

T. Rowe Price Undergraduate Credit Pitch Competition



Carrier Global
(NYSE: CARR)

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We are *overweight* on CARR's 2030 Notes

Thesis

- 1 Resilience due to Growing Demand in High-Efficiency Commercial Market
- 2 Expansive K-12 TAM Opportunity
- 3 Differentiation of Products Through Complementary Software Offerings

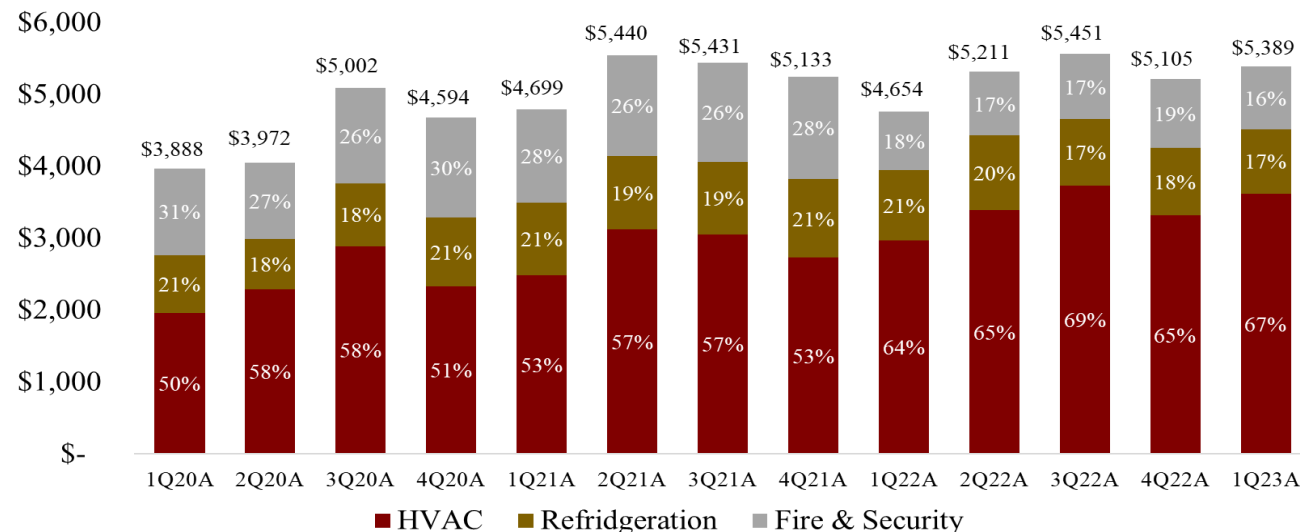
Catalysts

- 1 Potential Ratings Upgrade
- 2 Divestitures of Business Segments
- 3 Additional Energy Efficiency Regulation

Company Description

- Carrier Global (CARR) is an industry leader in providing heating, ventilation, air conditioning, and refrigeration (HVACR) and Fire & Security solutions globally
- CARR was formed in 2020 after United Technologies Corp. (UTC) split
- Provides products and services for residential, commercial, and transportation applications
- Operates in three major segments HVAC, refrigeration, and fire and safety (F&S)
- Has maintained strong credit profile, LTM Net Debt/EBITDA 1.47x
- Currently undergoing major transition into pure-play HVACR business

Segment Revenue Breakdown FY22A



CARR Company Data LTM (mm)

LTM Data

Revenue	\$21,040
EBITDA	\$3,687
FCF	\$1,698
Cash	\$3,347
Total Debt	\$8,753
Net Leverage	1.47x
Liquidity	\$5,347
Credit Rating	Baa3/BBB

Recent M&A Overview

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Sale of Chubb, Future Divestitures

- Chubb Fire & Security was sold in 1Q22 for \$3.1B to APi Group
- EV/EBITDA of ~13x, ~40% of FY21 F&S revenue
- Used for \$750m of debt paydown, \$1.6B of share repurchases
- 4/25/23 CARR announced plan to divest the rest of the F&S segment and commercial refrigeration (~28% of total refrig.)
- Based on 8x-12x sale multiple, likely \$7.5B to \$11.5B sale value
- Management said they expect higher multiple than Chubb
- 30% of net proceeds used to paydown debt for Chubb, likely similar or greater for this sale, leads to PF leverage 3.5x-3.6x

Announcement of Acquisition of Viessmann

- 4/25/23 CARR announced acquisition of Viessmann Climate Solutions for ~\$13.2B, 17.1x FY23E EBITDA, 13x w/synergies
- Compensation 80% cash (\$10.5B-\$11B), 20% stock (~\$2.4B)
- Management guided leverage at 3.5x post transaction, return to 2x in 2025 with realization of synergies
- Viessmann is based in Germany, large focus on heat pump
- CARR selling low-growth, low-margin segments and switching into pure-play HVAC in high growth segments
- Without divestitures, \$7.7B of new debt, total debt of \$16.5B, EBITDA of ~5B, PF leverage ~3.4x

Proj. PF Leverage w/Viessmann and Divestitures

		% of Net Proceeds Used for Debt Paydown							
		15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	45.00%	50.00%
F&S and Refrig. Sale Multiple	8.00x	3.7x	3.6x	3.5x	3.4x	3.3x	3.2x	3.1x	3.0x
	9.00x	3.7x	3.5x	3.4x	3.3x	3.2x	3.1x	3.0x	2.9x
	10.00x	3.6x	3.5x	3.4x	3.3x	3.2x	3.0x	2.9x	2.8x
	11.00x	3.6x	3.5x	3.3x	3.2x	3.1x	3.0x	2.8x	2.7x
	12.00x	3.5x	3.4x	3.3x	3.1x	3.0x	2.9x	2.7x	2.6x
	13.00x	3.5x	3.4x	3.2x	3.1x	2.9x	2.8x	2.6x	2.5x
	14.00x	3.5x	3.3x	3.2x	3.0x	2.8x	2.7x	2.5x	2.4x

Pro Forma Earnings Overview (\$mm)

PF EBITDA Reconciliation	FY20A	FY21A	FY22A	PF FY22A
Revenue				
HVAC	9,478	11,390	13,408	17,808
<i>% of sales</i>	53.3%	54.2%	64.3%	86.5%
Refrigeration	3,333	4,127	3,883	2,783
<i>% of sales</i>	18.7%	19.6%	18.6%	13.5%
Fire & Security	4,985	5,515	3,570	-
<i>% of sales</i>	28.0%	26.2%	17.1%	-
Total Revenue	17,796	21,032	20,861	20,591
EBIT	2,532	2,876	3,623	3,813
<i>% Operating margin</i>	14.2%	13.7%	17.4%	18.5%
Total D&A	310	303	345	362
EBITDA	2,842	3,179	3,968	4,175
<i>% EBITDA Margin</i>	16.0%	15.1%	19.0%	20.3%

Capital Structure Overview

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Carrier Global Capitalization Table

