8.73	10.58	12.60	12.85	12.69	0.50	0.51	0.50	0.50	0.50	4.20	4.55	5.13	4.95	5.16	1.63	1.59	1.41
Sports Direct International pl...	8.90	8.90	21.74	22.87	21.20	0.68	0.68	0.64	0.65	0.64	9.02	9.02	7.17	7.58	6.96	1.65	N/A	N/A
Dicks Sporting Goods Inc	10.77	10.40	11.88	9.99	12.13	0.37	0.35	0.34	0.34	0.33	4.32	3.88	4.39	3.91	4.45	1.60	1.59	1.41
Hibbett Sports Inc.	6.58	10.76	13.32	14.03	13.24	0.38	0.39	0.38	0.38	0.38	3.16	4.41	5.02	4.94	5.03	1.20	1.36	1.24
Foot Locker Inc.	8.55	10.87	11.54	11.67	11.53	0.61	0.62	0.61	0.61	0.61	4.07	4.69	5.24	4.95	5.28	2.09	2.33	2.18

XXL Valuation - Based on Fair 2018e EBITDA Multiple

NOK m except share price	
2018e EBITDA	1,097
Fair Multiple	8.0x
Implied EV	8,772
Net Debt (minus)	1,905
Implied Equity Value	6,867
Shares Outstanding	138
Fair Share Price	49.65
Downside	-41.8%

XXL is trading at significant premium to international peers
An 8x EV/EBITDA multiple on 2018e consensus figures applies more than 40% downside to current share price

peers. This is also what the sell-side community believes is justified currently.

Insiders buying shares: Should insiders buy shares, as oppose to sell which has been the case lately, investors might view this as a strength and sentiment would be positive.

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Finalist

Best Shorts

🔍 Snap Inc Cl a

Asset Class: **Equity**

Symbol: **SNAP:US**

Updated: **12/17/2017**

Submitted: **12/14/2017**

EXPECTED RETURN

47.5%

COMMUNITY RATING



BY:

Vimal Selvaraju

FORMERLY AT:

Greenchip Financial Corp



SHORT

ATTACHMENTS:



TIMEFRAME:

1-2 Years

SITUATION:

Other

MARKET CAP:

12.1B USD

Outlook on DAUs, ARPU and margins suggest that Snap is considerably overvalued at \$15.96 per share. The recent redesign and mounting competition will result in DAU and ARPU deterioration.



About Vimal Selvaraju

Vimal Selvaraju was most recently at Greenchip Financial, a long only fund focused on value and green investing. He has a degree in biochemistry at the University of Toronto and recently completed his MBA at the Rotman School of Management. While he has had years of experience working in real estate, he has been managing his own portfolio of equities for over 7 years. He is currently a generalist, and focuses on value and event-driven opportunities.

Snap Inc Cl A

Asset Class: **Equity** Symbol: **SNAP:US** Submitted: **12/14/2017** Updated: **12/17/2017**



BY:
Vimal Selvaraju

FORMERLY AT:
Greenchip Financial Corp

Pricing & Return Details

↓ **SHORT**

EXPECTED RETURN	47.5%
INITIAL PRICE	16.00 USD
TARGET PRICE	7.37 USD

COMMUNITY RATING: ★★★★★

PERCENTILE: 74%

Outlook on DAUs, ARPU and margins suggest that Snap is considerably overvalued at \$15.96 per share. The recent redesign and mounting competition will result in DAU and ARPU deterioration.



ASSET CLASS:
Equity



SITUATION:
Other



TARGET ALLOCATION:
5% - 10%



CATALYSTS:
N/A



TIMEFRAME:
1-2 Years

Investment Thesis

Recommendation: SELL (Ticker: SNAP)

Current Price: \$15.96

Target Price: \$7.37 (~54% return)

Time Horizon: 12-24 Months

Summary

The market's opinion of Snap remains unjustifiably hopeful. Outlook on DAUs, ARPU and margins suggest that the company is considerably overvalued at the current price of \$15.96. The redesign on Dec 4th and the mounting competitive pressures from Facebook will likely result in further deterioration of DAUs and ARPU growth.

What industry is Snap Inc. in?

Snap is a social media company that enables its users to take disappearing photos and videos, customize them with filter effects, and share them with friends and followers in a photo feed or send them directly to friends. Snap Inc., largely makes their money from ad revenues.

The company calls itself a camera company. I imagine this is supposed to be a marketing strategy, however, this type of semantics game has confused both investors and users in the past. It is clear this is not a useful approach by the organization.

Snap Inc.

Snap Inc. is a camera company.

We believe that reinventing the camera represents our greatest opportunity to improve the way people live and communicate.

Our products empower people to express themselves, live in the moment, learn about the world, and have fun together.

The IPO and the fall

The company IPO'd this year on March 2nd at the price of \$17 a share (48.7x 2016 Revenue) and a valuation of about \$19.7 billion. The stock jumped dramatically to \$27 a share a few days after the IPO. On July 11th 2017 Morgan Stanley, the companies lead underwriter, downgraded the stock from "overweight" to "equal-weight" and slashed its price target by \$12 to \$16. Morgan Stanley cited slow ad platform improvement, advertisers' struggles to create ads with adequate completion rates, and slowing user growth. Further downgrades, competition from Instagram and their "stories" platform, and poor Q3 results dropped the stock to below IPO prices. The stock has rallied over the past month with anticipation over Snap's redesign on December 4th. The stock currently stands at \$15.96 a share (27.3x LTM Revenue) and at a valuation of about \$19.22 billion.

