



Blue Chips Investor Letter
Spring 2017



Statement from the Chairman

Chairman, Investment Committee: Sid Jain

We have come a long way since the club was founded over a decade ago. From a ragtag group of students who shared a passion for investing, we have now become one of the most highly sought after clubs on campus, receiving hundreds of applications every year. Our rigorous new member training program has not gone unnoticed on Wall Street. Top tier firms such as Goldman Sachs and Lazard have begun to host exclusive events with our members and our alumni can now be found at essentially every major financial firm.

A lot of exciting changes have happened this past quarter. In addition to this inaugural investor letter, we now have a new sector dedicated to uncovering special situations investments, inter-sector social events, and a formalized feedback process for our members. The financial sector even had the opportunity to speak with legendary investor Howard Marks following their Oaktree pitch. Going forward, leadership has many more ideas, such as leveraging resources at the Booth School of Business, to continue Blue Chips' trajectory towards becoming the premier investment club in the country.

In terms of our portfolio, we anticipate substantially increasing our equity exposure (currently we have nearly 50% cash) over the next few quarters. As an investment club with permanent capital, we can afford to take truly long-term views on companies and thus, should not be trying to time the market. Some investors are convinced about an impending recession; I am not one of those people. To quote John Templeton, *"bull markets are born on pessimism, grow on skepticism, mature on optimism, and die on euphoria"*. Much of this historic bull market has grown on the back of investor skepticism of an economic recovery, but we just finally started to see optimism in the markets following Trump's victory in the 2016 presidential elections. Although some of this optimism has died down due to the perceived difficulties in implementing Trump's pro-business agenda, the economic data that has been coming out remains relatively stable — we have not yet hit the euphoria stage. While the market as a whole is not overwhelmingly cheap, it is also not ridiculously expensive, especially after taking into account the capital-light, fast-growing tech companies that dominate the S&P. We continue to find value using a bottom-up approach, as shown by our recent investments in Pandora Jewelry and Oaktree Capital Management.

We will also be placing a much greater emphasis on understanding the quality of a business rather than just its valuation. After doing a back test of our previous investments, we found that most of our losses came from companies that looked cheap but lacked competitive advantages. To deliver strong performance, we must be cognizant of our organization's structure which lends itself to permanent capital yet impermanent members. The most effective way to deal with this is to buy and hold growing companies with sustainable competitive advantages. Since these companies will grow their intrinsic value over time, they typically come with a much lower risk of permanent capital loss and thus, do not require as high a level of monitoring. While we will not shy from investing in lower quality companies should the opportunity seem exceptionally attractive (such as with PICO), we will be focusing on finding higher quality companies trading at a reasonable valuation.

In this letter, you will find the sector leaders' summaries of their pitches this quarter, the Investment Committee's decisions on those pitches, explanations behind exited positions, and analysis on all our current portfolio holdings. If you have any questions, please feel free to contact me at sidvjain@gmail.com or Jack Millman at jmillman@uchicago.edu. With that, I hope everyone has a great summer and see you in the fall!



Spring Pitches



Salem Media Group, Inc. (NASDAQ: SALM)

TMT Sector Leader: Nick Nigro

Company Overview

Salem Media is a diversified media company serving Christian and conservative audiences. The company has three primary business segments: broadcasting/radio (74% of LTM revenue), digital (17%) and publishing (10%). Its broadcasting segment operates 118 stations across 40 different market.

Investment Thesis

Our investment thesis for Salem Media can be broken down into four main value drivers. Although we believe that these factors make Salem an attractive business, we do not believe the company is currently cheap enough to justify a buy. As a result, we recommend a HOLD of Salem Media:

1. Under-appreciated industry: We believe that the conventional view of radio as a dying business and the Christian market as a declining market is overly pessimistic. Although the percentage of Americans identifying as Christian declined from 78% to in 2007 to 71% in 2014, the percentage identifying as Evangelical Protestants—a key market for Salem’s stations—remained steady at 26% over the same period. Moreover, radio reaches 93% of the U.S. population on a weekly basis, more than any media platform. Christian teaching and talk (CTT) radio is an attractive form of media for several reasons. It has been the fastest growing radio format over the past several years. Average weekly consumption per listener of CTT radio is approximately 20% higher than the industry average. 64% of CTT listeners believe that advertisers on Christian radio stations are more credible than those on other stations.
2. High-quality block programming revenues: Over 40% of Salem’s broadcasting revenues come from block programming—the sale of chunks of programming time to churches and other religious organizations to use for their own purposes. Salem’s block programming revenues are annuity-like in nature and, as such, are of far greater quality than traditional spot-advertising revenues. Annual renewal rates have remained above 95%, despite price increases of approximately 2.5% per year. Block programming revenues are also higher margin than traditional spot advertising revenues.
3. Competitive advantages in Christian radio: Salem Media is the only large national provider of Christian-themed radio content. The company’s stations compete in local markets with other small, local, Christian stations, which are at a significant disadvantage when attempting to compete with Salem’s strengths as a national organization. Specifically, Salem has developed strong relationships with notable Christian and conservative personalities; sponsors large “community outreach” events such as listener rallies, speaking tours, and Christian music concerts; and can cross promote across its three business lines.
4. Asymmetric risk-return profile in digital segment: We believe that success in the online news market is lottery-like in nature. Consequently, Salem doesn’t need to invest heavily in its digital business to compete with other players. Instead, the company can run a small but profitable business, with the ability to benefit immensely in the event that one of its sites wins the social media lottery.

Key Risks and Considerations

1. High Leverage: The company currently has \$261 million in floating rate debt on its balance sheet, in the form of a term loan due in 2020. The loan bears interest at a spread of between 2.25% and 3.5% over LIBOR, with the spread depending on Salem’s current interest coverage ratio. Additionally, covenants associated with the loan require that Salem adhere to a maximum leverage ratio of 5.75x adjusted EBITDA. Were Salem to exceed this leverage ratio, the company would enter a technical default, and the interest spread over LIBOR would automatically increase by 2%. Salem’s current leverage ratio is 4.96x.
2. Management: The company pays its CEO and Chair over \$1.6 million annually in rental leases for use of their property, and the CEO paid himself \$1.3 million in 2016. As the CEO and Chair together control 86% of all voting stock, we are concerned about whether these payments represent fair transactions.



Decision: NO PURCHASE

TMT Investment Committee Representative: Michael Presutti

The Technology, Media & Telecommunications Sector pitched Salem Media Group Inc. (SALM) on Wednesday, April 19, 2017 in General Meeting as a Hold. The Investment Committee (ICOMM) decided not to purchase SALM. Our reasons are as follows:

FIRSTLY: We do not consider SALM's business operations attractive. SALM's ROIC averaged 3.3% in the past four years, well below the calculated WACC of 6.4%, though a more appropriate WACC for a company with similar risk would be 10-12%. SALM's free cash flows are stable, but its low free cash flow yield suggests poor fundamental performance. SALM's operating margin averaged 12.0% in the past four years, which is lower than the broadcasting industry average, and we anticipate margin compression across segments. Lastly, we do not think SALM's foray into digital media, where it has no competitive advantage, will prove successful, especially given the erosion of pricing power in its core radio broadcast business.

SECONDLY: We are not comfortable with SALM's inordinately high leverage. Although we do not consider bankruptcy remotely likely, we have not discounted the possibility of default on covenants, in which case SALM would have to pay more interest on its debt. SALM must keep a minimum interest coverage ratio of 2.5x adjusted EBITDA, and a maximum leverage ratio of 5.75x adjusted EBITDA. SALM currently has 3.57x, and 4.96x, respectively, and a decrease of 15% from 2016 adjusted EBITDA in 2017 would cause SALM to violate its leverage ratio covenant. This scenario is not absurd considering SALM relies heavily on inorganic revenue but cannot maintain these levels as much of its debt comes due. Operating with significant leverage in a declining industry is not ideal, as many of SALM's bankrupt, or soon-to-be so, peers know.

THIRDLY: SALM's corporate governance makes us question the alignment of incentives. We first flagged significant related party transactions. The company pays the CEO and Chair over \$1.6 MM annually in rental leases for use of their property. The CEO also awarded himself \$1.3 MM in compensation in 2016. These are not insignificant sums for a company that made under \$9 MM in profit. The CEO and Chair also own 86% of all voting stock so investors cannot effectively influence their decisions. We also flagged a material weakness in accounting. An accountant employed by SALM stated, "the company has not maintained effective internal control over financial reporting." Afterwards, SALM fired the accountant, and hired a new one. Although we have no grounds to suspect malicious intent, the situation is nevertheless troubling.

Pandora Jewelry A/S (OTC: PANDY)

Consumer Sector Leader: Katherine Gerdes

Company Overview

Pandora is a global jewelry manufacturer and retailer founded in 1982 in Copenhagen, Denmark that went public in 2011. Pandora is widely-known as a product-specific brand that focuses highly on their core competency of charm bracelets. Charms account for 59% of the company's revenue, while bracelets, rings, and other jewelry account for 18%, 13%, and 10% respectively. The company is geographically diversified, with 47% of revenue coming from EMEA, 34% coming from the Americas, and 19% coming from APAC.

Investment Thesis

Our BUY recommendation can be broken down into three key value drivers:

1. *Attractive business model:* Pandora has demonstrated exceptionally strong financial performance (78% ROIC) over the past few years thanks to sustainable competitive advantages. Through rapid growth, Pandora has achieved efficient scale; the company currently sells jewelry in over 100 countries on 6 continents through more than 8,000 points of sale. Their business model focuses on charm bracelets that encourage repeat customers (60% recurring revenue). The company is vertically integrated and controls almost every step of the production and distribution process, so they are able to keep a close eye on costs of goods sold. Furthermore, Pandora has branded itself as an affordable jeweler, and this allows them to use less expensive raw materials than competitors. Pandora also employs strict inventory monitoring and control processes to make sure that their in-store product offerings are always up-to-date. To summarize, Pandora is a low-cost producer that has reached efficient scale and has a virtual monopoly on sentimental charm bracelets, a product that offers the company high margins (39% EBITDA margins).
2. *Significant runway:* Pandora still has substantial untapped growth runways, most significantly in China, which is currently the largest and fastest growing jewelry market in the world (growing at a 12% CAGR for the past five years). An expanding middle and upper class, coupled with migration from rural areas to urban centers, has bolstered demand for jewelry. China currently only accounts for 4% of Pandora's revenue, but this number is expected to increase over the coming years as Pandora opens more concept stores in the country. Pandora opened 44 new stores in China in 2016, bring the current number of Chinese stores to 97. Pandora also signed a letter of intent in January 2017 to enter India, another growing market. Pandora is preparing for this growth by expanding their production capabilities in Thailand; the company will double its production capacity by 2020.
3. *Undervalued:* The market is pricing Pandora at similar multiples (15x forward earnings) to other industry leaders, such as Tiffany and Signet. However, Pandora's strong growth prospects, impressive free cash flow generation, and overall superior financial performance merit higher multiples.