	<u>12/31/22</u>		<u>4/27/23</u>		<u>Interest Rate</u>	<u>Cash</u>		<u>Maturity</u>	<u>Debt / Adj. EBITDA</u>	
	<u>Face</u>	<u>Price</u>	<u>Market</u>	<u>YTW</u>		<u>OAS</u>	<u>Interest</u>		<u>FY22A</u>	<u>FY23E</u>
Cash & Cash Equivalents	\$3,347									
Bank Debt										
RCF due 2027	-	-	-		L + 137.5	-		2/10/2025		
Term Loan due 2027	403	99.99	403		TORF + 75	3		7/15/27		
Total Bank Debt	\$403		\$403		0.74%	\$3			0.11x	0.11x
<i>Net Bank Debt</i>	<i>(2,944)</i>		<i>(2,944)</i>						<i>-0.80x</i>	<i>-0.82x</i>
Fixed Rate										
Notes due 2025	\$1,200	95.5	\$1,145		2.24%	\$27	4.93%	74.3 bps	2/15/25	
Notes due 2027	900	92.6	834		2.49%	22	4.63%	101.2 bps	2/15/27	
Notes due 2030	2,000	87.1	1,742		2.72%	54	4.98%	140.8 bps	2/15/30	
Notes due 2031	750	85.5	641		2.70%	20	4.96%	146.2 bps	2/15/31	
Notes due 2040	1,500	78.1	1,172		3.37%	51	5.43%	168.3 bps	4/05/40	
Notes due 2050	2,000	74.0	1,479		3.57%	71	5.43%	166.5 bps	4/05/50	
Total Debt	\$8,753		\$7,417		2.55%	\$249	5.06%			2.37x
<i>Total Net Debt</i>	<i>5,406</i>		<i>4,070</i>							<i>1.47x</i>
Earnings:										
FY22A Adj. EBITDA	\$3,687									
FY23E Adj. EBITDA	\$3,569									

Note: TL is based on Tokyo Overnight Risk-Free Rate (TORF) and denominated in JPY, used for TCC acquisition

Liquidity

RCF Commitment	\$2,000
(-) RCF Borrowings	-
RCF Availability	\$2,000
(+) Cash	3,347
Total Liquidity	\$5,347

Highlights:

- Net leverage of 1.47x in FY22A, projected 1.51x in FY23E
- Average interest rate of just 2.55% in FY22A
- Total liquidity represents 61.1% of total debt outstanding

2030 Logic:

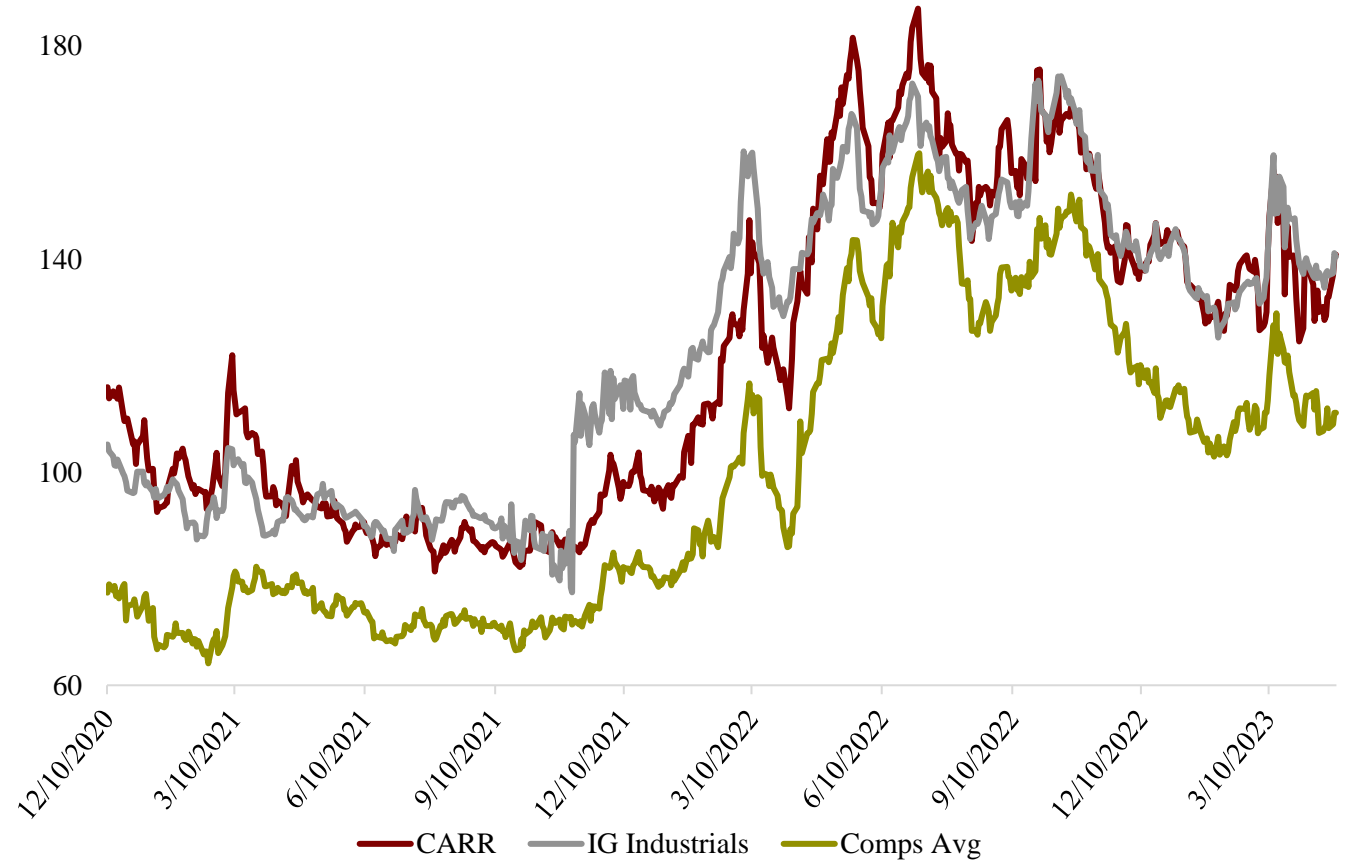
- 2025s, 2027s ruled out due to comp rules, low total return
- 2030 first maturity in 3 years
- 2040s also potentially attractive (explained in greater depth Pg 17)

Security Overview

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Description	
Maturity	2/15/2030
Coupon	2.722%
Amount Outstanding	2,000
Rank	Senior Unsecured
Rating	Baa3/BBB
Next Call Date	11/15/2029
Price	\$87.11
YTW	4.98%
G-Spread	143.2 bps
OAS	140.8 bps
Modified Duration	5.972

Historical OAS (Since 4Q20 Issuance, bps)



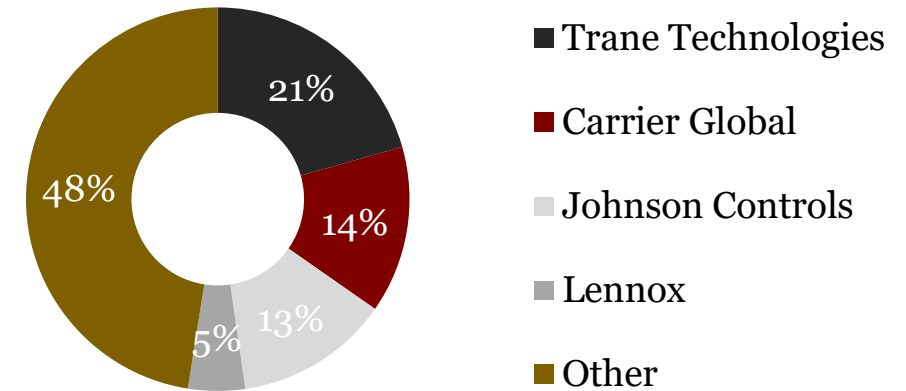
Competitive Landscape

- Major players such as CARR have a significant advantage due to the large amount of capital investment required in the manufacturing and development of HVAC market
- Brand recognition and channels play a crucial role for HVAC companies, end market users will naturally stick to one brand due to familiarity and complementary products
- Having a well-built channel will give manufactures strong pricing power

Downturn in Residential Market Demand

- The industry benefited over the COVID-19 Pandemic from the rising value of residential construction
- Rock-bottom rates and an increase of income per capita led to rapid expansion of residential construction
- Number of new, privately owned housing units and home HVAC upgrades expanded rapidly
- HVACR companies now faces headwinds due to decline in residential demand as a result of interest rate hikes