The consensus view

As far as I can tell, the consensus view is that although DAU growth has slowed down, Snap will at least be able to retain its loyal user base. The hope is that there will be a continued runway for ARPU growth as advertisers seek access to the traditionally illusive and arguably valuable teen demographic. Snap management continues to push the view that their user base is considerably more monetizable given that they post more content than users of other social networks.

My summarized view

Snap does not live in a vacuum. There are not only competitive pressures on DAUs, but also weakness in ARPU given that Instagram has copied nearly every monetizable function that Snap has put out. In addition to this, Snaps limited user information reduces ad targeting and subsequently ROI for advertisers. An app redesign within months of IPOing and a host of risk factors that are plaguing the company do not provide much reassurance that the company is heading in a good direction. Given reasonable and sober outlooks for DAUs, ARPU and margins, I believe the company is worth around **\$7.37** per share and I expect this thesis to express itself over the next 12-24 months.

Catalysts

App redesign may cause DAU disruption

During Q3 earnings Evan Spiegel explained that users have been saying that Snapchat is difficult to understand and difficult to use. He announced that the company has been working on redesigning the application with something similar to a personalized content feed. The launch of this redesign was on December 4th and Spiegel has suggested that there is a strong likelihood that it will be disruptive to the business in the short term.

The original design placed private messages, stories, and publisher stories on separate pages. The redesign places private messages between friends along with shared stories on the left side of the camera, while designating the right side of the camera for publisher stories, celebrities and other feeds that may interest users.

This may reduce views to publisher, advertiser and influencer content. At first glance, Ad agencies, seem to be opposed to the redesign. The primary argument is that the value in Snap was the ability for ad campaigns to be able to blend in with content from friends so as to seem more organic. This may also have the effect of decreasing viewers of celebrity and influencer content who maintain fairly loyal audiences. If these celebrities and influencers move to a platform that offers better monetization for publishers, than this may result in their audiences following them.

Note that this design change has not done much of anything to resolve the complaints of the app being difficult to use.

Management has added “creepy” ads in redesign

Many of Snapchats younger users actually use Snapchat as a communications app. This means, rather than sending texts or using WhatsApp, they are primarily using Snapchat. What is interesting here is that 60% of DAUs post Snaps every day, while 25% of DAUs post snaps to their story every day. Prior to the redesign, Spiegel has stated that they will never publish ads within their chat service, since “it’s creepy”. This was likely a wise strategy, however, it also suggested that a considerable amount of content was not monetizable on the app. Richard Greenfield from BTIG noticed this discrepancy and questioned Evan Spiegel in the q2 call without receiving a clear answer.

Although Snap has placed both stories and private messages on the left side of the app interface in the redesign, Snap only shows ads in between stories but not private messages. Irrespective of this, ads within stories now seemingly adopt Spiegel’s description of “creepy”. It is not certain whether users will actually care, but if Spiegel is correct in his assumption that “creepy” ads do in fact bother users, than this may cause further DAU disruption.

Expect stock based compensation and costs overall to remain high with android revamp

While this recent redesign was simply a UI change, the company has announced that it will be remaking the app for android given the poor performance across several devices. R&D costs will remain high along with SBC. Spiegel mentioned in the q3 earnings call that this is an ongoing investment and will require significant engineering resources across all teams.

Poor results and a waning stock price will result in dilution

The company has said to expect similar stock compensation expenses in the coming quarters. This is to be expected given the android revamp and the necessary R&D costs that the company will need to take on. If we expect stock based compensation to remain around a similar range to the last

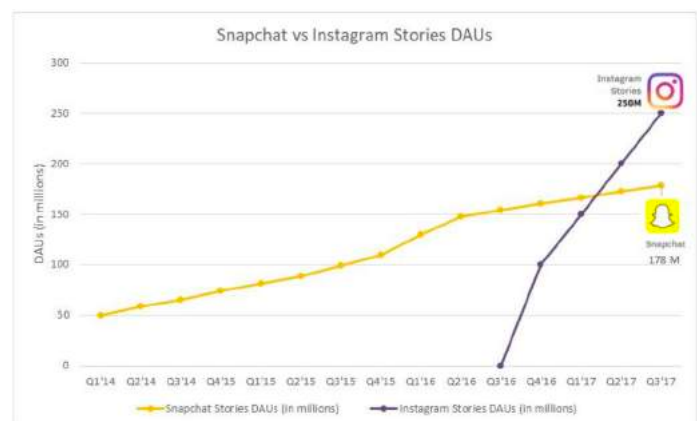
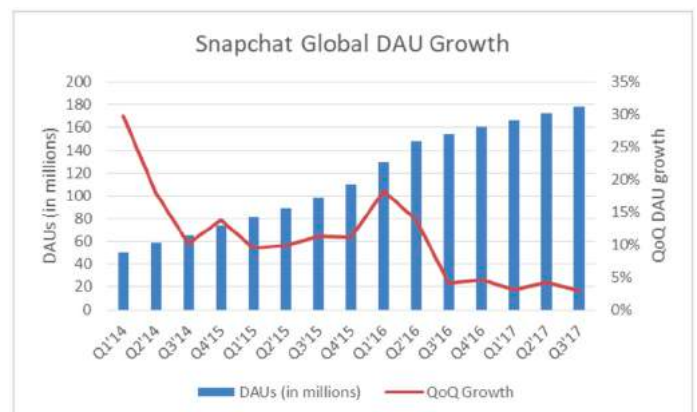
quarter (\$250 mill), at the current stock price we should expect 5% yearly dilution. If poor results continue to pile up in the next few quarters we can expect greater dilution on the share count.