Key Risks and Considerations

1. *Potential fad:* Charm bracelets could be a fad. If consumers lose interest in charm bracelets, this could be disastrous for Pandora. In addition, there may be a limit to the number of charms consumers are willing to purchase. After a customer has acquired a certain number of charms, they start to lose their sentimental value and all look the same.
2. *Shift from core strategy:* As Pandora diversifies away from charm bracelets, they will likely see margin depression as they enter the more competitive spaces of rings, earrings, and necklaces. Some of Pandora's competitors are more well-known in those categories and it is hard for a product-specific brand to transform itself into a lifestyle brand.
3. *Saturation:* Revenue growth in Pandora's largest, most mature markets (Australia, US, UK) has begun to slow down. Once Pandora has saturated a market, the drop-off rate of customers might exceed the addition rate of new customers, and this could cause growth to rapidly decelerate.

Decision: BUY

Interim Consumer Investment Committee Representative: Jack Millman

The Consumer Sector pitched Pandora (PANDY) on Wednesday, April 26, 2017 in General Meeting as a **Buy**. The Investment Committee (ICOMM) decided to follow the recommendation and purchase PANDY. After analysis, the Investment Committee agreed with the sector's thesis that Pandora is a high-quality business trading a reasonable valuation. We believe Pandora is attractive for the following reasons:

1. *Attractive and defensible recurring revenue business model:* Pandora's business is similar to a razor/blade model. Although they make little off the bracelets, the charms are sold at approximately 80% gross margins. As a result, Pandora's operating margins of 37% place it at the top of the luxury goods industry, above stalwart companies such as Hermes, Tiffany, and LVMH. Jared's tried to copy Pandora only to be unable to break in and now sells Pandora charms in-store. Consequently, ICOMM believes branding matters in this industry and Pandora has an edge on this front.
2. *Low-cost provider:* Pandora can produce at lower costs than its competitors due to a lower tax-rate, economies of scale, Thai-based distribution, and vertical integration, which allows them to re-meld any items that are not selling (rather than marking down inventory).
3. *Superior operations remind us of Zara:* Pandora is essentially trying to do what Zara did in fashion by refreshing its product cycle rapidly. The company used to create new designs twice a year but has steadily upped it to 7 times annually with plans to double that with the opening of a new production plant. We believe that down the road Pandora could start generating float like Zara once inventory turnover is high enough.
4. *Exceptional incremental ROIC:* Pandora has consistently generated returns on capital exceeding 50% over the past several years. With significant runway, particularly in China (world's largest jewelry consuming nation) where Pandora has only a small presence, there is significant upside potential. China in particular is attractive because jewelry spending is driven by fashion rather than marriage as is the case in the U.S. It is an extremely fragmented market (top player has 6% market share) that is growing rapidly. Even Tiffany has quadruple the number of stores as Pandora. Additionally, Pandora's largest market is the U.S. (25% of sales), but Pandora only has 350 stores compared to 1100 for Kay despite targeting a higher income customer. As such, we believe there is potential for growth in Pandora's developed markets.

Key Risks and Considerations

1. *Potential fad:* After years of rampant growth in developed regions, Pandora's sales have started to slow down. In its last fiscal year, sales—after adjusting for increase in e-commerce—only rose 2% in the United States. What is further concerning is that in the most recent quarter year-over-year comparable sales actually went negative even when including e-commerce.
2. *Oversaturation in developed markets:* There have been bearish theses on the company that developed markets are oversaturated with Pandora jewelry and that there will be a large drop-off in coming years as consumers no longer purchase more charms once they have already filled up their bracelets. With slowing sales and substantial customer penetration in its core markets we are closely monitoring this risk.
3. *Movement away from core competency:* Notably, the company has been rebranding to other forms of jewelry, such as rings, which moved from 6% to 13% of total revenue over the past two years. Although this diversification could help protect us from fads and oversaturation, it will also lead to much lower overall corporate margins with rings expected to have approximately half the gross margin as charms. Beyond that, the company has been rebranding from ads focusing on charms as having sentimental value to a more fashion-forward marketing strategy.

Overall, in order to mitigate these concerns, ICOMM has decided to focus on 3 things:

1. Consistent negative comparable sales after adjusting for e-commerce growth
2. Slow-down in the sale of bracelets (a likely forerunner to a drop-off in the sale of charms)
3. 20% stop-loss — given the potential downside if charm bracelets become a fad or over saturated, we have decided to begin exiting the position if the stock falls 20% from our initial purchase price

Oaktree Capital Management (NYSE: OAK)

Financials Sector Leader: Abhimanyu Sharma

Company Overview:

OAK is an alternative asset manager operating close-end, open-end, and evergreen funds. It derives its revenue from management fees (58%), incentive fees (27%), and investment income (15%). Traditionally, OAK's distressed debt strategy has been to invest in the most senior levels of a firm's capital structure. While OAK has been historically strong in Corporate/Distressed Debt opportunities, more recently, it has diversified into Real Estate and Emerging Market funds.

Investment Thesis

Our BUY recommendation is based on three points that make OAK a stable hedge for TBC's portfolio:

1. Structural advantage and performance: By employing a unique European-style waterfall structure, instead of a traditional American style structure, OAK needs to give back all of an investor's contributed capital plus interest before it can recognize a profit. This proves to be more beneficial for investors in bear markets as it mitigates long-term capital risk. Moreover, OAK deploys a dual fund structure that allows it to deploy its capital more flexibly than other AM firms. This means that OAK can quickly deploy a significant portion of dry powder during distressed periods. OAK also enforces a "lock-in" period of 10-12 years, which ensures that it has enough time to realize profits on its long-term oriented distressed debt funds.
2. Management fundraising ability and reputation: Since founding OAK, Howard Marks and Bruce Karsh have instilled an investment philosophy based on finding value in distressed debt opportunities. Over time, OAK has attracted clients including 75 US pension plans, 38 US States, and other tax- exempt institutional investors looking to lock-in rates over the long-term. This has allowed OAK to shore up ~\$20bn in dry powder, the highest in the industry. Although other AM funds have increased their dry powder arsenal focusing on distressed debt, we believe that OAK still holds an advantage in this space relative to peers due to its experience in distressed debt as well as its unique fund structure, which mitigates risks for institutional investors over the long-term and adds to the flexibility in deploying funds.
3. Stable earnings power: A key precursor to incentive earnings is OAK's accrued incentive income, an off-balance sheet item that accounts for the funds that are not fully harvested. OAK has industry leading accrued incentives, relative to the number of units, with ~\$5.5 per unit vs. an industry average of ~\$3 per unit. In the future, we see this trend continuing as OAK is increasingly recognizing a larger portion of accrued incentives through investments in principal investing (47% of accrued incentive income) and real estate (20%), more stable asset classes with strong and predictable cash flows. In the current market environment, this should continue to be a key value driver. In the scenario that the market turns, OAK will trigger its Fund10b's investment period, which will add to the fee-paying AUM. Overall, OAK has demonstrated a clear ability to maintain stable earnings power throughout any market environment.

Key Risks and Considerations

1. Shareholder vs. investor return: OAK's hedge-fund like structure skews incentives towards maximizing returns for investors/employees. This is seen in the elevated employee compensation as a percent of management fees, about 200% historically. However, this is offset by OAK's focus on stock-based compensation.
2. C-Corp conversion: While C-Corp conversion has been a topic of consideration for many alternate AM firms, it seems unlikely that OAK will convert to a C-Corp because 1) there hasn't been an empirically proven link between C-Corp conversion and long-term price appreciation and 2) OAK will not be able to convert back to a PTP structure.
3. Other: Opaque portfolio, which increases uncertainty in regards to earnings and investment IRRs, 2) Over reliance on current leadership, and 3) Increased scrutiny and oversight on government regulators.

Decision: BUY

Chairman, Investment Committee: Sid Jain &

Financials Investment Committee Representative: Vaibhav Verma

The Financial Sector pitched Oaktree Capital Group (OAK) on Wednesday, May 3, 2017 in General Meeting as a Buy. The Investment Committee (ICOMM) decided to follow the recommendation and purchase OAK. After analysis, we agreed with the sector's thesis that Oaktree is a counter-cyclical business with sticky AUM and significant untapped earnings power trading at a reasonable valuation. We believe OAK is attractive for the following reasons:

1. *Strong client loyalty with star management:* Oaktree has historically charged below-Street fees and regularly turned down money, resulting in very loyal clients and robust fundraising capabilities. This is proven by the fact that 80% of clients invest in multiple strategies and the company recently exceeded its fundraising target for its 10th flagship fund. It also usually enforces a "lock-in" period of 10-12 years, which largely eliminates the risk of clients pulling money at inopportune times. We believe the company has created a very strong brand for itself in the distressed debt space that has translated into increased investment opportunities. For example, 70% of its investments come from repeat sponsors, which highlights the barriers to entry especially relative to public equities. As a result, Oaktree is well poised to benefit from the trend of capital shifting towards alternative asset managers.
2. *Untapped earnings power:* Oaktree has \$20 billion in dry powder, highest in the industry, \$13 billion of which does not earn management fees. Assuming similar margins to current management fees and a 12x multiple, we believe untapped management fees alone are worth approximately \$9 per share. Furthermore, unlike other alternative asset managers, Oaktree is a countercyclical business due to its ability to raise money prior to a recession. For example, it raised \$19B in 2007. If the credit cycle turns again, the \$19B in raised capital would equate to roughly \$13 per share in new management fees. This ignores any incentive fees resulting from investment profits, which could be significant.
3. *Limited downside with optionality on the upside:* Realistically, we do not expect the stock to move much unless default rates rise. However, until then, we receive a 6% dividend yield that is covered by stable management fees. We believe the company is already at close-to-trough earnings since profits from the pre-recession funds have largely been distributed. Applying a conservative 12x multiple to the Company's very stable and growing management earnings (sell-side analysts assign a 15x multiple), valuing accrued incentives at 50% of their actual value, and valuing their 20% stake in DoubleLine at \$800 million (~12x FCF), our sum-of-the-parts analysis outputs a price close to the current stock price. This assigns zero value to investment and incentive income. If the credit cycle turns, the \$22 per share in management fees alone would result in an additional 50% upside. Because asset managers benefit from tremendous operating leverage, any additional AUM growth would drop straight to the bottom line. Finally, while we view this event as unlikely, conversion from the current PTP to C-corp tax structure would result in significant multiple expansion as it would allow many institutions to invest in Oaktree that cannot.

