

OTIS

OTIS Worldwide (NYSE: OTIS)

By: Ahmed Warsi, Kevan Shah, Satvik Deolal, Junaid Rana, and Nameer Jamal

Market Data as of 06-Dec-2021

Investment Summary

Otis is the leading manufacturer and service provider of elevators and escalators worldwide

Business Overview

How Do They Make Money?

- Manufactures and installs elevators, escalators and other moving products (E&E)
- Service, maintenance and repair as well as modernization services which include renovating, designing, and upgrading existing installed elevators

Investment Thesis

Why Is This a Good Business?

- Strongest within its oligopolistic industry through EBIT margins, maintenance base, high customer switching costs and ROIC of 45.5%
- Positioned to grow revenues within China which is the largest addressable market for E&E
- Digital offerings which should boost retention, conversion, and recapture its service base from ISPs

What Is The Market Missing?

- Since it's spin-off from UTC, Otis has continued to trade beneath its peers
- Otis' growth and conversion in China has historically lagged peers, however recent turnaround efforts in China has repaved the pathway for their growth

We recommend a hold rating on OTIS with an implied upside of 8.5%

Company Overview

Business Overview

Otis manufactures, installs, and sells elevators, escalators, and walkways

Business Model

New Equipment:

- ❑ Designing, manufacturing, and selling elevators, escalators and moving walkways
- ❑ Sold to residential, commercial, infrastructure, and various other customers through DTC and distributor channels
- ❑ Includes real-estate, building developers or contractors

Service and Maintenance:

- ❑ Maintenance and repair services to ensure safety, regulatory compliance, and general wear, and tear of aging units
- ❑ Modernization provides upgrades, renovations, and re-design older models
- ❑ Customers include pre-existing building owners that operate buildings where elevators and escalators are installed

Superior Elevator Portfolio per Application

Application	Optimal Elevator Types Held		
	Otis	Schindler	Kone
High-Rise	<ul style="list-style-type: none"> ▪ Faster speed, gearless, multi deck 	<ul style="list-style-type: none"> ▪ Slower than Otis, better space than Kone 	<ul style="list-style-type: none"> ▪ Small, slower than competitors
Mid-Rise	<ul style="list-style-type: none"> ▪ Faster, MRL ▪ Multiple offerings 	<ul style="list-style-type: none"> ▪ MRL elevators + 1 Hydro ▪ Slower than competitors 	<ul style="list-style-type: none"> ▪ Leading MRL portfolio
Low-Rise	<ul style="list-style-type: none"> ▪ Traction, faster speed ▪ Hydraulic, hole-less MRL 	<ul style="list-style-type: none"> ▪ Limited MRL ▪ Conventional Hydraulic 	<ul style="list-style-type: none"> ▪ Shorter range ▪ MRL

Otis Compared to Its Competitors

Fewer Visits, Better Service:

- ❑ Building owners are realizing that more maintenance visits does not equal fewer shutdowns
- ❑ Competitors charge less per visit, but Otis has 30% fewer visits along with 10% reduced complaints

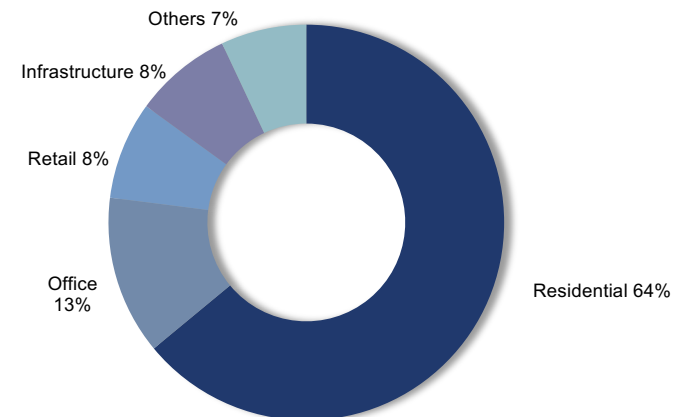
Rich Legacy Meeting A Variety Customer Needs:

- ❑ OTIS has been providing elevator, escalators, and other walkway services since the mid-19th century
- ❑ OTIS has more brand equity, ability to integrate, data, and a much more robust track record over peers

Unique Value Proposition; All-In-One Trustworthy Spot:

- ❑ OTIS provides legacy elevator installation, but also sticky modernization, and digitization services

Otis End Markets



A Robust Global Presence

Otis' presence spans across many key elevator and escalator markets such as China and Europe

94%

Retention
Rate

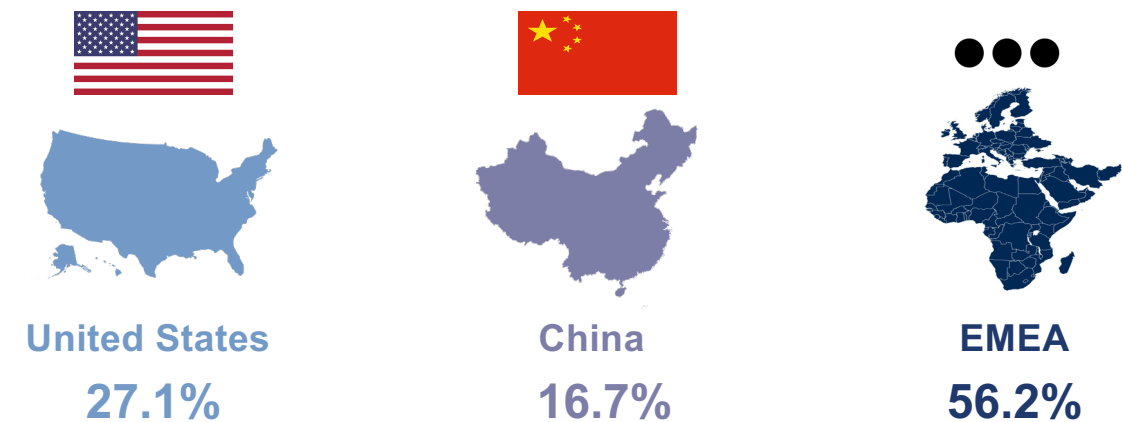
200+

Countries
Served

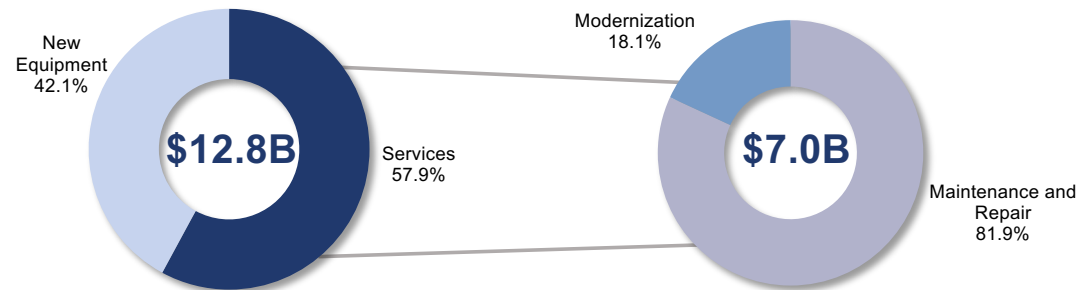
2.1M

Maintenance
Base

OTIS Geographical Revenue Breakdown



Segmentation Breakdown (US\$)