Key Drivers

The key drivers that are contributing to the future success or failure of Snap are DAUs (Daily Active Users), ARPU (Average revenue per user) and the target EBIT margin.

DAUs

Snapchat’s DAUs have been growing at an impressive rate since 2014, however, DAU growth has dramatically slowed down since Q3 of 2016. This large and sustained contraction in growth was no doubt due to the launch of Instagram stories on August 2nd, 2016. The pattern was similar across all regions, so I decided to share only the global DAU growth metrics. Facebook Inc., has since added a “stories” feature to their Facebook and WhatsApp apps as well.



Source: Snap and Facebook’s 10-Q, 10-K and S-1 Filings

The company has attempted to explain away the slowdown in DAUs by claiming that it was due to bad product updates in mid-2016 – the impact was apparently more pronounced with android users. The company allocated considerable attention and space to these updates in their S-1 filing and earnings calls, however, only a sentence was used to describe how competition affected DAUs. This claim was clearly misleading as Snap has implemented several android improvements to the app over the past year which have failed to re-bolster DAU growth.

Social media companies are in an arms race for capturing our attention. This battle is zero sum, and users have to allocate their time between these platforms. This is especially true between Snapchat stories and Instagram stories, given their similarities.

I expect Facebook to continue to be vigilant in offering comparable and competing features on their apps (Facebook, Instagram, and WhatsApp) in order to add users.

Influencer behaviour is a canary in the coal mine

Many influencers and celebrities on Snapchat and Instagram generate income by posting branded content to their loyal fans. One can expect that a loyal audience will follow an influencer or celebrity if they switch platforms. As a result, influencers and celebrity publishing behavior on either app allows for further insight into DAUs.

Snapchat has historically ignored the value that influencers and celebrities have had on generating users on the platform. Some influencers have received the message that, “Snapchat is an app for friends, not creators,” when telling management that they were thinking of leaving the platform. Others have been literally turned away at the door. Snap has, within the past month, changed their tune and has begun to reach out to influencers. While this is a step in the right direction, one wonders how spurned users will respond.

Influencers who make a living posting branded content require further analytics regarding their marketing strategies. Snap does not have such tools, nor has it been attentive to creating them. In fact, some influencers will set alarms for 23 hours and 59 minutes after taking a post to

remember to take a screenshot of the number of viewers. UEG claims it receives many screen shots when working with influencers, because it is important for them to have a comparison with how they spend their dollars. While some view Snap’s behaviour as a careless error, many believe this is a careful and well intentioned strategic decision in order to create a “friends-and-family” feel that will differentiate it from rivals. There is an inherent paradox of Snap, in that it wants to create a culture of privacy and authenticity yet wants to claim that it is a better ROI for advertisers. The downfall of Vine was also as a result of a lack of analytics and support from the platform.

Instagram on the other hand has provided “Instagram Insights” so that users can access basic stats for assessing ones Instagram marketing efforts. Many influencers have expressed much more opportunity and interest from Instagram to help them improve their marketing efforts. In addition to this, Instagram has a heavy presence at VidCon, the influencer conference in Anaheim, California. Snapchat does not send executives to the event.

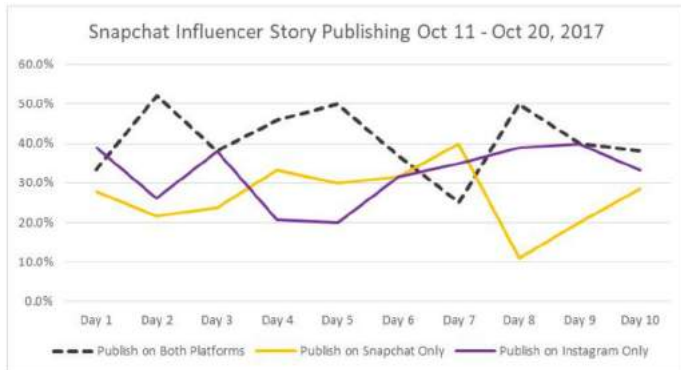
The influencer marketing agency, Mediakix, recently did a 30 day study on influencers’ use of Snapchat vs Instagram stories in February and August of this year. They found that of the 12 top social media influencers they tracked, they published 2x more Instagram stories than Snapchat stories, there was 14% growth in Instagram stories published in 6 months, and there was a 33% decline in Snapchat Stories published in 6 months.