Key Risks and Considerations

1. *Industry dynamics:* If the credit environment remains this strong (default rates for HY bonds at 2% vs. historical 4%), Oaktree's incentive income may be hampered. Even in a downturn, the \$200B in dry powder across the industry (triple 2007 levels) may negatively affect Oaktree's ability to capitalize on a downturn. That being said, we are still confident of the company's ability to raise money and generate management fees, which is distinct from its ability to generate incentive income from successful investments. At the current valuation, you essentially receive incentive income for free. Thus, we are not buying into Oaktree for its ability to earn massive returns in a downturn; we are buying into Oaktree for its ability to maintain and grow its income from management fees – any incentive income is a nice bonus. We are also not overly concerned with the shrinkage



of fees across the broader asset management industry. Alternative asset managers are more insulated than the average asset manager and Oaktree already charges below-Street on a fees basis.

2. *Mixed results in a downturn:* Even in a downturn, incentive income created will initially have negative results. Credit holdings will likely take an immediate hit, and because distressed debt investing entails long-term time horizons, it may take up to two years to see strong performance. Since Oaktree went public in 2012, we have no way of knowing exactly how its stock will perform in a recession. In theory, Oaktree's earning power should grow as it finds more investment opportunities. However, in practice, the stock may still sell off along with the rest of the sector. This could prove to be an attractive point to add to our position. As an investment club, we do not face the pressure of clients yanking money – thus, we can take advantage of time arbitrage and take longer-term positions in companies than the average fund manager.

While Oaktree serves as a soft hedge in our portfolio, we will continue monitoring several key metrics including AUM growth, management fees, and fund performance to gauge Oaktree's ability to fundraise and maintain current fee levels.



ICON Public Limited Company (NASDAQ: ICLR)

Healthcare Sector Leader: William Xia

Company Overview

ICON plc is an Irish global contract research organization (CRO), incorporated in 1990, which provides outsourced clinical development services—ranging from compound selection to Phase I-IV clinical studies—to pharmaceutical, biotechnology, and medical device companies. ICON serves some of the world's largest pharmaceutical companies, including Pfizer, Roche, and Merck. ICON derives 46%, 44%, and 11% of net income from the USA, Europe, and the rest of the world, respectively.

Investment Thesis

The Healthcare Sector's BUY recommendation stems from our belief that ICON is best positioned among peers to capture growth in the CRO industry. Meanwhile, its valuation is suppressed due to its high customer concentration in the short-term, providing long-term investors a time arbitrage opportunity.

- Rising development costs, expanding R&D budgets, and increasing specialty drug development will drive CRO industry growth at a 5.4% CAGR for the next five years.* The total cost per approved drug has grown at an inflation adjusted 7% CAGR since the 1970's, rising from \$179 million to \$2,558 million in 2013. Increasing staffing necessities, patient enrollment costs, and protocol complexity will continue to drive development costs. However, recent increases in R&D productivity as a result of more focused clinical development programs has encouraged greater pharmaceutical R&D spend, projected to grow at 2.8% CAGR until 2022. Lastly, the recent rise in specialty drugs such as in rare diseases, oncology, and autoimmune diseases, which require more complex clinical trials and scientific expertise, will increase demand for CROs' extensive infrastructure and clinical expertise. The combination of these trends in the pharmaceutical industry will drive sustained CRO industry growth in the long-term.
- Global CROs, like ICON, are best positioned to capture this industry growth due to the increasing adoption of the strategic partnerships model, increasing demand for global trials, and established reputation and expertise.* Large and increasingly medium sized pharma companies are consolidating their vendor base, forming long-term strategic partnerships with a select number of CROs. Therefore, when choosing CROs, pharma will require a broad range of services, offered only by large global CROs like ICON. These longer-term contracts will also further entrench CROs into a client's clinical development process, creating stickier relationships. Most important among these services are global clinical trials capabilities. An increasing proportion of trials are performed outside the U.S. and Western Europe, as a larger population for clinical trial participation significantly speeds the development process, sometimes cutting the cycle in half. Lastly, because sponsors entrust CROs with potentially multi-billion dollar assets, while the slightest error or abnormality in trials would result in rejection or re-trial, big pharma chooses CROs based on reputation and expertise. Global CROs offer advanced and large information technology systems, large networks of physicians and investigators, and access to extensive patient data. ICON counts 16 of the 20 largest pharmaceutical companies as clients, clearly demonstrating its reputation and expertise. These extensive service offerings and long established reputation and expertise serve as high barriers to enter the global CRO market.
- Among global CROs, ICON is best positioned to capture growth due to its superior product offerings and successful acquisitions model,* as demonstrated by consistently holding above industry average margins and backlog growth, with ROIC consistently above 15%. The standard in the CRO industry is the Deliverable Base Model, where one team is assigned a variety of projects. ICON uses a Full Time Equivalent Model (FTE), which assigns a single team to each project. Project team consistency offers higher quality work and greater efficiency, addressing quality of work concerns from clients and results in stronger client relationships. This is especially true for longer term projects, which are becoming more prevalent under strategic partnerships. Additionally, ICON claims they are the only full service CRO that offers the knowledge, software, and systems for adaptive trials. Adaptive trials, a recent evolution in the industry, allows parameters such as length, dosage, and size, to change during the trial, allowing for earlier detection of failures while increasing the probability of success for winners. ICON has been acquiring companies focusing on Phase 1 and



adaptive trials to gain projects in early trials and leverage the long-term benefits of the FTE model. We believe it would require several years for competitors to replicate ICON's model.

4. *ICON trades at a discount to peers and intrinsic value due to its high customer concentration in the short-term.* Pfizer and the top 5 clients account for approximately 24% and 45% of revenue, respectively. This high concentration has led ICON to trade below industry peers, despite superior margins and ROIC. However, ICON has shown consistent, but slow diversification of their client base. Further diversification will be driven by general industry growth, strategic partnerships in ex-top 5 clients, and ICON's superior product offerings. Customer concentration is therefore a short-term risk, presenting a time arbitrage opportunity for long-term investors.

Key Risks and Considerations

1. *High customer concentration* is mitigated by general industry growth, increasing outsource penetration, and the increasing use of strategic partnerships, which all create stickier client relationships.
2. *Failure to significantly diversify in the long-term* would break our valuation thesis, trapping ICON at a discounted valuation compared to peers. The risk is mitigated by strong diversification track record, industry growth, superior product offerings, and increased strategic partnerships in ex-top 5 clients
3. *Backlog conversion to revenue is not guaranteed.* This risk is mitigated by historical precedent, with average cancelation rate of around 14% each quarter with a 5% standard deviation. We can identify no reason for drastic change in the foreseeable future.



Decision: NO PURCHASE

Interim Healthcare Investment Committee Representative: Michael Presutti

The Healthcare Sector pitched ICON Public Limited Company (ICLR) on Wednesday, May 10, 2017 in General Meeting as a Buy. The Investment Committee (ICOMM) decided not to purchase ICLR. Our reasons are as follows:

FIRSTLY: ICLR does not appear to have sustainable competitive advantages. The sector referenced two competitive advantages in the pitch: the Adaptive Trials Model and the Full Time Equivalent Model. Although these models are currently unique to ICLR, they cannot be competitive advantages because ICLR cannot protect them exclusively, and thus guarantee their sustainability beyond the next few years. At the moment, ICLR has consistently higher ROIC than its peers, and, if attributable to the models, then we would expect to see competitors adopting them in the next few years. Furthermore, to our knowledge, no pharma company has ever explicitly stated that it prefers ICLR's FTE model over competing CRO's models.

SECONDLY: ICLR does not have the scale advantages of larger CROs. Even though ICLR is one of the largest CROs, it is not the largest or most global by far. As such, ICLR's purported capitalization of global trends may be crowded out by larger CROs. For instance, LabCorp has been making a big push into the space, recently acquiring Covance and approaching PPD. Quintile purchased IMS Health, the largest vendor of US physician prescribing data, allowing it to cross-sell its massive data library to customers using their service. Both LabCorp and Quintile are nearly triple the size of ICLR and have much greater geographic scope, economies of scale, and product offerings. We are also concerned increased competition among CROs could damage ICLR's business prospects. Pfizer, ICLR's largest customer, recently hired three new CROs: Parexel, PPD, and inVentiv. From what we can discern, these hires have not yet affected ICLR, but Pfizer may make its CROs compete for contracts as new projects arise.

THIRDLY: ICLR does not appear to be undervalued at roughly 19x earnings. As ICLR struggles to gain new clients and growth slows down, we believe it faces a significant risk of multiple contraction. The sector based the undervaluation thesis on high customer concentration but we have neither the data nor the analysis to support this assertion. For high customer concentration to contribute to undervaluation, the market would have to be punishing ICLR unnecessarily more than its peers, which is unlikely considering ICLR has the highest customer concentration among its peers. Investors may simply recognize the elevated risk and adjust their prices accordingly. But let's play devil's advocate for a moment. Then, assuming the thesis to be true, we would need assurance that ICLR can diversify its customer base more successfully than the market expects, which we consider unlikely given historical trends and no material catalysts.