Market Share



Resurgence of Commercial Market Demand

- HVAC companies are expected to benefit from the recovery of nonresidential construction activity over the next 5 years
- Nonresidential construction (commercial) demand was at ~50% normal value during the pandemic is now slated to rebound
- Commercial HVAC demand is expected to grow at 6.86% through 2027
- New regulations regarding efficiency outputs will also bolster the demand for HVAC installations and upgrades in the near future

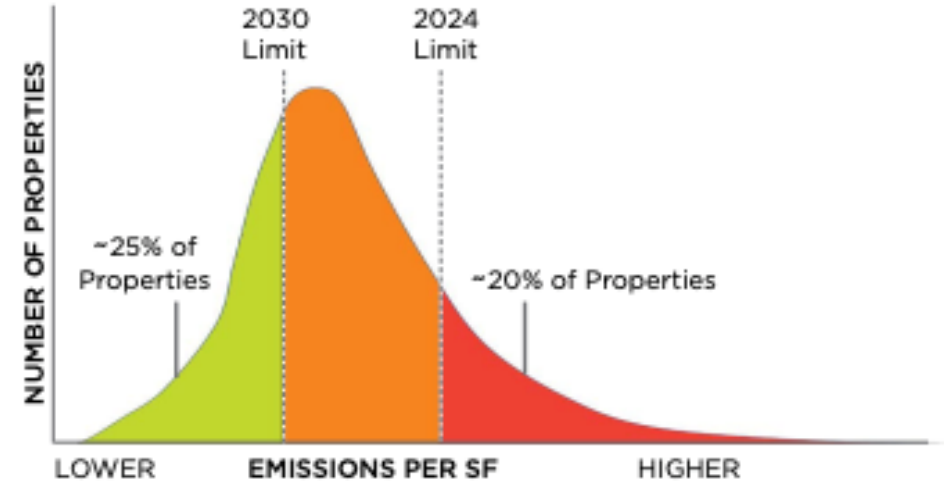
Regulation Forcing Replacement

- New industry trends to efficiency due to regulation
- Dept. of Energy raised IEER requirements by 15% in FY23, affects entire country
- Laws city to city, like Local Law 97 in NYC, large buildings must cut emissions by 40%, affects ~50,000 buildings
- 20% LL97 non-compliance by 2024, 75% in 2030
- Incentives to reduce, 179D tax deduction was raised ~2.5x from \$1.88/SF prior to 2023 to \$5.00/SF currently
- EU all new buildings zero-emissions by 2030, all by 2050

Vacancy Minimized in Upgraded Buildings

- “Green Premium” in RE drives upgrades to sustainability due to companies seeking more sustainable buildings
- New offices have 3%-5% lower vacancy than old, offices with high efficiency ratings have ~10% sales premium, 10%-20% lease premium
- Commercial heating accounts for ~6% of global emissions, HVACR accounts for ~33% of building emissions
- CARR commercial backlog up ~20% in 1Q23

LL97 Non-Compliant Properties by Limit



One Vanderbilt LL97 Compliance Example

Est Penalty (\$/yr)	\$734,498	\$1,982,888	\$2,441,880	\$2,914,541
15,000				
13,000	2741			
11,000				
9,000		7399		
7,000				
5,000	12582		9111	
3,000		4513		
1,000			2801	
-1,000				1037
	2024-2029	2030-2034	2035-2039	2020-2049

■ Carbon Below Threshold ■ Carbon Over Threshold

K-12 Overview

- Largely due to COVID-19, schools have been increasingly seeking HVAC system upgrades to help combat
- Increasing ventilation rates from 10 cubic feet per minute to 20 CFM resulted in 60% reduction of airborne particles
- Actual temperature also important
- Students 12.3% more likely to fail an exam on a 90°F day than on a 75°F day
- An estimated 41% of public schools need HVAC upgrade/replacement (~36,000), 80%+ over 10 years old

Federal Funding Tailwinds

- While schools generally lack funding/major tailwind to HVAC upgrades is recent Federal Funding
- Elementary and Secondary School Emergency Relief Fund (ESSR) created during pandemic, has ~\$200B in funding for schools; can be allocated for health-based improvements
- First created in March 2020, still 2/3 (~\$130B) still unallocated
- We think this provides a catalyst for schools to make the necessary improvements more rapidly due to temporary nature of funding
- While not all of this will go to HVAC, helps subsidize costs

Potential Market Size

- We estimated a cost for HVAC replacement of \$7,000-\$10,000 per student in school
- Average of 514 students in a US school
- Cost per school between \$2.3m and 6.3m
- Sensitized below based on % of schools captured and cost per school
- TAM between \$51B and \$229B, most likely ~\$150B-170B
- While CARR will not capture all of this demand, we believe this demand will help to shore up weakness in resi demand

TAM of US K-12 HVAC Replacement (\$mm)

		% of 36,000 Schools Captured					
		\$ in millions	60%	70%	80%	90%	100%
Cost per School	2,369		51,170	59,699	68,227	76,756	85,284
	2,869		61,970	72,299	82,627	92,956	103,284
	3,369		72,770	84,899	97,027	109,156	121,284
	3,869		83,570	97,499	111,427	125,356	139,284
	4,369		94,370	110,099	125,827	141,556	157,284
	4,869		105,170	122,699	140,227	157,756	175,284
	5,369		115,970	135,299	154,627	173,956	193,284
	5,869		126,770	147,899	169,027	190,156	211,284
	6,369		137,570	160,499	183,427	206,356	229,284

CARR Abound and Lynx Software Offerings

- Abound launched in 1Q23, measurement and analysis of energy and emissions across property portfolio
- Similar programs reduce breakdowns 70%-75%, maintenance costs by 25%-30%; currently has 500k AUM with 1M+ in 2026
- Lynx launched in FY22, creates connected cold chain
- 13% of food loss caused by refrigeration, ~\$400B worth of value
- Currently 70K chillers under contact, 20K connected chillers
- Both systems market leading in user experience, acts as complementary product to HVAC, creates network effect

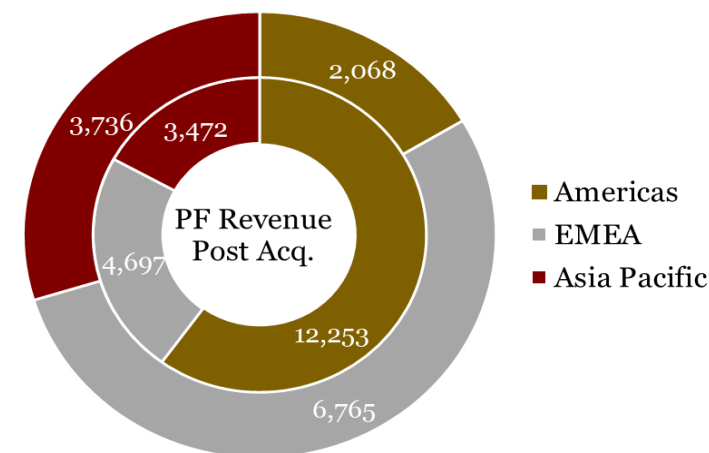
Viessmann Software and Interoperability

- Viessmann will continue to bolster software offerings
- One Base offers connected ecosystem from installers to users to full Viessmann product range
- Viessmann acts as emissions reduction hub, offers heat pumps, batteries, and solar
- Each component interoperable, can install each separately
- Only HVAC operator with solar/electricity storage arm
- As Viessmann is integrated/spreads to CARR channels, combination offers all climate products from solar to filtration