I felt that Mediakix followed a metric that was not necessarily a useful lead indicator. I think it would be much more useful to see whether influencer are either using Snapchat or Instagram exclusively, and how this may change over time. For example, if an influencer stopped posting content on both platforms at the same time and instead moved exclusively to Instagram, then their Snapchat audience would need to decide whether they would also move to Instagram. I also wanted to use a greater sample size (32) to Mediakix’s 12.

I analyzed how many influencers used 1) both platforms at the same time, 2) used only Snapchat, and 3) used only Instagram stories. I performed this analysis over two 10 day periods. Oct 11th – October 20th and November 22nd –

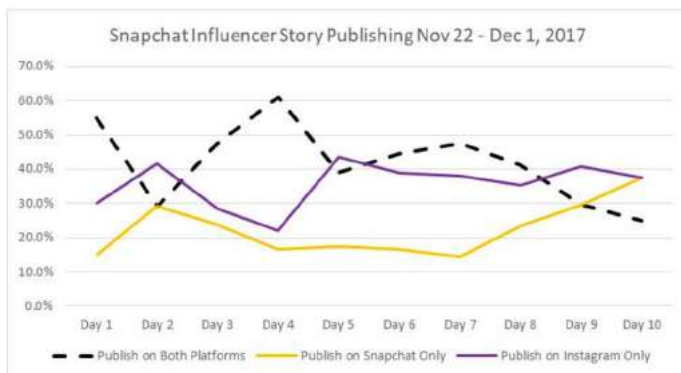
December 1st. Although the study was only done for two 10 day periods, I believe its insights are useful because it directly analyzed how influencers chose to allocate their time and attention given two similar and competing platforms in Snapchat and Instagram.

My first set included influencers from Snapchat as suggested from [business insider](#) and [Izea](#). I only kept those individuals that had both an Instagram and Snapchat account.



Source: My own analysis

The first period shows that there are a considerable amount of celebrities and influencers who are either using both platforms, are using only Snapchat or are only using Instagram. On average across the 10 day period 40.9% of users published on both platforms, 26.8% of users published exclusively on Snapchat and 32.3% of users published exclusively on Instagram.



Source: My own analysis

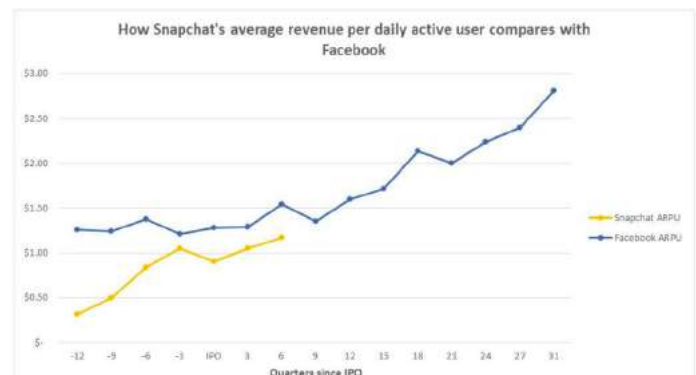
The second study showed higher exclusive publishing on Instagram Stories than Snapchat on all days. On average across the 10 day period **42.0%** of users published on both

platforms, **22.4%** of users published exclusively on Snapchat and **35.6%** of users published exclusively on Instagram.

While Snapchat exclusive story publishing decreased by **4.4%**, I think it would be worthwhile to gain a few more data points. In particular, I would like to analyze celebrity and influencer usage post the redesign efforts that have recently occurred. I will update this study with another 10 day period on the monthly anniversary of the redesign.

ARPU

Irrespective of the DAU slowdown, the company does not seem concerned with user growth because they believe that revenue growth is not reliant on it. Instead, they believe that the nature of Snapchats platform and the higher engagement they have with their users will allow Snapchat to sell their ads at a premium to a Facebook or an Instagram.



Source: Snap and Facebook's 10-Q, 10-K and S-1 Filings

The switch from direct ad sales to auction based

According to Digiday, buyers say that the cost for ads on Instagram Stories is about \$3-\$4 CPMs (Cost per 1000 impressions), and completion rates are between two and three times higher on Instagram than Snapchat. Snapchat Ads cost approximately \$20-\$40 CPMs depending on where the ad appears. Snap has shifted their direct ad sales to an auction format, and this has negatively impacted CPMs which have dropped 60% year-over year. Snap has managed to survive this drop due impressions being up 400% compared to a year ago. I expect Snap to continue to face pressure on CPM growth and impressions given the competition and DAU issues it is facing.

Future DAU growth is targeted towards users who are less valuable to advertisers

As I have mentioned earlier, management is now focused on Android users. Given the fact that the company already reaches 70% of 13 to 34 year olds in the U.S., the U.K., France and Australia, we can expect that the majority of future additions in DAUs will come from users in developing areas. With less discretionary funds at their disposal, additions in this user group will naturally have a diminishing effect on ARPU growth.

