STERN IAG

Board of Advisors Meeting

December 2nd, 2019

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Letter from Portfolio Manager

Dear Board of Advisors,

As the semester comes to an end, we reflect on the lessons we have learned. In addition to overhauling the oversight packet and cutting down to the content that matters, we've significantly improved both the pitch tracking and documentation process. With all the pitch information now available to everyone in the organization, we'd like to use it to find our patterns in areas we make mistakes in and areas in which we tend to find upside. We are developing a document that compiles our lessons learnt. We've found that this semester has been particularly helpful in developing the following:

- **Higher Levels of Diligence:** Within the internal meetings, we're beginning to uphold a standard of diligence required. It's a simple conclusion, but the better versed we are in all the publicly available information, the less surprised we are when say, earnings miss. In the past, we've used level of diligence as a proxy to determine idea quality. We've begun to disaggregate the two and there have been multiple high level diligence pitches we didn't move on with.
- **Honesty:** The flip side of upholding the standard is that it must be complemented with honesty. This is perhaps the most difficult aspect of the process from our perspective. The infrastructure to bring 2-3 ideas per internal meeting can be made in a year. But the challenge is maintaining the structure and being honest even with hours of work put into an idea. We still struggle with honesty.
- **Not Compromising on Values:** We've had positions in the past in which, for instance, corporate governance was an identified risk. But because everything else was better, we moved forward with the idea and we were punished. We've become much less compromising over the semester with some pitches being left behind with only one red flag.

With that in mind we'd like to bring two pitches we believe to be both interesting and solid businesses:

- **Allison Transmissions – Page 20 – (NYSE: ALSN):** A truck transmissions company at a reasonable price with significant pricing power. It is priced at a discount to historicals due to slowdown in fracking and misplaced fears in the EV threat.
- **Premier Inc. – Page 31 – (NASDAQ: PINC):** A group purchasing organization for health services conglomerates focusing on the medtech space priced at attractive multiples due to both historical dilution and concerns regarding future dilutions.

Best,

Steve Woo

Portfolio Manager

II. Portfolio Team Overview

2019 - 2020 Team Roster

Portfolio Manager
Steve Woo

Senior Analysts
Sruthi Boddu
Michael Giese
Nived Gopakumar
Mateo Panjol-Tuflija
Oliver Jiang
Mark Sun
Larry Wang

Junior Analysts
Srikar Alluri
Liam Coohill
Cody Fang
Nisha Honnaya
Simran Korpal
Caleb Nuttle
Jaro Van Diepen
Chen Zhou

New Analysts
Ian Chen
Nicole Dai
Sonali Mohani
Aashka Sanghvi
Achyut Seth
Anthony Wang
Catherine Wang

III. Performance Analysis

Holdings Summary *(as of November 25th, 2019)*

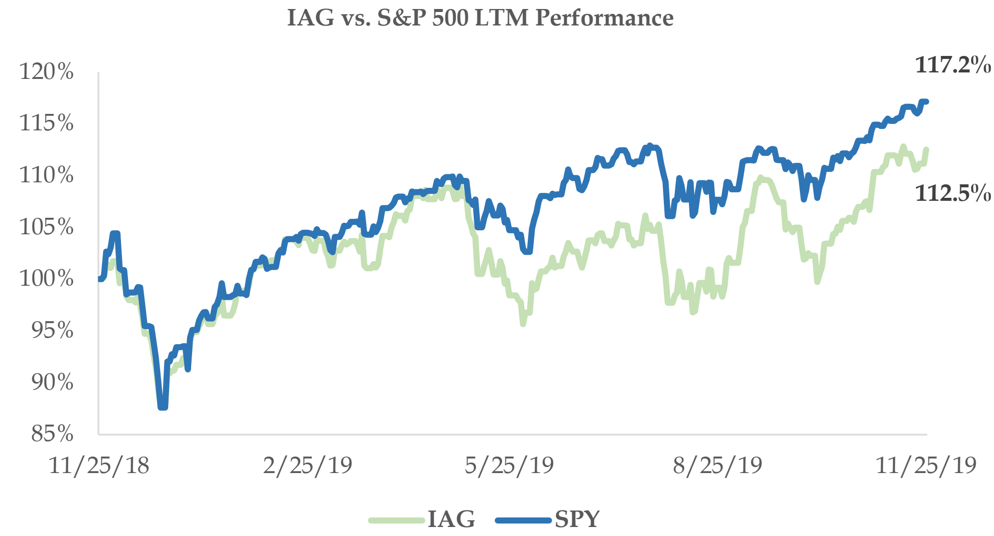
Core Holdings									
Company Name	**Ticker**	**Analyst**	**Date of Purchase**	**% of Portfolio**	**Share Count**	**Price At Purchase**	**Share Price**	**Current Return**	**Morningstar Industry**
Blackberry	BB	Nived G.	12/4/18	**3.5%**	290	$8.18	$5.48	**(33.0%)**	TMT
BorgWarner	BWA	Larry W.	3/14/19	**5.3%**	55	$38.34	$43.47	**13.4%**	Consumer Cyc.
CVS Health Corp	CVS	Michael G.	12/6/16	**3.4%**	20	$77.28	$76.58	**(0.9%)**	Healthcare
First Energy	FE	Oliver J.	10/29/19	**5.2%**	50	$47.30	$47.72	**0.9%**	Utilities
HCA	HCA	Srikar A.	9/26/19	**5.9%**	19	$119.20	$141.54	**18.7%**	Healthcare
Stanley Black & Decker	SWK	Moeez T.	5/3/18	**4.9%**	14	$139.53	$159.29	**14.2%**	Consumer Stp.
United Rentals	URI	Caleb N.	3/14/19	**5.9%**	17	$122.97	$157.02	**27.7%**	Industrials
XPO Logistics	XPO	Chen Z.	10/20/19	**5.6%**	30	$79.37	$84.34	**6.3%**	Industrials
ZTO Express	ZTO	Mark S.	3/14/19	**4.6%**	100	$19.28	$20.98	**8.8%**	Industrials
SPDR S&P 500 ETF	SPY			**5.5%**	8		$313.37		
Total Core Holdings				**49.7%**			**$20,114.51**	**6.2%**	

Opportunistic Holdings									
Company Name	**Ticker**	**Analyst**	**Date of Purchase**	**% of Portfolio**	**Share Count**	**Price At Purchase**	**Share Price**	**Current Return**	**Morningstar Industry**
Advansix	ASIX	Mateo P.	3/14/19	**3.0%**	67	$31.09	$20.37	**(34.5%)**	Chemicals
Brixmor	BRX	Cody F.	12/4/18	**6.7%**	140	$16.00	$21.80	**36.3%**	Real Estate
DaVita	DVA	Mark S.	10/3/18	**5.3%**	33	$72.15	$73.39	**1.7%**	Healthcare
Gilead	GILD	Simran K.	11/13/17	**3.7%**	25	$73.77	$67.22	**(8.9%)**	Healthcare
Green Brick Partners	GRBK	Srikar A.	12/3/17	**4.1%**	162	$11.39	$11.46	**0.6%**	Real Estate
LyondellBasell	LYB	Oliver J.	4/18/19	**5.2%**	25	$91.55	$94.75	**3.5%**	Chemicals
Recro Pharma	REPH	Mark S.	10/29/19	**5.4%**	160	$13.20	$15.49	**17.3%**	Healthcare
Baudax Bio	BXRX	Mark S.	11/14/19	**0.6%**	64	$0.00	$4.56		Healthcare
Western Digital Corp	WDC	Mateo P.	10/3/18	**4.6%**	42	$56.45	$49.76	**(11.9%)**	TMT
Total Oppt. Holdings				**38.7%**			**$17,604.59**	**0.5%**	
Total Portfolio Equity				**88.4%**			**$40,226.06**	**11.8%**	
Cash				**11.6%**			**$5,296.00**		
Total Portfolio Holdings				**100.0%**			**$45,522.06**		

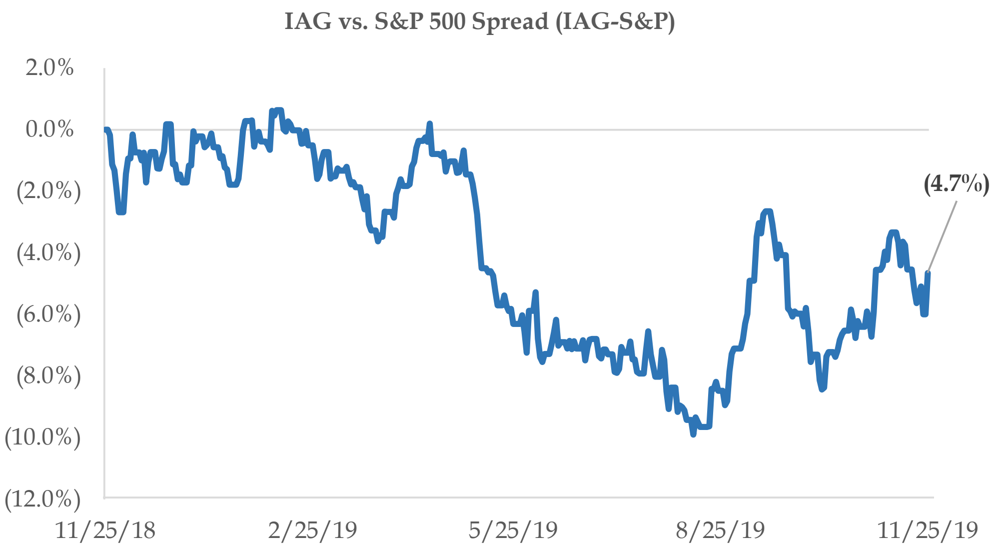
Portfolio KPIs	
Indicator	**Number**
Daily Sharpe Ratio	(0.02)
Annualized Sharpe Ratio	(0.35)
Portfolio Beta (Top-Down)	0.69
Daily Volatility	0.43

Assumption: Given that the Google Finance interface pulls numbers on a daily basis and we don't have multiyear data on portfolio performance, **we annualize daily beta to get the year end number**. We do realize this is a significant assumption.

Portfolio Performance vs. Benchmark

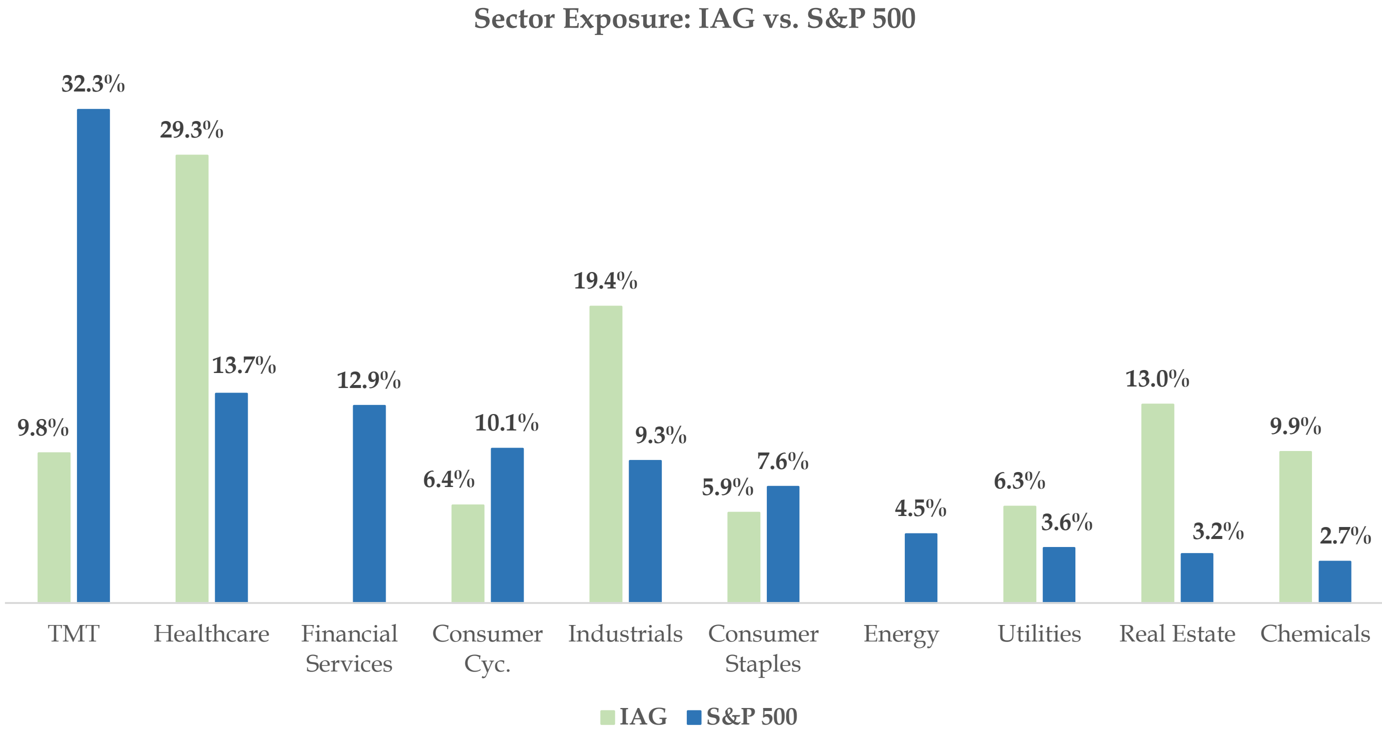


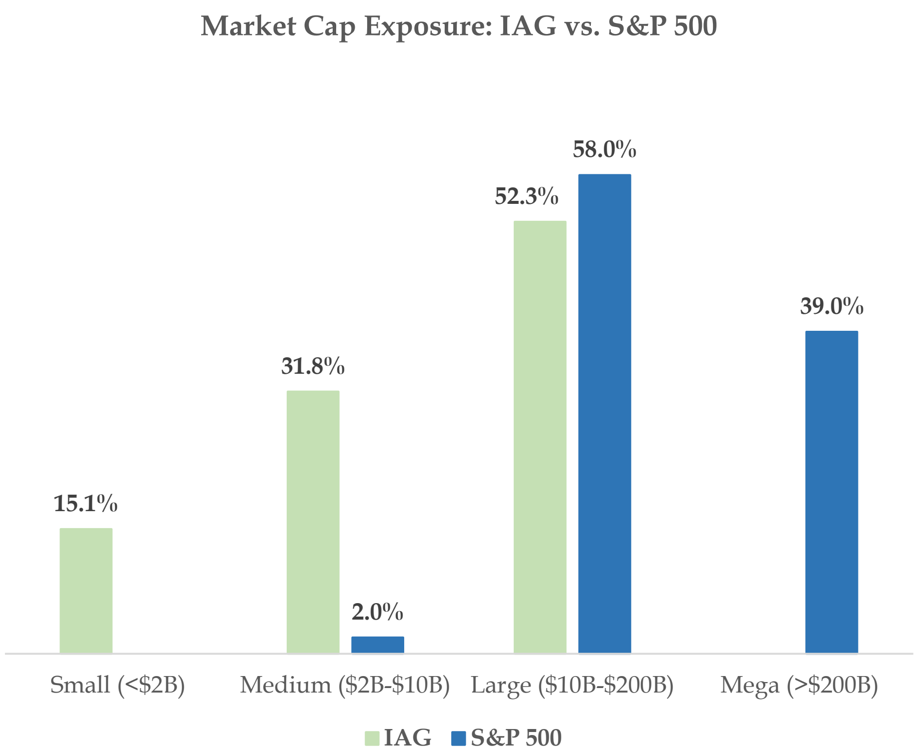
The spread between IAG and the S&P closed to an extent mostly due to the purchase of **Recro Pharmaceuticals following the successful spinoff of Baudax Bio and FDA approval in its opioid segment.** In addition, some losses were cut earlier in the semester.