Global Expansion Fueling Channel Growth

- Viessmann largest and most recent acquisition, positions CARR more in EU
- Viessmann generates ~47% of revenue in EU, ~\$2B
- CARR signed to fully acquire Toshiba Carrier (TCC) in Japan
- Market leader in VRF and light commercial
- Purchased Giwee in China, completed in 2Q21
- Also operator in VRF and light commercial, pushes into China
- CARR ability to cross-sell, use assets in other channels major differentiator
- Trane majority concentrated in NA, small EU exposure

CARR Pro Forma Segment Breakdown (FY22A)



Catalyst: Ratings Upgrade

Ratings Upgrade to Baa1

- We believe CARR is in prime position for a ratings upgrade
- Currently rated Baa3 and BBB by Moody's and S&P Global
- 4/4/23 Trane Technologies (TT) was upgrade from Baa3 to Baa1 by Moody's
- We believe, based on the competitor upgrade and our build of the Moody's Manufacturing Scorecard, that CARR will soon follow with an upgrade to Baa1
- We used consensus estimates to build to a Baa2 rating for FY22A and a Baa1 rating in FY23E and FY24E
- Build assumes a maintenance of Baa3 in two qualitative measures (40% weight) and assumes low range of each quantitative measure
- Compared to TT, CARR significantly higher in revenue, coverage, and margins, only being behind in Debt/EBITDA and FCF/Debt
- Recent announcements of M&A change timeline of upgrade but do not change outlook
- Moody's, S&P reaffirmed CARR as Baa3 following announcement, even with management guided leverage of ~3.5x at close
- Depending on sale multiples, use of proceeds for debt, we could see reversion to current credit profiles shortly 1H24
- Moody's maintained Positive outlook, noted as Debt/EBITDA around 3.0x, higher EBITDA margins put pressure on upgrade

Manufacturing Scorecard Summary

Manufacturing Scorecard Summary	Weight	Current	FY23E	FY24E
Scale	20%	7.5	7.5	7.5
Profitability and Efficiency	40%	3.6	3.3	2.6
Qualitative	40%	9.0	9.0	9.0
Total Weighted Score	100%	8.7	8.4	7.7
Implied Credit Rating		Baa2	Baa1	Baa1
Current Credit Rating		Baa3		

Competitor Rating Analysis

Competitor Ratings Analysis	CARR	TT	Diff.
Metrics (FY22A)			
Revenue	21,040	15,992	(5,048)
Debt/EBITDA	2.37x	1.78x	-0.59x
FCF/Debt	19.40%	25.06%	5.67%
EBITDA/Interest Expense	16.99x	12.44x	-4.55x
EBITDA Margin	17.52%	16.99%	-0.53%
Current Rating (Moody's)	Baa3	Baa1	
Last Rating Review	2/28/2023	4/3/2023	
Moody's Outlook	Positive	Positive	

Catalyst: Divestitures

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Divestitures of Less-Productive Segments

- Currently accounts for ~22% of revenue (~\$4.6B)
- Both segments are lower margin, lower growth than HVAC
- Sale will align with CARR's initiative to move to pure play HVAC
- Sale of remaining F&S would free up capital that can be allocated towards HVAC segment and product innovation
- Will allow for significant deleveraging with proceeds
- ~30% of Chubb proceeds used for paydown; 30% of divestiture translates to ~3.3x leverage with 50% translating to ~2.7x

Recent Example of Debt Paydown

PF Balance Sheet Summary	FY20A	FY21A	FY22A	PF FY22A
Cash	3,115	2,987	3,520	6,695 ¹
Total Debt	10,227	10,647	8,842	13,673
Net Debt	7,112	7,660	5,322	6,978
Debt/EBITDA	3.60x	3.35x	2.23x	3.28x
Net Debt/EBITDA	2.50x	2.41x	1.34x	1.67x
CARR FY22 Debt			-	8,842
(-) Proceeds from Sales				(2,869)
% of Total Proceeds				30% ²
(+) New Debt from Viessmann				7,700
New Company Debt				13,673
PF FY23E EBITDA				4,175
Leverage				3.28x

Divestiture Sale Pro-Forma Earnings

PF EBITDA Reconciliation	FY20A	FY21A	FY22A	PF FY22A
Revenue				
HVAC	9,478	11,390	13,408	17,808
% of sales	53.3%	54.2%	64.3%	86.5%
Refrigeration	3,333	4,127	3,883	2,783
% of sales	18.7%	19.6%	18.6%	13.5%
Fire & Security	4,985	5,515	3,570	-
% of sales	28.01%	26.22%	17.11%	-
Total Revenue	17,796	21,032	20,861	20,591
HVAC	1,591 ³	1,738	2,610	3,467
% Operating margin	16.8%	15.3%	19.5%	19.5%
Refrigeration	357	476	483	346
% Operating margin	10.7%	11.5%	12.4%	12.4%
Fire & Security	584	662	530 ⁴	-
% Operating margin	11.7%	12.0%	14.8%	-
EBIT	2,532	2,876	3,623	3,813
HVAC D&A	163	186	256	340
% of segment sales	1.7%	1.6%	1.9%	1.9%
Refrigeration D&A	39	36	31	22
% of segment sales	1.2%	0.9%	0.8%	0.8%
Fire & Security D&A	108	81	58	-
% of segment sales	2.2%	1.5%	1.6%	-
Total D&A	310	303	345	362
EBITDA	2,842	3,179	3,968	4,175
% EBITDA Margin	16.0%	15.1%	19.0%	20.3%