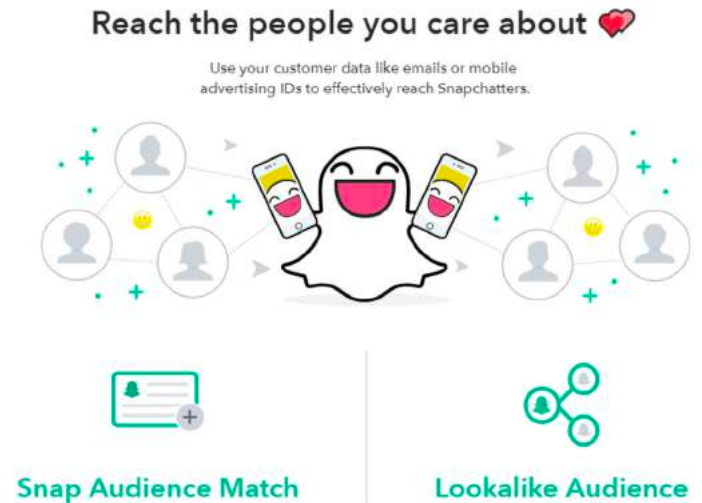
Management continues to sell the claim that “engagement” is a strong ROI indicator

It is also useful to notice that just because users are posting content every day, it does not necessarily mean that they are more amenable to advertising and as a result, higher ARPU's. It is instructive to recognize that historically, the majority of ad viewers have been passive content consumers. Radio, Television and Film audiences all apply there. Facebook, Instagram, likely follow the 1-9-90 rule (not precisely) in which the majority of their content is created by 1% of the users, 9% of users are commenters and raters and 90 percent of users are lurkers. Think about YouTube's video bloggers and their viewers. The vloggers have to be on average more engaged with the service, but does that mean that they are more likely to purchase the products in the ads than their audience? I do not necessarily believe that high publisher metrics encourage advertisers to pay a premium for ads. Targeting and conversion are more compelling metrics, and they are precisely the ones that Snapchat has had difficulty in implementing and analyzing.

Snapchat can't target demographics in the same manner as Facebook or Google.

Another way to increase the ARPU would be to create an ad platform that can target the exact type of user that would be amenable to a particular type of advertising. For example, advertising whey protein to someone who is interested in fitness. Snapchats dogmatic stance towards privacy along with the apps current format makes it difficult for them to attain this kind of info. What they do allow businesses to do is to either upload email lists of your customers and target them specifically, or using those email lists, Snapchat will

find an audience that is a “Lookalike” audience to broadcast your ad to.



Source: Snapchat Business Account

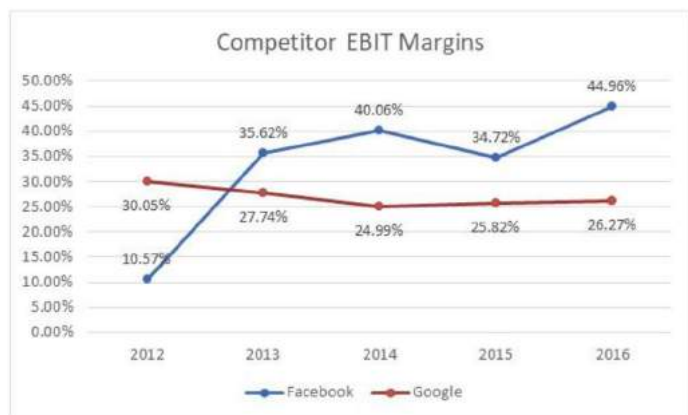
Instagram's adverts manager is considerably richer. The dials that can be pulled to narrow down ones audience are census like. For example, I can find an audience of 23-25 year old men, who speak Korean and French, studied biochemistry, work at amazon, are early technology adopters, are having a wedding anniversary within the next 61-90 days and who do not have a special affinity for yoga. This kind of granularity is absurd. As it stands, Snapchat has no way of developing an ad product that is comparable without considerably walking back their culture and views regarding privacy.

Margin potential

Much of the bull thesis in Snap is borne out of the possibility that it can expand its margins dramatically as it scales its business. It is useful to compare margins of its more mature competitors in this space to get a feel for what its future margins should look like.

Facebook, Google and Twitter have all decided to build out their own data centres for storage while Snap decided to use Google and Amazon Web services to use Google Cloud Platform and Amazon Web Services. As a result comparing EBIT across FB, Google and Twitter would be ideal, so that we can recognize the effects of depreciation, that are built into Snap's cloud storage costs.

I left Twitter out of this analysis given their negative margins.



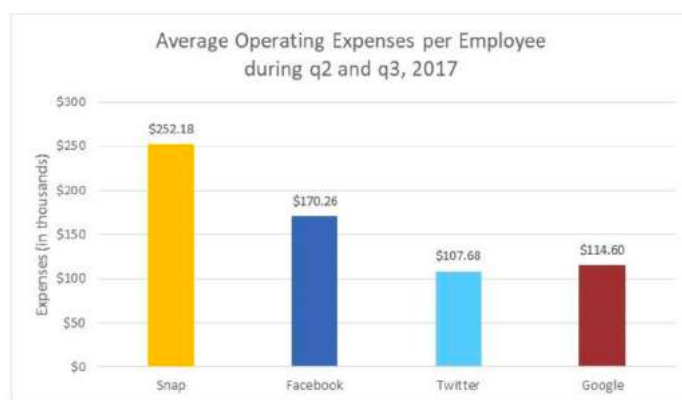
Source: Facebook and Alphabet 10-K Filings

Note that Facebook has developed considerable efficiencies in data centre management and is a leader in the space. 25% margins would remain fairly optimistic for Snap given the competitive nature of their business and their cost structure relating to their cloud service expenses.