AV Homes, Inc. (NASDAQ: AVHI)

Industrials Sector Leader: Liam Zhao

Company Overview

AVHI is a land developer and home/community builder based in the US. It has two business segments: home building and land sales. Within home building, AVHI focuses on active adults and primary residential communities. The company operates in Florida (50% of LTM revenue), Arizona (19%) and the Carolinas (31%).

Investment Thesis

The Industrial Sector's BUY recommendation stems from three key points:

1. Structural changes from suppressed land holding company under TPG: Before the financial crisis, AVHI took on significant amounts of debt to purchase real estate assets and suffered huge losses during the crisis. Since TPG's takeover in 2013, AVHI transformed from a land holding company to a homebuilding company with strong competitive advantages. Under TPG, AVHI restructured its costs (SG&A as a percent of revenue decreased from 51% to 13%) and diversified its operations through strategic acquisitions. Through these structural changes, AVHI improved its competitive positioning by focusing on the niche senior housing industry and the Southeast region.
2. Favorable market conditions in Southeast regions and niche senior housing industry: AVHI enjoys more growth opportunities than its competitors due to its focus on the senior housing industry and the Southeast region. The senior housing industry will experience stronger growth over the next few years due to aging baby boomers who are expected to account for 20% of the total US population by 2029. Florida, Arizona and the Carolinas are also the fastest growing regions of the US housing market as indicated by the S&P Case-Shiller Index.
3. Real estate assets significantly undervalued by the market: We believe the significant amounts of real estate assets bought by AVHI before the housing crisis are undervalued by the market because of the poor performance of AVHI during the crisis. Performing a Residual Land Valuation of these real estate lots with conservative pricing, we came to an asset value of \$25.80 per share, implying over 45% upside to the current market price.

Key Risks and Considerations

1. Macroeconomic risks: As a homebuilding company, AVHI is highly sensitive to the housing market. If the housing market crashes, AVHI's value will drop significantly. There is no inherent mitigating factor to this risk. However, we believe the housing market will maintain its strong performance for at least the next 3 years, which should be sufficient time for the market to realize AVHI's value.
2. Senior population's changing preferences: AVHI only focuses on independent living sites and is not diversified enough in their senior community projects. Accordingly, if there are increasing preferences towards senior living communities, then AVHI's profitability might be impacted. Nevertheless, as of now, the majority of senior population prefer independent living as they age.
3. TPG stock sell-off: TPG owns over 40% of shares outstanding and as they try to liquidate their investment, the stock could be affected. However, TPG has not indicated any intention of selling its ownership in the short term and is more likely to engage in continuous improvement (it has not liquidated any of its real estate investments since 2012) or a sale of AVHI.



Decision: NO PURCHASE

Industrials Investment Committee Representative: Stephanie Liu

The Industrials Sector pitched AV Homes Inc. (AVHI) on Wednesday, May 10, 2017, in General Meeting as a Buy. The Investment Committee (ICOMM) decided not to purchase AVHI. Our reasons are as follows:

FIRSTLY: We believe the homebuilding industry is unattractive. With low barriers to entry and limited product differentiation, the industry is highly competitive with limited free cash flow generation due to the need to reinvest into future projects. Furthermore, the adult community housing market has been struggling due to increased supply entering the industry and we do not see the situation improving anytime soon. Larger competitors, such as industry leader Brookdale Senior Living (BKD), have been experiencing lower than expected occupancy rates. Since the industry has significant fixed costs yet low variable costs, it is likely that players will resort to cutting prices to fill rooms. In that scenario, AVHI will struggle to compete against BKD which is 3x larger than the next biggest competitor and has the lowest cost structure in the industry.

SECONDLY: TPG's 40% stake in AVHI presents a significant overhang. With an investment horizon of about 7 years, TPG had already bought into AVHI about 4 years ago. We believe that TPG will sell off their holding in AVHI in the next few years, and markets will price the sell off beforehand. Exiting their position without moving the price will be difficult because of the lack of liquidity in the stock.

THIRDLY: We do not find the current stock price to represent an attractive margin of safety. We perceive liquidation of real estate assets to be unlikely, presenting little to no upside to the investment thesis. Management compensation is based on acquiring additional growth capital and expanding business through new land acquisitions, neither of which indicate a liquidation. Furthermore, we do not find the specific geographies AVHI operates in to be highly attractive. Both the Carolinas and Arizona already have extremely low capitalization rates of about 5%, limiting the potential upside from a continued housing up cycle. Finally, we found an error in the net working capital calculations for the DCF. When we corrected it, we are given a massively depressed implied share price in even the bull case.



Tecnoglass (NASDAQ: TGLS)

Special Situations Sector Leader: Jimmy Degnan

Company Overview

Tecnoglass is involved in the design and manufacture of high quality window products sold in Latin America and the United States. Operating from a 2.7 million square foot production facility in Barranquilla Colombia, the company is a vertically integrated producer of treated glass, aluminum products and architectural window systems primarily used in custom residential and commercial high-rises. The United States and Colombia are the company's current primary markets, accounting for 62% and 33% of FY16 revenue respectively.

Investment Thesis

The Special Situations Sector's BUY recommendation stems from our belief that the market's overreaction to past accounting issues allows investors to acquire a strong and growing business at an attractive valuation.

1. Attractive business: We believe that Tecnoglass is a strong business well-positioned to generate healthy, growing cash flows. Tecnoglass is more vertically integrated than competitors, encapsulating a larger proportion of the end-product supply chain with its own aluminum extrusion and energy production facilities. Centralized manufacturing in Colombia allows for lower labor costs and advantageous shipping prices stemming from Colombia's current trade deficit. As a result of these competitive advantages, Tecnoglass achieves higher operating margins (16% in 2016 vs. 13% and 11% versus competitors PGTI and APOG respectively) while delivering technologically competitive end-products.
2. Significant cash flow potential: We believe that the completion of Tecnoglass's capex build-out in 2016 gives the company considerable room to increase revenue and margins with little additional capital outlay. Management has indicated that they can increase revenue by 25-35% without incurring substantial additional capex costs, thereby improving the company's EBITDA and ROIC metrics.
3. Moving past accounting issues: We believe that Tecnoglass will be able to move beyond prior accounting and reporting issues. Tecnoglass went public via a merger with a Special Purpose Acquisition Company (SPAC) which resulted in the issuance of warrants, unit purchasing options, and earn-out shares based on EBITDA targets. While a number of different accounting issues led to 8 financial restatements, we believe these issues were largely immaterial, reflected no malicious intent, and will not exist going forward. All earn-out shares and warrants expired after December 2016, and we are confident steps implemented to fix reporting issues will be successful.
4. Reasonable valuation: We believe that numerous valuation metrics yield considerable upside potential. The company currently trades at an 8x EV/EBITDA multiple, compared with 9.5x for direct competitors. A conservative cost of equity of 18.5% yields a target price of \$13.50 based on DCF projections.

Key Risks and Considerations

1. Cyclicality: A slowdown in high-end residential or commercial construction could pose a significant threat to future revenue growth. Although the company is actively diversifying sales geographies, US sales are highly concentrated in South Florida.
2. Emerging market exposure: The company is exposed to geopolitical risks associated with Colombia. As 33% of revenue and all manufacturing facilities are located in Colombia, the company is exposed to changes in Colombia's security, legal, and corporate environment, in addition to movements of the Colombian Peso.
3. Continued accounting issues: Tecnoglass may be unable to file correct financial statements in the future.
4. Corporate governance: The interests of the management team, whom hold 2/3 of the company's common stock, may diverge from those of other equity holders. While the sector has been pleased overall with their performance, management's continued ownership of some related-party entities and propensity to dilute equity may become problematic in the future.



Decision: NO PURCHASE

Special Situations Investment Committee Representative: Sid Jain

The Special Situations Sector pitched Tecnoglass (TGLS) on Wednesday, May 17, 2017, in General Meeting as a Buy. The Investment Committee (ICOMM) decided not to purchase TGLS. Our reasons are as follows:

FIRSTLY: We do not consider TGLS' business to be attractive. Despite its low cost advantage, the company still only generates a measly 7% return on invested capital, well below its 14% cost of capital. TGLS' failure to earn an economic profit is particularly worrisome as it has been enjoying a historic bull market for the past few years — any sort of deterioration in the macroeconomic environment will cause the company's returns to drop even further. We are skeptical of management's claim that it will be able to lower capital expenditure and working capital requirements going forward but even then, its returns on capital will likely never top 10%. Furthermore, we do not believe TGLS' cost advantage, which depends on its attractive location in Colombia, to be sustainable. There is nothing that necessarily prevents a much larger competitor, such as Apogee, from shifting part of its production to Colombia especially as TGLS increasingly encroaches on its territory in the United States.

SECONDLY: The recurring accounting issues make us question the company's actual earnings power going forward. TGLS restated 8 financial statements between 2014 and 2015, some of them twice. In fact, the company was almost delisted from the NASDAQ for its inability to file its 1Q16 quarterly earnings on time. Best case scenario, this is just a sign of incompetent management. Worst case scenario, this is a fraudulent company. However, as undergraduates without an accounting background, we do not feel confident in our ability to definitively decide where on the spectrum the company lies. Even though most of the issues relate to the company's earnout share and warrant liabilities (which have since expired), we noticed other accounting problems. For example, the company had to revise its sales figure in one quarter because it incorrectly included inter-company sales. To quote Warren Buffett, "in the world of business, bad news often surfaces serially: you see a cockroach in your kitchen; as the days go by, you meet his relatives".

THIRDLY: While we do not believe the construction industry will necessarily collapse anytime soon, we are concerned with what will happen once the market perceives the cycle starting to turn. Nearly a decade into the recovery, TGLS earnings power are closer to a peak than a trough. As we saw in 2008, the glass industry is highly cyclical due to its reliance on discretionary one-time projects — for example, Apogee's stock collapsed over 80% from peak to trough during the recession. Furthermore, the company's production facilities and a third of its sales depend on Colombia. While the recent cease-fire between FARC rebels and the Colombian government resulted in a temporary peace in 2016, violence is already starting to uptick as competitors try to fill the power vacuum. As we saw with Brazil's corruption scandals, political risks should not be underestimated when investing in emerging markets.