Key Performance Metrics

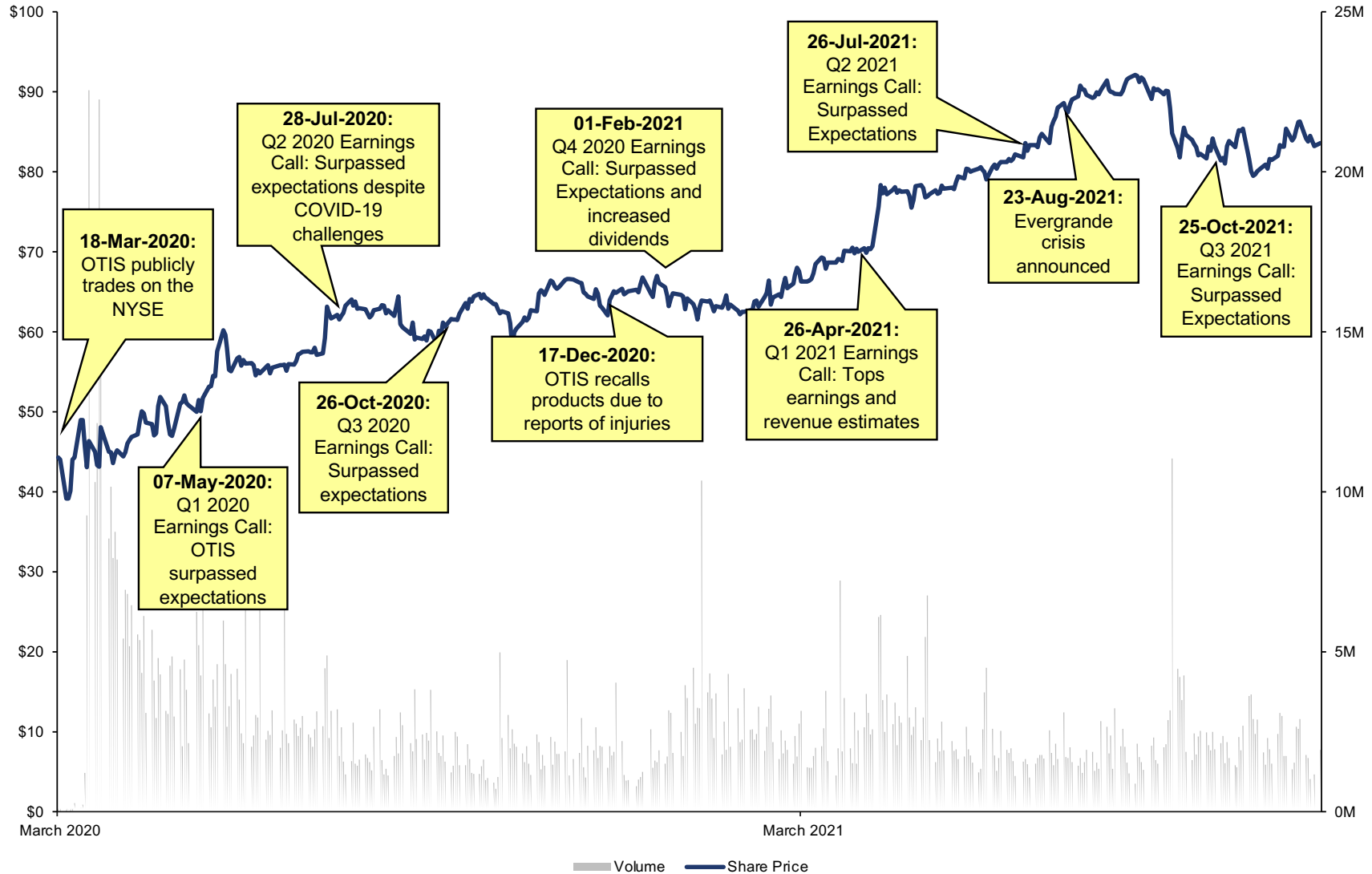
16.7%
EBITDA Margins

12.2%
Unlevered FCF Yield

~2.0%
4-Year Revenue CAGR

2-Year Share Price Performance

OTIS' recent share price has seen near-term resistance from China headwinds



Industry Overview

Industry Dynamics & Major Players

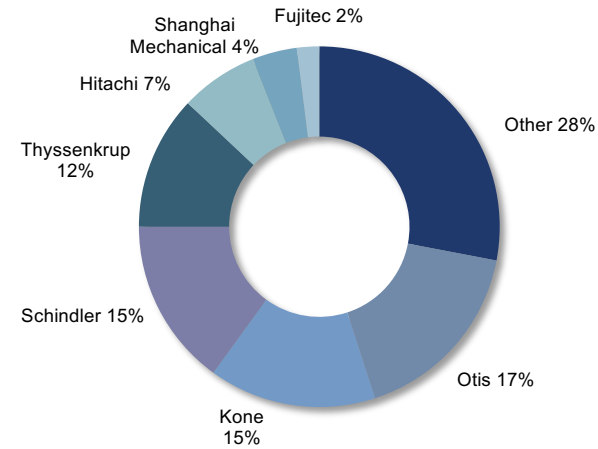
Industry Overview

An aging global installed base and IoT serve as key drivers for future growth

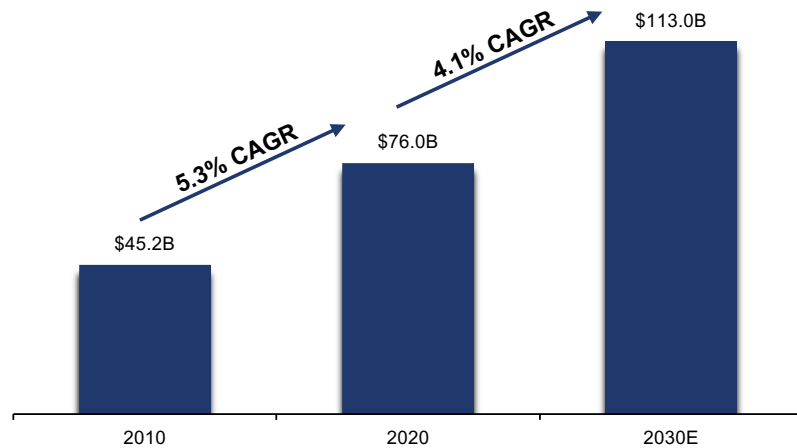
Industry Highlights

- Industry is currently at inflection point diverging into two paths
 - Traditional suppliers that adopt digital faster
 - New entrants focused purely on digitalization
- The primary theme developing in this industry for the next decade is digital / Industrial IoT, driving growth as this allows for companies to differentiate themselves, and provide more value-added services, driving up overall revenues
- Regulation-driven maintenance secures future industry revenues as elevator, and escalator maintenance is a legal requirement for global building operations
- Industry ROIC is strong at 20%+, with larger players capitalizing on a larger portion of those returns

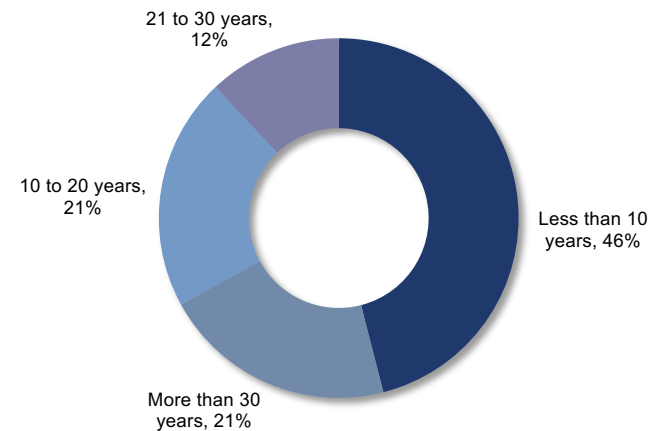
Global Market Share



Global Elevator and Escalator Market Size



Aging Global Installed Base

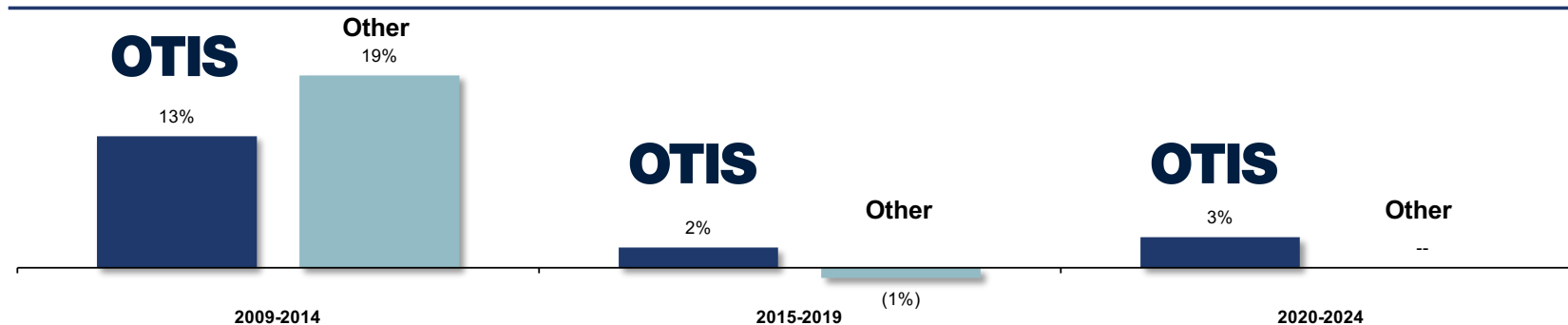


Industry Comparable Table

E&E players compete based on the stickiness of their service business

Metrics	Otis	Kone	Schindler
Market Cap	\$34.2B	\$30.7B	\$27.9B
Total number of Elevators and Escalators across the world	18.0M	17.0M	9.0M
Americas Revenues (%)	27.14%	19.52%	27.36%
Asia- Pacific Revenues (%)	16.74%	41.08%	27.71%
EMEA Revenues (%)	56.12%	39.40%	44.93%
TTM Operating Margins (%)	15.31%	13.00%	10.25%
Maintenance Base	2.1M	1.4M	N/A

OTIS Vs Market's China New Equipment Units CAGR



Investment Theses

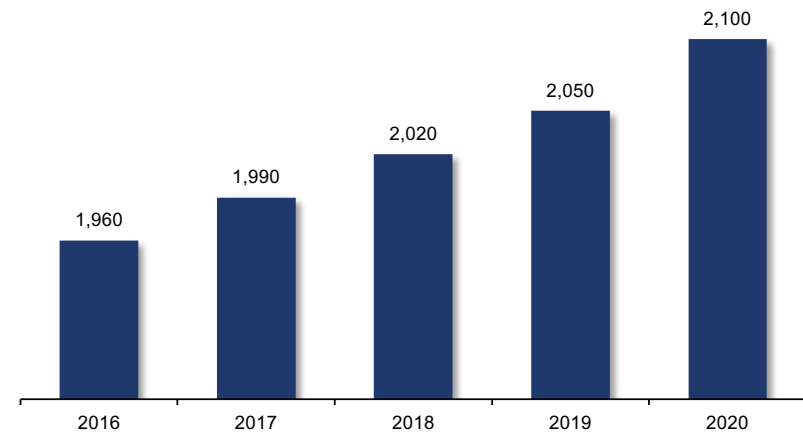
Investment Thesis: Why Is This a Good Business?

Thesis I: Oligopolistic position leading to enhanced ROIC and FCF generation

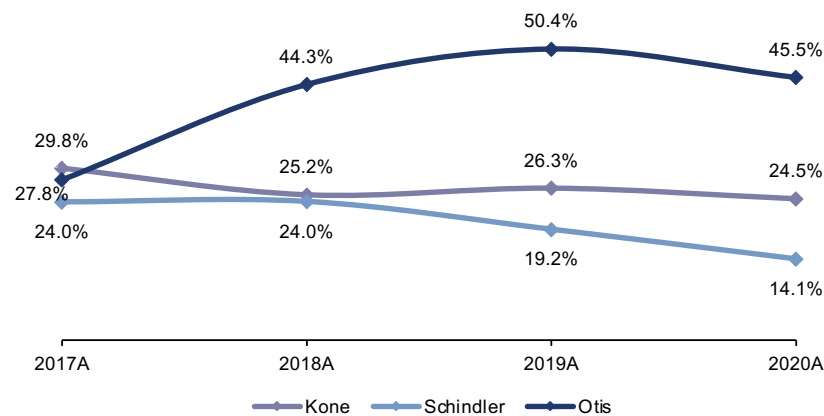
Competitive Advantages

- In an oligopolistic industry, Otis is the largest OEM with the strongest margins, and maintenance base
 - With 2.1 million maintenance units, Otis has a sizably larger portfolio by a factor of 40-50% compared to Schindler, Kone, and ThyssenKrupp which drives its margin superiority
- Otis' maintenance contract retention rate is 94%, up 100bps compared to 2019
 - Once customers join the maintenance fleet, they incur high switching costs and face regulatory obligations
 - Otis' brand value and ability to offer customers the most comprehensive service through digital offerings supports their retention rate

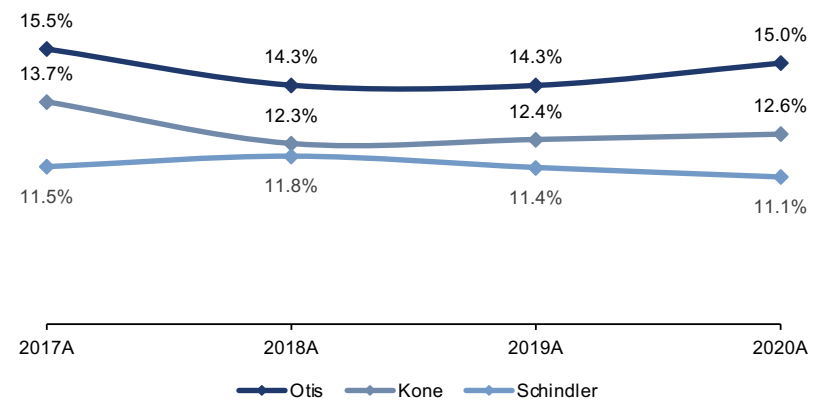
Maintenance Units (000s Units)



Return On Invested Capital (ROIC)



Adjusted EBIT Margins



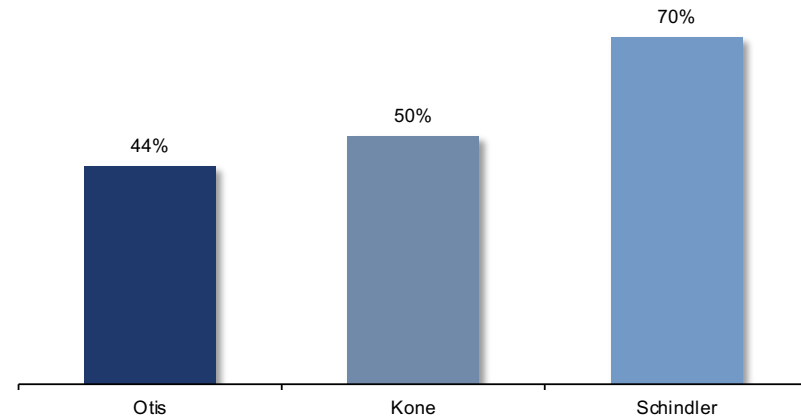
Investment Thesis: Why Is This a Good Business?