Snap on average, pays their employees and suppliers more than their competitors do

Keeping q1 aside, Snap has paid an average of \$252,000 in operating expenses per employee per quarter this year. Facebook has paid operating expenses of about \$170,000

per employee quarter over the same period, although historically the metric has maintained a similar range including the year in which they IPO'd. Twitter during the same period paid an average of \$108,000 in operating expenses per employee per quarter and Google, \$115,000. Snap is paying either their employees or their suppliers or both considerably more than their competitors. This could either be due to a lack of cost consciousness or that this is simply the market rate for attracting talent to their headquarters in Venice, Los Angeles. Recognize that I did not include cost of revenue as this would magnify Snap's use of cloud service expenses.



Source: Snap, Facebook, Twitter and Google's 10-Q filings

Keeping q1 aside, Snap has paid an average of \$252,000 in operating expenses per employee per quarter this year...

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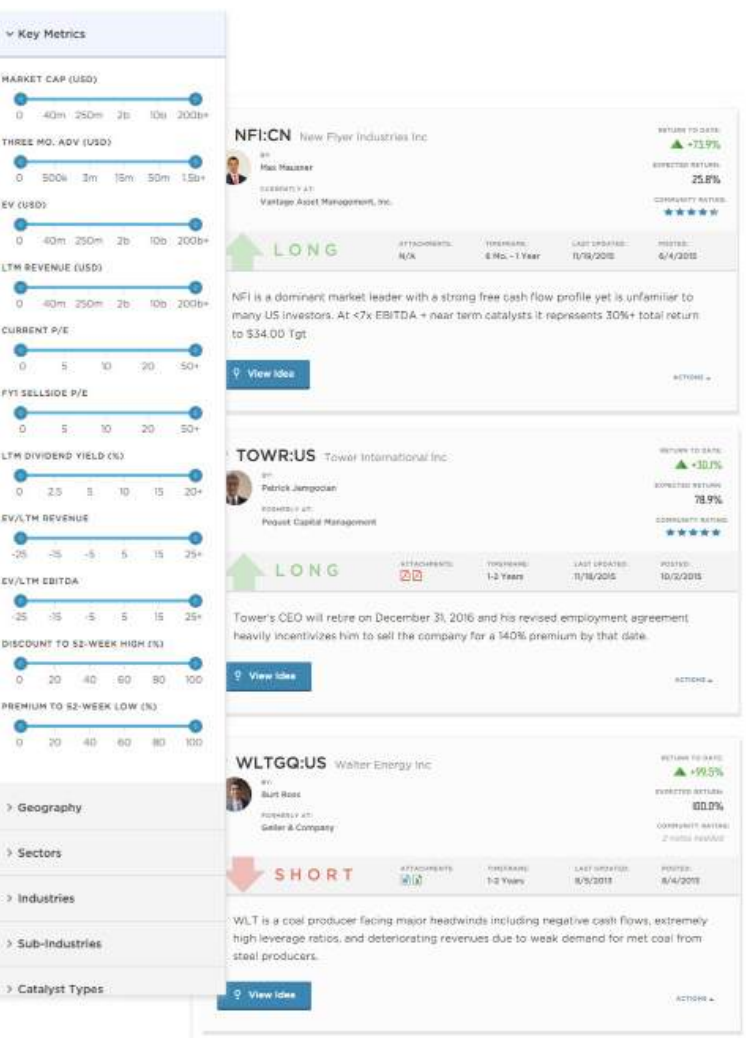
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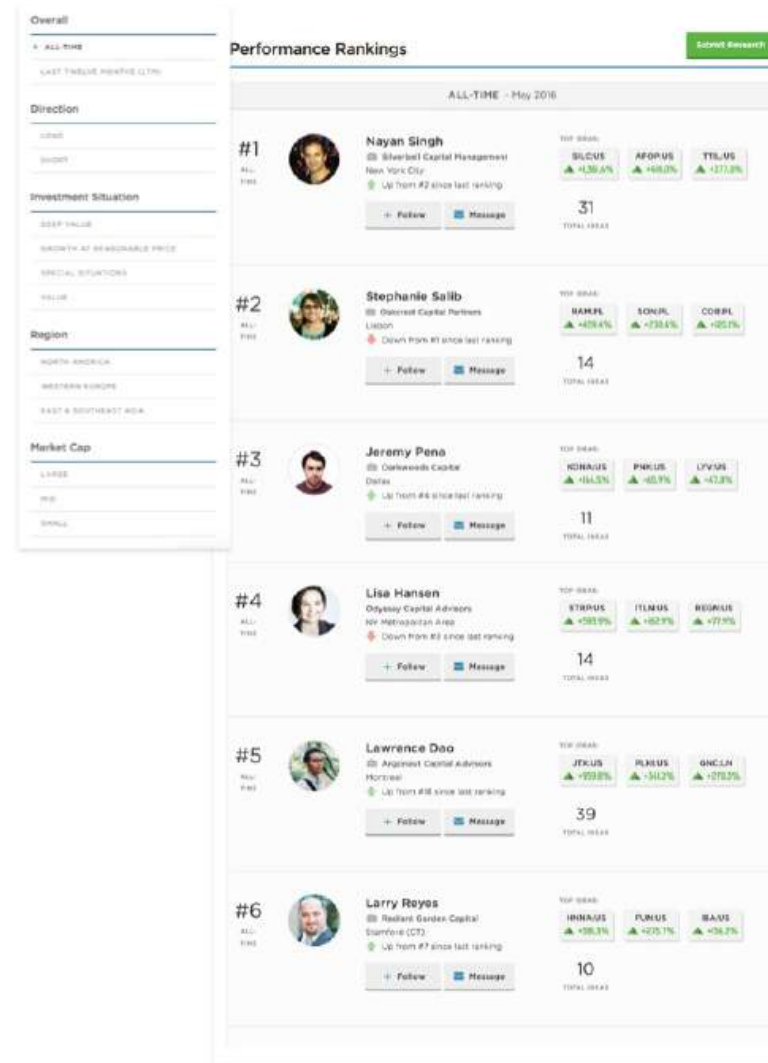
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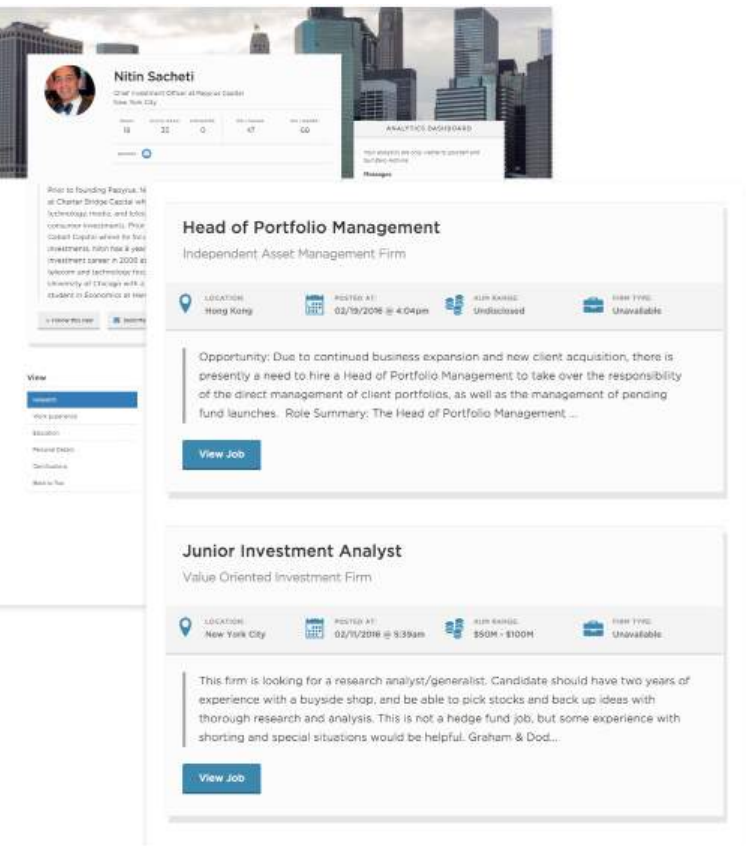