In terms of valuation, we do not believe this company warrants anywhere near its current 8x EBITDA multiple as it is a mediocre business operating in a cyclical industry nearing a peak with recurring accounting issues and significant emerging market risk.



NGL Energy Partners (NYSE: NGL)

Natural Resources Sector Leader: Roland Huang

Company Overview

NGL Energy Partners is a diversified midstream master limited partnership or MLP based in Tulsa, Oklahoma. NGL's operations consists of five segments – Crude Logistics, Liquids, Water Solutions, Retail Propane, and Refined Products – with geographically diverse assets. Revenue breakdown for the five operating segments in FY2017 was Crude (12.8%), Liquids (11.1%), Water Solutions (1.2%), Retail Propane (3.2%), Refined Products (71.7%).

Investment Thesis

The Natural Resources Sector is recommending a BUY with a target price of \$18.71 as we believe that NGL has a strong fundamental business that has been overly punished for operational headwinds over the past year.

1. Management strategy shift: Since taking on Oaktree as a preferred investor, NGL has initiated a strategy shift to unlock long term value. Whereas NGL had previously grown through aggressive acquisition, management now aims to shift towards driving internal returns and pursuing acquisition only at very favorable multiples. Management has also emphasized on expanding its revenue stream to become more long-term and fee based. With a strong asset base, this will allow NGL to spin off more consistent cash distributions to investors. In an attempt to address its trim down debt situation, management cut distributions in April 2016 and deferred distribution increases until FY2018. As MLP investors are primarily yield focused, we believe that NGL's relatively poor distribution outlook greatly reduced its market valuation. However, as long term investors with a 3 to 5-year investment horizon, this distribution cut presents a time arbitrage opportunity as we stand to benefit from the improved financial health in the long run.
2. Promising capex projects: Recently completed capex projects, most notably the Grand Mesa Pipeline, will generate a significant predictable cash flows going forward. The Grand Mesa Pipeline came online in November 2016 and is the newest pipeline to service the Niobrara, one of the most productive shale plays in the U.S. New well production in the Niobrara has increased 700% since 2012 and the region has a very favorable operating economics. NGL has already locked in long term minimum volume commitments with an average contract length of nine years, giving us downside protection as well as upside potential. We believe that other smaller capex projects and acquisitions such as the STACK extension of the Glass Mountain Pipeline, Murphy acquisitions, and Sawtooth caverns have great upside potential for NGL as well.
3. Upsides from valuation: Even with extremely conservative projections, our DDM valuation base case still gives us a significant margin of safety at the current stock price of \$13.60. In our distributable cash flow analysis, we projected the operating segments based on NGL's abnormally poor performance in 2016. Even with conservative projections, our base case DDM generates an upside of 37.6% with a distribution coverage ratio of 1.15x – 1.21x.

Risks to Thesis

1. Debt: NGL is highly levered with a leverage ratio of 4.65x. Its debt covenants require it to maintain a leverage ratio less than 4.75x, which NGL might not be able to maintain.
2. MLP structure: Unit-holders of MLPs have limited voting rights and no input on the election of board members. As a result, unit-holders are limited in the actions they can take against the general partners.
3. Energy prices: Despite management emphasizing its diversified operations, all five operating segments are still broadly affected by fuel prices and volume in the U.S.
4. Warm winters: The 2015-2016 and 2016-2017 winter seasons were unusually warm, with the latter being the warmest in a decade. Warm winters lower heating demand and negatively impact both the retail propane and liquids segments. If the winter weather trend of the past two years were to continue, NGL's ability to generate distributable cash flow would be impaired.



Decision: MONITOR

Natural Resources Investment Committee Representative: Henry Luo

The Natural Resources Sector pitched NGL Energy Partners (NGL) on Wednesday, May 24, 2017 in General Meeting as a Buy. The Investment Committee (ICOMM) decided not to follow the sector's recommendation but will continue to monitor the stock for a more attractive entry point and/or improvement in company fundamentals. Our reasons are as follows:

FIRSTLY: We are concerned about NGL's high debt levels. Leverage rose in the most recent earnings report to 4.65x (dangerously close to a covenant of 4.75x). This was preceded by Moody's downgrading NGL's Corporate Family Rating (CFR) from Ba3 to B1 in February, citing expectations of high financial leverage through mid-2018 in a recovering but challenged midstream industry environment. Although we do not believe bankruptcy to be a material risk, we cannot disregard this troubling trend for a couple reasons. For one, breaching the covenants would hinder NGL's ability to seek external financing. As an MLP, the company must distribute 90% of its free cash flow to unitholders, creating a reliance on external financing. With its current limited access to debt markets, the company may be forced to turn to equity offerings, which would dilute existing shareholders. In fact, the company engaged in a \$250M equity offering in February of this year, indicating the potential for this action to recur. The inability to raise debt also resulted in Oaktree's convertible investment at extremely beneficial terms for Oaktree. Since 4Q16, management has stated its intent to reduce the leverage ratio to 3.25x or lower by March 2018, a goal that they reiterated during the most recent earnings call, but the lack of substantial progress thus far is disconcerting. The company may be able to raise the maximum leverage ratio as it has in the past, but credit markets can freeze extremely quickly and so we will wait until the company has made more progress with its deleveraging.

SECONDLY: We are uncomfortable with the quality of NGL's customers. Although we agree that the company's shift to fee-based contracts is a sound strategy, concerns over the customers' operational and financial states linger. For example, several of NGL's water solutions customers are in troubled financial straits and all of its Grand Mesa customers are sub-investment grade (one of them, Bonanza Creek, actually declared bankruptcy in 2016). Long-term contracts are often meaningless in a bankruptcy situation because they can be broken under section 365 of the bankruptcy code.

That being said, several aspects of the sector's investment thesis did appeal to us. We recognize that the market's overreaction to the company's missed distribution guidance may have detached price from intrinsic value, creating a potential time arbitrage opportunity as the company improves its financial standing and better positions itself to increase dividends. Assuming no issues with leverage and/or clients, we believe the company will be able to increase its dividend due to its distribution coverage ratio of 1.3x and quality mid-stream assets. Furthermore, the current distribution structure incentivizes management to grow dividends as currently general partners do not earn income from their IDRs. In terms of management, the company's CEO, Michael Krimbill, was successful during his previous stint as the CFO of Energy Transfer Partners (ETP) as he and his fellow executives oversaw a variety of accretive acquisitions at low multiples, driving ETP's share price up 270%. NGL's management team shares our interests as shareholders through its 9% insider ownership.

Even with these strengths in mind, the short-term risk of further price deterioration stemming from continued indebtedness, equity dilution, operational setbacks, and/or lower distributions outweighs the advantages of opening a position now. We believe a 12-14% cost of equity, instead of 10%, is more appropriate given the risks associated with the business. As such, we will continue assessing the business until we are offered a more attractive margin of safety.



Exited Positions



Sold GCP Applied Technologies (NYSE: GCP) for \$31.86

Bought at weighted average of \$19.66 (+62% return)

We sold GCP after the company received a buyout offer for its most valuable segment, resulting in a 25% share price appreciation. We owned GCP after it was spun off from another holding, WR Grace (GRA). Our original purchase of GRA was predicated on the market correctly valuing the company's highly attractive specialty catalyst segment and net operating losses once its less attractive construction business (GCP) was spun off. Management seemed to agree with our thesis as the CEO remained with GRA, levered up GCP to pay off GRA debt, and kept all the NOLs at GRA. However, GCP has far outperformed GRA in the post-February cyclical run-up. At this moment, we believe that GCP is fairly valued at nearly 15x EBIT, a steep multiple for a highly cyclical company expected to grow at low single digits.

Sold Rayonier Advanced Materials (NYSE: RYAM) for \$12.69

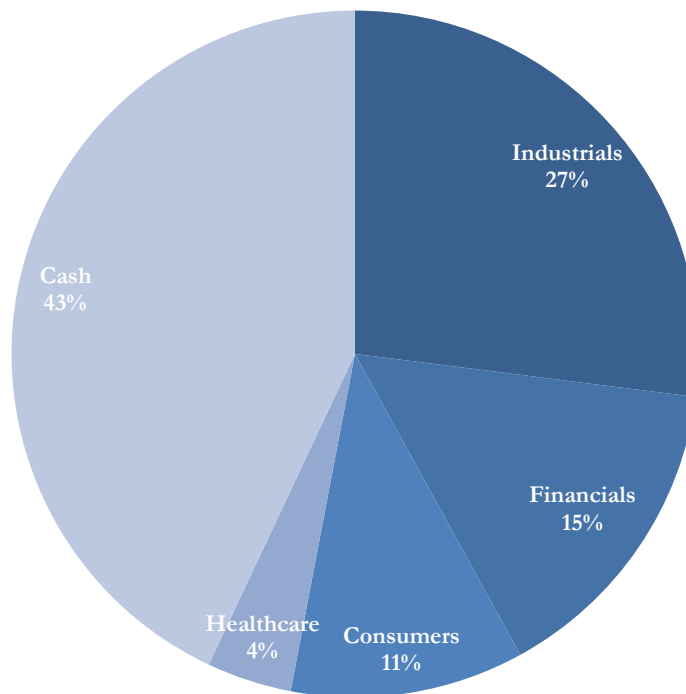
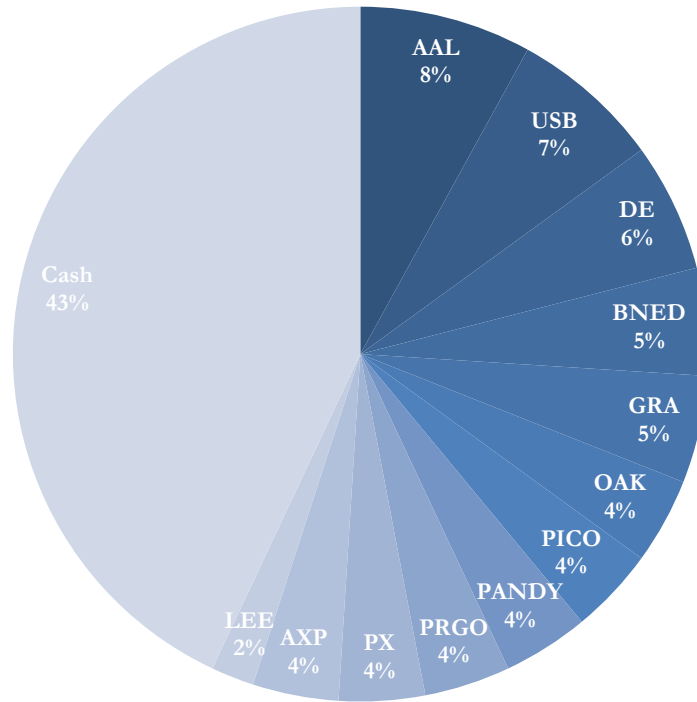
Bought at \$17.29 (-26% loss)

We sold RYAM as we believed our original thesis was broken and so we decided to cut our losses. First, RYAM's economic moat is not as wide as we had originally expected. In August 2015, the company's largest customer disputed contract terms. Although this issue was eventually resolved, impending contract renewals will likely involve costly negotiations that further hamper RYAM's profitability. Second, industry trends have deteriorated. Specialty cellulose is currently facing persistent overcapacity, resulting in consistent price declines over the past few years. In particular, Bracell, a Brazilian competitor, is determined to increase its share of the market, which it can pursue through its clean balance sheets and significant cost advantage over RYAM. We do not find the company's 10% FCF yield to be attractive given the significant risks involved.