As of 11/24/19 the spread between IAG and the S&P was -465 BPS. It reached the low point of the year in the later part of summer and has since improved. We believe a significant part of our underperformance is due to large losses (30%+) concentrated in a few positions that aren't quite balanced out by gains in the other direction. **We do recognize this is problematic given our beta is close to 1.**

Portfolio Exposure vs. Benchmark





IAG continues to target the S&P 500 benchmark specified in the fund mandate. As of November 2019, **IAG is most overexposed in healthcare and industrials.** Interesting opportunities in both the healthcare services space and the pharmaceuticals space has allowed us to enter into 2 new positions these past few months. Although IAG's track record in the space isn't quite good, we continue to look at the space given the industry interest in the organization.

IAG continues to be underexposed to large- and mega-cap positions, an issue which continues to persist given the hardship of identifying value plays in such areas.

IV. Key Holdings Update

Portfolio Updates Since Oct. 2019 Meeting

Company	Ticker	Update
Advansix	**ASIX**	**Sell note in packet.**
Blackberry	**BB**	**Sell note in packet.**
BorgWarner	**BWA**	We would like to propose holding our stake in BorgWarner at $42.79 per share, up 11.6% since inception in March 2019. BWA reported an overall solid Q3 result, delivering strong earnings that drove a modest price rally. The company's backlog contribution was better than expected, resulting in a full year increase from ~$480 million to ~$550 million. In addition, BWA's announced its new contract wins in Integrated Drive Module, a product that integrates BWA electric motor, transmission and power electronics, further demonstrating new progresses in expanding its electric propulsion technology portfolio. Given its robust fundamentals and more opportunities in the hybrid and EV market, we believe there can be additional upsides to be captured. We will pay close attention to the result of full-year earnings release on 02/13/2020.
Brixmor	**BRX**	**Sell note in packet.**
CVS Health Corp	**CVS**	In their Q3 earnings, CVS beat street EPS estimates by 4% and affirmed guidance for 2020 of EPS of $7 a share. Fundamentally, the HealthHUB concept continues to outperform with higher Rx volume, MinuteClinic visits, front store sales, traffic, and a higher margin. The company continues to focus on its Omnicare platform and cross selling opportunities that will be driven more heavily in the coming quarters. As for our position, excluding dividends, we are only 1.6% down from our original cost basis two years ago, and have rode through the fundamental change business and strategy that looks to be beneficial long term.
DaVita	**DVA**	**Sell note in packet.**
First Energy	**FE**	Since taking the position last month, First Energy has traded horizontally following its 3rd quarter earnings of 76 cents per share, beating our estimates of 66 cents per share. Distribution results experienced higher operating expenses and depreciation due to the absence of earnings from the Ohio distribution modernization rider. This was offset by improved transmission results, driven by higher rate base, as a result of its 'Energizing the Future' initiative. Our thesis remains intact, and we we'll continue to monitor closely for any major changes in transmission growth rates and their Debt/EBITDA ratio, which is slightly above the industry's. Management further narrowed 2019 earning guidance to $2.50-$2.60.
Gilead	**GILD**	**Sell note in packet.**

Portfolio Updates Since Oct. 2019 Meeting

Company	Ticker	Update
Green Brick Partners	**GRBK**	The company had an earnings beat recently and has seen a good start to their anticipated Trophy Signature homes division. Green Brick expects to capture a lot of the upside from this division in 2020. For the previous quarter, Dallas was the largest market in the nation and Atlanta was the fifth. Return on capital still remains more attractive than similar size peers. Due to these factors, we would like to recommend a hold on these positions.
HCA	**HCA**	HCA has achieved upside since purchase as the company reported an earnings beat on both revenue and EPS. They saw record growth in admissions as well as a better acuity mix for the quarter. In particular, both orthopedic and cardiovascular volume was at record highs. Occupancy is at a high of 73% and they expect physician hiring to grow 8-12% a year. Management has guided for 2020 growth to be at the high end of the long term average. For these reasons, we would propose holding this position.
LyondellBasell	**LYB**	Q3 EPS of \$2.70 was \$0.04 below consensus. We rebuilt the model based on narrower projected commodity prices and updated EV/EBITDA multiples for all LYB segments. Our price target using a SOTP valuation method continues to be in the \$108-118 range with an overall EV/EBITDA multiple of 7.55x, in line with consensus. The business continues to return cash – FCF/Sales ~10x, FCF yield ~ 10% - to its investors, and we are being paid a 5% dividend yield to hold this company with the potential that headwinds turn into tailwinds. Other considerations: 1) Hyperzone polyethylene facility is expected to ramp up through 1H20; the capacity has been included in FY21 capacity projections. 2) The company will be ~35% exposed to trade war as 35% of 2021 total PE production will be exported, mostly to China. LDPE is subject to 10% additional tariff from Dec 15 this year. 3) Industry overall capacity additions have stumbled in 3Q19 as a couple of plants faced issues when starting up. Expect to continue into 4Q19 and even 1H20. 4) Asia naphtha-ethylene-PE margins (lower costs means LYB faces more competition) were called out by management as trough conditions, although market has priced in an extended rebound 5) APS (Schulman) cost synergies of ~\$100m have been realized, with a further \$75 by the end of 2020, while integration costs should come down.
Recro Pharma/ Baudax Bio	**REPH/ BXRX**	We'd like to continue to hold our stake in Recro at \$15.16 per share post-spin-off and \$16.95 pre-spin-off, representing 14.6% upside post-spin-off and 28.6% pre-spin-off since our inception a month ago. After our inception in October, we saw significant changes in the company. We saw events including: 1. The company reported its 3Q earnings and revised up the CDMO segment revenue guidance to \$98 million to \$100 million from the original \$94 million. They also maintained the same EBITDA margin guidance. 2. The company completed the spin-off process for its acute care division. The stock is trading under BXRX with 2.5 Recro to 1 BXRX spin-off ratio. The BXRX is getting around \$19 million cash from the legacy CDMO business, which would allow them to get about a 6 to 9 month runway for the future appeal process. 3. The FDA surprisingly approved the appeal application for the acute care non-opioid pain killer products. Management shares the optimism that with specific restriction of the labeling, the drug has the potential to gain marketing approval in early 2020. Based on the following developments, we are revisiting our thesis and believe the following: 1. The CDMO segment is still undervalued, especially post spin-off. After the new guidance, we see the CDMO segment trade around a 9x EV/EBITDA basis. Therefore, it would still have some runway to grow in terms of multiple expansion or potential M&A. 2. The original judgment of ascribing the BXRX, its drug development segment, as zero value has been revised. Based on the 50% probability of approval as well as its underlying assets, the stock could be valued around 9-12 dollars, representing around 60 to 100% upside, and the failure could result in \$2-3, representing a 50% decline. Therefore, we are recommending to hold both segments for the longer-term to revaluate as the company just completed the spin-off around 1 week ago, and the current trading can be volatile.

Portfolio Updates Since Oct. 2019 Meeting

Company	Ticker	Update
Stanley Black and Decker	**SWK**	Stanley Black and Decker remains a core holding in the portfolio and provides no reason to sell at this point. The company's management continues to see success from their strategic acquisitions and ability to integrate businesses into the brand. SWK announced major cost cutting initiatives last quarter which should begin to materialize by 2021, but we're mainly looking to see stable margins and increased growth in the tools and storage segment from their Q4. Until we lose faith in management or see the stock appreciate to levels we cannot justify, we feel that we should continue holding this position.
United Rentals	**URI**	We would like to recommend holding URI at $157.02 per share (PT: $140-180), currently representing 27.7% upside. We believe that URI's risk/reward profile is still highly favorable with the business trading at 5.7x LTM EBITDA which is close to recession levels. Meanwhile, the company continues to reduce leverage (2.6x Net Debt to LTM EBITDA) and successfully realize cost synergies from its acquisition. Given our broader portfolio, we are comfortable to continue holding URI on the basis on continued multiple expansion fueled by the aforementioned acquisition integration and reducing leverage.
Western Digital Corp	**WDC**	We would suggest holding our position in WDC. As a reminder the thesis laid out in March of 2018 had started to play out in September. WDC had seen a rally in its valuation as it surged north of 75% from the low in June. The NAND and Flash market saw normalization as supplier and customer inventories dwindled, led by a power outage at the WDC-Toshiba joint factory . However, since our last update during the oversight meeting in October, WDC stock has lost just south of 21% of its value-completely wiping out our upside. The underperformance is a result of two factors: 1) Reduced guidance for the last quarter of 2019 2) WDC CEO Stepping down. This being said, we believe this is not a long term concern given the market developments indicating persistent undersupply, supporting strong pricing and margin expansion. However, given the accelerated reduction in NAND pricing we are adjusting our price target to $71.
XPO Logistics	**XPO**	We recommend holding our current position in XPO at $83 per share (Nov. 22), up 5% from the purchase date. XPO currently trades at 7.1x forward EV/EBITDA, representing a sharp discount over its SOTP valuation as well as the 2018 level of 9.8x. There has not been major fundamental development since the last meeting and our theses remain intact. The quarterly operating ratio for the less-than-truckload segment improved from 85.4% last year to 80.8%. Excluding the impact of gains in real estate sales, the ratio improved by 210 bps year-over-year. Management attributes the increase to continued improvement in yield and tight cost control and notes that tech-driven optimizations of pricing and labor are beginning to contribute to these results, in line with our theses. The recent Q3 2019 earnings announcement suggests that net income rose 18% year-over-year to $136 million while revenue declined by 4.4% year-over-year to $4.33 billion, reflective of an improvement in the margin front due to the previously mentioned improvements and the loss of the largest customer as well as softness in freight brokerage. The market has reacted neutrally to the development.
ZTO Express	**ZTO**	We want to continue to propose holding our stake in ZTO at $20.74 per share, representing a 7.6 % upside since our inception. Since the last update. ZTO reported its 2019 Q3 earnings, while the company beat EPS estimates, it failed to meet the revenue expectations. Thus, the stock dropped around 8% post earnings. Looking into the critical operating data, we see that the package volume rose significantly at approximately 47%. ZTO also improved its cost efficiency program, which stabilized its EBITDA margin and operating margin after multi-quarter decreased. However, we are seeing increasing competition in terms of market shares as well as intensifying price war in the delivery industry, which reflects in flat per package price as well as slowing market share expansion. We will also keenly observe the progress of the Chinese parcel industry, monitoring not only company-level data as well as industry-level data from Post Bureau as we believe the next year will be a critical time for the Chinese parcel delivery market amid an economic slowdown and increasing consolidation and new partnerships/entries.

V. Sell Notes

Sell Note: AdvanSix (NYSE: ASIX)

Dear Board of Advisors,

We would like to sell our position on **AdvanSix (NYSE: ASIX)**, representing a **34.5% downside**. Our initial Investment Thesis was based on multiple upswings in spreads that determine the operational performance of the issuing company. We believed that AdvanSix is well positioned to benefit from said upswings given their high utilization rate, lowest cost of production and smart capital deployment. Specifically, the spread in question that led to underperformance is the following:

CPL-BNZ

Caprolactam and Nylon-6 segment performances track the spread between caprolactam and benzene (CPL-BNZ). The thesis proposed that new capacity from China would be experiencing headwinds as more stringent environmental laws come into play. Plants in China were rumored to move to industrial parks to reduce pollution. With 1/3 of global capacity in areas of environmental scrutiny and utilization rates low, this should have led to many plants shutting down altogether over the next several years and increasing spreads above the current levels. The benzene demand in the US is stable, while supply saw a hit with major players shutting down plants. Furthermore, the reduced supply in CPL should have seen a boost to spreads as benzene experiences headwinds in the Asia market, as it sees lag between added capacity and increased demand primarily from downstream industries such as SM. Reports saw supplies lasting longer in 2019. Meanwhile, the price spread against the key downstream segments, such as styrene, phenol and caprolactam, had continued to favor the derivatives, which are enjoying more than adequate margins from relatively low-priced benzene. These conditions combined were projected to increase the spread from historical lows in the start of 2019 to levels more in-line to those of 2018, hovering around 2018. However, the spread has seen further downturn, dropping from ~$1,000/mt to $800/mt. The reduction in the spread can be explained by significant pressure acting from both sides, both the feedstock material and end markets. Firstly, Benzene has seen a significant upswing, primarily driven by higher oil prices, causing most of the reduction. Secondly, our thesis had little transparency into the end market demand for nylon based products, which ,in hindsight, proved to be a critical mistake. The demand end has been severely week driven by low end market demand stemming from the likes of the automotive and carpet industries.