Thesis II: Chinese penetration being a leading driver of revenue

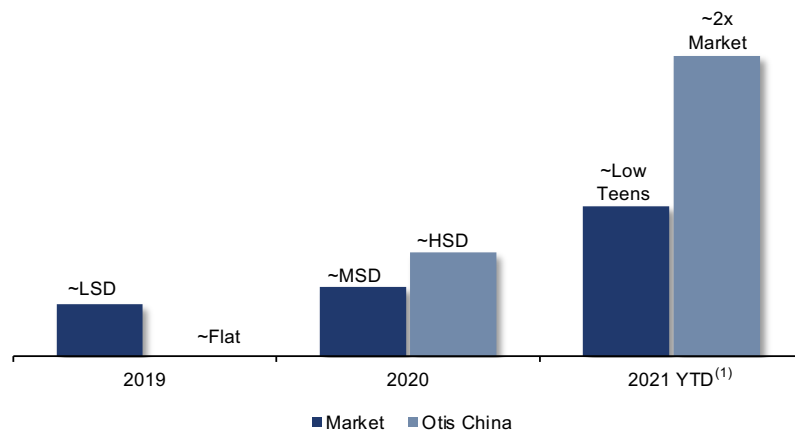
Chinese Market Growth Trajectory

- Independent service providers (ISPs) have 75%+ of the Chinese elevator market
 - Otis' conversion rate in China currently lags behind its largest competitors
 - In 2020, Otis added 850 agents, and distributors in China to boost conversion rates, and expand outside of Tier 1 and 2 cities into more underpenetrated Chinese markets
 - Otis is also capturing market share from ISPs through connected product offerings such as Otis ONE, Otis 360, and Gen3
- Since expansion measures have ramped up, Otis' new equipment orders have outpaced the market by a factor of 2x
 - In conjunction it's service portfolio growth rate reached parity in 2020, and outpaces the market YTD

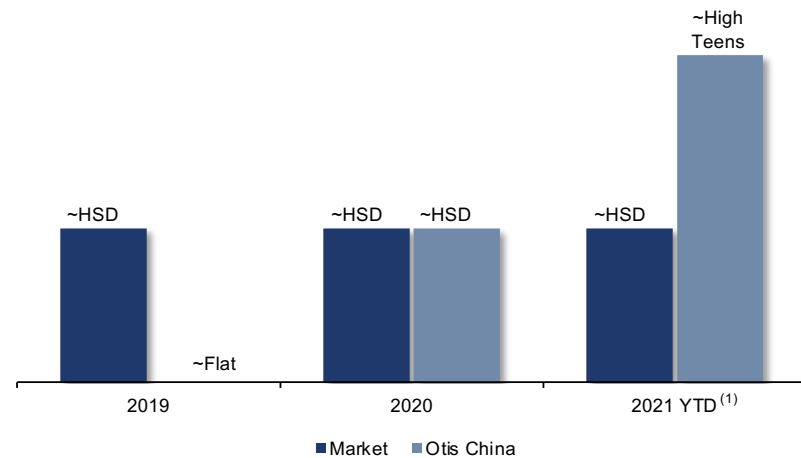
China Conversion Rates (NE to Service)



Chinese New Equipment Unit Orders (%)



Chinese Maintenance Portfolio Units (%)



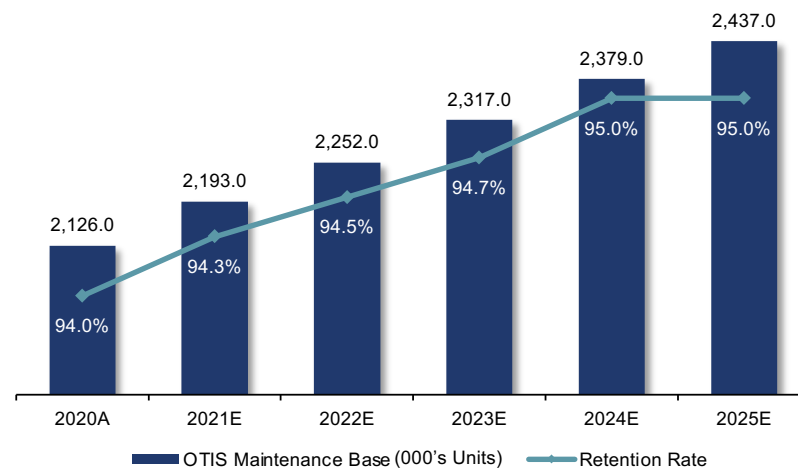
Investment Thesis: Why Is This a Good Business?

Thesis III: Digitization leading to improved operating efficiencies and retention

Service Revenue Growth Through Digitization

- Digitization of Maintenance Base will improve the wrap rate for multiyear contracts with Otis ONE
- Connected Elevators offer multiple growth opportunities:
 1. Offering additional digital services to customers bringing new revenues (+15-20%) of a typical service contract
 2. Better service for predictive maintenance and faster solutions in decreased times leading to better retention and conversion rates
- ISPs currently pose competition towards service of traditional mechanical elevators but with rollout and integration of Otis ONE, Otis is able raise retention rates, and grow their maintenance base further

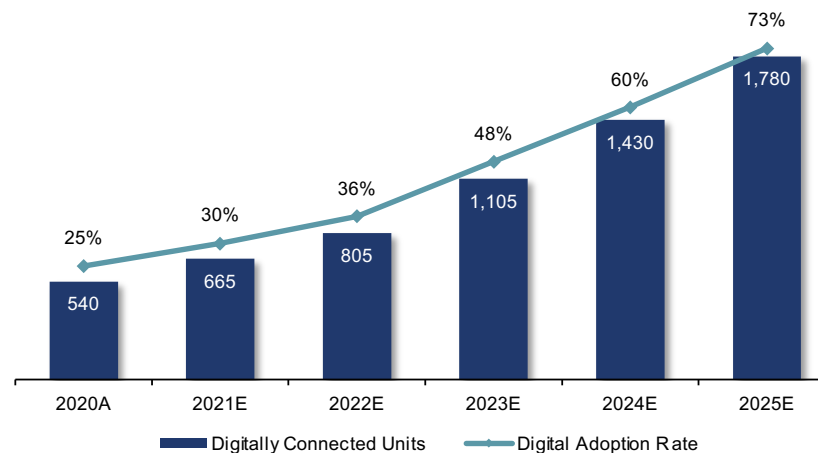
OTIS Maintenance Base vs Retention Rates



Otis Service Recapture

In millions except per unit and rates	2020A	2021E	2022E	2023E	2024E
Total Maintenance and Repair Revenues	\$ 6,047M	\$ 6,538M	\$ 7,033M	\$ 7,544M	\$ 8,052M
Units Currently Served	2.10M	2.19M	2.28M	2.37M	2.46M
Revenue per serviced unit (thousands)	2.88	2.99	3.08	3.18	3.27
Installed Base Opportunity	2.00M	1.99M	1.97M	1.96M	1.94M
Capture rate		0.8%	0.8%	0.8%	0.8%
Revenue uplift from recapture		\$49M	\$53M	\$57M	\$60M
% uplift from recapture		0.8%	0.8%	0.8%	0.8%

Digitization of Maintenance Base (000s Units)



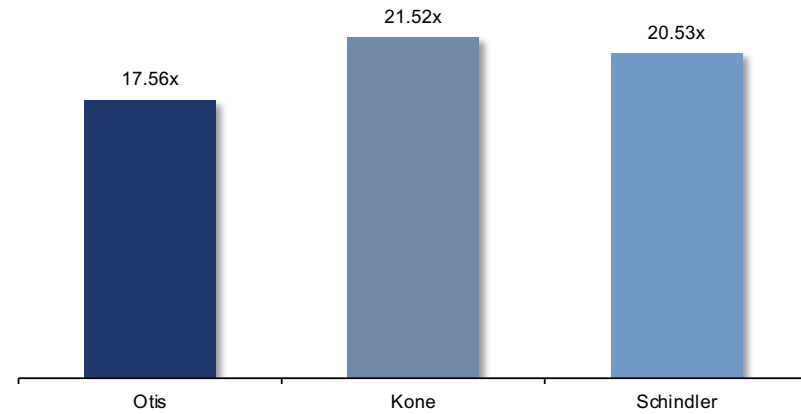
Investment Thesis: What Is The Market Missing?

Market is underappreciating Otis' strong businesses advantages due to recent low-growth

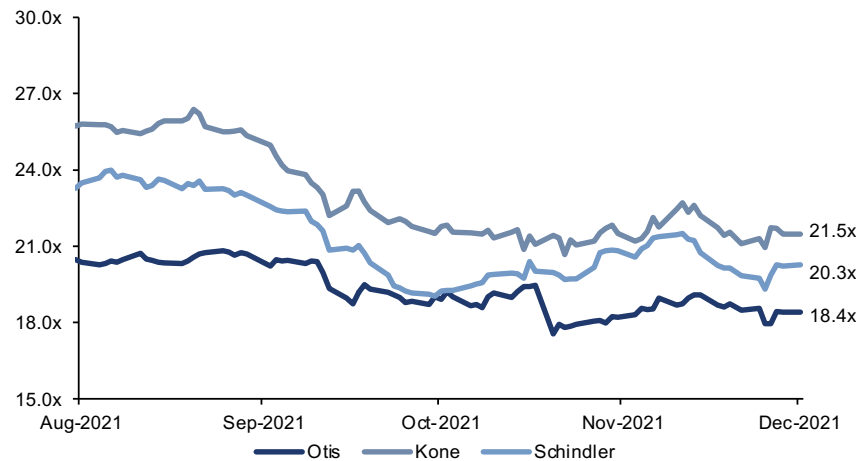
Variant View: SpinCo Dynamics & Growth

- Market has underappreciated the full potential of Otis' independence, and ability to be more growth oriented since it's SpinCo debut
- Otis was a late mover in China as a result of unwanted margin contraction in a market dominated by new equipment
- The market is pricing players with strong exposure and growth potential in China at a premium
- Despite stronger margins, ROIC, and maintenance base than peers, Otis trades at a discount because of an underappreciation of Otis' China growth prospects
- Once the market understands Otis' path to success in China, valuation gap between key peers, Kone and Schindler will narrow

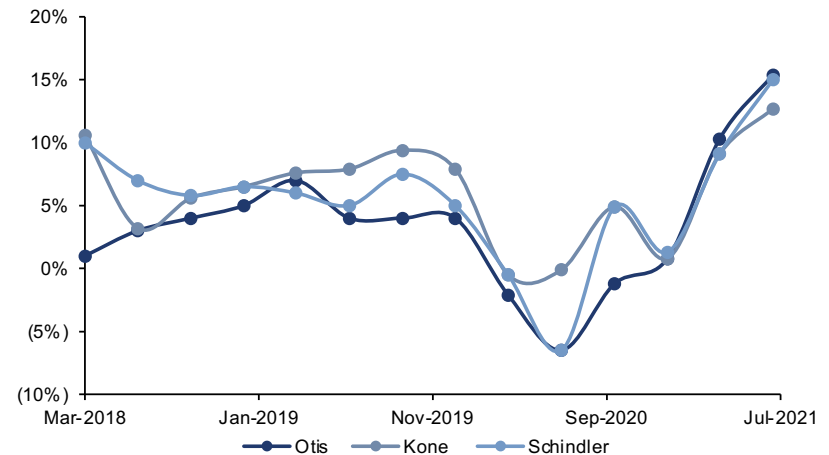
EV/NTM EBIT



EV/LTM EBIT Since Evergrande



Quarterly Organic Sales Growth Q1-18 to Q2-21



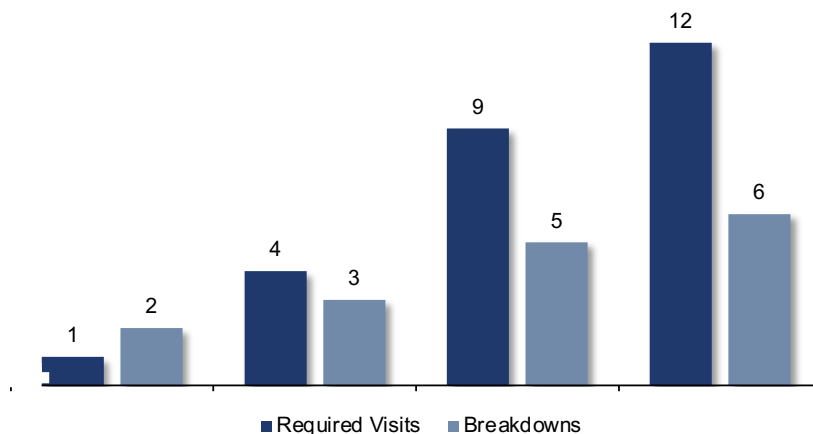
The Bear Case—What Could Go Wrong?