1. Assumes all other proceeds go to cash 2. Chubb used ~30% for debt repayment

3. Excludes Beijer Sale 4. Excludes Chubb Sale

Sources: Company Filings

Catalyst: Further Regulation

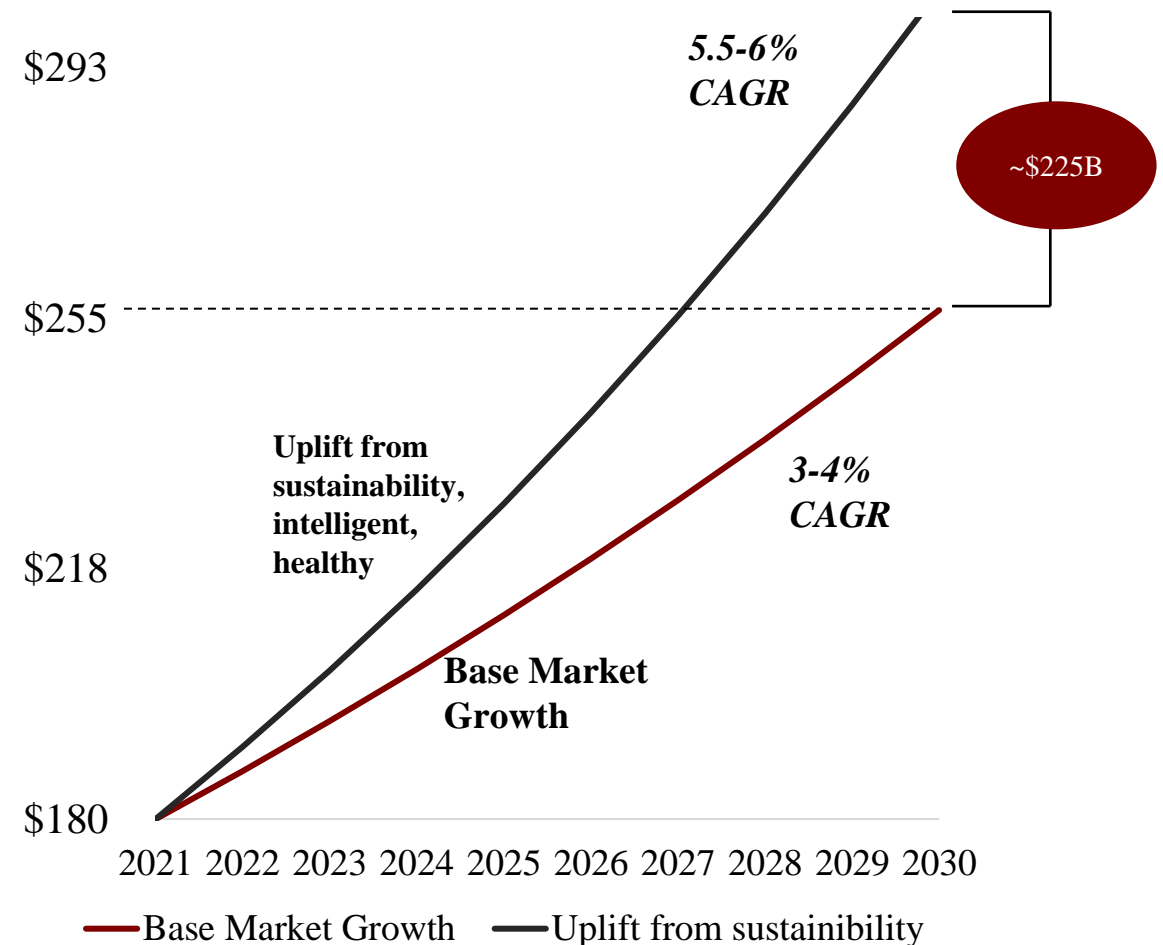
Additional Energy Efficiency Regulation

- Continued regulation will further grow replacement rates and overall demand for HVAC systems
- CARR differs from competitors by offering some of the highest efficiency systems on the market
- HVAC had Seasonal Energy Efficiency Ratio (SEER) and Integrated Energy Efficiency Ratio (IEER) requirements raised in 2023 further pushing new and old buildings towards replacement
- There are 110mm HVAC units in the US alone, among those 92mm are 10 years or older
- Average lifespan of an HVAC system is ~10-15 years
- Expect continued regulation to target this aging population

Similar Opportunity in EU Bolstered by Viessmann

- RePower EU; Europe's transitioning plan to energy independence from Russia
- 17 countries in the EU have banned/plan to ban fossil fuels
- There is a market move to heat pump systems (VRF) due to its electric heating capability, move away from fossil fuels
- CARR will be well positioned to in the EU VRF market through its acquisition of Viessmann
- Viessman is one-stop-shop for HVAC and solar, will continue to strengthen CARR's channels in the EU market

HVAC Market Sizing (\$bn)



Relative Valuation

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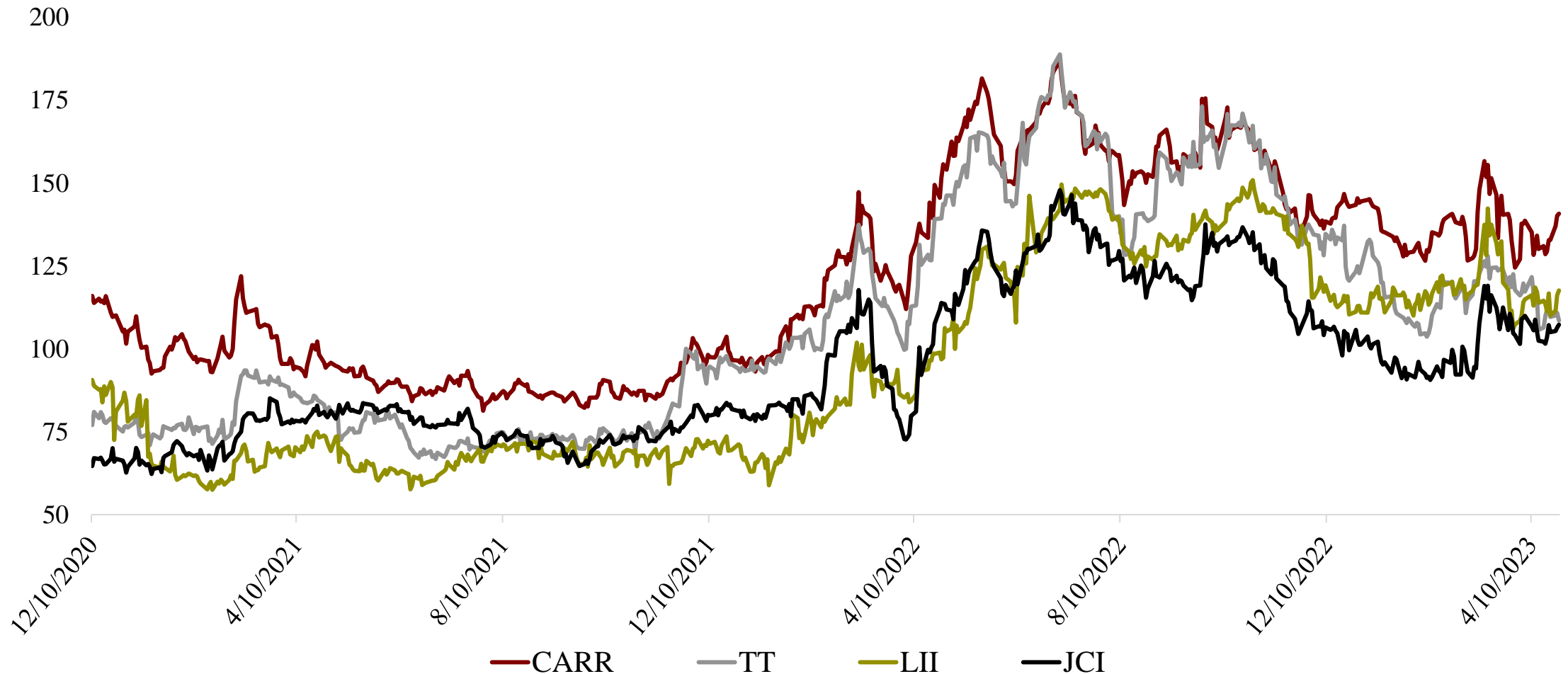
Analysis

- CARR currently trading wide of 4 determined comps: Trane (TT), Lennox (LII), and Johnson Controls (JCI)
- Currently ~32bps wide of TT, ~23bps wide of LII, and ~33bps wide of JCI
- Historically traded ~13bps wide of TT, lower LTM net leverage, similar scale, CARR now also pure-play HVAC with acq.
- Investors getting high-growth HVAC and VRF business similar to TT at a discount, with high-growth European market
- Historically traded ~27bps wide of LII, 1x lower net leverage, higher margin business, much more scale
- LII significant exposure to resi HVAC w/o commercial to offset
- Historically traded ~27bps wide of JCI, >1x lower net leverage, higher margins, similar scale
- JCI significant F&S business, lower margins and growth
- Represented through 93bp spread per turn of leverage for CARR; 81bps, 42bps, 44bps for TT, LII, and JCI, respectively
- CARR trading similar to IG Industrials index (~140bps) while comps trade at ~30bps premium
- Premium likely due to industry fundamentals highlighted in thesis which CARR is in prime position to take advantage of
- Market discount caused by 1. recent widening due to M&A announcements, increase in leverage that is beneficial long-term and 2. lack of specification/new firm due to spin-off from UTC