Current Holdings

Portfolio Weightings



American Airlines Group, Inc. (NASDAQ: AAL)

Chairman, Investment Committee: Sid Jain

American Airlines is the world's largest airline when measured by fleet size, revenue, and destinations served.

Our original investment thesis in American Airlines was as follows:

1. *Changing competitive dynamics:* Historically, airlines have been one of the worst industries to invest in as a result of high fixed costs, low marginal costs, and lots of competition. Competitive forces drove prices down to the low marginal cost, making it impossible to recover fixed costs. Furthermore, the combination of unionization and low cost carriers, such as Southwest, decimated airline profitability. However, a wave of bankruptcies and consolidation has changed the industry. Compared to 11 previously, there are now just four major players (Delta, United, American, and Southwest) who control roughly 90% of the market and are being more rational in terms of pricing. At 40 of America's biggest hubs, a single carrier now accounts for more than half of capacity. Capital requirements for new entrants have increased 60x over the past decade, making it extremely difficult for new players to enter.
2. *Emergence from bankruptcy:* AAL was the last legacy carrier in the US to enter bankruptcy. Throughout its Chapter 11, it renegotiated labor costs and shed heavy pension liabilities, significantly lowering its cost basis. AAL was also able to improve its inflexible capital structure and begin investing in a newer fleet. Years of significant operating losses left it with \$15B in deferred tax assets.
3. *Synergies from US Airways merger:* Following its emergence from bankruptcy, AAL merged with US Airways. After analyzing the performance of past airline mergers, we believed there would be significant synergies through a shared network and a lower CASM (cost per available seat mile).

We continue to believe in our thesis:

1. *Improving industry dynamics:* Consolidation has truly changed the industry. The major players now target ROICs upwards of 15%; some of the players even base management's compensation off that target. Instead of increasing capacity, legacy carriers are buying back shares and issuing dividends — for example, Delta has stated it will return 50% of cash flow back to shareholders and American has already bought back 33% of shares outstanding in the past three years. This is not what one would expect from a capital intensive industry which has historically not even earned its cost of capital. Buffett's recent purchase of all four major airlines despite decades of criticizing the industry is just icing on the cake. As a result, we expect increased pricing power from American and the other major players. We have already started to see it for the past few quarters with improved PRASM (passenger revenue per available seat mile) numbers.
2. *Under appreciated credit card business:* This is a major update to our additional thesis. All the airlines have co-branding agreements with credit card companies, but have repeatedly declined to disclose the profitability of this business. According to Stifel, airlines earn nearly 50% of their profits from selling miles to a credit card company. These deals are highly lucrative since they generate high returns on capital for airlines, don't face competitive pressures, and generate float — thus, they deserve a premium multiple (~15x earnings). In fact, AAL's credit card business could potentially be worth more than its core business of selling tickets.
3. *AAL, well positioned:* Amongst the legacy carriers, we believe AAL has the most upside as it closes its PRASM (per unit revenue) gap with the other players in the industry. Having completed a massive capital expenditure plan, it now has the youngest fleet and can now focus on returning cash to shareholders.

When it comes to valuation, we believe there is a significant discrepancy between perception and reality as the market has failed to appreciate the massive changes the industry has gone through. The airline industry is growing in the mid-single digits, earnings returns on capital significantly upwards of their cost of capital, and returning cash to shareholders.

However, AAL trades at just over 5x forward EBITDA and 10x forward earnings, at the lower end of what airlines have historically traded at. If any other company in the industrial sector shared AAL's financial metrics, it would be trading at least a 50% higher multiple. This also ignores the airline's credit card business, which as mentioned above, deserves a higher multiple. Essentially, we believe that AAL will enjoy some growth in earnings but most of its upside comes from a



significant multiple expansion as the market begins to value it as a higher quality industrial company. While there is no clear catalyst for this multiple reevaluation, we believe that as the industry slows down, the quality of AAL's business will start to show, resulting in significant earnings beats.

However, despite the recent sell off, we have decided to not buy more due to the company announcing wage hikes in 1Q17 earnings, resulting in an additional \$1B of costs over the next three years. Although we expected wage hikes since AAL had been underpaying its pilots relative to peers, we did not expect it to come so soon since the labor contract did not expire for another two years. This is the first time where we questioned the validity of our thesis that the airline industry had truly reformed. Previously, in expansion periods, pilots would force airlines to increase their pay, which is basically what we just saw. We are also closely monitoring industry capacity levels to see if airlines have once again fallen into the trap of rapidly increasing supply during a bull market.



American Express Company (NYSE: AXP)

Financials Investment Committee Representative: Vaibhav Verma

American Express provides credit cards and charge cards, as well as corporate services like travel and expense management. AXP provides credit to consumers and businesses, processes transactions on its closed-loop network, and adds value through exceptional incentives and customer services to card members.

Our original investment thesis was as follows:

1. AXP's affluent customer base and closed-loop processing model generate significant value for merchants, creating a sustainable network effect for AXP.
2. The brand has demonstrated success with its small business initiatives and can effectively scale up its strategy.
3. Partnerships with UnionPay and others will break down barriers that have traditionally muted AXP's international growth.
4. Even without growth, AXP has substantial no-growth value and is a quality, industry-leading business. At 13x earnings, the stock traded at a reasonable price given its strong fundamentals, despite short-term headwinds. At the time, we felt that American Express had a number of avenues to grow their business, despite losing their contract with Costco.

We have become increasingly concerned about the company for the following reasons:

1. Weakness with co-branded cards: At the time of the pitch, 23% of AXP's revenue came from co-branded cards. However, they have lost relationships with many clients including Costco and JetBlue with more losses looming (i.e. Starwood). AXP has maintained EPS through buybacks, but this is not sustainable, and its multiple has compressed as a result. Even AXP's position as a niche high-end player is under siege with new entrants such as Chase Sapphire Reserve gaining market share. AXP's margins will likely deteriorate as it is forced to spend more to attract new customers.
2. Uncertainty in China: The relationship with UnionPay did not give AXP a significant competitive advantage over its traditional payment processing competitors. Thus, growth expected from the UnionPay contract did not materialize. Although the Chinese government announced in 2015 that it would open up the bank card clearing market, the rules issued have been vague and uncertain.
3. FinTech disruption: In the near-to-medium term, we believe the credit card space is fairly safe from FinTech disruptors. In fact, credit card companies have partnered with payment processors such as Apple Pay and PayPal, allowing card companies to benefit from FinTech growth. In the long term, however, FinTech threatens to cannibalize chunks of the credit card market.

Due to our large cash position, we have decided to maintain our position, as we do not see a significant downside. That being said, AXP will likely be the first stock we sell once we find more attractive investment opportunities.

Barnes and Noble Education (NYSE: BNED)

Interim Consumers Investment Committee Representative: Jack Millman

BNED is the leading player in the college bookstore industry and maintains local monopolies at each school and has a consistent customer base.

Our original thesis was as follows:

1. Recent spinoff and small cap: BNED was spun-off from its larger parent company Barnes and Noble bookstores (BKS) in August 2015. As the smaller segment of the spinoff the company has a market cap below \$450 million and no research coverage, which we believe makes it an attractive place to look for a disconnect between price and value.
2. Appealing industry dynamics: BNED's bookstores are typically the only one on campus, which provides a local monopoly with a consistent consumer base. These stores often have partnerships with each campus where the school will direct students towards the stores. This is highlighted by the fact that many BNED stores pay rent as a percent of sales, so schools are incentivized to channel students to the stores. Additionally, the bookstores often have a monopoly on apparel, which have higher margins than books and are more insulated from competitors like Amazon. Lastly, the industry is very fragmented which creates an opportunity to drive store growth at what we believe is a low double-digit return on capital.
3. Potential to drive FCF growth: Historically, the company has wasted a significant portion of its free-cash-flow. For example, the company has spent over ten million dollars a year on a service called Yuzu that is tangential to its core business. BNED estimates it will save \$13 million in 2017 alone by outsourcing Yuzu. BNED also spent \$18 million on Loudcloud, which is an analytics software that can be used by teachers. This is a competitive space and we do not think it is the best place for BNED to deploy capital. Fortunately, recent capital allocation decisions have been better. Since we initiated our position, BNED purchased MBS Direct, one of the largest used book wholesalers, for a total takeover value of \$205 million. We believe this is at an attractive 15-20% FCF yield and less than 4x EBITDA. Lastly, legendary value investor David Abrams owns 20% of shares outstanding and will likely push back if there are any terrible allocations of cash flow going forward.
4. Attractive valuation: At less than 5x forward EV/EBITDA we believe the company trades too cheaply relative to its attractive business model. Moreover, adjusting for unnecessary and inefficient costs, the company trades at a mid-teens FCF yield, which we believe justifies the risks in the investment.