Headwinds for maintenance demand and technological disruption posing major risk

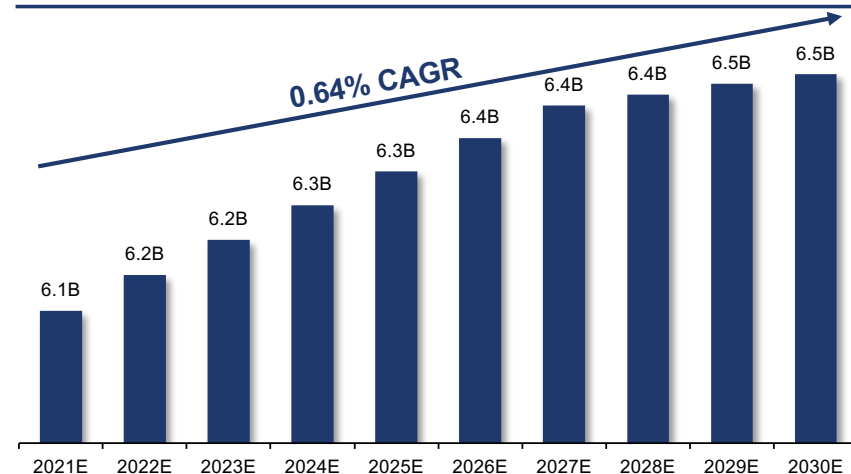
Downturns & Headwinds In Market-Wide Demand

- **Evergrande’s bankruptcy risk:** China’s second largest property developer is in \$300B worth of debt, and on the verge of bankruptcy
 - China is the largest new equipment market making up 70% of the global units sold for elevators, and escalators, residential real estate has driven most of this demand
 - China was also seeing the strongest growth rates: new equipment, and modernization units were up 10%+ YoY with maintenance units up 5-10% in the first half of 2021
- **COVID-19 Residential and Commercial Development Shift:** Potential for reduced demand due to lack of apartment and office development due to work-from-home and changing sentiment surrounding apartment residences
 - EMEA and China area sentiment shift not as drastic as North America. Europe and Asia are bulk of Otis revenues
- **Technology-focused disruption:** Uptime is a company that offers predictive maintenance technology for elevators, and tracks data analytics. Uptime sells to ISPs to help them improve retention rates, safety, and efficiency
- **Reduction in elevator maintenance demand:** Much of the industry’s maintenance model is outdated, and less visits may eventually become the norm
 - Building owners are paying for the number of visits; not if the elevators are routinely fixed

Correlation of Maintenance Visits Vs Breakdowns



Downside For Service-Based Revenues



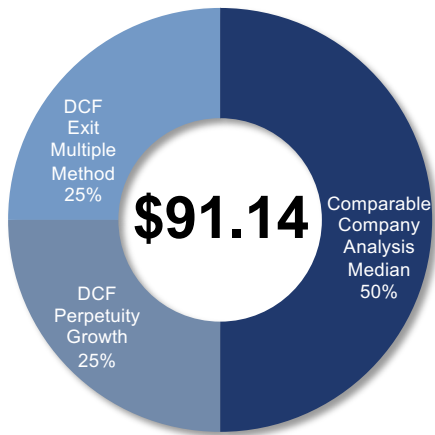
Valuation Summary

Intrinsic and relative valuation, implied share price per range of values

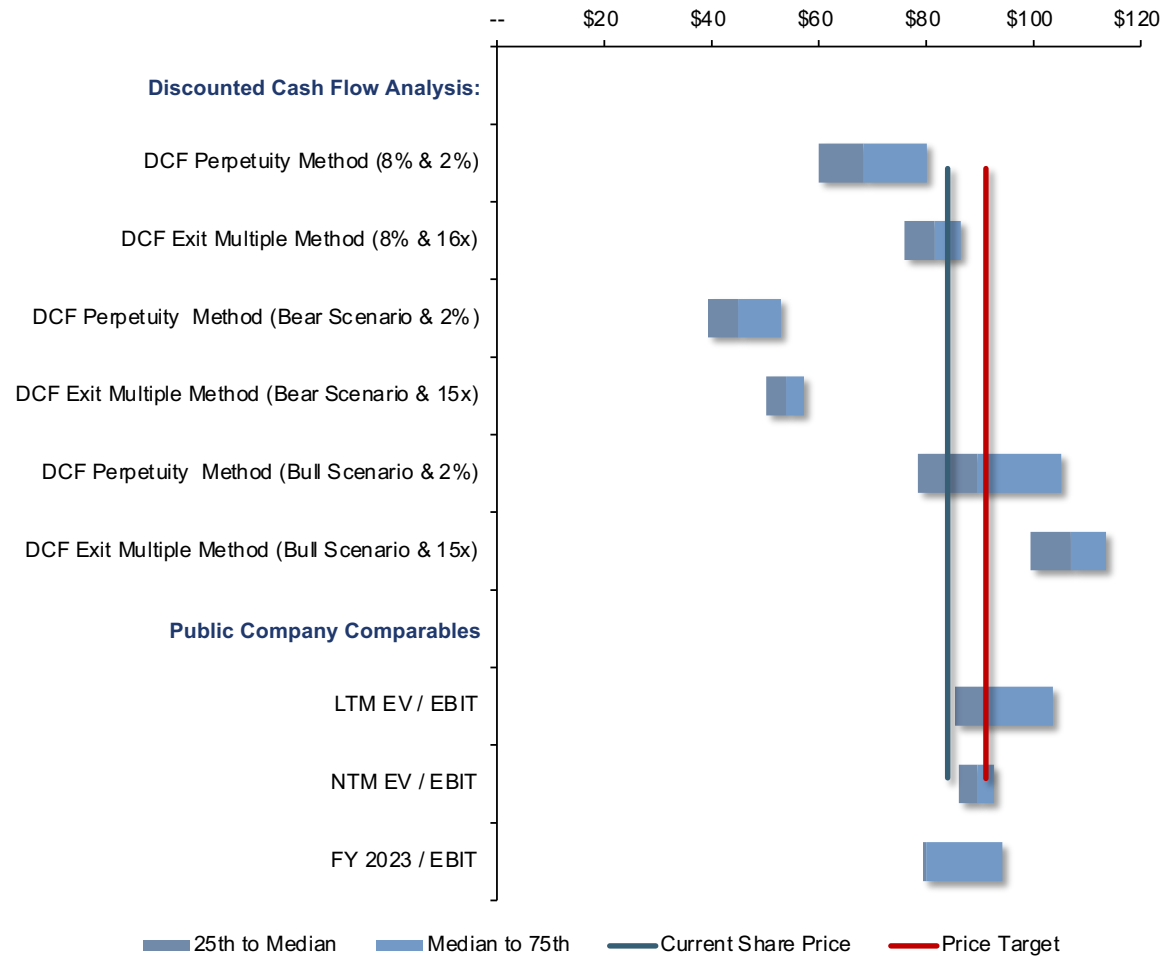
We recommend a **hold** on
OTIS with an implied upside
of **8.5%**

Results and Weighting

- **Current Price:** \$84.01
- **Target Price:** \$91.14
- **Implied Upside:** 8.5%



Football Field Valuation Summary



Valuations

Relative & Intrinsic

Discounted Cash Flow

Intrinsic valuation

Discounted Cash Flow Analysis (In \$ Millions)	Historical				Projections									
	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Running the Base Case														
Total New Equipment Revenues	5,453	5,596	5,648	5,371	6,190	6,623	7,021	7,372	7,667	7,897	8,094	8,272	8,438	8,581
Total Maintenance and Repair Revenues	5,667	6,017	6,120	6,047	6,538	7,033	7,544	8,052	8,591	9,032	9,493	9,927	10,380	10,799
Revenue Per Maintenance Unit (In thousands)	2.85	2.98	2.99	2.88	2.99	3.08	3.18	3.27	3.37	3.44	3.51	3.58	3.65	3.72
Maintenance Base	1.99	2.02	2.05	2.10	2.19	2.28	2.37	2.46	2.55	2.63	2.71	2.78	2.85	2.90
Installed Base Opportunity Held by ISPs				2.00	1.99	1.97	1.96	1.94	1.93	1.91	1.90	1.88	1.87	1.85
Total Renovation Revenues	1,203	1,302	1,350	1,338	1,392	1,461	1,549	1,673	1,840	2,015	2,196	2,383	2,573	2,766
Total Revenues	12,323	12,915	13,118	12,756	14,120	15,117	16,114	17,096	18,098	18,943	19,783	20,582	21,391	22,146
Total Operating Income														
New Equipment Adj. Operating Income	498	406	402	348	464	497	576	604	613	632	648	662	675	686
Service Adj. Operating Income	1,490	1,526	1,599	1,658	1,800	1,971	2,155	2,353	2,576	2,728	2,887	3,041	3,199	3,351
General Corporate Expenses and Other	(74)	(88)	(129)	(87)	(99)	(106)	(113)	(120)	(127)	(133)	(138)	(144)	(150)	(155)
Adjusted EBIT	1,914	1,844	1,872	1,919	2,165	2,362	2,618	2,838	3,063	3,228	3,396	3,558	3,725	3,882
Tax Rate	58.7%	36.1%	31.9%	30.1%	29.0%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
NOPAT	790	1,178	1,275	1,341	1,537	1,736	1,924	2,086	2,251	2,372	2,496	2,615	2,738	2,853
Plus: Depreciation and Amortization	177	190	180	191	211	226	241	256	271	284	296	308	320	332
Less: Capital Expenditures	(133)	(172)	(145)	(183)	(212)	(227)	(242)	(256)	(271)	(284)	(297)	(309)	(321)	(332)
Less: Increase / (Decrease) in NWC	--	35	135	(216)	(28)	(30)	(32)	(34)	(36)	(38)	(40)	(41)	(43)	(44)
Unlevered Free Cash Flow	834	1,231	1,445	1,133	1,509	1,705	1,892	2,051	2,215	2,334	2,456	2,574	2,694	2,808
UFCF Growth Rate		47.6%	17.3%	(21.6%)	33.1%	13.0%	10.9%	8.4%	8.0%	5.4%	5.2%	4.8%	4.7%	4.2%
Discount Period					0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Discount Rate					8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Discount Factor					0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow					1,452	1,519	1,560	1,567	1,566	1,528	1,489	1,445	1,401	1,352
Shares Outstanding		433.1	433.1	434.6	430.6	430.6	428.4	426.3	424.2	422.0	419.9	417.8	415.7	413.6
Share Buybacks					4.0	0.0	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
% of Shares Outstanding					0.9%	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

Perpetuity Growth Method		Exit Multiple Method	
Cumulative PV of FCF	14,880.3	Cumulative PV of FCF	14,880.3
% of Enterprise Value	39.3%	% of Enterprise Value	32.6%
Terminal Value		Terminal Value	
Final Year UFCF	2,808.4	Final Year EBIT	3,882.0
Perpetuity Growth Rate	2.0%	Exit EBIT Multiple	16.5x
Terminal Value	47,742.4	Terminal Value	64,052.7
PV of Terminal Value	22,981.5	PV of Terminal Value	30,832.7
% of Enterprise Value	60.7%	% of Enterprise Value	67.4%
Total Enterprise Value	37,861.8	Total Enterprise Value	45,713.1
Plus: Cash	1,553.0	Plus: Cash	1,553.0
Plus: Short-term Investments	--	Plus: Short-term Investments	--
Less: Total Debt	(5,420.0)	Less: Total Debt	(5,420.0)
Less: Preferred Stock	--	Less: Preferred Stock	--
Less: Non-Controlling Interest	(559.0)	Less: Non-Controlling Interest	(559.0)
Less: Future Pension Obligation	(635.0)	Less: Future Pension Obligation	(635.0)
Total Equity Value	32,800.8	Total Equity Value	40,652.1
Diluted Shares Outstanding	413.6	Diluted Shares Outstanding	413.6
Implied Share Price	\$79.31	Implied Share Price	\$98.29
Current Share Price	\$84.01	Current Share Price	\$84.01
Implied Margin of Safety	(5.6%)	Implied Margin of Safety	17.0%

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$85.54	\$91.33	\$98.27	\$106.76	\$117.38
	7.5%	\$77.65	\$82.36	\$87.92	\$94.60	\$102.76
	8.0%	\$70.90	\$74.78	\$79.31	\$84.65	\$91.07
	8.5%	\$65.06	\$68.30	\$72.03	\$76.38	\$81.52
	9.0%	\$59.97	\$62.69	\$65.79	\$69.38	\$73.57
		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$97.00	\$101.94	\$106.87	\$111.81	\$116.74
	7.5%	\$93.04	\$97.76	\$102.48	\$107.20	\$111.92
	8.0%	\$89.25	\$93.77	\$98.29	\$102.81	\$107.32
	8.5%	\$85.64	\$89.96	\$94.28	\$98.61	\$102.93
	9.0%	\$82.18	\$86.32	\$90.46	\$94.60	\$98.74