Lessons Learned

Given the historically low spreads and a hope of a reversion to the mean that is characteristic to a cyclical company, I had thought of recommending holding our position, leading to a delay in our exit. However, I quickly realized that seems cheaper can always be cheaper, as shown by our model which indicates that, given current spreads, the stock should be trading at $10 per share. In conclusion, there was not enough weight given to understanding the market dynamics in our thesis. Specifically, there is no notion of sensitivity to demand necessary to sustain the spreads projected by the changes in the supply stack. To add on top of this lack of transparency, the context presented by the China-US trade war, it would be difficult to project what levels spreads might achieve once the cycle recovers. Given this uncertainty and the tail risk, I recommend exiting our position.

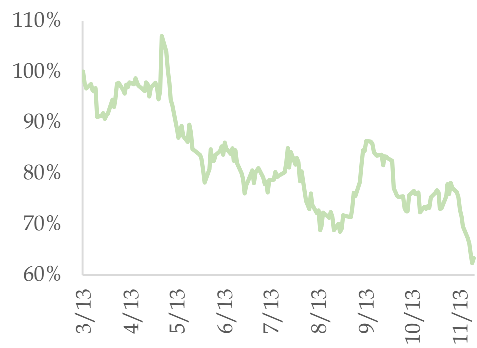
Best,

Mateo

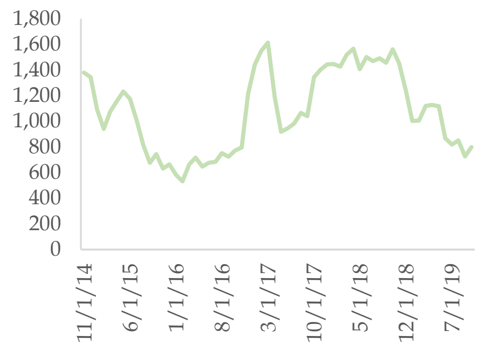
Stock Overview (LTM Figures)

	At Purchase	Current
Share Price:	$31.1	$20.4
Mkt. Cap (*mm*):	947.9	551.0
EV/EBITDA:	7.3x	6.8x
Operating Margin	7.0%	3.6%
BNZ-CPL	1,010	797
Sulfate ($/*mt*)	260	245

Performance Since Purchase on 3/14/19



BNZ-CPL Spread



Sell Note: BlackBerry (NYSE: BB)

Dear Board of Advisors,

We would like to sell our position in **Blackberry (NYSE: BB)**, representing a **32.9% downside**. Blackberry's stock dropped after the company missed on revenues for the quarter and issued down on guidance for FY. Earnings were in line.

Management's key message is that is does not have gaping holes in their technology, is in the right markets that are large and growing with the right products and has a platform and portfolio that is aligned with where the market is headed. The goal to create a single, unified platform (creating a single, unified platform that spans mobile and IoT post-Cylance acquisition) appears well-positioned to address the emerging cybersecurity challenge across IoT endpoints. While the strategy is sound and the opportunity is large, the market is early and LT visibility is really low. Management acknowledged that it most recently had missteps in execution, though changes are underway to address these issues and drive growth. Our initial thesis was as follows:

Microsoft Risk is Overblown [Not Actualized]: Given the difficulty in finding growth in the ESS segment, it's possible part of this is attributable to competition. Management attributed the shortfall in ESS revenue YD (Q1 flat Y/Y, down mid-teens Y/Y) to sales mis-execution, as new customer wins took longer to close, government deployments were delayed and existing customer renewals weren't managed properly.

Licensing Model is Better than Perpetual Model [Not Actualized]: Further diligence on whether this priced in or not was required. Through more exposure to the SAAS space, it became clear that the Adobe precedent was over-extrapolated.

BTS is a 'High Bet' Category [Not Actualized]: The BTS segment is still quite promising. We have no doubt that there is significant white space for growth. However, this is not the primary concern for the investors at the moment. The ESS stability is required for the BTS segment to grow.

Conclusion: The key premise behind the thesis was that the stable cash flows from the ESS business would be used to improve the BTS segment. There is significant uncertainty regarding the ESS segment. Sales execution continues to be an issue, but we have few ways of tracking this through a KPI. Our confidence in the company depends on data points that aren't public. We believe we have significantly overrated the competitive advantage of the ESS segment.

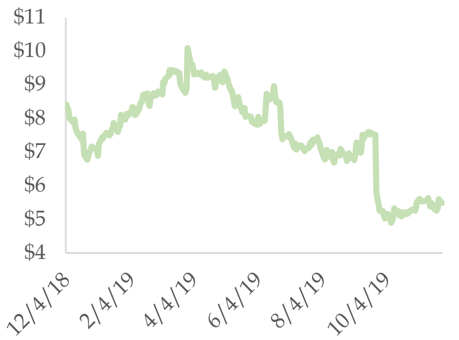
Best,

Steve

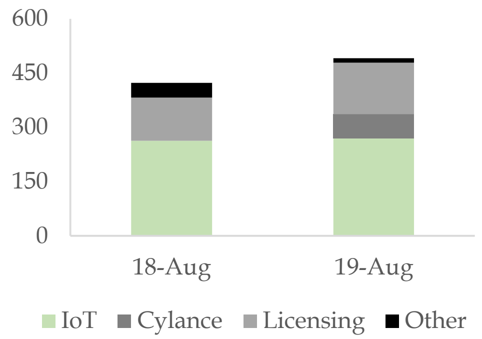
Stock Overview (LTM Figures)

	At Purchase:	Current:
Share Price:	$8.18	$5.21
Revenue:	$840	$916
GM (%)	76%	78%
Net Debt:	($2,300)	($251)
EV/Rev:	2.9x	2.1x

Performance Since Purchase on 12/4/18



Revenue Breakdown Over 6 Months



Sell Note: Brixmor Property Group (NYSE: BRX)

Dear Board of Advisors,

We would like to sell our position in **Brixmor Property Group (NYSE: BRX)**, representing a **36.5% capital appreciation and a 7.1% yield capture for a total ROI of 43.6%.** This represents the upper end of our initial upside projection and we believe that the company has more than fully corrected. Our initial thesis was as follows:

Underdeveloped during Blackstone ownership [Actualized]: Compared to comparables, the BRX properties are older and require more renovation as Blackstone allocated the improvement spending to dividends. In the short term, this is a cash outflow, but management incentives would be aligned with the stockholders. This would result in superior quality properties over time. The capitalization rates and P/FFO metrics indicate BRX is now considered on par with its peers when it comes to earnings quality and sustainability.

Open air shopping centers provide an inherent defense against e-commerce [Actualized]: As a whole, the dividend yields are objectively reasonable and capitalization rates aren't too different from the typical Class B mall rate of 6.5%. The strip center REIT space has outperformed the broader market and we attribute this to the consumer recovery that happened in 2018, but was just lagged for their landlords.

Management strategy of shaving property is right given current CRE environment [Actualized]: The market punished BRX for being a net seller of properties. Its competitors were growing when it came to property count. When 3Q19 earnings indicated a same store 4.4% NOI growth YoY despite a decline in properties, it became clear BRX can exercise pricing power in its core portfolio.

In addition to our thesis points completely actualizing, we'd like to sell for the following reasons:

Aggressive Sales: The main driver of NOI in our original model was gross leasable area (GLA). BRX currently has 72 million, but I projected 74 million by year end. Assuming properties will be sold in Q4, my model would be optimistic. **We are especially uncomfortable with the lack of clarity on the disposition plan.** SS NOI growth was to average ~3% for the next 5 years in my original projections. The company recently raised year end SS NOI growth to 3.25% from 3.00% previously in their 3Q19 earnings. Brixmor continues to exercise its pricing power with a 30% new lease spread after factoring in renovations, but the dispositions have been quite aggressive.

Tenant Health: However, another possible red flag we see is tenant health. This company reacted positively to positive earnings data released in the beginning of summer. We didn't account for the company being so sensitive to tenant data given their insolation to the general consumer discretionary environment. On the flip side, Kroger recently slowed its pace of store renovations and laid off some staff in an effort to cost cut. Kroger specifically is the second largest tenant and growth concerns regarding Kroger didn't impact BRX equity. Given the Q3 beat, the market is assuming this isn't systemic, but we would like to exercise caution and sell.

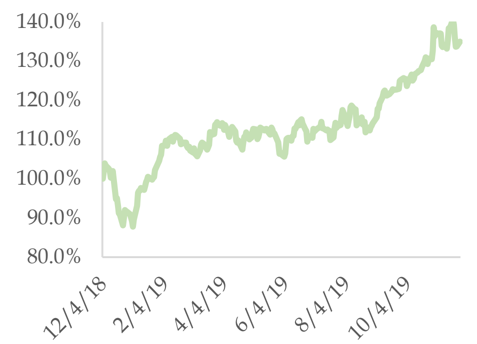
Best,

Steve

Stock Overview (LTM Figures)

	At Purchase	Current
Share Price:	$16.0	$21.8
Mkt. Cap:	4.7B	6.5B
Cap Rate:	10.1%	7.2%
P/FFO	7.9x	9.1x
Dividend Yield	7.1%	5.3%
GLA (millions)	77 sq. ft	72 sq. ft

Performance Since Purchase on 12/4/18



Comparable REIT Metrics

REIT	Div. Yield	Cap Rate	P/FFO
Weingarten	5.1%	5.7%	12.2x
Kimco	5.3%	7.0%	11.1x
Cedar Realty	7.7%	10.9%	9.5x
Saul Centers	4.2%	7.6%	18.2x
Kite Realty	6.7%	8.6%	8.2x
Brixmor	**5.3%**	**7.2%**	**9.0x**
Average	**5.7%**	**7.8%**	**11.4x**

Sell Note: DaVita Inc. (NYSE: DVA)

Dear Board of Advisors,

We would like to sell our position on **DaVita (NYSE: DVA)**, representing a **0.5% upside**. Our initial Investment Thesis was as follows:

Thesis Point 1: Virtual monopoly in Kidney Dialysis Market: The market volume dynamics for dialysis are incredibly stable with multiple tailwinds. The patient base is inelastic (mortality without treatments 3x / week) and has grown at a 3.8% due to an aging population burdened by risk factors such as hypertension and obesity.

Thesis Point 2: Overblown Regulatory Headwinds Creates Opportune Buying Time: The California assembly and senate passed SB 1156 on 8/30, a union-backed bill that would cap commercial dialysis payments at lower Medicare rates and force charities to disclose donors of third-party payments. We believed this unlikely given that a natural legislative rollout would make 50% of clinics unprofitable and cripple the entire industry.

Thesis Point 3: Divestiture will spur focus while providing additional cash to a highly recurring FCF generation business. This will allow them to buy back shares and create immense EPS growth: For the past two years, management has eliminated close to 15% of the share float, and still has $1.4bn left in their share repurchase program.

Thesis Review:

Thesis 1 has **changed** as the while the industry **monopoly has not changed materially** in the past year, the direction of the industry has gradually shifted to home dialysis after a new regulation was passed in July by Trump administration. Therefore, while organic revenue growth is still at 2 to 3%, well along the historical 2.5% CAGR, the future growth prospects might be limited.

Thesis 2 has been **actualized.** The ballots in California and other similar ballots have been rejected. However, the new ballot has been proposed for the 2020 cycle at California again, and dialysis industry is expecting to fight against again in a similar fashion.

Thesis 3 has been **partially actualized**. The company, while failing to close the DMG divestiture on time with expected values, conducted a new round of Dutch auction back in August, which taking around 15% share out of circulation, a higher number than our expectation. Since then, management has guided slowdown on share repurchases to ensure a safe leverage.

Selling Reasons

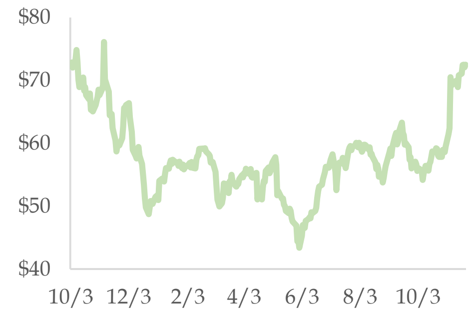
In short, we believe the complexity of the businesses has increased. For the company itself, we are still seeing a moderate upside after the changes in regulation, increasing negative chatter and short position on DVA as well as the slow down in growth and share repurchases.

But we believe the moderate upside (high single digits to low teens) might risk further misunderstanding the business after the strategy shift in September and exposure into unexpected regulatory changes. Furthermore, the diligence required in obtaining the comforts for both scenarios is enormous, with the possibilities we are still unable to form the views amid fluid regulatory and industry conditions. Therefore, we believe it would be a good time to exit and pursue other opportunities.

Stock Overview (LTM Figures)

	At Purchase:	Current:
Share Price:	$72.15	$72.48
G. Margin:	74%	80%
EBITDA Margin	18.1%	20.1%
EBITDA	$2,081 mm	$2,276 mm
Operating Cash Flow	$1,530 mm	$2,235 mm

Performance Since Purchase on 10/3/18



Sell Note: Gilead Sciences Inc. (NASDAQ: GILD)

Dear Board of Advisors,

We would like to sell our position on **Gilead Sciences Inc. (NASDAQ: GILD)**, representing an **11.3% downside**. Our initial Investment Thesis was as follows:

Thesis 1: Gilead had recently acquired Kite Pharma which diversified their pipeline to include CAR-T. It was anticipated that Gilead's enhanced resources would allow Kite Pharma to surpass Novartis's CAR-T therapy. The CAR-T segment has taken off in recent years because of the amazing success stories. Additionally, Gilead was and still is exploring the expansion of CAR-T into solid tumors and other hematologic diseases increasing the total addressable market of CAR-T drugs.

Thesis 2: Gilead's joint collaboration with Galapagos will power the development of new drug pipeline. Gilead is to develop Filgotinib for rheumatoid arthritis, Crohn's disease and ulcerative colitis patients which has a TAM of approximately 4.2m in the U.S. alone. This joint collaboration provides a strong pipeline. In May of 2019, Filgotinib demonstrated clinical efficacy.

Thesis 3: Growth in China for Hepatitis C. Gilead grew their Hepatits C Segment in China because less than 1% of people were receiving treatment and it is the fourth most common infectious disease in China.