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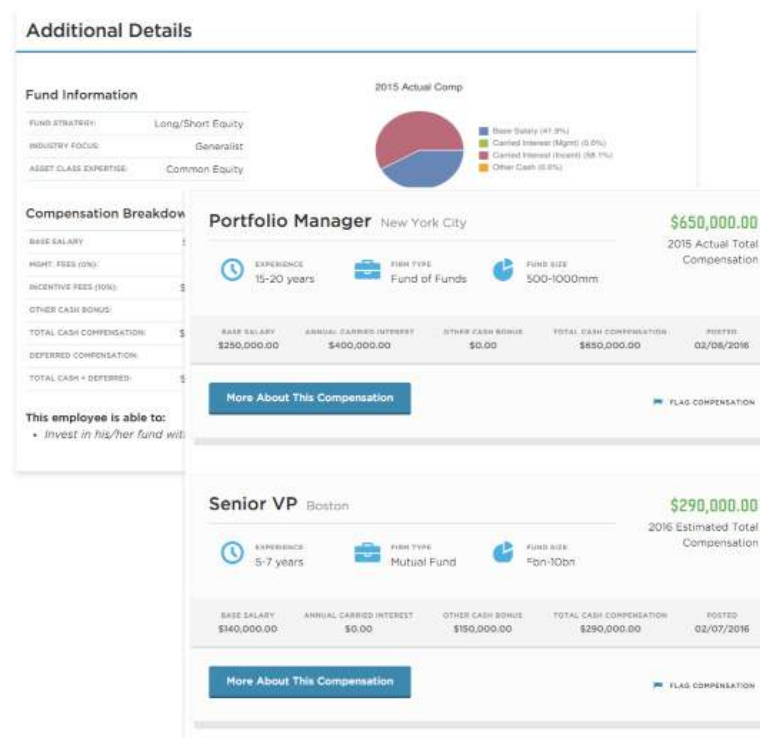
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Rankings brings recognition to the most consistent alpha generators on the buy-side using a methodology that is agnostic to pedigree, AUM, or seniority. Consistent benchmark out-performance on multiple recommendations is what you need to climb the Rankings ladder.