Comparable Companies

Elevator and infrastructure components

Company Name	Share Price (\$)	Equity Value (\$M)	Enterprise Value (\$M)	EV / EBITDA			P / E			EV / EBIT		
				LTM	NTM	2023E	LTM	NTM	2023E	LTM	NTM	2023E
Elevator Peers												
Schindler Holding AG	261.11	28,261	25,352	16.81x	14.61x	14.46x	30.10x	30.29x	29.90x	20.28x	20.53x	17.95x
KONE Oyj	67.30	34,858	32,684	18.20x	17.79x	17.64x	30.23x	30.08x	28.43x	21.48x	21.52x	20.71x
Median				17.51x	16.20x	16.05x	30.16x	30.19x	29.16x	20.88x	21.03x	19.33x
Average				17.51x	16.20x	16.05x	30.16x	30.19x	29.16x	20.88x	21.03x	19.33x
Infrastructure Components												
Trane Technologies plc	193.30	45,917	48,031	21.50x	18.68x	18.25x	34.00x	29.11x	28.04x	24.13x	21.10x	20.61x
Johnson Controls International plc	77.95	54,903	63,872	15.32x	15.65x	13.98x	33.54x	24.32x	20.32x	19.21x	19.86x	17.10x
Carrier Global Corporation	56.12	48,633	56,487	20.83x	16.55x	16.01x	21.87x	23.19x	22.24x	23.87x	18.45x	17.83x
Median				20.83x	16.55x	16.01x	33.54x	24.32x	22.24x	23.87x	19.86x	17.83x
Average				19.21x	16.96x	16.08x	29.80x	25.54x	23.53x	22.40x	19.80x	18.51x
Otis Worldwide Corporation	82.80	35,171	40,099	16.84x	15.98x	16.01x	28.92x	26.26x	25.43x	18.41x	17.56x	17.47x
Industry Median				18.20x	16.55x	16.01x	30.23x	29.11x	28.04x	21.48x	20.53x	17.95x
Industry Average				18.53x	16.66x	16.07x	29.95x	27.40x	25.78x	21.79x	20.29x	18.84x
Premium (Discount) to Median				(7.5%)	(3.4%)	0.0%	(4.3%)	(9.8%)	(9.3%)	(14.3%)	(14.5%)	(2.7%)

Company Name	Share Price (\$)	Equity Value (\$M)	Enterprise Value (\$M)	Return Metrics			Margins			Leverage		NTM Growth		
				ROIC	ROA	ROE	EBITDA (%)	EBIT (%)	ULFCF (%)	Net Debt / EBITDA	Debt / Equity	Revenue	EBITDA	EBIT
Elevator Peers														
Schindler Holding AG	261.11	28,261	25,352	17.30%	6.40%	22.10%	12.37%	10.25%	-	nmf	18.90%	3.03%	15.06%	-1.21%
KONE Oyj	67.30	34,858	32,684	24.40%	9.50%	35.30%	15.34%	13.00%	10.97%	nmf	-	2.82%	2.32%	-0.21%
Median				20.85%	7.95%	28.70%	13.85%	11.63%	10.97%	nmf	18.90%	2.92%	8.69%	-0.71%
Average				20.85%	7.95%	28.70%	13.85%	11.63%	10.97%	nmf	18.90%	2.92%	8.69%	-0.71%
Infrastructure Components														
Trane Technologies plc	193.30	45,917	48,031	10.60%	6.90%	21.40%	16.25%	14.48%	12.14%	0.90x	74.60%	10.60%	6.90%	21.40%
Johnson Controls International plc	77.95	54,903	63,872	7.50%	5.00%	9.40%	17.62%	14.05%	11.96%	1.70x	48.60%	7.50%	5.00%	9.40%
Carrier Global Corporation	56.12	48,633	56,487	8.30%	5.70%	35.60%	13.51%	11.79%	-3.00%	2.60x	141.30%	8.30%	5.70%	35.60%
Median				8.30%	5.70%	21.40%	16.25%	14.05%	11.96%	1.70x	74.60%	8.30%	5.70%	21.40%
Average				8.80%	5.87%	22.13%	15.79%	13.44%	7.03%	1.73x	88.17%	8.80%	5.87%	22.13%
Otis Worldwide Corporation	82.80	35,171	40,099	48.00%	13.00%	-	16.74%	15.31%	12.22%	1.70x	-	3.43%	5.38%	4.83%
Industry Median				10.60%	6.40%	22.10%	15.34%	13.00%	11.47%	1.70x	61.60%	3.03%	15.06%	-0.21%
Industry Average				13.62%	6.70%	24.76%	15.02%	12.71%	8.02%	1.73x	70.85%	10.60%	8.69%	35.60%
Premium (Discount) to Median				352.83%	103.13%	-	9.13%	17.78%	6.59%	0.0%	-	2.92%	8.69%	-0.71%

OTIS's ULFCF, EBIT, EBITDA, & ROIC all exceed that of peers; OTIS deserves to trade at a premium relative to elevator and infrastructure components peers

Appendices

Management Team

Strong management team with decades of experience in the defence industry

Judy Marks

President & CEO



Prior to becoming CEO, and President, Judy has held senior leadership roles at three global icons – IBM, Lockheed Martin, and Siemens AG. She was serving as CEO of both Siemens USA, and Dresser-Rand, a Siemens business, when appointed President of Otis in 2017. In April 2020, Judy led the successful spin of Otis to an independent publicly traded company on the NYSE. Her experience spans multiple disciplines including positions in systems engineering, engineering management, business development, capture management, program management, and executive management.



Rahul Ghai

Executive VP & CFO



Rahul has expertise across all financial functions including investor relations, FP&A, internal audit, tax, and treasury. Prior to Otis, Rahul served as Senior Vice President, and CFO of Harris Corporation. During his tenure as Harris CFO, the company produced double-digit earnings growth annually, and delivered stock price appreciation that well outpaced the S&P 500. Prior to Harris, Rahul held several executive-level finance roles at Aetna, and United Technologies Corporation (UTC).



David F Keffer

Executive VP of Operations



Prior to joining Otis, Todd served as Vice President, Global Supply Chain, Purchasing, and Logistics at Lear Corporation. He also held multiple executive positions at Dell Technologies, including senior leadership roles in Singapore as the company's Executive Director for Global Procurement & Operations Engineering, and later as Executive Director of Global Supply Chain – leading both the design, and execution of Dell's internal, and external manufacturing footprint optimization.



Ownership Analysis

Commentary

Top 25 Shareholders




Institutional Ownership	% Ownership	Cumulative Ownership
Vanguard Group Inc/The	9.05%	9.05%
BlackRock Inc	8.60%	17.65%
State Street Corp	3.93%	21.58%
FMR LLC	3.47%	25.05%
Massachusetts Financial Services	2.57%	27.62%
Fiera Capital Corp	2.39%	30.01%
Geode Capital Management LLC	2.02%	32.03%
Capital Group Cos Inc/The	1.73%	33.76%
Alliance Bernstein LP	1.69%	35.45%
Bank of New York Mellon Corp/The	1.68%	37.13%
Invesco Ltd	1.46%	38.59%
Norges Bank	1.37%	39.96%
BLS Capital Fondsmæglersekskab A/S	1.36%	41.32%
Dodge & Cox	1.35%	42.67%
Northern Trust Corp	1.13%	43.80%
AKO Capital LLP	1.13%	44.93%
Deccan Value Investors LP	1.08%	46.01%
Bank of America Corp	0.99%	47.00%
J Safra Sarasin Investment Funds AG	0.91%	47.91%
Government Pension Investment Fund Japan	0.86%	48.77%
ClearBridge LLC	0.86%	49.63%
Boston Partners Global Investors Inc	0.81%	50.44%
CIBC Private Wealth Group LLC	0.78%	51.22%
Legal & General Group PLC	0.77%	51.99%
Los Angeles Capital Management LLC	0.73%	52.72%
Top 25 Shareholders	52.72%	-
Other	47.28%	100.00%
Total	100.00%	

Insider Ownership – % of Total

Insider Ownership	% Ownership
Marks Judith F	0.01%
LaFreniere Nora E	0.00%
Havanec Laurie P	0.00%
Montlivault Stephane De	0.00%
Fernandez Bernardo Calleja	0.00%
Cramer James F	0.00%
Kearney Christopher J	0.00%
McGraw III Harold W Terry	0.00%
Preston Margaret M V	0.00%
Black Jeffrey H	0.00%
Top 10 Shareholders	0.00%
Total	0.01%

Product Portfolio

Diverse and innovative product base spanning elevators, escalators, and walkways

<p>Low Rise Elevators</p>	<p>Gen2 Underslung <small>(Control room not shown)</small></p> 	<p>Gen2 Overslung <small>(Control room not shown)</small></p> 	<p>Hydrofit Elevator</p> 	<p>Gen3 Edge</p> 	<p>Gen3 Edge</p> 			
<p>Mid Rise Elevators</p>	<p>Gen2 Underslung <small>(Control room not shown)</small></p> 	<p>Gen2 Overslung <small>(Control room not shown)</small></p> 	<p>Gen3 Edge</p> 	<p>Gen3 Edge</p> 	<p>Software OTIS ONE EMS Panorama 2.0</p>	<p>Compass 360</p> 		
<p>High Rise Elevators</p>	<p>Gen2 Underslung <small>(Control room not shown)</small></p> 	<p>Gen2 Overslung <small>(Control room not shown)</small></p> 	<p>Software OTIS ONE EMS Panorama 2.0</p>	<p>Compass 360</p> 	<p>SkyRise Single Deck</p> 	<p>SkyRise Double Deck</p> 	<p>SkyRise Super Double Deck</p> 	<p>SkyBuild Elevator</p> 
<p>Escalators and Moving Walkways</p>			<p>Otis Elevator (Basic)</p> 			<p>Otis Moving Walkway (Basic)</p> 		

Otis General Product Line and Applications

Broad and innovative products allows Otis to capture E&E market

Low Rise Elevators

■ Product Lines:

- Gen2 Elevator (MRL)
 - 350-500fpm top speed
- Gen3 Elevator
 - 350-500fpm top speed
 - Gearless traction
- HydroFit
 - Machine room less, Hole-less

■ Low Rise Elevator portfolios applicable to buildings with up to 5 floors

Mid Rise Elevators

■ Product Lines:

- Gen2 Elevator (MRL)
- Gen3 Elevator
- EMS Panorama 2.0
 - Elevator Management System, OTIS ONE
 - IoT Data Platform for maintenance
- Compass 360
 - Smart Rider Management

■ Mid Rise Elevator Portfolio applicable to buildings from 0 to 12 floors

High Rise Elevators

■ Product Lines:

- Gen3 Elevator
- EMS Panorama 2.0
- OTIS ONE
- Compass 360
- SkyRise
 - 12.5m/s, 1-3 decks, 4.5t
- SkyBuild
 - Construction elevator, 3.5m/s, 1.6t

■ High Rise Elevator Portfolio applicable to buildings with 12+ floors

Escalators and Moving Walkways

■ Product Lines

- Public Escalators
 - Max 39' 4", 100ft/min, highly customizable
- Commercial Moving Walks
 - Max 262ft, 100ft/min+
- Public Moving Walks
 - Max 394ft, 100ft/min+

■ Escalators, and Moving Walks applicable for variety of spaces, and are customizable