Comparable Companies Analysis

Competitors (Millions of \$)	CARR	TT	LII	JCI
Market Cap	835	228	35	687
Debt	8,753	4,836	1,514	9,747
Net Debt	5,406	3,616	1,453	8,238
Enterprise Value	39,676	45,316	11,272	49,493
Revenue (LTM)	21,040	15,992	4,754	25,505
EBITDA (LTM)	3,687	2,718	521	3,448
Consensus EBITDA (FY23E)	3,569	2,984	799	4,156
Debt/EBITDA (LTM)	2.37x	1.78x	2.90x	2.83x
Net Debt/EBITDA (LTM)	1.47x	1.33x	2.79x	2.39x
Net Debt/EBITDA (FY23E)	1.51x	1.21x	1.82x	1.98x
EBITDA/Interest (LTM)	16.99x	12.44x	13.47x	15.26x
FCF (LTM)	1,698	1,212	201	711
Consensus FCF (FY23E)	1,920	2,014	340	2,000
FCF/Net Debt	31.4%	33.5%	13.9%	8.6%
FCF/Net Debt (FY23E)	35.5%	55.7%	23.4%	24.3%
Comparable Securities	CARR	TT	LII	JCI
Maturity	2/15/2030	3/21/2029	8/1/2027	9/15/2030
Coupon	2.720%	3.800%	1.700%	1.750%
Rating	Baa3	Baa1	Baa2	Baa2
Mod. Duration	5.97	5.10	3.97	6.69
Price	87.11	95.35	88.33	82.56
YTW	4.98%	4.71%	4.76%	4.56%
OAS	140.8 bps	108.5 bps	117.6 bps	107.3 bps
Spread/Leverage (LTM)	96.0 bps	81.6 bps	42.2 bps	44.9 bps
Spread/Leverage (FY23E)	93.0 bps	89.6 bps	64.7 bps	54.2 bps

OAS Graphs vs Comps (Since 4Q20 Issuance, bps)



Total Return Sensitivity Analysis

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Potential Events and Analysis

- We believe 2030 attractive on both hold to maturity and sale
- Relative to comps, we expect a 20bp-40bp to trade more in line with comps that are at a premium compared to the industrials index
- CARR notes widened 10bps-15bps relative to TT off of Viessmann acquisition and divestiture news
- We believe risks involved in the refocus of CARR's portfolio are being overcompensated for in spreads, despite the transactions move to a higher margin, higher growth area
- Upon news, we began to look into 2040s due to long-term benefit of this refocus, however we still believe the majority of the benefits will be realized before 2030 maturity

2030 Total Return (Non-Annualized)

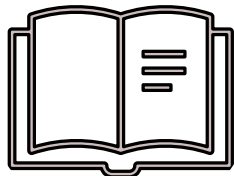
	Date of Sale													
	8/31/2023	2/29/2024	8/31/2024	2/28/2025	8/31/2025	2/28/2026	8/31/2026	2/28/2027	8/31/2027	2/29/2028	8/31/2028	2/28/2029	8/31/2029	2/15/2030
Tightening/Widening from Current Spread														
+30.00	0.10%	1.67%	3.23%	4.79%	6.35%	7.91%	9.48%	11.04%	12.60%	14.16%	15.72%	17.28%	18.85%	20.41%
+25.00	0.40%	1.96%	3.53%	5.09%	6.65%	8.21%	9.77%	11.34%	12.90%	14.46%	16.02%	17.58%	19.15%	20.71%
+20.00	0.70%	2.26%	3.82%	5.39%	6.95%	8.51%	10.07%	11.63%	13.20%	14.76%	16.32%	17.88%	19.44%	21.01%
+15.00	1.00%	2.56%	4.12%	5.69%	7.25%	8.81%	10.37%	11.93%	13.49%	15.06%	16.62%	18.18%	19.74%	21.30%
+10.00	1.30%	2.86%	4.42%	5.98%	7.55%	9.11%	10.67%	12.23%	13.79%	15.35%	16.92%	18.48%	20.04%	21.60%
+5.00	1.60%	3.16%	4.72%	6.28%	7.84%	9.41%	10.97%	12.53%	14.09%	15.65%	17.21%	18.78%	20.34%	21.90%
0.00	1.91%	3.47%	5.03%	6.59%	8.15%	9.72%	11.28%	12.84%	14.40%	15.96%	17.52%	19.09%	20.65%	22.21%
-5.00	2.20%	3.77%	5.33%	6.89%	8.45%	10.01%	11.58%	13.14%	14.70%	16.26%	17.82%	19.38%	20.95%	22.51%
-10.00	2.50%	4.06%	5.63%	7.19%	8.75%	10.31%	11.87%	13.44%	15.00%	16.56%	18.12%	19.68%	21.25%	22.81%
-15.00	2.81%	4.37%	5.94%	7.50%	9.06%	10.62%	12.18%	13.75%	15.31%	16.87%	18.43%	19.99%	21.55%	23.12%
-20.00	3.12%	4.68%	6.25%	7.81%	9.37%	10.93%	12.49%	14.06%	15.62%	17.18%	18.74%	20.30%	21.86%	23.43%
-25.00	3.60%	5.17%	6.73%	8.29%	9.85%	11.41%	12.98%	14.54%	16.10%	17.66%	19.22%	20.78%	22.35%	23.91%
-30.00	3.73%	5.29%	6.85%	8.42%	9.98%	11.54%	13.10%	14.66%	16.23%	17.79%	19.35%	20.91%	22.47%	24.03%
-35.00	4.04%	5.60%	7.16%	8.73%	10.29%	11.85%	13.41%	14.97%	16.54%	18.10%	19.66%	21.22%	22.78%	24.34%
-40.00	4.35%	5.91%	7.47%	9.04%	10.60%	12.16%	13.72%	15.28%	16.85%	18.41%	19.97%	21.53%	23.09%	24.65%



Downturn in residential demand as result of rising interest rates is more significant than current market pricing



Substantial weakening of foreign currencies against US dollar along with rising international competition reduces US export sales



Inconsistent international, national, and regional requirements associated with climate change/emission regulations creates economic and regulatory uncertainty for CARR

We are *overweight* on CARR's 2030 Notes

Thesis

- 1 Resilience due to Growing Demand in High-Efficiency Commercial Market
- 2 Untapped TAM K-12 Market
- 3 Differentiation of Products Through Complementary Software Offerings

Catalysts

- 1 Ratings Upgrade to Baa1
- 2 Divestitures of Business Segments
- 3 Additional Energy Efficiency Regulation