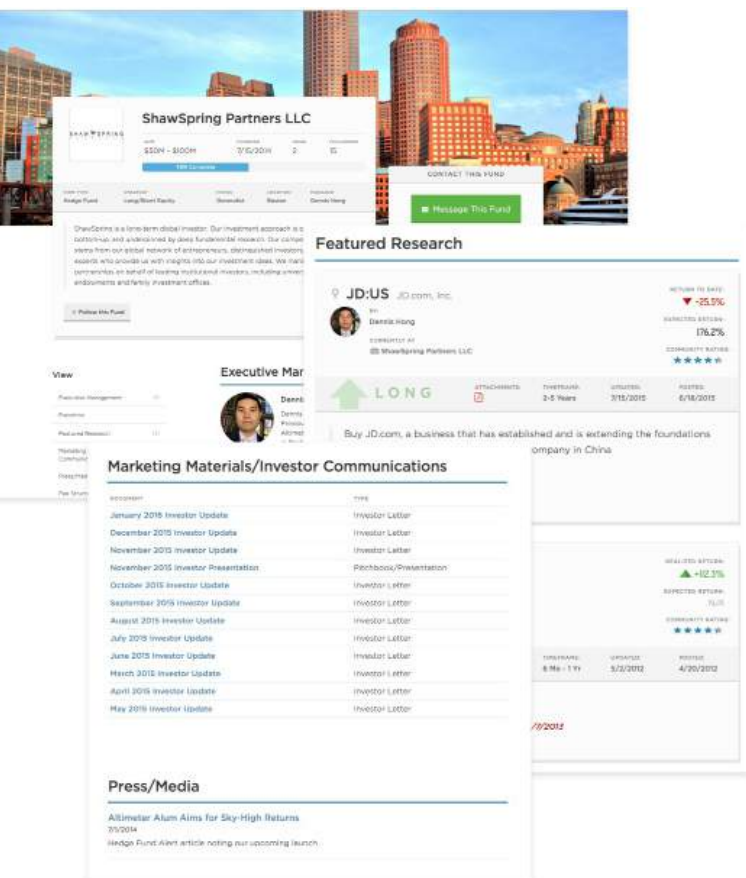
100% Anonymous

All SumZero Buyside members are eligible to get ranked on SumZero after submitting a minimum number of research ideas. Rankings lists are updated each month. All Buyside and Allocator members can access Rankings for free.



SumZero Cap Intro

<http://sumzero.com>



A Better Way To Raise Capital

Tired of constantly explaining and re-explaining the details of your fund to disinterested or unqualified investors? SumZero's Cap Intro program puts the essential information of your fund in front of hundreds of pre-qualified institutional allocators in a passively managed, reverse-solicitation format. From returns to firm references to investor letters to your proprietary research on SumZero, all your materials are neatly contained in one protected page.

Pitch Your Fund Efficiently

Show allocators why your fund is different. Remove barriers to your documents and data, and present the full picture of your expertise, process, performance, and infrastructure.

Get Introduced

Experience broad exposure to a high-quality group of investors that are actively allocating to funds and can radically change the future of yours. Get matched with capital allocators who reach out to you based on the quality of your fund's page.



SumZero Allocator

<http://sumzero.com>

For Allocators: No More Bad First Dates

Finding a good fund is work...phone calls with fund managers can be exhausting and your inbox is often flooded with spam. SumZero Allocator was custom-built to address the needs of institutions looking to find unique funds which match the particulars of all investment mandates without adding to the problem.

Filter by Funds that Matter to You

Browse and view hundreds of funds on the SumZero Cap Intro platform. Remove friction from the due diligence process with unrestricted access to all documents. Passively track, filter, and create email alerts for funds of all types.

Privacy Matters

You are guarded from spam. Your name and contact information are never displayed on the site, and never made available to members without your explicit permission. SumZero Cap Intro is a reverse-solicitation database.

The screenshot displays the SumZero Allocator web application. On the left is a sidebar with search filters under the 'General' tab, including fields for Keyword, AUM, Strategy, Focus, Location, Years Operating, Firm Type, and a 'Min. Completeness' slider. Below these are checkboxes for 'Has Supplied References', 'Has Listed Fund Positions', and 'Has Completed Due Diligence Section', along with a 'Sort By' dropdown. The main content area shows three fund profiles. Each profile includes the fund name, AUM range, Investment Start Date, Years, and a 'View Fund Profile' button. The first profile is 'Elevated Capital LLC' with AUM \$1M - \$10M and Investment Start Date 4/1/2006. The second is 'Abrika Capital Management LP' with AUM \$50M - \$100M and Investment Start Date 1/1/2008. The third is 'Nishkama Capital LLC' with AUM \$10M - \$50M and Investment Start Date 6/1/2013. Each profile also includes a brief description of the fund's strategy and focus.



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