Notable Otis Elevators

Otis' elevators and escalators move 2 billion+ people daily

Eiffel Tower



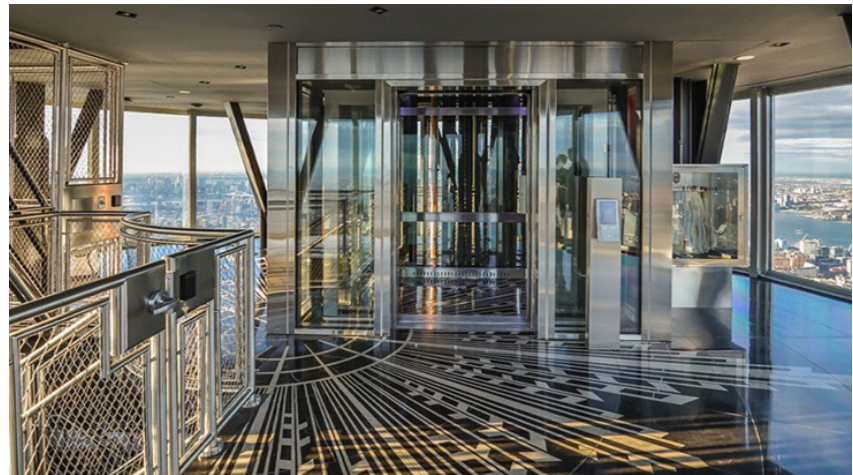
Burj Khalifa



Empire State Building

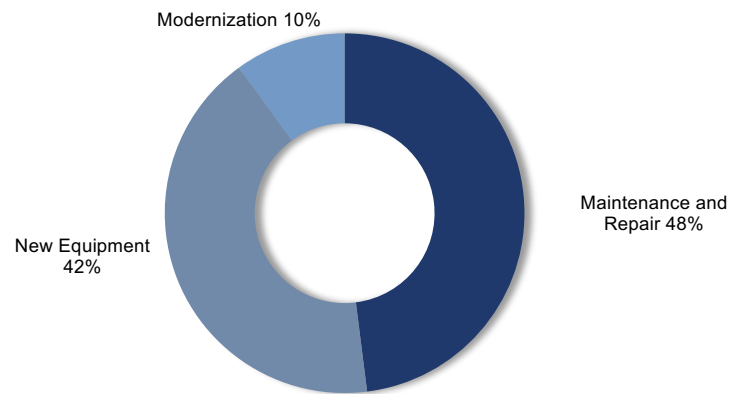


Otis Skyrise Elevator

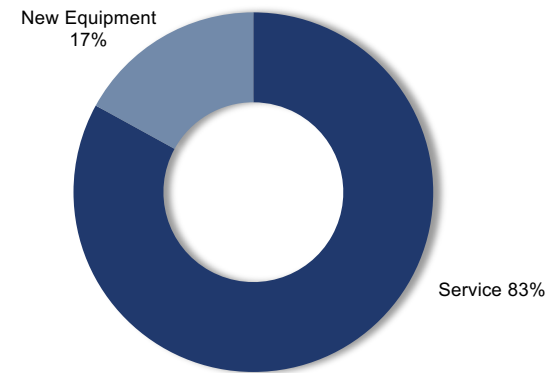


OTIS Segment Split

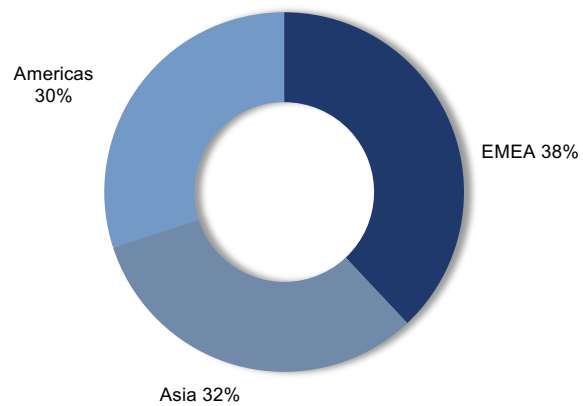
Sales



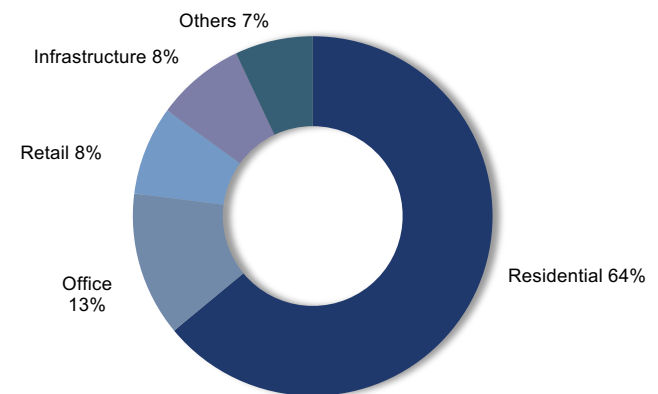
EBIT



Geography

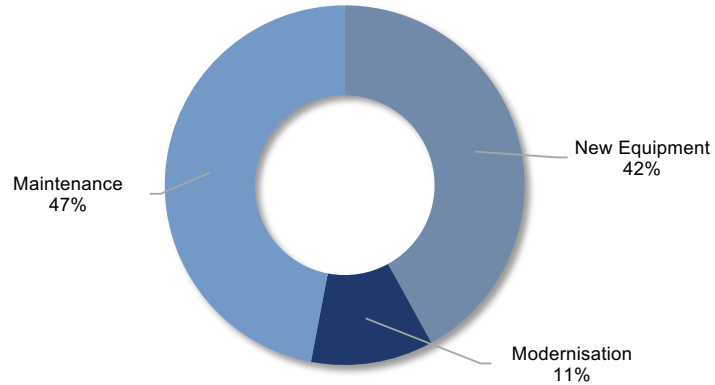


End Markets

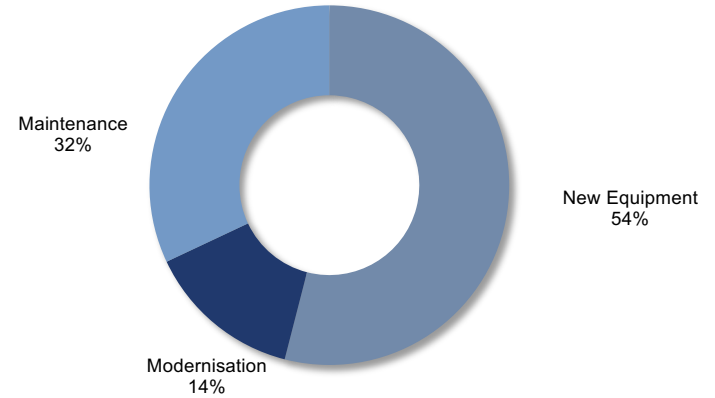


Business Split of Otis Vs Key Competitors

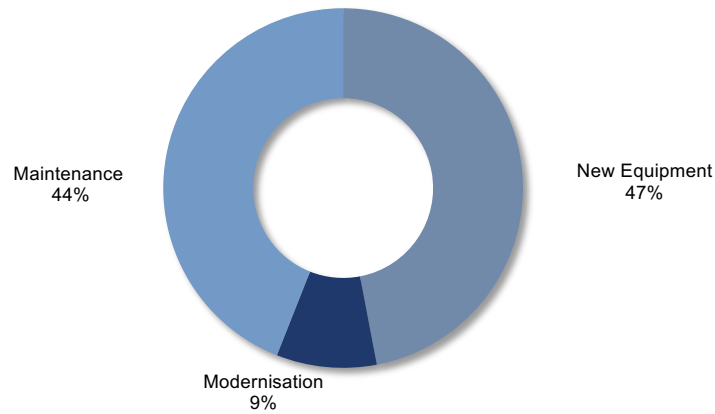
Otis



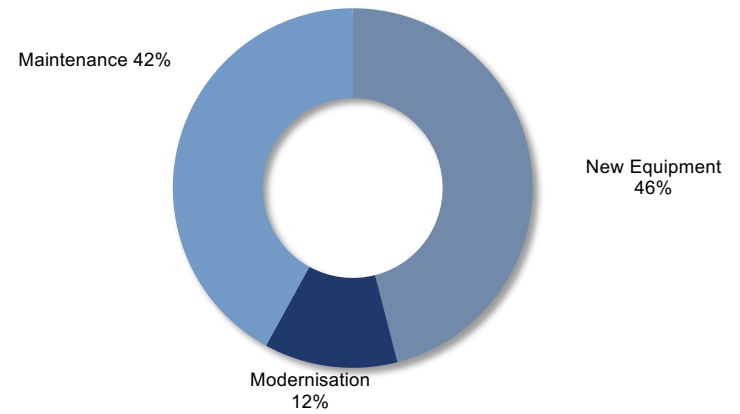
Kone



Schindler

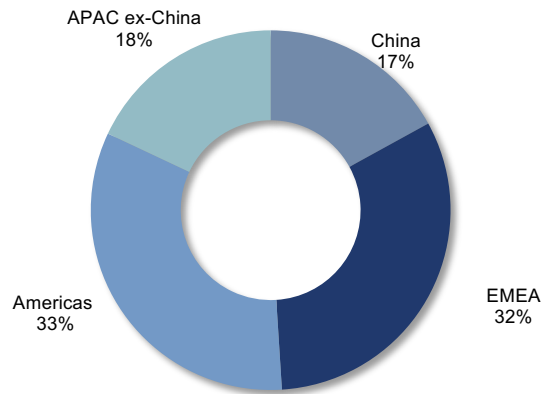


Thyssenkrupp

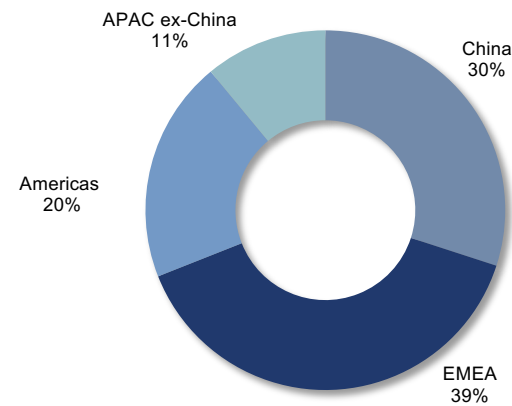


Geographic Split of Otis Vs Key Competitors