We would like to sell for the following reasons:

- **Underappreciation of competitive dynamics in China and the power of the government.** One of the main thesis points in the original thesis was the growth of the Hep C Segment in China. Gilead however did not receive a patent for their drug and had to sell it alongside other generic brands thus cutting their price tag to 1/5 of what they sold it in the United States.
- **Lack of Clarity on Future of the Company.** Currently, Gilead's Hep C segment is tapering out because of the increased competition in that sector and the fact that there were more people cured. In addition to their declining Hep C segment Gilead's HIV segment with every new drug is cannibalizing sales from existing segments. Gilead has moved into new areas through there acquisition of Kite Pharma and partnership with Galapagos however CAR-T development is a many years away and there is a lack of clarity in that segment. Additionally, there are many different companies developing CAR-T drugs and there will be much competition in this sector.
- **Overconfidence in the fact that Gilead's expensive drugs will be covered under insurance.** The majority of Gilead drugs were covered by insurance at the time and with 91% of the United States and all of UK insured this was a plus point with Gilead. However, increasingly expensive drugs and increased scrutiny from the government has caused some drugs to go uninsured.

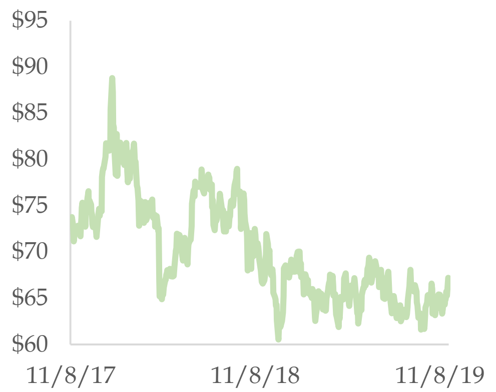
Best,

Simran

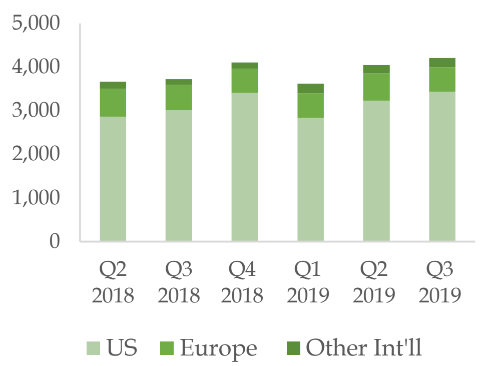
Stock Overview (LTM Figures)

	At Purchase:	Current:
Share Price:	$73.10	$65.26
Market Cap	91.53 B	84.56 B
G. Margin	83%	79%
FCF Yield	28.1%	(13.4%)
EPS:	$3.54	$2.11

Performance Since Purchase 11/8/17



HIV Segment Stagnant



VII. New Position Proposals

Allison Transmission Holdings Inc (ALSN)

Quality business at an attractive valuation committed to returning capital to shareholders

Cody Fang
Junior Analyst
cody.fang@stern.nyu.edu

Ian Chen
Junior Analyst
ic1168@stern.nyu.edu

Price Target: $63.03

December 2, 2019

Business Description:

Allison Transmission Holdings, Inc., together with its subsidiaries, designs, manufactures, and sells commercial and defense fully-automatic transmissions for medium- and heavy-duty commercial vehicles, and medium- and heavy-tactical U.S. defense vehicles worldwide. It offers 12 transmission product lines for various applications, including distribution, refuse, construction, fire, and emergency on-highway trucks; school, transit, and hybrid-transit buses; motor homes; energy, mining, and construction off-highway vehicles and equipment; and wheeled and tracked defense vehicles.

Investment Thesis:

- **The market is unfairly punishing Allison due to an overhanging EV truck threat:** Similar to autos, there has been much a large amount of speculation regarding the transition to electric trucks. However, we believe the threat of electric trucks is too far away to materially affect both revenues and valuation for Allison at the moment. As approximately 20% of revenues are tied to municipal spending: school buses, firetrucks, etc, these areas are relatively EV proof as school districts have better things to spend money on and EVs could be potentially hazardous in firefighting applications. The company has recently completed a few acquisitions pertaining to electric vehicle and has touted its e-axle solutions, which is a bolt-in axle that is compatible with current vehicle frames and suspensions. The threat from EV's in Class 4-8 trucks is more noise than a material headwind, and Allison is best positioned to capture any shift towards EV trucks in the far future through its superior product profile.
- **Exclusive expansion into Class 4 and 5 trucks reduces correlation with Oil and Gas and stands to increase replacement part revenue:** As heavier trucks are also associated with construction and oil and gas (fracking) in addition to municipal services, the company has been expanding into the Class 4 and 5 truck market to lower the correlation with these cyclical sectors. The company is Navistar and GM's exclusive provider of automatic transmissions for their Class 4 and 5 lines with GM reentering the space after a 10-year hiatus. In 2018, the Class 4 and 5 truck market produced 107,274 units, about as much as Class 6 and 7 trucks. In 2019 Q3, Allison had a market penetration of 7% compared to 74% for Class 6 and 7 trucks. Class 4 and 5 trucks are used in a variety of application from last and first mile delivery to tow trucks to electricity maintenance trucks. This is a great segment to move into especially considering the average age of a class 4-5 truck in 2018 is 14.8 years as opposed to 10.8 years in 2008. Not only will entering the class 4-5 truck market through GM and Navistar reduce correlation with fracking, there is a greater opportunity for replacement parts as well.
- **Much of the Fracking weakness seen in replacement parts is already priced in, and Q4 temporary stoppages at OEMs have reduced on-highway volumes:** Recently, there has been inventory buildup as the inventory to retail sales ratio is at an all-time high. This is primarily due to the UAW strikes at GM which have trickled on to affect most OEMs, and projected class 6-7 weakness which seems to already be priced in. Weakness is fracking has impacted the sale of replacement parts and retransmissions, which are historically Allison's most profitable segment. The stock reacted negatively on the news and the prolonged fracking weakness is expected to last until at least 1H 2020. We believe that much of the fracking weakness is already priced into the stock given the historically low EV/ NTM EBITDA of ~8.5x.

Key Ratios and Statistics:

Price Target	$63.03
Upside	24.8%
Share Price (11/22/19)	$47.25
Market Cap ($mm)	$ 5,633.7
EV/NTM EBITDA	8.47x
P/E	9.3x
P/FCFF	9.87x
Average Daily Volume (mm)	1.1
52-Week Low	$40.35
52-Week High	$52.67

FY ($mm)	2018A	2019E	2020E	2021E
Revenues	$2,713	$2,650	$2,570	$2,663
EBIT	939	814	797	834
Capex	100	160	160	160
FCFF	737	638	611	635

Figure 1 – EV/Forward EBITDA History

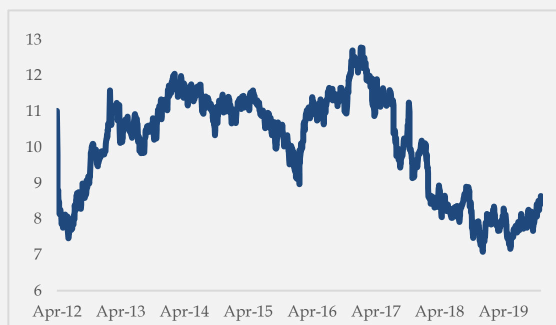
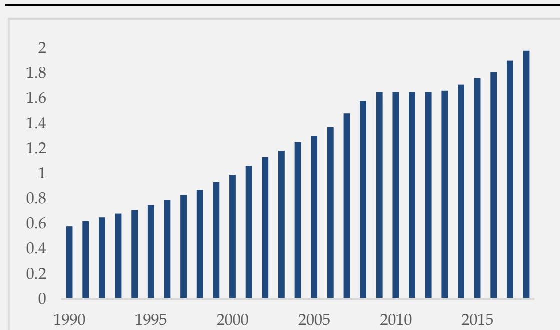


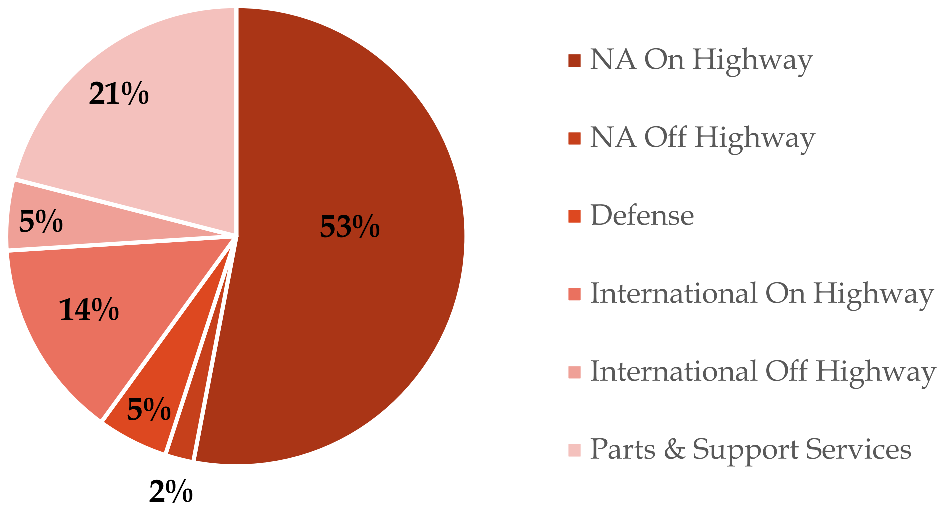
Figure 2 – Historical Municipal Spending



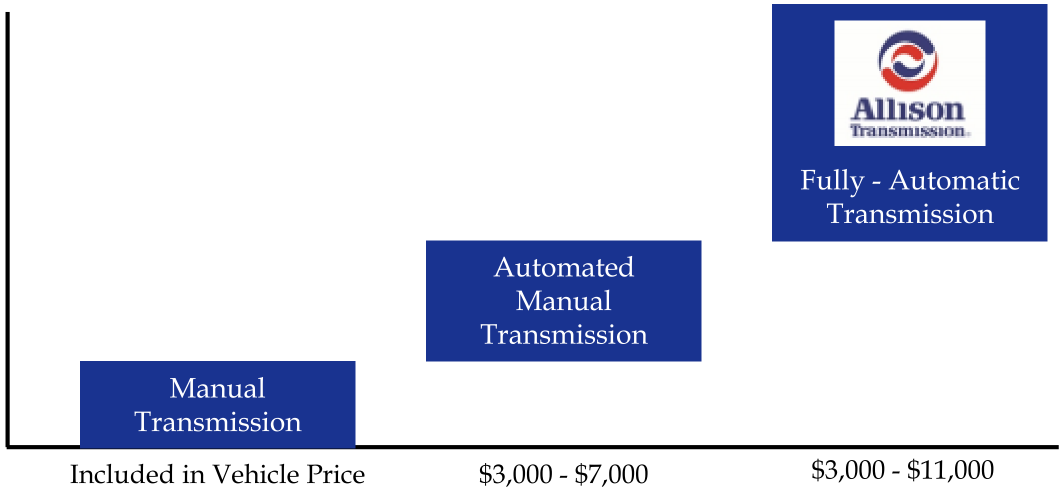
Allison Transmissions Overview

Allison is an industry leader in the automatic transmission space for medium and heavy duty trucks for a variety of end uses

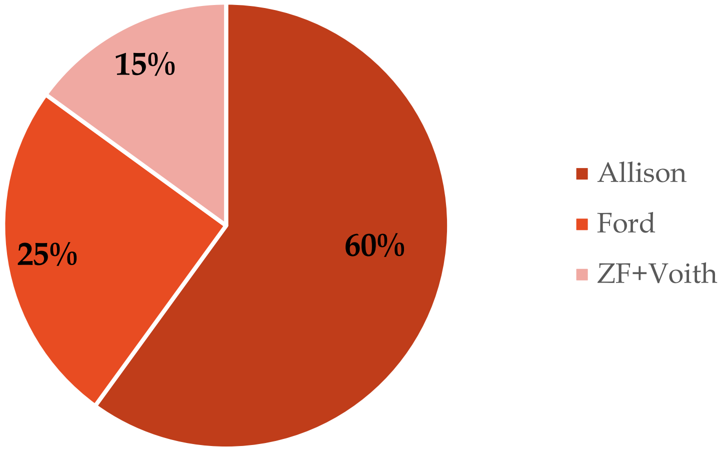
Revenue Breakdown



Allison Transmission Price



Allison Enjoys Significant Market Share



Automatic Transmission Value Add

- Lower maintenance expense (lifetime)
- Increased vehicle residual value
- Less driver training required
- Lower fuel expense
- Reduces driver fatigue
- Increases driver retention
- Increases safety
- Helps driver recruitment

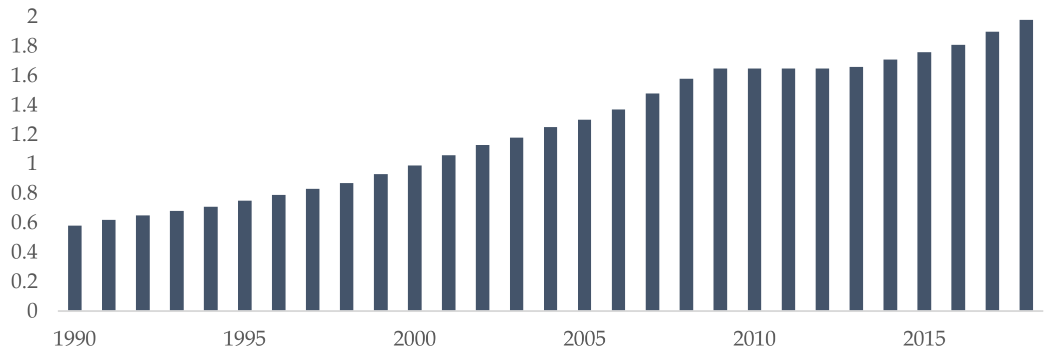
End Market Breakdown

It is important to note that Allison has zero exposure to the cyclical Class 8 linehaul Tractor segment, and approximately 20% of revenues are tied to municipal spending.