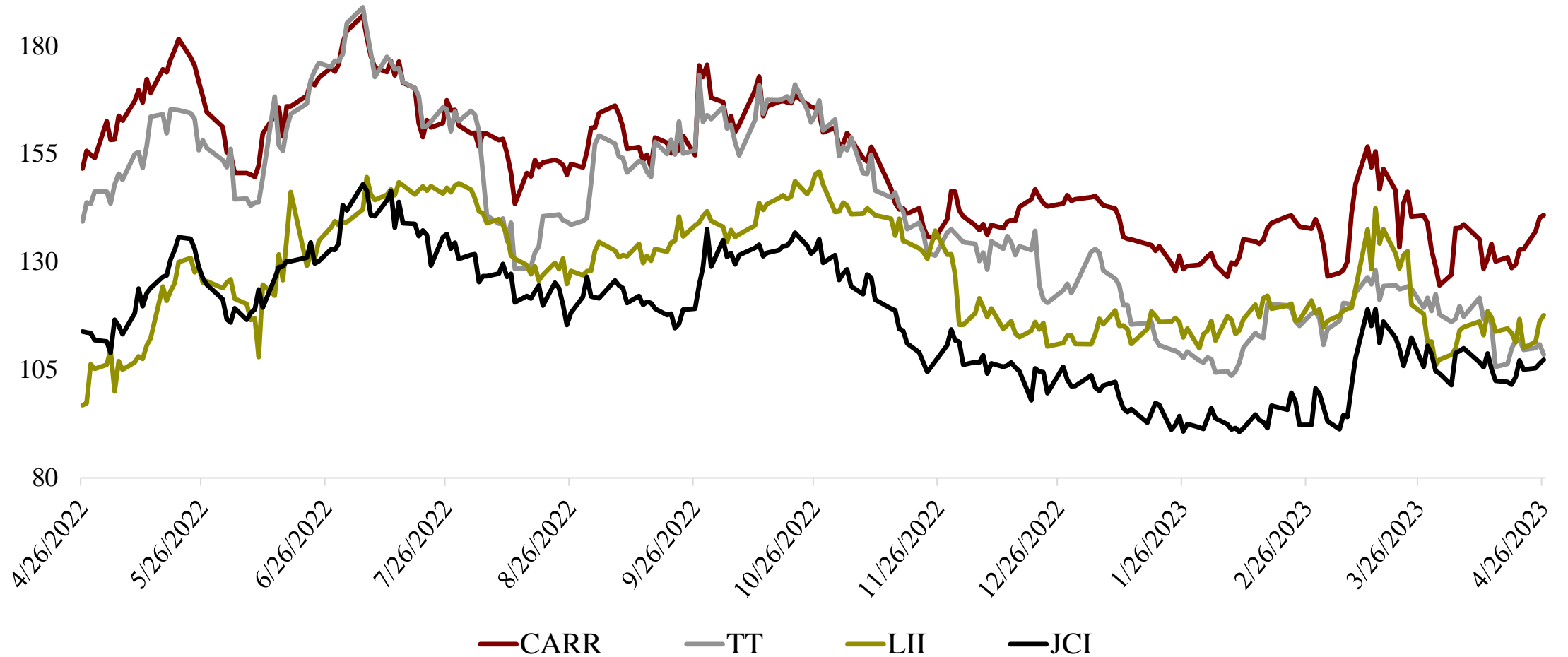
Thank you for Listening
Questions?

Ratings Upgrade Full

Manufacturing Scorecard	Weight	Current	FY23E	FY24E
Scale				
Revenue (Billions of \$)	20%	20,421	22,160	22,946
<i>Score</i>		7.5	7.5	7.5
Profitability and Efficiency				
EBITDA Margin	5%	18.1%	16.1%	16.6%
<i>Score</i>		7.5	10.5	10.5
Debt/EBITDA	10%	2.4x	2.4x	2.1x
<i>Score</i>		10.5	10.5	10.5
RCF/Net Debt	10%	23.2%	32.8%	52.2%
<i>Score</i>		13.5	10.5	4.5
FCF/Debt	5%	15.7%	22.8%	29.6%
<i>Score</i>		7.5	4.5	1.5
EBITDA/Interest Expense	10%	16.8x	16.8x	18.2x
<i>Score</i>		4.5	4.5	4.5
Qualitative				
Business Profile ₁	25%	Baa3	Baa3	Baa3
<i>Score</i>		9	9	9
Financial Policy ₁	15%	Baa3	Baa3	Baa3
<i>Score</i>		9	9	9
Total Weighted Score	100%	8.7	8.4	7.7
Implied Credit Rating		Baa2	Baa1	Baa1
Current Credit Rating		Baa3		

1. Assumes Baa3 for Qualitative Measures

OAS Graphs vs Comps (1 Year, bps)



Potential Divestiture Proceeds (\$mm)

		Multiple on F&S Sale									
		6x	7x	8x	9x	10x	11x	12x	13x	14x	15x
Multiple on Refrig. Sale	6x	5,738	6,326	6,914	7,502	8,090	8,678	9,266	9,854	10,442	11,030
	7x	6,107	6,695	7,283	7,871	8,459	9,047	9,635	10,223	10,811	11,399
	8x	6,475	7,063	7,651	8,239	8,827	9,415	10,003	10,591	11,179	11,767
	9x	6,844	7,432	8,020	8,608	9,196	9,784	10,372	10,960	11,548	12,136
	10x	7,212	7,800	8,388	8,976	9,564	10,152	10,740	11,328	11,916	12,504
	11x	7,580	8,168	8,756	9,344	9,932	10,520	11,108	11,696	12,284	12,872
	12x	7,949	8,537	9,125	9,713	10,301	10,889	11,477	12,065	12,653	13,241
	13x	8,317	8,905	9,493	10,081	10,669	11,257	11,845	12,433	13,021	13,609
	14x	8,685	9,273	9,861	10,449	11,037	11,625	12,213	12,801	13,389	13,977
	15x	9,054	9,642	10,230	10,818	11,406	11,994	12,582	13,170	13,758	14,346

2040 Total Return (Non-Annualized)

	Date of Sale																
	4/30/2024	4/30/2025	4/30/2026	4/30/2027	4/30/2028	4/30/2029	4/30/2030	4/30/2031	4/30/2032	4/30/2033	4/30/2034	4/30/2035	4/30/2036	4/30/2037	4/30/2038	4/30/2039	4/5/2040
Tightening/Widening from Current Spread																	
+55.00	-1.96%	2.41%	6.78%	11.16%	15.53%	19.90%	24.27%	28.64%	33.01%	37.39%	41.76%	46.13%	50.50%	54.87%	59.24%	63.61%	67.99%
+50.00	-1.38%	3.00%	7.37%	11.74%	16.11%	20.48%	24.85%	29.22%	33.60%	37.97%	42.34%	46.71%	51.08%	55.45%	59.83%	64.20%	68.57%
+45.00	-0.81%	3.57%	7.94%	12.31%	16.68%	21.05%	25.42%	29.79%	34.17%	38.54%	42.91%	47.28%	51.65%	56.02%	60.39%	64.77%	69.14%
+40.00	-0.25%	4.12%	8.49%	12.86%	17.24%	21.61%	25.98%	30.35%	34.72%	39.09%	43.47%	47.84%	52.21%	56.58%	60.95%	65.32%	69.69%
+35.00	0.27%	4.64%	9.01%	13.38%	17.75%	22.13%	26.50%	30.87%	35.24%	39.61%	43.98%	48.35%	52.73%	57.10%	61.47%	65.84%	70.21%
+30.00	0.85%	5.22%	9.59%	13.97%	18.34%	22.71%	27.08%	31.45%	35.82%	40.19%	44.57%	48.94%	53.31%	57.68%	62.05%	66.42%	70.79%
+25.00	1.43%	5.80%	10.18%	14.55%	18.92%	23.29%	27.66%	32.03%	36.41%	40.78%	45.15%	49.52%	53.89%	58.26%	62.63%	67.01%	71.38%
+20.00	2.04%	6.41%	10.78%	15.16%	19.53%	23.90%	28.27%	32.64%	37.01%	41.39%	45.76%	50.13%	54.50%	58.87%	63.24%	67.61%	71.99%
+15.00	2.64%	7.01%	11.38%	15.75%	20.12%	24.49%	28.87%	33.24%	37.61%	41.98%	46.35%	50.72%	55.10%	59.47%	63.84%	68.21%	72.58%
+10.00	3.22%	7.59%	11.96%	16.33%	20.71%	25.08%	29.45%	33.82%	38.19%	42.56%	46.93%	51.31%	55.68%	60.05%	64.42%	68.79%	73.16%
+5.00	3.78%	8.15%	12.52%	16.89%	21.26%	25.63%	30.01%	34.38%	38.75%	43.12%	47.49%	51.86%	56.23%	60.61%	64.98%	69.35%	73.72%
+0.00	4.37%	8.74%	13.11%	17.49%	21.86%	26.23%	30.60%	34.97%	39.34%	43.72%	48.09%	52.46%	56.83%	61.20%	65.57%	69.94%	74.32%
-5.00	4.88%	9.25%	13.62%	17.99%	22.36%	26.73%	31.11%	35.48%	39.85%	44.22%	48.59%	52.96%	57.33%	61.71%	66.08%	70.45%	74.82%
-10.00	5.46%	9.83%	14.20%	18.57%	22.94%	27.32%	31.69%	36.06%	40.43%	44.80%	49.17%	53.55%	57.92%	62.29%	66.66%	71.03%	75.40%
-15.00	6.09%	10.46%	14.84%	19.21%	23.58%	27.95%	32.32%	36.69%	41.07%	45.44%	49.81%	54.18%	58.55%	62.92%	67.29%	71.67%	76.04%
-20.00	6.71%	11.09%	15.46%	19.83%	24.20%	28.57%	32.94%	37.32%	41.69%	46.06%	50.43%	54.80%	59.17%	63.54%	67.92%	72.29%	76.66%
-25.00	7.31%	11.68%	16.05%	20.42%	24.80%	29.17%	33.54%	37.91%	42.28%	46.65%	51.03%	55.40%	59.77%	64.14%	68.51%	72.88%	77.25%
-30.00	7.96%	12.33%	16.70%	21.07%	25.44%	29.81%	34.19%	38.56%	42.93%	47.30%	51.67%	56.04%	60.42%	64.79%	69.16%	73.53%	77.90%
-35.00	8.60%	12.98%	17.35%	21.72%	26.09%	30.46%	34.83%	39.21%	43.58%	47.95%	52.32%	56.69%	61.06%	65.43%	69.81%	74.18%	78.55%
-40.00	9.28%	13.65%	18.02%	22.39%	26.76%	31.14%	35.51%	39.88%	44.25%	48.62%	52.99%	57.36%	61.74%	66.11%	70.48%	74.85%	79.22%
-45.00	9.89%	14.26%	18.63%	23.00%	27.37%	31.74%	36.12%	40.49%	44.86%	49.23%	53.60%	57.97%	62.34%	66.72%	71.09%	75.46%	79.83%
-50.00	10.53%	14.90%	19.28%	23.65%	28.02%	32.39%	36.76%	41.13%	45.51%	49.88%	54.25%	58.62%	62.99%	67.36%	71.73%	76.11%	80.48%
-55.00	11.22%	15.59%	19.96%	24.33%	28.71%	33.08%	37.45%	41.82%	46.19%	50.56%	54.93%	59.31%	63.68%	68.05%	72.42%	76.79%	81.16%
-60.00	11.87%	16.24%	20.61%	24.98%	29.35%	33.72%	38.10%	42.47%	46.84%	51.21%	55.58%	59.95%	64.32%	68.70%	73.07%	77.44%	81.81%
-65.00	12.51%	16.89%	21.26%	25.63%	30.00%	34.37%	38.74%	43.11%	47.49%	51.86%	56.23%	60.60%	64.97%	69.34%	73.72%	78.09%	82.46%
-70.00	13.19%	17.56%	21.93%	26.30%	30.67%	35.04%	39.42%	43.79%	48.16%	52.53%	56.90%	61.27%	65.65%	70.02%	74.39%	78.76%	83.13%