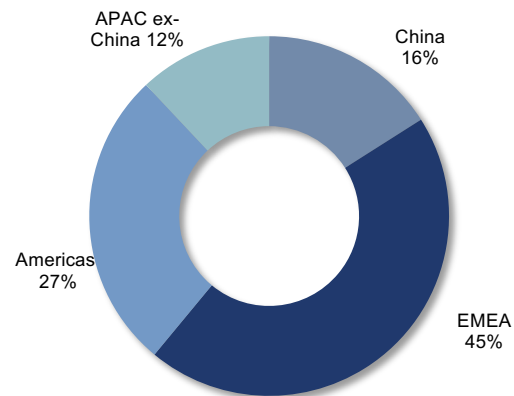
Otis



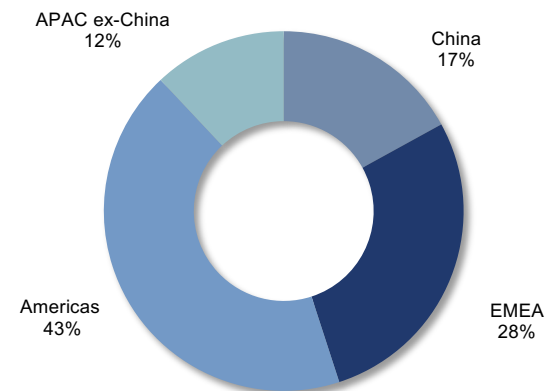
Kone



Schindler

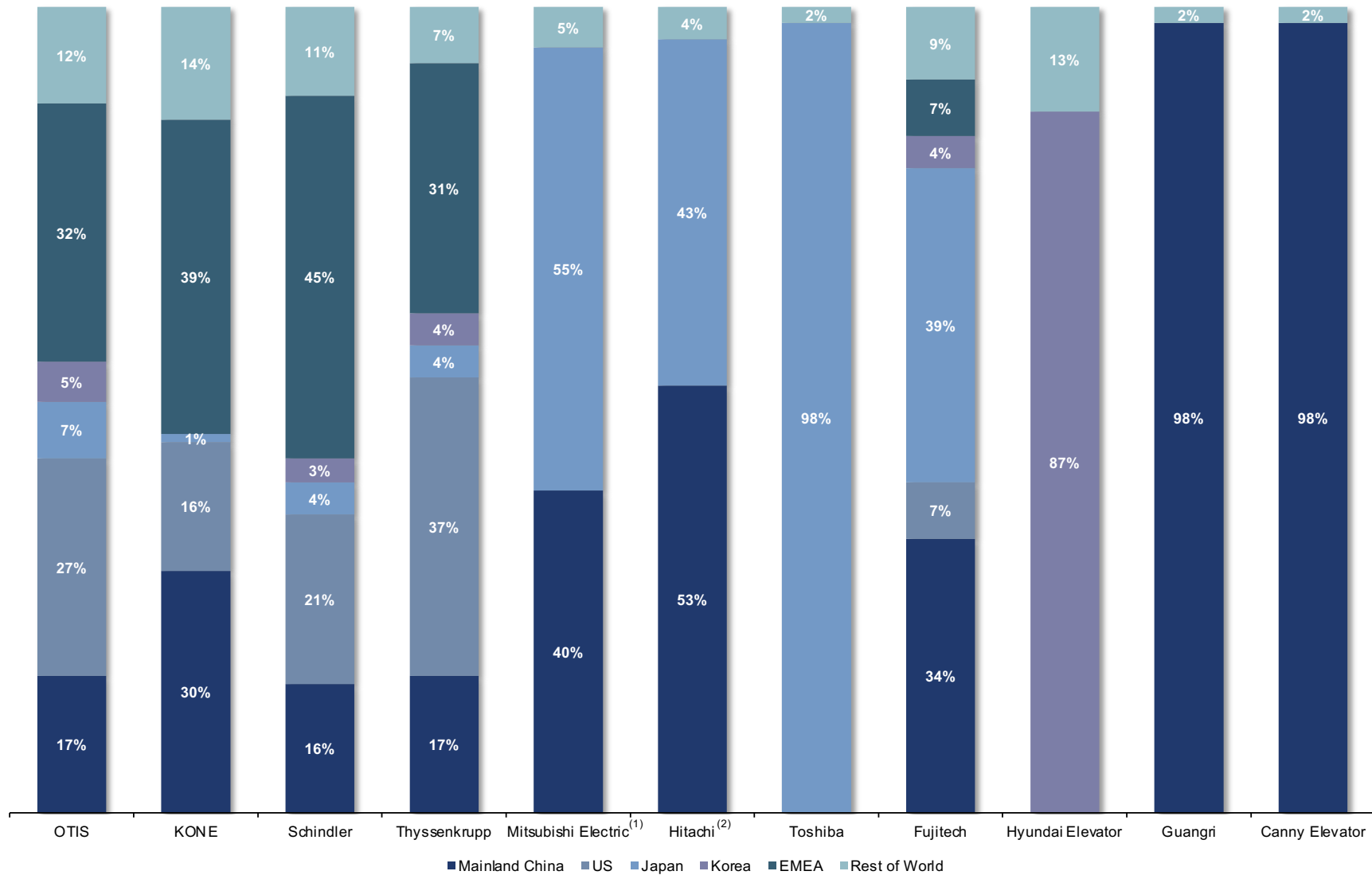


Thyssenkrupp



Competitor Revenue Geographic Segmentation

Otis is well diversified across key markets compared to its competitors



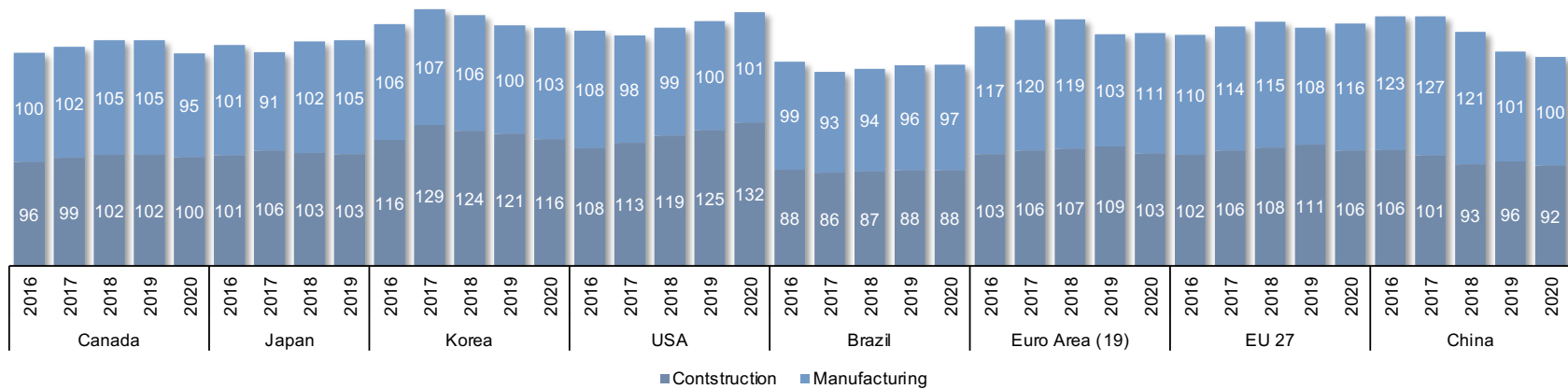
Source(s): HSBC

1. Data for Mitsubishi Electric building systems, SMEIC sales used for mainland China
2. Hitachi building systems geographical breakdown

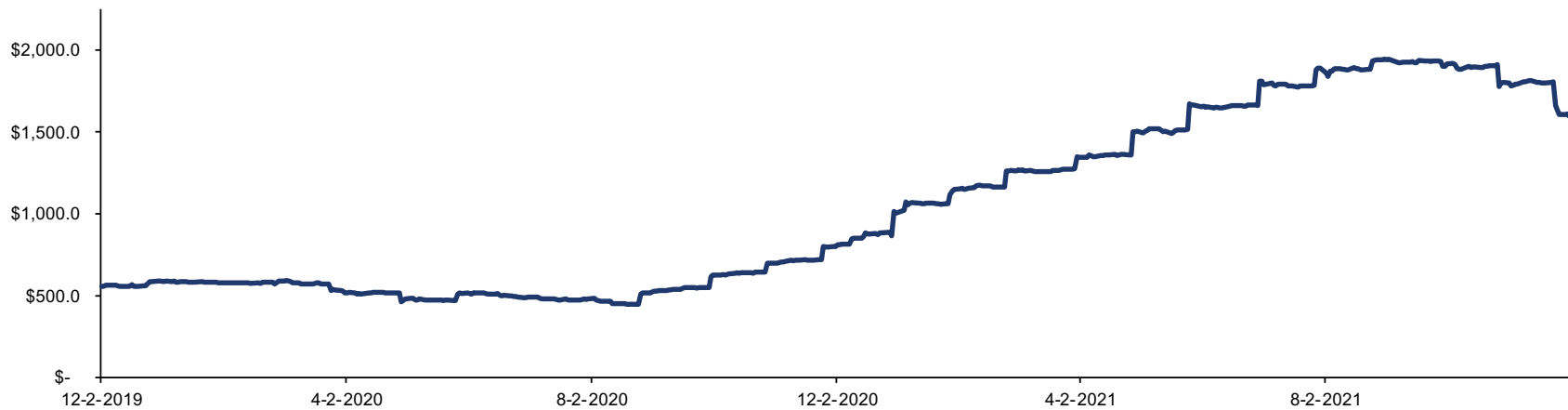
Industry Macroeconomic Factors

Key industry macro indicators or external forces

Global Industrial Production Index (Key Geographies) Construction vs Manufacturing (2015 =100)



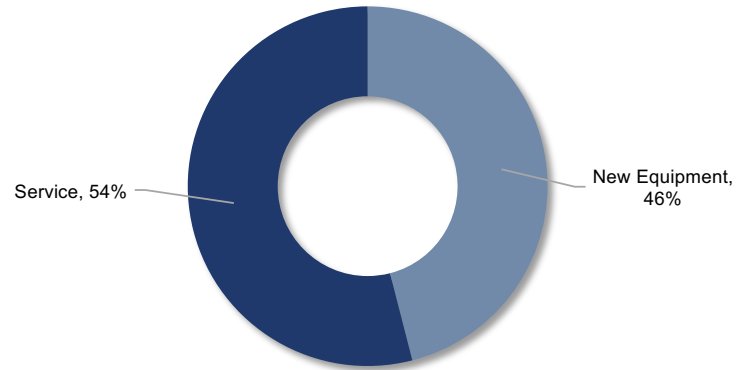
2-Year US Hot-Rolled Coil Steel Index Futures (\$USD)