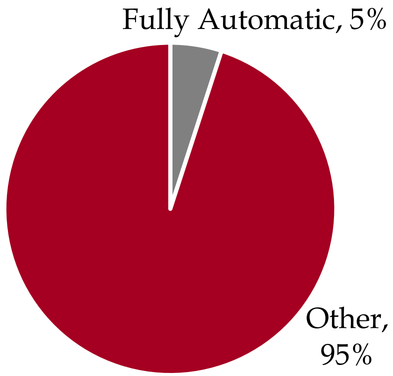
Allison Transmission Penetration by End Market Q3 2019

		Underserved	Core Addressable Market				Underserved	
	Class 1-3	Class 4-5	Motor Home	School Bus	Class 6-7	Class 8 Straight	Class 8 Metro	Class 8 Tractor
Vehicles								
Weight (000's of lbs)	< 14 lbs	14-19 lbs	16-33 lbs	16-33 lbs	19-33 lbs	33 lbs+	33 lbs+	33 lbs+
2018 Industry Units Produced	11,850,372	107,274	21,673	36,875	112,551	86,914	74,536	162,840
2018 Allison Share	0%	7%	39%	88%	74%	70%	5%	0%

Historical Municipal Spending



International Expansion



- International Expansion is a large tailwind for the industry as a whole
- Allison is the #1 transmission manufacturer in China with 75,000 units installed already
- Chinese focus is primarily on trucks with vocational applications

Fracking Weakness Headwinds are Priced in

Long standing fracking weakness has hurt Allison's replacement parts business as sidelined rigs are being scrapped down for parts

Fracking Weakness

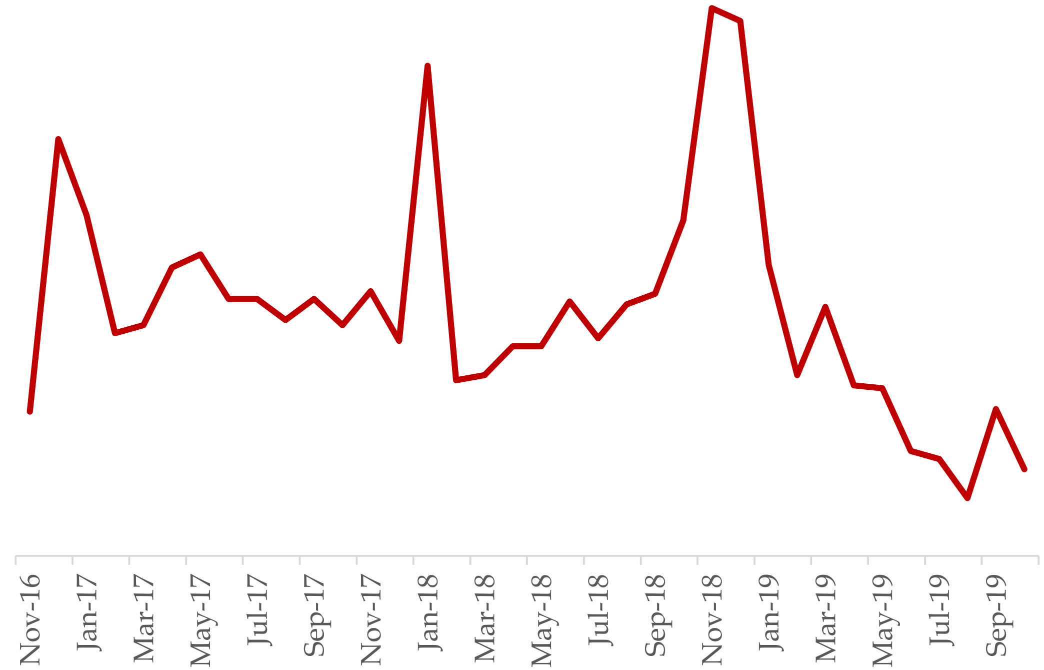
Parts

- Only 30-40% of parts are tied to fracking, meaning only 6-8% of total revenues are tied to fracking replacement parts which is not as significant as the market discount seems

Off-Highway

- The sale of new transmission for water, sand, and equipment trucks represents only 2% of all revenues
- Fracking weakness has been ongoing YTD due to the lower price meaning the headwind has been anticipated for some time

Henry Hub Natural Gas Sport Price



"Allison's full year 2019 net sales guidance reflects lower demand in the Service Parts, Support Equipment & Other and North American Off-Highway end markets, principally driven by lower demand for -- from hydraulic fracturing applications" – Management Q3

EV Segment R&D

ALSN captured any headwind arising from the increasing viability of EV or hybrid drivetrains with the purchase of two new divisions. Vantage Power and the AxleTech give ALSN entry into a rapidly developing market where they can leverage their market share and connections to drive new sales.

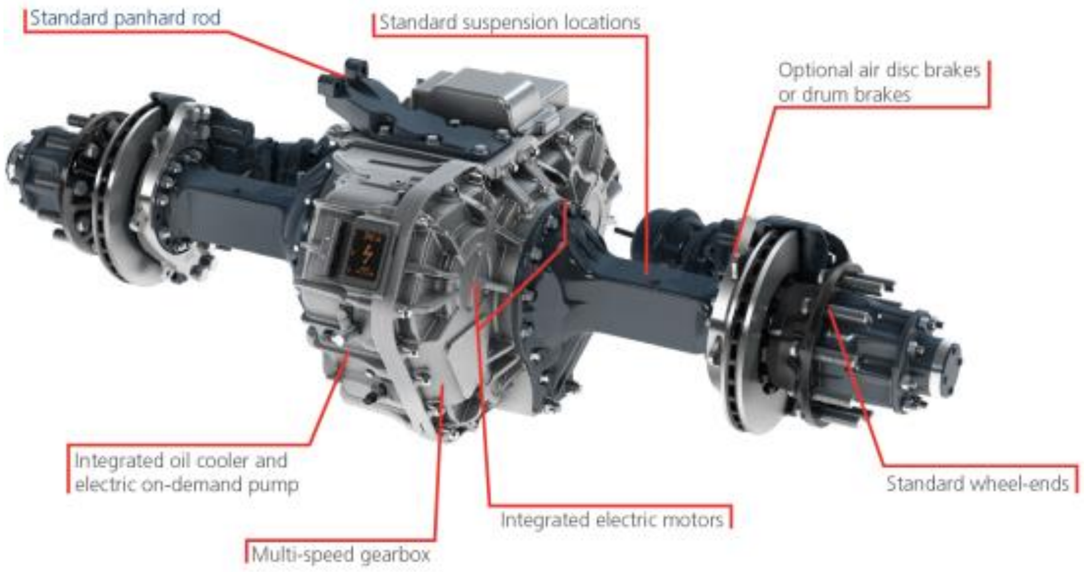
AxleTech Electric Vehicle Systems Division

- Acquired for $123 million in April 2019
- Develops and markets axles , suspensions, and eCarriers for BEV, HEV, and PHEV off-highway applications
- Applications include: Rail Car, Lift Truck, Terminal Tractor, Agriculture, Loader, Hauler, Dump Truck, Mining, Construction
- Early stage, but Allison has been extremely selective in their acquisition (this is the largest and only significant acquisition to date)

Vantage Power

- Acquired for $16.81 million in April 2019
- Designs from the ground up multiple hybrid / electric powertrain systems and integrates them into vehicle platforms
- Mainly seen as a R&D play with a few individual projects involving hybrid and electric metro buses

Allison e-Axle



- Integrated axles designed to fit between the wheels of medium and heavy duty trucks
- Bolt in solution for BEV, HEV, and PHEV that is compatible with current vehicle frames, suspensions, wheel ends and OEM manufacturing processes

"Vantage Power's entrepreneurial spirit and technological advancements complement our strategic priorities to meet and exceed our customers' demands. Through this and other growth initiatives, we will continue to build upon our conventional and electric hybrid products today while differentiating ourselves in the electrification and fuel cell markets."-David S. Graziosi, President and CEO

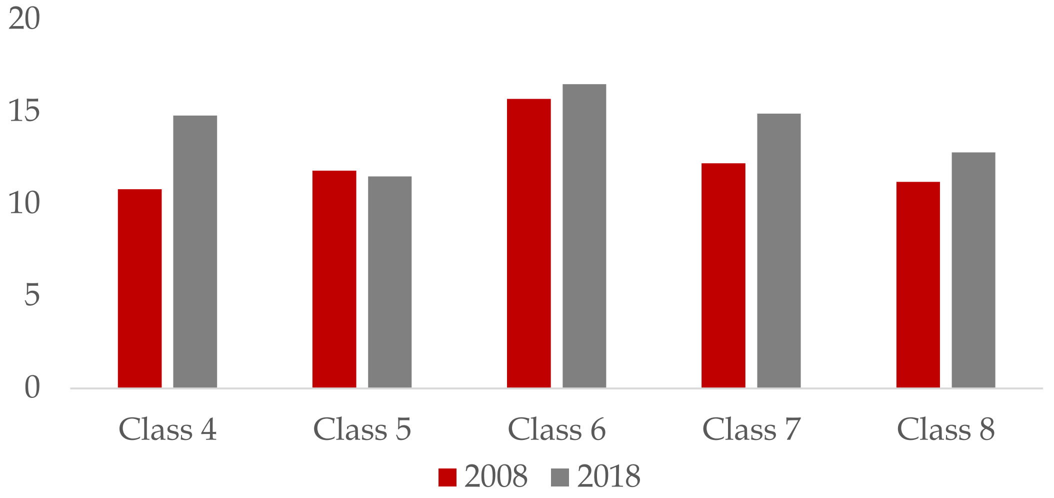
Class 4 & 5 Truck Expansion

Expansion into Class 4 and 5 trucks provides a significant opportunity as well as reducing correlation with fracking and construction

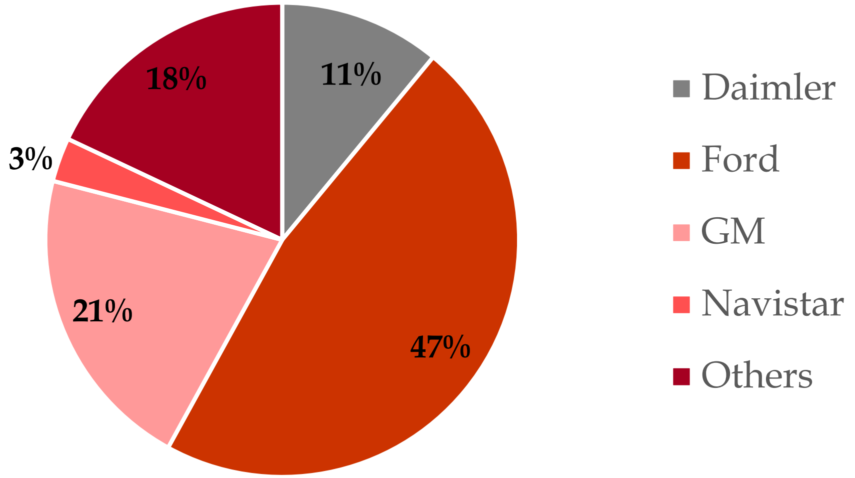
Class 4 and Class 5 Truck Overview

- Trucks with a Gross Vehicle Weight of **14,000 to 19,000 lbs** are classified as Class 4 and 5
- These trucks are used for primarily **commercial purposes**
- End uses include box trucks, city delivery trucks, electricity maintenance trucks, and tow trucks
- At these classes there is no need for a **Commercial Driver's License** (CDL)
- Examples include the Ford E-450 passenger van, the Ford F-550, and the Chevy Silverado 5500
- GM / Navistar re-entered this market in **2019**

Class 4 Trucks Have Gotten Older….



North America Class 4 and 5 Market Share (2009)



Why Would GM / Navistar Enter the Market Now….?

- After a **10 year** hiatus, GM re-entered the Class 4 and 5 market
- GM reentering the market is a **great signal** regarding the health of the current market
- Allison has signed an **exclusive contract** with both GM and Navistar to provide transmissions
- The Class 4 and 5 market is **relatively less cyclical** as the end markets for the trucks are tow trucks, maintenance vehicles, and delivery trucks

Bull Case

Case Scenario	
Bull	3

Allison Transmission Holdings Inc (ALSN US) Revenue Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
NA On Highway												
Revenue	1,081.00	1,132.00	1,023.00	1,177.00	1,317.00	1,404.50	1,334.28	1,394.32	1,443.12	1,479.20	1,516.18	1.54%
Growth Rate		*4.72%*	*-9.63%*	*15.05%*	*11.89%*	*6.64%*	*-5.00%*	*4.50%*	*3.50%*	*2.50%*	*2.50%*	
NA Off Highway												
Revenue	100.00	55.00	7.00	51.00	93.00	53.00	53.00	53.00	53.00	53.00	53.00	0.00%
Growth Rate		*-45.00%*	*-87.27%*	*628.57%*	*82.35%*	*-43.01%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
Defense												
Revenue	157.00	113.00	115.00	117.00	158.00	137.80	137.80	137.80	137.80	137.80	137.80	0.00%
Growth rate		*-28.03%*	*1.77%*	*1.74%*	*35.04%*	*-12.78%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
Outside NA On Highway												
Revenue	264.00	262.00	305.00	344.00	383.00	371.00	385.28	401.08	418.53	437.78	459.01	4.35%
Growth rate		*-0.76%*	*16.41%*	*12.79%*	*11.34%*	*-3.13%*	*3.85%*	*4.10%*	*4.35%*	*4.60%*	*4.85%*	
Outside NA Off Highway												
Revenue	81.00	35.00	12.00	41.00	129.00	127.20	127.20	127.20	127.20	127.20	127.20	0.00%
Growth rate		*-56.79%*	*-65.71%*	*241.67%*	*214.63%*	*-1.40%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
Service Parts, Support, Equipment + Other												
Revenue	444.00	389.00	378.00	532.00	633.00	556.50	539.81	561.40	582.45	602.84	622.43	2.26%
Growth rate		*-12.39%*	*-2.83%*	*40.74%*	*18.98%*	*-12.09%*	*-3.00%*	*4.00%*	*3.75%*	*3.50%*	*3.25%*	
Total Revenue	$ 2,127.00	$ 1,986.00	$ 1,840.00	$ 2,262.00	$ 2,713.00	$ 2,650.00	$ 2,577.36	$ 2,674.79	$ 2,762.10	$ 2,837.81	$ 2,915.62	1.93%
Growth rate		*-6.63%*	*-7.35%*	*22.93%*	*19.94%*	*-2.32%*	*-2.74%*	*3.78%*	*3.26%*	*2.74%*	*2.74%*	