K-12 TAM Sensitivity Table

	\$bn	% of 36,000 Schools Captured																						
		5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%	105%	110%	115%
Cost per School	1,126	2.0	4.1	6.1	8.1	10.1	12.2	14.2	16.2	18.2	20.3	22.3	24.3	26.3	28.4	30.4	32.4	34.5	36.5	38.5	40.5	42.6	44.6	46.6
	1,626	2.9	5.9	8.8	11.7	14.6	17.6	20.5	23.4	26.3	29.3	32.2	35.1	38.0	41.0	43.9	46.8	49.8	52.7	55.6	58.5	61.5	64.4	67.3
	2,126	3.8	7.7	11.5	15.3	19.1	23.0	26.8	30.6	34.4	38.3	42.1	45.9	49.7	53.6	57.4	61.2	65.1	68.9	72.7	76.5	80.4	84.2	88.0
	2,626	4.7	9.5	14.2	18.9	23.6	28.4	33.1	37.8	42.5	47.3	52.0	56.7	61.4	66.2	70.9	75.6	80.4	85.1	89.8	94.5	99.3	104.0	108.7
	3,126	5.6	11.3	16.9	22.5	28.1	33.8	39.4	45.0	50.6	56.3	61.9	67.5	73.1	78.8	84.4	90.0	95.7	101.3	106.9	112.5	118.2	123.8	129.4
	3,626	6.5	13.1	19.6	26.1	32.6	39.2	45.7	52.2	58.7	65.3	71.8	78.3	84.8	91.4	97.9	104.4	111.0	117.5	124.0	130.5	137.1	143.6	150.1
	4,126	7.4	14.9	22.3	29.7	37.1	44.6	52.0	59.4	66.8	74.3	81.7	89.1	96.5	104.0	111.4	118.8	126.3	133.7	141.1	148.5	156.0	163.4	170.8
	4,626	8.3	16.7	25.0	33.3	41.6	50.0	58.3	66.6	74.9	83.3	91.6	99.9	108.2	116.6	124.9	133.2	141.6	149.9	158.2	166.5	174.9	183.2	191.5
	5,126	9.2	18.5	27.7	36.9	46.1	55.4	64.6	73.8	83.0	92.3	101.5	110.7	119.9	129.2	138.4	147.6	156.9	166.1	175.3	184.5	193.8	203.0	212.2
	5,626	10.1	20.3	30.4	40.5	50.6	60.8	70.9	81.0	91.1	101.3	111.4	121.5	131.6	141.8	151.9	162.0	172.2	182.3	192.4	202.5	212.7	222.8	232.9
	6,126	11.0	22.1	33.1	44.1	55.1	66.2	77.2	88.2	99.2	110.3	121.3	132.3	143.3	154.4	165.4	176.4	187.5	198.5	209.5	220.5	231.6	242.6	253.6
	6,626	11.9	23.9	35.8	47.7	59.6	71.6	83.5	95.4	107.3	119.3	131.2	143.1	155.0	167.0	178.9	190.8	202.8	214.7	226.6	238.5	250.5	262.4	274.3
	7,126	12.8	25.7	38.5	51.3	64.1	77.0	89.8	102.6	115.4	128.3	141.1	153.9	166.7	179.6	192.4	205.2	218.1	230.9	243.7	256.5	269.4	282.2	295.0
	7,626	13.7	27.5	41.2	54.9	68.6	82.4	96.1	109.8	123.5	137.3	151.0	164.7	178.4	192.2	205.9	219.6	233.4	247.1	260.8	274.5	288.3	302.0	315.7
	8,126	14.6	29.3	43.9	58.5	73.1	87.8	102.4	117.0	131.6	146.3	160.9	175.5	190.1	204.8	219.4	234.0	248.7	263.3	277.9	292.5	307.2	321.8	336.4
	8,626	15.5	31.1	46.6	62.1	77.6	93.2	108.7	124.2	139.7	155.3	170.8	186.3	201.8	217.4	232.9	248.4	264.0	279.5	295.0	310.5	326.1	341.6	357.1
	9,126	16.4	32.9	49.3	65.7	82.1	98.6	115.0	131.4	147.8	164.3	180.7	197.1	213.5	230.0	246.4	262.8	279.3	295.7	312.1	328.5	345.0	361.4	377.8
	9,626	17.3	34.7	52.0	69.3	86.6	104.0	121.3	138.6	155.9	173.3	190.6	207.9	225.2	242.6	259.9	277.2	294.6	311.9	329.2	346.5	363.9	381.2	398.5
	10,126	18.2	36.5	54.7	72.9	91.1	109.4	127.6	145.8	164.0	182.3	200.5	218.7	236.9	255.2	273.4	291.6	309.9	328.1	346.3	364.5	382.8	401.0	419.2