Our thesis remains essentially intact. However, we have become concerned with recent weakness in the apparel segment. The apparel segment is the jewel in BNED's business and recently saw its first negative year-over-year growth. Apparel had been providing protection against continued pressure on the book-selling business, so apparel struggles could materially impact BNED's long-term prospects. Furthermore, the core of the textbook-selling business continues to be under substantial pressure from Amazon. Beyond just consumers moving towards acquiring books on Amazon, stores are now implementing price matching, which could drive down margins.



Deere & Co. (NYSE: DE)

Consumers Investment Committee Representative: Thomas Dunn

Deere & Co is the world's largest producer of agricultural equipment. In addition, it also manufactures forestry and construction equipment and operates a captive financing division. While the original investment thesis is no longer available, the company's cost-cutting efforts and the stabilizing agricultural equipment market lead us to maintain our position despite the higher valuation.

1. Stabilization in end markets: Deere's primary customers are farmers, whose purchasing power is strongly influenced by global crop prices and yields. A decline in crop prices over the past five years has been the primary cause of a 30% dip in Deere's revenue since 2013. Corn prices have declined 59.5% since July 2012, and soybean prices have similarly declined 54.5%. However, the recent numbers seem to indicate that the agricultural cycle is beginning to turn. Per-share earnings rose 62% in 2Q17 and revenue forecasts for the year were revised significantly upwards to a projected 8% increase. The market for agricultural equipment in North America seems to be stabilizing and driving the forecast revision, as it improved to a 5% projected decline in revenue from 10-15% previously. Dealer inventories were largely depleted last year and so Deere should enjoy a significant tailwind as dealers begin to restock. Furthermore, with used equipment levels continuing to come down, equipment pricing has more or less stabilized.
2. Operational improvements: Deere has adjusted to falling prices by cutting costs. Over the past three years, the company has cut \$521m off of its SG&A. Furthermore, Deere's agricultural equipment margins are at 8.4% in 2016 vs. 4% in 2001 even though North America's high horsepower unit volumes are down over 20%. This leads us to believe that Deere's mid-cycle earnings will be significantly higher than in previous cycles. While restructuring costs will eat into margins this year, we expect to see improved margins past 2017 as a result of reduced salary costs.
3. Reasonable valuation: Deere trades at 21x forward earnings which is more or less in line with its historical multiple and where competitors are currently trading at. We believe the company warrants this multiple as a result of its ability to generate upwards of 20% returns on equity on trough earnings. After normalizing earnings, we find that the company is trading at closer to 15x earnings.

Lee Enterprises (NYSE: LEE)

Interim Consumers Investment Committee Representative: Jack Millman

Lee, based in Iowa, is a leading provider of local newspapers. With an intense focus on local markets, the company has a unique business model and strong operating margins. The company emerged from bankruptcy in 2012 with an improved balance sheet, albeit still significant debt-load. We believe the market is overestimating concerns related to the company's solvency, which provides an appealing risk-reward profile.

Our original investment thesis was as follows:

1. *Local moat*: Given the company's emphasis on local markets, they typically provide the only or dominant newspaper within a given city. Analyzing LEE's top 10 markets by subscriber counts, we found that Lee reached on average 75% of all adults, categorized from 18 years old and above, in these markets. Despite the industry-wide trend of falling subscriber counts, Lee's top 10 markets saw little change in viewership, implying a sticky customer base.
2. *Improving debt situation*: Lee has been able to generate significant FCF, utilize its sizable NOLs, and pay down a large portion of its debt. Although Lee will begin paying taxes this year, the sector has modeled out the company's balance sheet for the next five years and believes that Lee will pay down the higher interest expense notes over the next 3-4 years. As a result, the only remaining debt is fixed rate which they should be able to refinance once maturities become more significant after 2022. The company was able to refinance in 2014 and we believe will be able to do so again. Additionally, equity holders were only diluted 13% when the company went through bankruptcy. This occurred when the company had a significantly worse financial position, so we see some value in the equity even in a worst case scenario.
3. *Significant potential upside relative to risks*: After modeling out the company's balance sheet and income statement for the next five years and applying an industry average EV/EBITDA multiple, the sector sees a mid-to-high 20% annualized return in the base case for the investment horizon.

The Investment Committee (ICOMM) does see material risks in this investment. This is a leveraged company in a declining industry that has already gone through bankruptcy before. Additionally, given the high levels of debt, it will be necessary for the company to refinance its debt over the next five or so years. It can be difficult for us to definitively know how this refinancing will play out. With revenues consistently falling mid-to-high single digits, the company's ability to pay down its debt will decrease over time. If the bear case plays out, there is a possibility the company will declare bankruptcy again, which would result in our position being largely wiped out.

Overall, despite the risks, ICOMM views Lee as an attractively priced binary play where we see the upside potential as more likely than the downside. Given the 3x+ expected multiple on invested capital at the current share price, we continue to hold the position and will monitor operational performance and debt pay-down.



Perrigo Company (NASDAQ: PRGO)

Interim Healthcare Investment Committee Representative: Michael Presutti

Perrigo is a global leader in over-the-counter (OTC) drugs. Its main OTC segments are store-brand and brand-name, with store-brand concentrated in the U.S. and brand-name concentrated in Europe. Perrigo has a 70% market share in store-brand OTC. Beyond OTC, Perrigo operates in numerous other segments, such as prescription generics.

Our original investment thesis was as follows:

1. *Strong core business:* CHC controls approximately 70% of the OTC drug market in the United States. The CHC segment, which represents half of operating income excluding Tysabri royalties, benefits from scale and existing distribution lines that make it difficult for new entrants to compete. The continuing trend of Rx to OTC should allow additional growth opportunities; we believe the CHC segment can grow at mid-single digits on a forward basis. This segment has also demonstrated resilience during 2008-2010 when the segment grew from \$1.7bn to \$2.3bn in revenue. The BCH segment is similarly a consumer staple, although information for performance in a downturn is not as readily available.
2. *Recent mismanagement obscuring true earnings power:* Recent mismanagement, such as the decision to acquire Omega without a solid integration plan and the rejection of the Mylan hostile bid, has caused investors to undervalue Perrigo's otherwise strong core assets. Omega's failure to meet its ambitious sales targets forced management to impair 46.7% of the \$4.5 billion acquisition. Mismanagement also drove the improper execution of their acquisition strategy in general, resulting in significant dilution of earnings and drew management's attention away from the core assets.
3. *Activist involvement:* Unprecedented pressure from shareholders, most notably Starboard Value, which now holds a 6.5% stake, makes us more confident that misaligned incentives will not persist. Management has already made efforts to safeguard against misaligned incentives, such as corporate governance changes and portfolio reviews. For example, during a portfolio review, management assesses whether each asset or line of assets are aligned with the firm's core business. If it is not, they mark it as a candidate for sale or discontinuation, depending on its value potential. We believe BCH has significant potential to improve margins after completion of marketing and sales efforts by Perrigo. Additional self-help opportunities, including supply chain efficiencies, allow management to add additional upside through incremental margin improvements.

We continue to believe Perrigo remains an attractive investment opportunity for the following reasons:

1. *Core thesis intact:* As we made clear from the beginning, Starboard may take time to unlock value for Perrigo. The continued stock decline reflects the pains Perrigo feels as it impairs goodwill and intangibles and divests from non-core assets to de-lever its balance sheet. Starboard, which has already replaced five members of Perrigo's board and prompted the sale of the Tysabri royalty stream for up to \$2.85 billion, will also push for share repurchases. Meanwhile, the core OTC business keeps chugging along as expected.
2. *Market overreaction to recent developments:* After the raid on its corporate offices on May 3, 2017, Perrigo officially joined most of its peers in the Department of Justice investigation into price collusion in the generics industry. However, Perrigo's generics business is not its core business (unlike competitors) so the extent of the damage is limited at best. Furthermore, Perrigo filed its 2016 Form 10-K with restated financial statements on May 22, 2017, which the market reacted positively to. The restated financials, which primarily reflect the new accounting treatment for Tysabri, do not affect net cash flows.

Regarding valuation, Perrigo appears even more undervalued than when pitched. RBC Capital Markets suggested that a sale of the non-core Rx business would generate \$4.8 billion alone, roughly half of Perrigo's current market cap. Furthermore, PRGO trades at a historically cheap multiple on depressed earnings. If we assume the 12x earnings multiple immediately before the goodwill and intangible asset impairments which drove earnings negative, as representative, our potential upside and margin of safety are high. We believe it is possible that PRGO's multiple may expand back to 20x where it had been trading historically after operations stabilize, although we do not depend on significant multiple expansion in our valuation. Potential catalysts include: the sale of Tysabri, the sale of the Rx business, continuing margin improvements in the core businesses, and an outright sale of the entire business.



PICO Holdings (NASDAQ: PICO)

Chairman, Investment Committee: Sid Jain

PICO Holdings is a West Coast holding company with significant water rights and real estate assets currently in the process of liquidation.

Our original investment thesis was as follows:

1. Water rights: Because of previous management's poor performance in monetizing its assets, investors had overlooked PICO's increasingly valuable water rights in the Southwest. In the past, water supply has been greater than water demand, but since the early 2000's, water demand has outpaced water supply due to the Colorado River and Lake Mead continuing to dry out. As a result, water prices have risen significantly, allowing PICO to capitalize on its substantive water rights. We analyzed historical price per acre-foot for these rights and believed the rights alone were worth roughly \$12 a share, which is what the stock was trading at the time of our investment. This implied that we would be receiving the real estate for free.
2. Real estate: PICO's real estate assets remain well positioned to benefit from a continued housing up cycle. Acquired mostly at rock bottom prices in 2008, PICO's real estate assets have increased in value but are currently only valued at cost on the balance sheet due to GAAP accounting rules. Furthermore, with the inflow of tech companies into Nevada and data centers in Arizona, real estate demand and prices are expected to continue to increase. Conservatively valuing this segment at book value resulted in \$5 per share of real estate.
3. Activists: the involvement of several activist investors (who collectively owned 16% of shares outstanding) and significant NOLs (\$2 per share) increased the likelihood of a tax-free asset monetization. New activist investors on the board had just ousted the CEO who had invested in numerous unrelated businesses, destroying significant shareholder value. Additionally, they revised the compensation structure to make management's incentives aligned with shareholders (lower base salary, bonus linked to selling assets above book value). PICO's top priority is now to return capital to shareholders through a stock repurchase program and/or special dividend.