Allison Transmission Holdings Inc (ALSN US) Costs Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
Revenue	2,127.00	1,986.00	1,840.00	2,262.00	2,713.00	2,650.00	2,577.36	2,674.79	2,762.10	2,837.81	2,915.62	1.93%
Total COGS	1,151.50	1,052.00	976.00	1,131.00	1,291.00	1,351.50	1,308.01	1,350.77	1,387.95	1,418.91	1,450.52	
Depreciation Expense	93.80	88.30	83.50	80.00	77.00	79.50	77.32	80.24	82.86	85.13	87.47	
Gross Profit	**$ 975.50**	**$ 934.00**	**$ 864.00**	**$ 1,131.00**	**$ 1,422.00**	**$ 1,298.50**	**$ 1,269.35**	**$ 1,324.02**	**$ 1,374.14**	**$ 1,418.91**	**$ 1,465.10**	2.44%
Gross Profit Margin	45.86%	47.03%	46.96%	50.00%	52.41%	*49.00%*	*49.25%*	*49.50%*	*49.75%*	*50.00%*	*50.25%*	
Total SG&A	343.90	317.00	324.00	342.00	352.00	397.50	380.16	387.85	393.60	397.29	400.90	
Amortization Expense	98.80	97.10	92.40	90.00	87.00	86.50	86.00	86.00	86.00	86.00	86.00	
R&D	103.80	93.00	88.00	105.00	131.00	132.50	134.02	144.44	154.68	164.59	174.94	
EBIT	**$ 527.80**	**$ 524.00**	**$ 452.00**	**$ 684.00**	**$ 939.00**	**$ 768.50**	**$ 755.17**	**$ 791.74**	**$ 825.87**	**$ 857.02**	**$ 889.26**	2.96%
EBIT Margin	24.81%	26.38%	24.57%	30.24%	34.61%	*29.00%*	*29.30%*	*29.60%*	*29.90%*	*30.20%*	*30.50%*	

Allison Transmission Inc, DCF

USD ($) in Millions

	2019E	2020E	2021E	2022E	2023E	2024E	5Y CAGR
EBIT	**$ 768.50**	**$ 755.17**	**$ 791.74**	**$ 825.87**	**$ 857.02**	**$ 889.26**	2.96%
Tax Rate	*20.00%*	*20.00%*	*20.00%*	*20.00%*	*20.00%*	*20.00%*	
Taxes	153.70	151.03	158.35	165.17	171.40	177.85	
NOPAT	$ 614.80	$ 604.13	$ 633.39	$ 660.69	$ 685.62	$ 711.41	
Plus: Depreciation and Amortization	$ 166.00	$ 163.32	$ 166.24	$ 168.86	$ 171.13	$ 173.47	
Less: CapEx	160	160	160	160	160	160	0.00%
NWC	132	128	133	137	141	145	
Less: Change in NWC	$ (18.15)	$ (3.61)	$ 4.85	$ 4.34	$ 3.77	$ 3.87	
Unlevered Free Cash Flow	$ 638.95	$ 611.07	$ 634.79	$ 665.21	$ 692.98	$ 721.01	2.45%
Discount Factor	98.19%	92.95%	86.40%	80.30%	74.64%	69.38%	
Present Value of FCF	$627.37	$567.98	$548.43	$534.19	$517.26	$500.23	

Weighted Average Cost of Capital	
Risk Free Rate	1.42%
Beta	1.35
Equity Risk Premium	5.09%
Cost of Equity	8.29%
Cost of Debt	5.41%
Effective Tax Rate	20.00%
After-tax Cost of Debt	4.33%
Equity Financing	5,633.7
Debt Financing	2,564.0
Equity Weighting	68.72%
Debt Weighting	31.28%
WACC	**7.1%**

Terminal Value: Perpetual Growth	
Perpetuity Growth Rate	2.0%
Free Cash Flow	500.23
Terminal Value	9,904
Present Value of TV	6,581
EV	9,876
TV as % of EV	66.6%
Calculation of EV	
EV	9,876
Less: Net Debt	2,428
Equity Value	7,448
Equity Value Per Share (Diluted)	**$59.21**
Current Share Price	**$48.13**
Upside / Downside	**23.0%**

Terminal Value: Multiple Method	
Exit EV/EBITDA Multiple	10.0x
EBITDA	1,063
Terminal Value	10,627
Present Value of TV	7,061
EV	10,357
TV as % of EV	68.2%
Calculation of EV	
EV	10,357
Less: Net Debt	2,428
Equity Value	7,929
Equity Value Per Share (Diluted)	**$63.03**
Current Share Price	**$48.13**
Upside / Downside	**31.0%**

The bull case assumes that the NA on-highway weakness recovers to 2019 levels in 2021-2022 and the fracking impact is gone by 2021. Additionally, the bull case assumes a 2% growth rate and a 10x EV/EBITDA exit multiple given that the average multiple over the past 7 years has been ~10x.

Allison Transmission

Base Case

Case Scenario	
Base	2

Allison Transmission Holdings Inc (ALSN US) Revenue Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
NA On Highway												
Revenue	1,081.00	1,132.00	1,023.00	1,177.00	1,317.00	1,404.50	1,285.12	1,320.46	1,356.77	1,387.30	1,415.04	0.15%
Growth Rate		4.72%	-9.63%	15.05%	11.89%	6.64%	-8.50%	2.75%	2.75%	2.25%	2.00%	
NA Off Highway												
Revenue	100.00	55.00	7.00	51.00	93.00	53.00	53.00	53.00	53.00	53.00	53.00	0.00%
Growth Rate		-45.00%	-87.27%	628.57%	82.35%	-43.01%	0.00%	0.00%	0.00%	0.00%	0.00%	
Defense												
Revenue	157.00	113.00	115.00	117.00	158.00	137.80	137.80	137.80	137.80	137.80	137.80	0.00%
Growth rate		-28.03%	1.77%	1.74%	35.04%	-12.78%	0.00%	0.00%	0.00%	0.00%	0.00%	
Outside NA On Highway												
Revenue	264.00	262.00	305.00	344.00	383.00	371.00	374.71	379.39	385.08	391.82	399.66	1.50%
Growth rate		-0.76%	16.41%	12.79%	11.34%	-3.13%	1.00%	1.25%	1.50%	1.75%	2.00%	
Outside NA Off Highway												
Revenue	81.00	35.00	12.00	41.00	129.00	127.20	127.20	127.20	127.20	127.20	127.20	0.00%
Growth rate		-56.79%	-65.71%	241.67%	214.63%	-1.40%	0.00%	0.00%	0.00%	0.00%	0.00%	
Service Parts, Support, Equipment + Other												
Revenue	444.00	389.00	378.00	532.00	633.00	556.50	523.11	541.42	559.01	575.79	591.62	1.23%
Growth rate		-12.39%	-2.83%	40.74%	18.98%	-12.09%	-6.00%	3.50%	3.25%	3.00%	2.75%	
Total Revenue	$ 2,127.00	$ 1,986.00	$ 1,840.00	$ 2,262.00	$ 2,713.00	$ 2,650.00	$ 2,500.94	$ 2,559.27	$ 2,618.87	$ 2,672.91	$ 2,724.32	0.55%
Growth rate		-6.63%	-7.35%	22.93%	19.94%	-2.32%	-5.63%	2.33%	2.33%	2.06%	1.92%	

Allison Transmission Holdings Inc (ALSN US) Costs Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
Revenue	2,127.00	1,986.00	1,840.00	2,262.00	2,713.00	2,650.00	2,500.94	2,559.27	2,618.87	2,672.91	2,724.32	0.55%
Total COGS	1,151.50	1,052.00	976.00	1,131.00	1,291.00	1,351.50	1,269.23	1,292.43	1,315.98	1,336.45	1,355.35	
Depreciation Expense	93.80	88.30	83.50	80.00	77.00	79.50	75.03	76.78	78.57	80.19	81.73	
Gross Profit	$ 975.50	$ 934.00	$ 864.00	$ 1,131.00	$ 1,422.00	$ 1,298.50	$ 1,231.71	$ 1,266.84	$ 1,302.89	$ 1,336.45	$ 1,368.97	1.06%
Gross Profit Margin	45.86%	47.03%	46.96%	50.00%	52.41%	49.00%	49.25%	49.50%	49.75%	50.00%	50.25%	
Total SG&A	343.90	317.00	324.00	342.00	352.00	397.50	368.89	371.09	373.19	374.21	374.59	
Amortization Expense	98.80	97.10	92.40	90.00	87.00	86.50	86.00	86.00	86.00	86.00	86.00	
R&D	103.80	93.00	88.00	105.00	131.00	132.50	130.05	138.20	146.66	155.03	163.46	
EBIT	$ 527.80	$ 524.00	$ 452.00	$ 684.00	$ 939.00	$ 768.50	$ 732.77	$ 757.54	$ 783.04	$ 807.22	$ 830.92	1.57%
EBIT Margin	24.81%	26.38%	24.57%	30.24%	34.61%	29.00%	29.30%	29.60%	29.90%	30.20%	30.50%	

Allison Transmission Inc, DCF

USD ($) in Millions

	2019E	2020E	2021E	2022E	2023E	2024E	5Y CAGR
EBIT	$ 768.50	$ 732.77	$ 757.54	$ 783.04	$ 807.22	$ 830.92	1.57%
Tax Rate	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	
Taxes	153.70	146.55	151.51	156.61	161.44	166.18	
NOPAT	$ 614.80	$ 586.22	$ 606.04	$ 626.43	$ 645.77	$ 664.74	
Plus: Depreciation and Amortization	$ 166.00	$ 161.03	$ 162.78	$ 164.57	$ 166.19	$ 167.73	
Less: CapEx	160	160	160	160	160	160	0.00%
NWC	132	124	127	130	133	136	
Less: Change in NWC	$ (18.15)	$ (7.42)	$ 2.90	$ 2.97	$ 2.69	$ 2.56	
Unlevered Free Cash Flow	$ 638.95	$ 594.66	$ 605.91	$ 628.03	$ 649.27	$ 669.91	0.95%
Discount Factor	98.19%	92.95%	86.40%	80.30%	74.64%	69.38%	
Present Value of FCF	$627.37	$552.74	$523.48	$504.34	$484.63	$464.78	

Weighted Average Cost of Capital	
Risk Free Rate	1.42%
Beta	1.35
Equity Risk Premium	5.09%
Cost of Equity	8.29%
Cost of Debt	5.41%
Effective Tax Rate	20.00%
After-tax Cost of Debt	4.33%
Equity Financing	5,633.7
Debt Financing	2,564.0
Equity Weighting	68.72%
Debt Weighting	31.28%
WACC	**7.1%**

Terminal Value: Perpetual Growth	
Perpetuity Growth Rate	1.0%
Free Cash Flow	464.78
Terminal Value	7,682
Present Value of TV	5,104
EV	8,261
TV as % of EV	61.8%
Calculation of EV	
EV	8,261
Less: Net Debt	2,428
Equity Value	5,833
Equity Value Per Share (Diluted)	**$46.37**
Current Share Price	**$48.13**
Upside / Downside	**-3.7%**

Terminal Value: Multiple Method	
Exit EV/EBITDA Multiple	9.0x
EBITDA	999
Terminal Value	8,988
Present Value of TV	5,972
EV	9,129
TV as % of EV	65.4%
Calculation of EV	
EV	9,129
Less: Net Debt	2,428
Equity Value	6,701
Equity Value Per Share (Diluted)	**$53.27**
Current Share Price	**$48.13**
Upside / Downside	**10.7%**

The base case assumes that the NA on-highway weakness recovers to 2019 levels in 2023-2024 and the fracking impact is gone by 2022. Additionally, the base case assumes a 1% growth rate and a 9.0x EV/EBITDA exit multiple even though the average multiple over the past 7 years has been ~10x.

Allison Transmission

Bear Case

Case Scenario	
Bear	1

Allison Transmission Holdings Inc (ALSN US) Revenue Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
NA On Highway												
Revenue	1,081.00	1,132.00	1,023.00	1,177.00	1,317.00	1,404.50	1,179.78	1,120.79	1,140.40	1,157.51	1,174.87	-3.51%
Growth Rate		4.72%	-9.63%	15.05%	11.89%	6.64%	-16.00%	-5.00%	1.75%	1.50%	1.50%	
NA Off Highway												
Revenue	100.00	55.00	7.00	51.00	93.00	53.00	53.00	53.00	53.00	53.00	53.00	0.00%
Growth Rate		-45.00%	-87.27%	628.57%	82.35%	-43.01%	0.00%	0.00%	0.00%	0.00%	0.00%	
Defense												
Revenue	157.00	113.00	115.00	117.00	158.00	137.80	137.80	137.80	137.80	137.80	137.80	0.00%
Growth rate		-28.03%	1.77%	1.74%	35.04%	-12.78%	0.00%	0.00%	0.00%	0.00%	0.00%	
Outside NA On Highway												
Revenue	264.00	262.00	305.00	344.00	383.00	371.00	371.00	371.00	371.00	371.00	371.00	0.00%
Growth rate		-0.76%	16.41%	12.79%	11.34%	-3.13%	0.00%	0.00%	0.00%	0.00%	0.00%	
Outside NA Off Highway												
Revenue	81.00	35.00	12.00	41.00	129.00	127.20	127.20	127.20	127.20	127.20	127.20	0.00%
Growth rate		-56.79%	-65.71%	241.67%	214.63%	-1.40%	0.00%	0.00%	0.00%	0.00%	0.00%	
Service Parts, Support, Equipment + Other												
Revenue	444.00	389.00	378.00	532.00	633.00	556.50	503.63	488.52	504.40	519.53	533.82	-0.83%
Growth rate		-12.39%	-2.83%	40.74%	18.98%	-12.09%	-9.50%	-3.00%	3.25%	3.00%	2.75%	
Total Revenue	$ 2,127.00	$ 1,986.00	$ 1,840.00	$ 2,262.00	$ 2,713.00	$ 2,650.00	$ 2,372.41	$ 2,298.31	$ 2,333.81	$ 2,366.04	$ 2,397.69	-1.98%
Growth rate		-6.63%	-7.35%	22.93%	19.94%	-2.32%	-10.48%	-3.12%	1.54%	1.38%	1.34%	

Allison Transmission Holdings Inc (ALSN US) Costs Build

In Millions of USD except Per Share	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	5Y CAGR
Period ending	12/30/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	
Revenue	2,127.00	1,986.00	1,840.00	2,262.00	2,713.00	2,650.00	2,372.41	2,298.31	2,333.81	2,366.04	2,397.69	-1.98%
Total COGS	1,151.50	1,052.00	976.00	1,131.00	1,291.00	1,351.50	1,204.00	1,160.65	1,172.74	1,183.02	1,192.85	
Depreciation Expense	93.80	88.30	83.50	80.00	77.00	79.50	71.17	68.95	70.01	70.98	71.93	
Gross Profit	$ 975.50	$ 934.00	$ 864.00	$ 1,131.00	$ 1,422.00	$ 1,298.50	$ 1,168.41	$ 1,137.67	$ 1,161.07	$ 1,183.02	$ 1,204.84	-1.49%
Gross Profit Margin	45.86%	47.03%	46.96%	50.00%	52.41%	49.00%	49.25%	49.50%	49.75%	50.00%	50.25%	
Total SG&A	343.90	317.00	324.00	342.00	352.00	397.50	349.93	333.26	332.57	331.25	329.68	
Amortization Expense	98.80	97.10	92.40	90.00	87.00	86.50	86.00	86.00	86.00	86.00	86.00	
R&D	103.80	93.00	88.00	105.00	131.00	132.50	123.37	124.11	130.69	137.23	143.86	
EBIT	$ 527.80	$ 524.00	$ 452.00	$ 684.00	$ 939.00	$ 768.50	$ 695.12	$ 680.30	$ 697.81	$ 714.55	$ 731.30	-0.99%
EBIT Margin	24.81%	26.38%	24.57%	30.24%	34.61%	29.00%	29.30%	29.60%	29.90%	30.20%	30.50%	

Allison Transmission Inc, DCF

USD ($) in Millions

	2019E	2020E	2021E	2022E	2023E	2024E	5Y CAGR
EBIT	$ 768.50	$ 695.12	$ 680.30	$ 697.81	$ 714.55	$ 731.30	-0.99%
Tax Rate	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	
Taxes	153.70	139.02	136.06	139.56	142.91	146.26	
NOPAT	$ 614.80	$ 556.09	$ 544.24	$ 558.25	$ 571.64	$ 585.04	
Plus: Depreciation and Amortization	$ 166.00	$ 157.17	$ 154.95	$ 156.01	$ 156.98	$ 157.93	
Less: CapEx	160	160	160	160	160	160	0.00%
NWC	132	118	114	116	118	119	
Less: Change in NWC	$ (18.15)	$ (13.81)	$ (3.69)	$ 1.77	$ 1.60	$ 1.57	
Unlevered Free Cash Flow	$ 638.95	$ 567.08	$ 542.88	$ 552.49	$ 567.01	$ 581.39	-1.87%
Discount Factor	98.19%	92.95%	86.40%	80.30%	74.64%	69.38%	
Present Value of FCF	$627.37	$527.10	$469.02	$443.68	$423.23	$403.37	

Weighted Average Cost of Capital	
Risk Free Rate	1.42%
Beta	1.35
Equity Risk Premium	5.09%
Cost of Equity	8.29%
Cost of Debt	5.41%
Effective Tax Rate	20.00%
After-tax Cost of Debt	4.33%
Equity Financing	5,633.7
Debt Financing	2,564.0
Equity Weighting	68.72%
Debt Weighting	31.28%
WACC	**7.1%**

Terminal Value: Perpetual Growth	
Perpetuity Growth Rate	0.5%
Free Cash Flow	403.37
Terminal Value	6,158
Present Value of TV	4,092
EV	6,985
TV as % of EV	58.6%
Calculation of EV	
EV	6,985
Less: Net Debt	2,428
Equity Value	4,557
Equity Value Per Share (Diluted)	**$36.23**
Current Share Price	**$48.13**
Upside / Downside	**-24.7%**

Terminal Value: Multiple Method	
Exit EV/EBITDA Multiple	8.0x
EBITDA	889
Terminal Value	7,114
Present Value of TV	4,727
EV	7,621
TV as % of EV	62.0%
Calculation of EV	
EV	7,621
Less: Net Debt	2,428
Equity Value	5,193
Equity Value Per Share (Diluted)	**$41.28**
Current Share Price	**$48.13**
Upside / Downside	**-14.2%**

The bear case assumes that the NA on-highway weakness never recovers to 2019 levels and the fracking impact is gone by 2024. Additionally, the bull case assumes a 0.5% growth rate and a 8.0x EV/EBITDA exit multiple given that the average multiple over the past 7 years has been ~10x.

Sensitivity Analysis and Conclusion

Sensitivity Analysis (Bull)

Perpetual Growth Rate

	$59.21	1.0%	1.5%	2.0%	2.5%	3.0%
WACC	6.10%	$ 65.06	$ 71.31	$ 79.09	$ 89.02	$ 102.16
	6.60%	$ 56.78	$ 61.64	$ 67.56	$ 74.92	$ 84.32
	7.10%	$ 49.94	$ 53.79	$ 58.39	$ 63.99	$ 70.96
	7.60%	$ 44.21	$ 47.30	$ 50.94	$ 55.30	$ 60.60
	8.10%	$ 39.35	$ 41.86	$ 44.79	$ 48.23	$ 52.35

Exit Multiple EV/EBITDA

	$63.03	9.00	9.50	10.00	10.50	11.00
WACC	6.10%	$ 60.85	$ 63.81	$ 66.77	$ 69.73	$ 72.69
	6.60%	$ 59.02	$ 61.90	$ 64.78	$ 67.65	$ 70.53
	7.10%	$ 57.24	$ 60.04	$ 62.84	$ 65.64	$ 68.44
	7.60%	$ 55.51	$ 58.24	$ 60.96	$ 63.68	$ 66.40
	8.10%	$ 53.83	$ 56.48	$ 59.13	$ 61.78	$ 64.42

Sensitivity Analysis (Base)

Perpetual Growth Rate

	$46.37	0.0%	0.5%	1.0%	1.5%	2.0%
WACC	6.10%	$ 51.09	$ 55.08	$ 59.85	$ 65.66	$ 72.88
	6.60%	$ 45.17	$ 48.38	$ 52.15	$ 56.67	$ 62.16
	7.10%	$ 40.15	$ 42.76	$ 45.79	$ 49.37	$ 53.64
	7.60%	$ 35.86	$ 38.00	$ 40.46	$ 43.33	$ 46.72
	8.10%	$ 32.14	$ 33.91	$ 35.94	$ 38.28	$ 40.99

Exit Multiple EV/EBITDA

	$53.27	8.00	8.50	9.00	9.50	10.00
WACC	6.10%	$ 51.94	$ 54.73	$ 57.52	$ 60.30	$ 63.09
	6.60%	$ 50.37	$ 53.08	$ 55.79	$ 58.50	$ 61.22
	7.10%	$ 48.85	$ 51.49	$ 54.12	$ 56.76	$ 59.39
	7.60%	$ 47.37	$ 49.93	$ 52.50	$ 55.06	$ 57.62
	8.10%	$ 45.93	$ 48.42	$ 50.92	$ 53.41	$ 55.90

Sensitivity Analysis (Bear)

Perpetual Growth Rate

	$36.23	-0.5%	0.0%	0.5%	1.0%	1.5%
WACC	6.10%	$ 40.08	$ 43.02	$ 46.48	$ 50.62	$ 55.66
	6.60%	$ 35.49	$ 37.88	$ 40.66	$ 43.94	$ 47.86
	7.10%	$ 31.56	$ 33.52	$ 35.78	$ 38.41	$ 41.51
	7.60%	$ 28.15	$ 29.78	$ 31.64	$ 33.78	$ 36.27
	8.10%	$ 25.19	$ 26.55	$ 28.09	$ 29.85	$ 31.88

Exit Multiple EV/EBITDA

	$41.28	7.00	7.50	8.00	8.50	9.00
WACC	6.10%	$ 38.94	$ 41.41	$ 43.89	$ 46.37	$ 48.85
	6.60%	$ 37.68	$ 40.09	$ 42.50	$ 44.91	$ 47.32
	7.10%	$ 36.46	$ 38.80	$ 41.14	$ 43.49	$ 45.83
	7.60%	$ 35.27	$ 37.55	$ 39.83	$ 42.11	$ 44.38
	8.10%	$ 34.12	$ 36.34	$ 38.55	$ 40.77	$ 42.98

Overall, Allison is a great business in an industry where it has dominant market share. The company has bought back 40% of its float in the last 5 years and has an additional $1.1 billion remaining on its current share repurchase plan. It seems like Allison is committed to returning cash to shareholders after deleveraging following its IPO in 2012. Although the company faces material headwinds, many of these are temporary including the fracking weakness and UAW strikes. We think that the more structural headwinds: the class 6 and 7 weakness, is already priced in given the relatively low multiple and the expansion into Class 4 and 5 trucks should offset said weakness. The company trades at around ~10x P/FCF and seems like a great company at a reasonable valuation.

Premier Inc. (NASDAQ: PINC)

Attractive High Growth and High Margin Business Model Trading at Steep Discount

Caleb Nuttle
Junior Analyst
Caleb.Nuttle@stern.nyu.edu

Tony Wang
Junior Analyst
Tony.Wang@stern.nyu.edu

Price Target: $46.45 (26.7% upside)

November 26th, 2019

Business Description:

Premier Inc. (PINC) is a US based group purchasing organization (GPO) for national hospitals and health centers. PINC is currently the second largest GPO is the US by unit volume, having over a large membership base of over 4,000 hospitals and 175,000+ health providers. The aim of the organization is to negotiate favorable supply prices and contracts for its thousands of members by utilizing it collective buying power. GPO's generate revenues to through administrative fees paid by the supplier, ~3% of net supply purchases. GPO's typically have a revenue split with their hospital members to give back 70% of these administrative fees to the original purchaser. However, Premier Inc. has negotiated contracts with their members for 30% revenue share rates due to their duel class share structure. The company also operates an ancillary data tracking software service for their hospital members, operating as a SAAS revenue model.

Investment Thesis:

- **Positive Contract Negotiation Not Recognized:** PINC's two largest members, Yankee and GNYHA, have 7 year contracts which were negotiated by the company during its IPO in October 30th, 2013, while all other members had 5 year contracts. These two large hospital members contribute ~13% of the company's gross net administrative fees. The company had previously renegotiated their contracts with the other hospitals in 2018 and had retained the same revenue split (30% | 70%) for another 5 years (expiring 2023). The market fears that Yankee and GNYHA will squeeze PINC on the revenue share, demanding rates more in line with the industry. However, should the hospitals walk away from PINC as members they would forfeit any unexercised Class B shares, losing the hospitals millions. This gives PINC strong negotiating power. In PINC's most recent earning call, management confirmed Yankee renewed their 7 year contract at 30% revenue share, the share price rose 10% on the news.
- **Dilutive Affect Artificially Suppressing Company:** Class B shareholders are allowed to exchange 1/7 of their shares for either Class A shares or for cash equivalent. Over the past 6 years since the company's IPO, the members have only exchanged their Class B shares for Class A. Members choose to exchange their shares primarily for tax advantages. This dilutive affect has suppressed the company's share price and the company's net income. The company accounts for the dilution on their income statement, decreasing the company's reported net income.
- **Share back rate is sustainable:** Short sellers, represented by Spruce Point, underestimate the company's exclusive access to suppliers and PINC's ability to retain its favorable revenue split. Firstly, there are differentiations between GPOs, as there has been a long-lasting oligopoly. In fact, Premier Inc provides mid-large hospitals and specialized pharmaceutical supply services, while PINC's largest competitor, Vizient, provides primarily supply services for acute care. Secondly, PINC needs only to provide 2% more savings to the average member to justify its 30% revenue share. Additionally, as PINC's administrative revenues has been increasing annually since the company's IPO and 30% revenue share contract, they must be meeting this threshold to justify their low revenue split.