Our thesis has played out as expected and we will maintain our position as we believe it remains a highly attractive uncorrelated investment opportunity.

1. Improved corporate governance: In addition to the removal of the CEO (who we felt was deliberately delaying liquidation), most of the board has been replaced with investment professionals which makes us more confident of an expedited asset sale, especially as the company has already begun to sell off water rights. Furthermore, executive compensation has been restructured to be more shareholder-oriented. Previously, management used to take home 20% of profits for any assets sold above book value. The percent has been dropped to 8.75%, increasing our price target accordingly, and is based upon gross invested capital rather than book value. An issue with the previous CEO had been consistent write downs to make the profit hurdle rate easier when he sold off assets — that problem has been fixed with this new compensation structure.
2. Asset sales: PICO sold its UCP subsidiary to Century Communities (CCS) for \$11.35 (\$5.32 in cash, 0.2309 in CCS stock). We had expected this sale to happen eventually but the speed at which it happened makes us even more bullish. This should also clean up a lot of the complexity with PICO's financial statements. Previously, PICO's balance sheet showed significant amounts of debt but closer analysis caused us to realize that it was a result of the consolidation of UCP's financials and only applied to UCP assets with no recourse to PICO. With the sale of this subsidiary, PICO is becoming more of a pure play on water prices.

While the stock has run up to our base case price target, we believe that the biggest risks with the company (delayed asset monetization, poor corporate governance) have largely been mitigated and so the bull case price target (~\$22) is a more appropriate fair value. We will continue monitoring price per acre-foot for water rights sales.



Praxair, Inc. (NYSE: PX)

Industrials Investment Committee Representative: Stephanie Liu

Praxair is the largest industrial gases provider in North and South American and one of the largest internationally. It produces, distributes, and sells atmospheric and processed gases and surface coatings.

Our original investment thesis was as follows:

1. Contracts and nature of industry provide strong economic moat and high historical ROIC: With contracts up to 20 years and a 95% renewal rate, PX has an ROIC of 12.4% compared to an industry average of 8.8%. The industry is structured similarly to an oligopoly with a few large major players dominating the space. Generally, customers do not change suppliers due to high switching costs. Therefore, competitors distinguish themselves by establishing market presence in local regions. PX generates above average returns on capital due to its low-cost model from its massive distribution network. It uses an integrated network of local on-site gas producers and in-house distributors to establish a monopoly over a 250-mile radius around each facility, reducing competitive rivalry and the threat of new entrants.
2. Diversified portfolio of customers makes company less subject to localized risk: With a large base of end markets, PX is able to weather local and market-wide downturns. PX has a diverse portfolio of clients in end markets from manufacturing (25% of sales) to more resilient food and beverage industries (6% of sales). Furthermore, PX offers years of reliable expertise and diverse services through their following business segments (gas supply & management, industrial services, oil & gas services, and surface coatings) that allow PX to offer multiple services to a sticky customer base.
3. Positioned for growth in developing markets: PX has a wide geographic footprint with about 53% of sales coming from North America, 19% coming from South America, 15% from Europe, and 13% from Asia. PX's strong backlog of \$2.6 billion is expected to drive strong growth internationally, especially in Asia where manufacturing is the third largest market due to infrastructural improvement. It also has a strong track record of accretive acquisitions in locations with high customer market growth and integrated facilities that offer low cost distributions and efficiency.

We continue to see PX as an attractive investment due to the following reasons:

1. Strategic expansion projects and acquisitions: PX has an established and strong network in North America and strengthens its market presence into new regions through acquisitions and projects to capture market growth. PX signed a 20-year agreement to build out its and extend its Gulf Coast pipeline systems 46 miles to from Texas City to reach Freeport, Texas. PX's pipeline extensions set it up to capture increasing manufacturing demands in the Gulf Coast region. Internationally, PX also acquired Yara International's European CO₂ business to expand its food & beverage end market and access to more resilient markets.
2. Strong reliable business model: In a mature industry known for sticky customers, PX's size, diverse industry expertise, and regional presence continue to attract large customers, like its most recent customer Rolls Royce, to its diverse portfolio of clients.

For the above reasons, we will continue to hold our position in PX. Although the stock is not a bargain anymore at just over 22x earnings and the announced mega merger with Linde is concerning, we believe PX is a reliable and stable company with little downside. However, Praxair is another position we will likely sell once we find more attractive investment opportunities.



U.S. Bancorp (NYSE: USB)

Financials Investment Committee Representative: Vaibhav Verma

U.S. Bancorp is the fifth largest commercial bank in the U.S., providing banking, investment, mortgage, trust, and payment services.

Our original investment thesis was as follows:

1. USB's conservative loan portfolio and strong profitability will provide sustainable value growth: U.S. Bancorp has leading business fundamentals, currently with an ROE of 12.4% and ROA of 1.3% (well above the 10% ROE and 1% ROA standard for commercial banks). USB's cost discipline is evidence with its strong 50% efficiency ratio. Furthermore, USB's loan portfolio remains conservative with a 0.5% bad loan percentage.
2. Poised to gain market share through sustainable industry-leading long-term growth: Although USB's loan portfolio has seen modest growth since 2012, this has not translated to strong revenue growth – a characteristic common across banks because of the last several years' low-interest environment.
3. Low leverage allows for deep runway for expansion and profitability: USB has a 9.3x leverage ratio (Assets/Ratio), slightly lower than the 10x standard.

As one of the best commercial banks in the US, USB justly trades at a premium to its peers. We will continue to maintain our position for the following reasons:

1. Downside protection: With a high capitalization ratio and a conservative portfolio, USB was well-positioned during the Great Recession and performed very well. As comparable banks reported significant losses and required government bailouts, USB bottomed at a solid 8.4% ROE and 0.7% ROA in 2009. Since then, USB's competitive strength has only improved, and we feel confident about USB's position in a bear or bull market.
2. Debt ratings: With the highest debt ratings from Moody (A1) and S&P (A+) in its peer group, USB's cost of funds is 0.43%. Because it has a lower cost of funding, USB can afford to offer loans to at lower rate than its competitors, offering savings from 40 to 80 bps. With this advantage, USB maintains high-quality clients and has no need to force loans for yield.
3. Noninterest income: USB has scaled its payment business and corporate trust business, which are outsized relative to the composition of revenue. This requires scale and does not require significant capital. As a result, its strong asset turnover is much higher than its peers.

While the stock trade at just over 2x book value, we will continue holding it as it represents a low risk way to get financials exposure in a rising interest rate environment.



W.R. Grace & Co. (NYSE: GRA)

Chairman, Investment Committee: Sid Jain

Grace is the largest producer of specialty catalysts that help remove impurities from crude oil and break it down into distilled gasoline.

Our original investment thesis in Grace was as follows:

1. *Attractive business model:* Grace is a wide-moat, recession-resistant cash cow. The company earns returns significantly above its cost of capital over a full economic cycle; currently, it generates upwards of 30% returns on capital. The company provides specialized technologies to each company and enjoys long-term contracts (70% customer renewal rate). Furthermore, since refiners cannot run without catalysts and the technology is such a small portion of total costs (<5% of total cost), Grace has significant pricing power — Credit Suisse estimated that refiners can get 5-10x return on their catalyst investment. As long as transportation fuel demand continues, the company is in business.
2. *Spinoff situation:* Grace recently emerged from a 13-year Chapter 11 bankruptcy, which caused it to accumulate over \$1.9B in NOLs, and announced it was spinning off its cyclical segment. Banks were just beginning coverage, which was surprising since Grace was a \$7B company. We believed the market was undervaluing Grace because of its less attractive construction business (which caused the bankruptcy) and once it was spun off, increased focus on catalysts should help drive multiple expansion.
3. *Strong management:* After buying back \$500 million worth of shares in 2014, management plans to buyback \$2B worth of shares over the next few years, which will help drive EPS growth. Key executives must maintain 3-5x of their salary in the form of stock. Furthermore, utilizing the spinoff to unlock value is a sign of shareholder-friendly management.

Although Grace has underperformed both the S&P and the chemical sector, we continue to believe it remains an attractive investment opportunity for the following reasons:

1. *Favorable supply/demand dynamics:* we believe we are in the early innings of a pricing up cycle with utilization for catalysts at nearly 90% and a massive new refinery coming on line in the Middle East. The second biggest player in the industry already hiked prices 10% last year. Goldman Sachs estimates that a similar price hike would result in 30% higher earnings power due to Grace's operating leverage. For reference, it has almost been a decade since the last pricing up cycle, which resulted in a nearly 20% price increase. Demand is expected to remain strong due to the trend towards heavier crude (which requires more catalysts), increased environmental regulations (refiners are being required to use more catalysts to remove impurities), and transportation demand. As a result, refinery capacity is expected to increase at 2% annually. On the supply side, no major FCC units are expected to come on line until 2018 at the earliest. However, the market has been concerned with delays in the Middle East refinery and peak crack spreads. Grace has been slow to implement price hikes most likely for these two reasons; regardless, prices have finally started to improve.
2. *Potential M&A candidate:* As mentioned above, Grace operates in a highly attractive business. The catalyst industry is oligopolistic with the top four players controlling 90% of the market. Market shares have shifted by less than 5% since 2010 and Grace is the largest player with 33% of the market. Long-term relationships due to specialized technologies, strict regulations, and massive economies of scale make it extremely difficult for newcomers to enter. Grace earns high returns on capital, has little reinvestment needs, and is recession resistant, making it an attractive asset for private equity funds. Grace is also the only pure play catalyst company. As a result, if someone wanted to enter the industry, buying Grace would make the most sense.

In terms of valuation, Grace trades at just 10x EBITDA (after backing out the NOL value), which we believe undervalues the company's pricing power, growth outlook, and competitive positioning. Recent transactions in the space have been done anywhere from 12.5-15x EBITDA. Although our thesis has been taking longer to play out than expected, we remain enthusiastic about our investment.