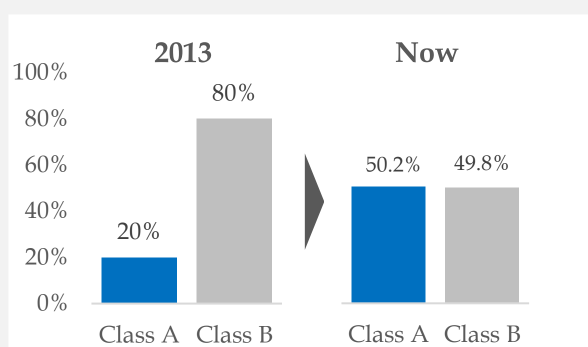
Key Ratios and Statistics:

Price Target	$46.45
Upside	26.7%
Share Price (11/24/19)	$36.51
Market Cap	$4.45B
52-Week Low	27.37$
52-Week High	42.00$
EV/EBITDA	3.87x
Gross Margin	55.83%
Net Debt/EBITDA	0.10x

USD: MM	**2016A**	**2017A**	**2018A**	**2019A**
Revenue	1,163	1,455	1,661	1,563
EBITDA	317	377	434	450
NI	42	96	33	156

Figure 1 – Share Price (Since IPO)

Figure 2 – Duel Class Shares



Company Overview – Corporate Structure

Company Summary

- Premier Inc is a US based group purchasing organization (*GPO*) for national hospitals and health centers
- The company utilizes its large membership base of over **4,000 hospitals and 175,000+** other health providers
- Premier is the **2nd largest** GPO by unit volume, being beaten by competitor Vizient

PREMIER

$60 Billion
Order Volume

vizient

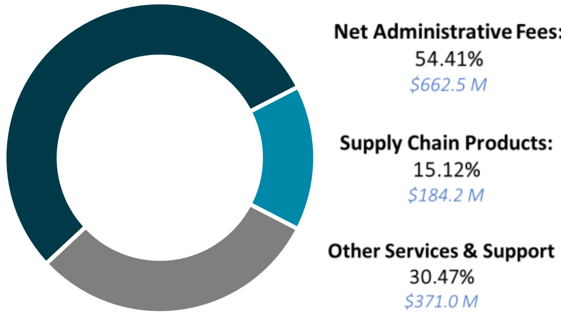
$100 Billion
Order Volume

Duel Class Share Structure

- Through voluntary exchanges, Public Class A shareholders have majority control of the company

Revenue Summary

- Premier Inc generates most of its revenues from its GPO services
- The company also sells data analytics software to its hospital members on a SaaS business model



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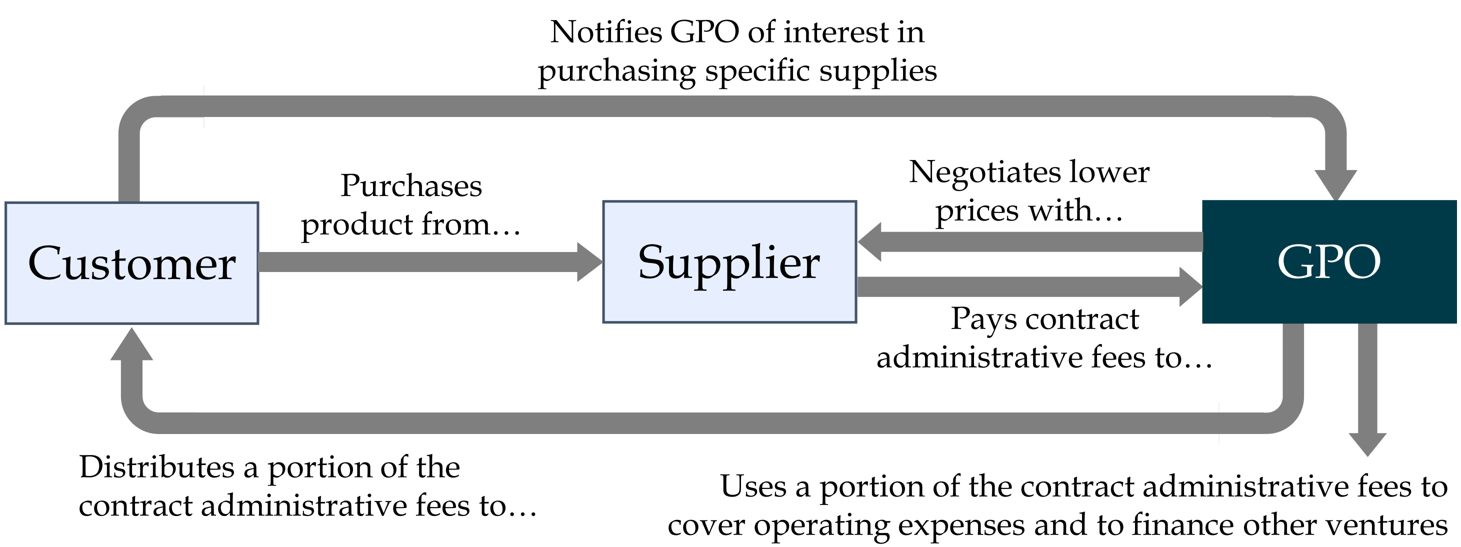
Company Overview – What is a GPO

What is a GPO

- A *group purchasing organization* (**GPO**) is an entity which is created in order to leverage the purchasing power of a group of businesses to obtain discounts from vendors based on the collective buying power of the organization's members
- The GPO's earnings come from an **administrative fee** the organization collects from vendors, which are generally based upon the purchase price of the healthcare provider pays for a product purchased through a GPO contract (*typically 3% of order amount*)
- GPOs have existed since the **turn of the 20th century** and are heavily utilized in the hospital and healthcare industry
- It is worth noting that most GPOs are owned in part by their underlying hospital members, and that a hospital can be in **multiple GPOs at once**



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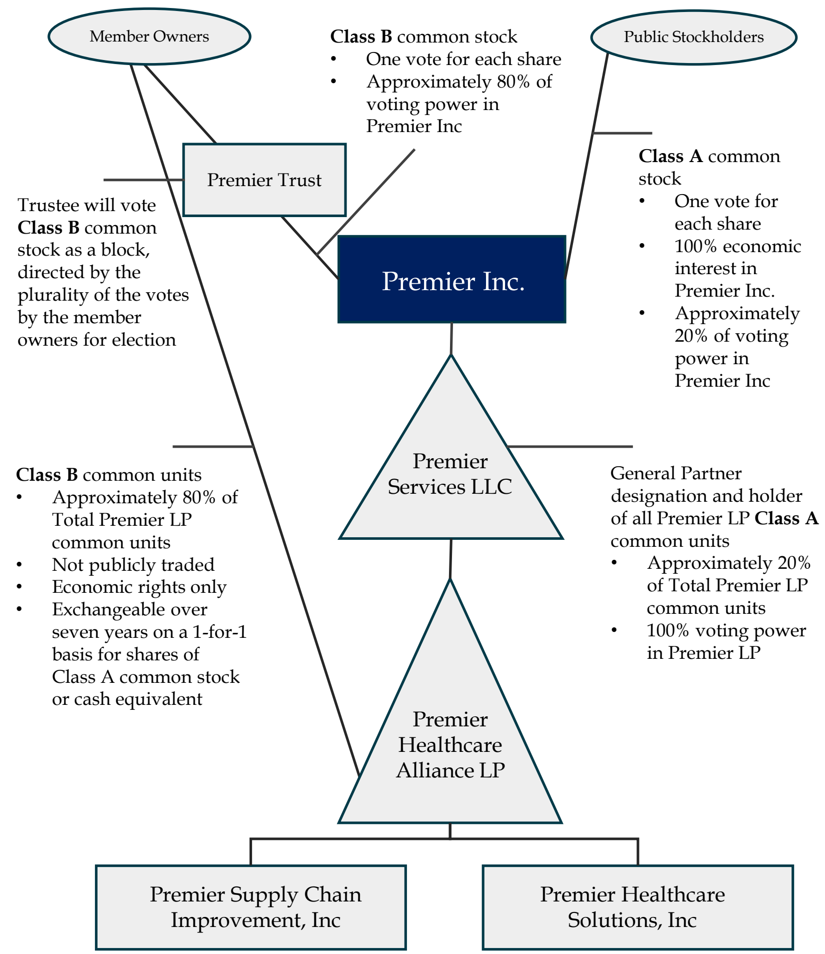
Company Overview – Corporate Structure

Corporate Structure

- The company was originally founded as a limited partnership by a group of large hospital groups in the US, who split their ownership of the LP equally
- When the company went public in 2013, management incentivized the company's founding hospitals to allow the listing by a duel class share listing
- The duel-share breakdown originally was **80|20 Class B to Class A shares**
- Class B shares were non-tradable, but members could **exchange 1/7th** of their shares every year since their IPO on Oct. 31, 2013
- Every year the company's class B share holders have liquidated their positions for class A shares for **short-term tax advantages**
- In July 2019, the company finally tipped in favor of class A shares, with Class A representing **50.2% of the company's common stock** and thereby having voting rights

Corporate Structure - Diagram



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Company Overview – Contract Timeline

IPO Contract Structure

- The company has significantly lower share back rates with their member hospitals (*30% vs industry average ~70%*)
- Company negotiated 5-year contracts with all members in 2013 locking in 30% share back rate
- Company had negotiated 7-year contracts with Yankee and GNYHA, their two largest members (making up 13% of annual purchase volume)

Contract Renegotiation

- The company has previously renegotiated their contracts with their members with 5-year contracts for the same 30% revenue share back rate
- Contract renegotiations had to take place by Sept. 30th, but the date to exercise Class B shares was Oct. 30th
- If a member does not renegotiate their contracts, any Class B shares are sold at par value, costing hospital members millions

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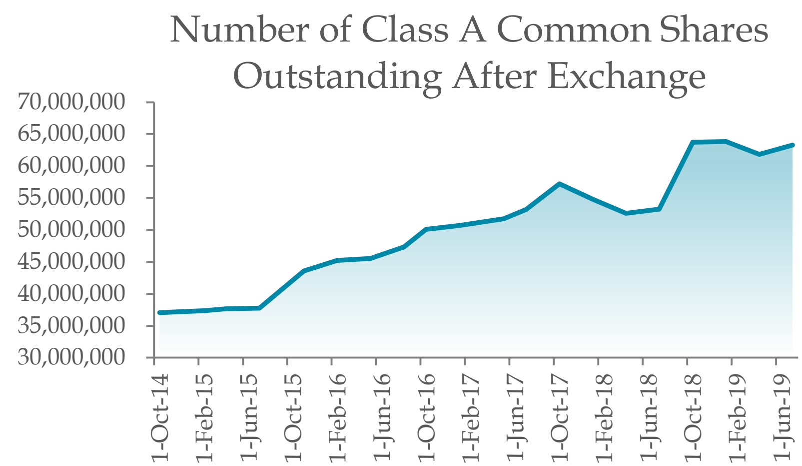
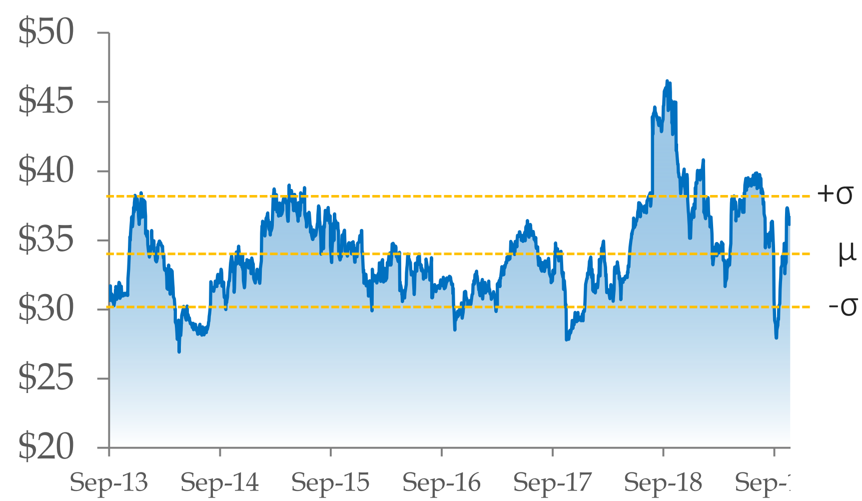
Thesis Overview – Share Dilution

IPO Contract Structure

- Class B shareholders are allowed to exchange 1/7 of their shares for either Class A shares or for cash equivalent
- Over the past 6 years since the company's IPO, the members have only exchanged their Class B shares for Class A
- Members choose to exchange their shares primarily for tax advantages
- This dilutive effect has suppressed the company's share price and the company's net income
- The company accounts for the dilution on their income statement, decreasing the company's reported net income.

Share Dilution Supression





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Thesis Overview – Sustainable Share Back Rate

Premier Sustainable Share Back Rate

- The market fears that Premier Inc.'s hospital members will squeeze the company for a higher Administrative Fee Share Back Rate from 30% closer to the GPO industry standard of 70%
- This fear underestimates the company's exclusive access to suppliers and PINC's higher savings cost
- Firstly, there are differentiations between GPOs, as there has been a long-lasting oligopoly
- Premier Inc. provides mid-large hospitals and specialized pharmaceutical supply services, while PINC's largest competitor, Vizient, provides primarily supply services for acute care
- PINC only needs to provide 2% more savings to the average member to justify its 30% revenue share
- Additionally, as PINC's administrative revenues has been increasing annually since the company's IPO and 30% revenue share contract, they must be meeting this threshold to justify their low revenue split

Average GPO	
Average Hospital Annual Spend	$ 7,990,000
Average GPO Savings Cost	18%
Annual Spend pre-GPO	$ 10,000,000
GPO Savings	$ 2,010,000
Core Savings	$ 1,800,000
Administrative Fee Share Back	$ 210,000
Share Back Rate Average	70%
Average Administrative Fee	3%
Gross Administrative Fee	$ 300,000

VS

Premier Inc.	
Average Hospital Annual Spend	$ 7,990,000
Premier Inc GPO Savings Cost	20%
Annual Spend pre-GPO	$ 10,000,000
GPO Savings	$ 2,010,000
Core Savings	$ 1,920,000
Administrative Fee Share Back	$ 90,000
Share Back Rate Average	30%
Average Administrative Fee	3%
Gross Administrative Fee	$ 300,000

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Valuation

Years Ended (In Thousands, Except Per Share Amount	2020	2021	2022	2023	2024	TV
EBIT	331,661	270,306	272,424	274,511	276,573	
Less: Income Tax	(69,649)	(56,764)	(57,209)	(57,647)	(58,080)	
Tax Rate	21%	21%	21%	21%	21%	
(+) D&A	154,125	178,024	207,552	239,208	275,987	
(-) Changes in NWC	(79,608)	(44,645)	(65,617)	(35,241)	(30,845)	
Capital Expenditures	191,943	276,519	287,568	293,410	299,254	
Free Cash Flow	**303,803**	**159,692**	**200,815**	**197,903**	**226,070**	**2,882,394**
Discount Factor	1.00	2.00	3.00	4.00	5.00	5.00
Discount Period	1.00	2.00	3.00	4.00	5.00	5.00
Discount Rate	10.00%					
Present Value of Cash Flow	276,184.18	131,976.80	150,875.47	135,170.08	140,371.76	1,789,739.96
Cash Flows	834,578.29					
Terminal Growth	2.0%					
Terminal Value	1,789,739.96					
"+Net Cash - Debt"	125244					
$ / Share	**$ 46.45**					
Shares Outstanding	59,188					
Implied Upside	**26.61%**		**Current Price (8/23/2019)**		**$ 36.69**	

Terminal Growth Rate	WACC					
	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%
-1.50%	43.88509	39.85455	36.52999	33.7417	31.37026	29.32923
-1.00%	45.52688	41.14305	37.56113	34.58038	32.06182	29.90622
-0.50%	47.36183	42.56718	38.69048	35.49199	32.80871	30.52595
0.00%	49.42614	44.14954	39.93275	36.48647	33.61784	31.19335
0.50%	51.76569	45.91807	41.3058	37.57566	34.49732	31.91415
1.00%	54.43947	47.90767	42.83141	38.77378	35.45676	32.69501
1.50%	57.5246	50.16254	44.5365	40.09801	36.50757	33.54378

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