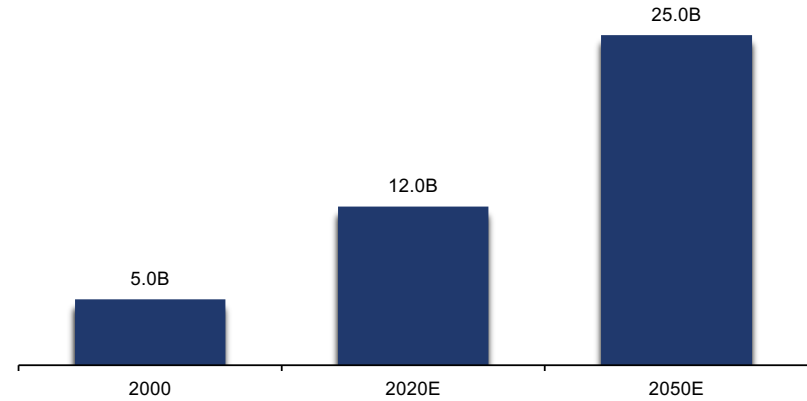
Industry Overview

Drivers and trends

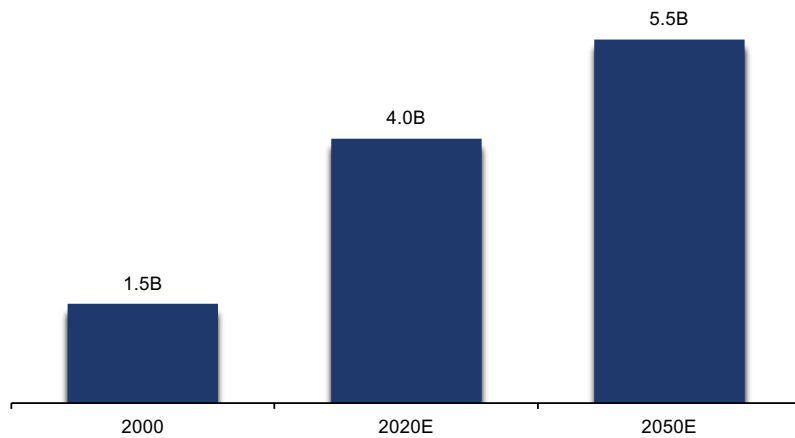
Industry Revenue Mix



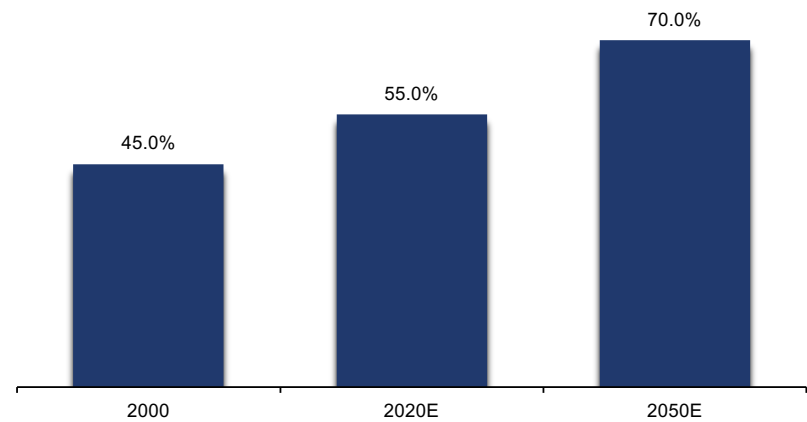
Global Connected IoT Devices



Global Middle Class Population



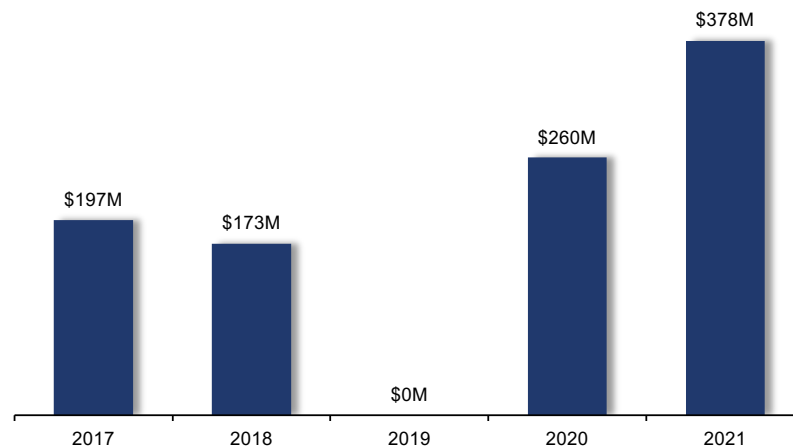
Global Urban Population



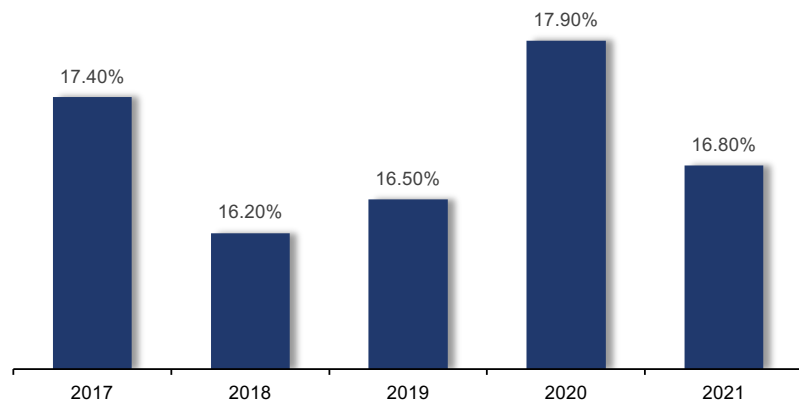
Commentary

- Otis' dividends in 2017 and 2018 can be attributed to United Technologies. Once United Technologies merged with Raytheon in 2018, Otis was spun off. Therefore, explaining the \$0 dividends paid in 2019
- OTIS has taken an extra steps to return capital to shareholders by providing a larger dividend currently than their time as a United Technologies subsidiary
- OTIS' EBITDA margin has stayed consistent within the 16-18% range
- Otis decided to buy-back shares worth \$5.5M in January. Also repurchased \$1.2M worth of shares in April. Management guidance provides favorable future for share repurchases moving forward

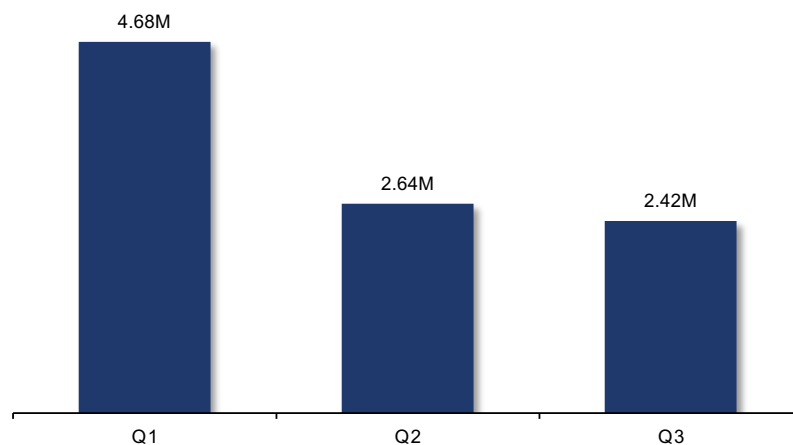
Dividends Paid



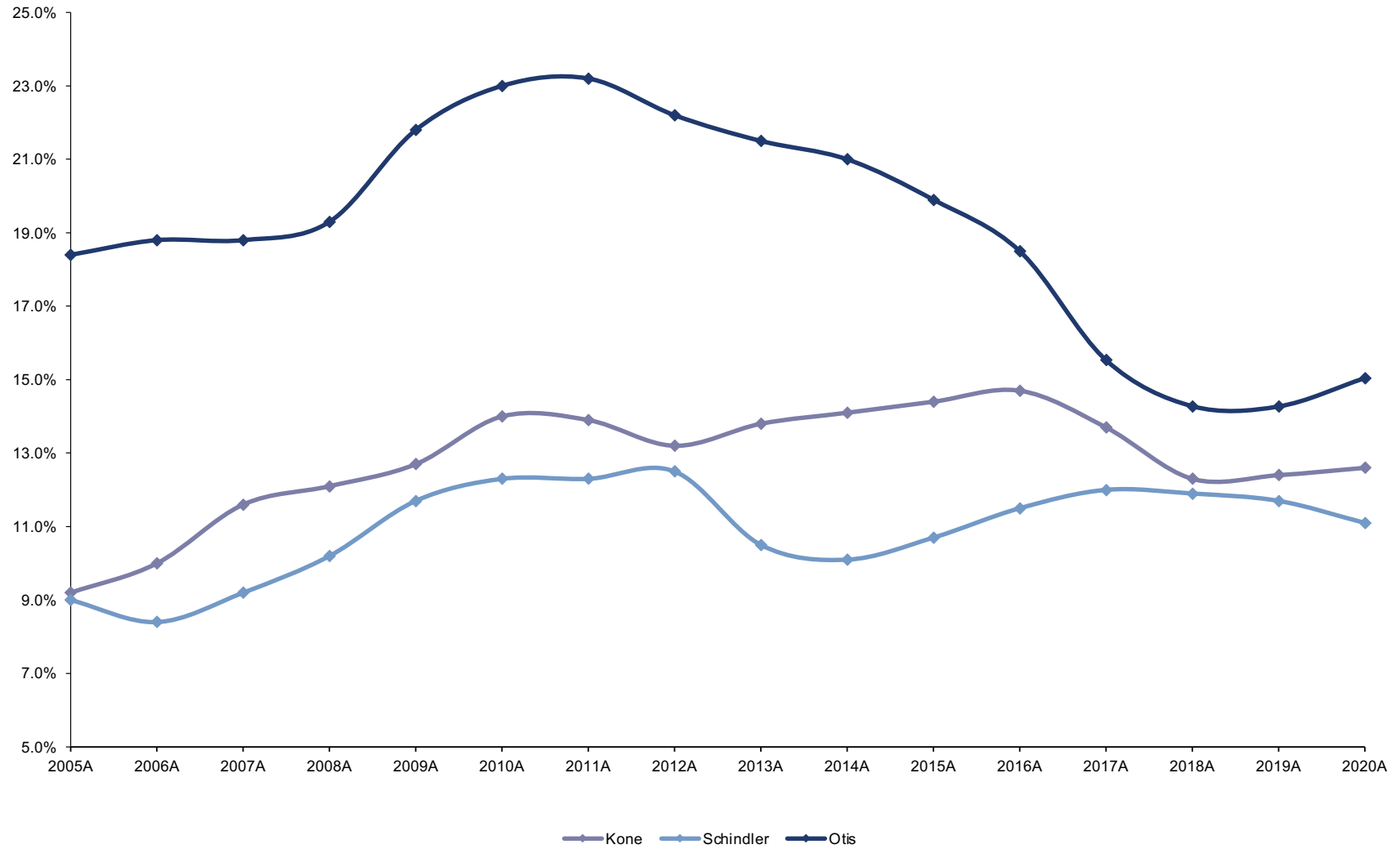
EBITDA Margin



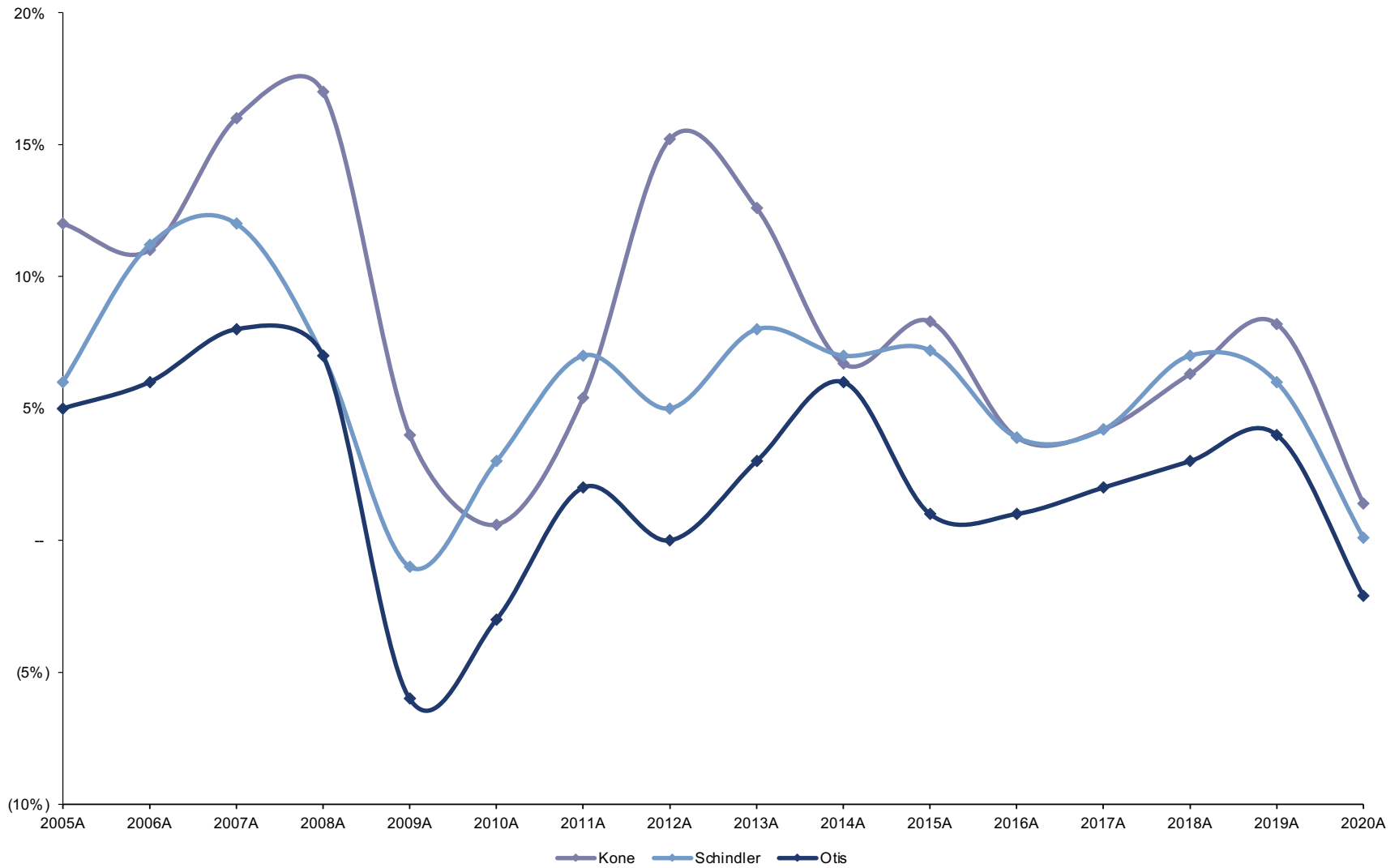
Share Repurchases in 2021



Major Elevator Players Adjusted EBIT Margins

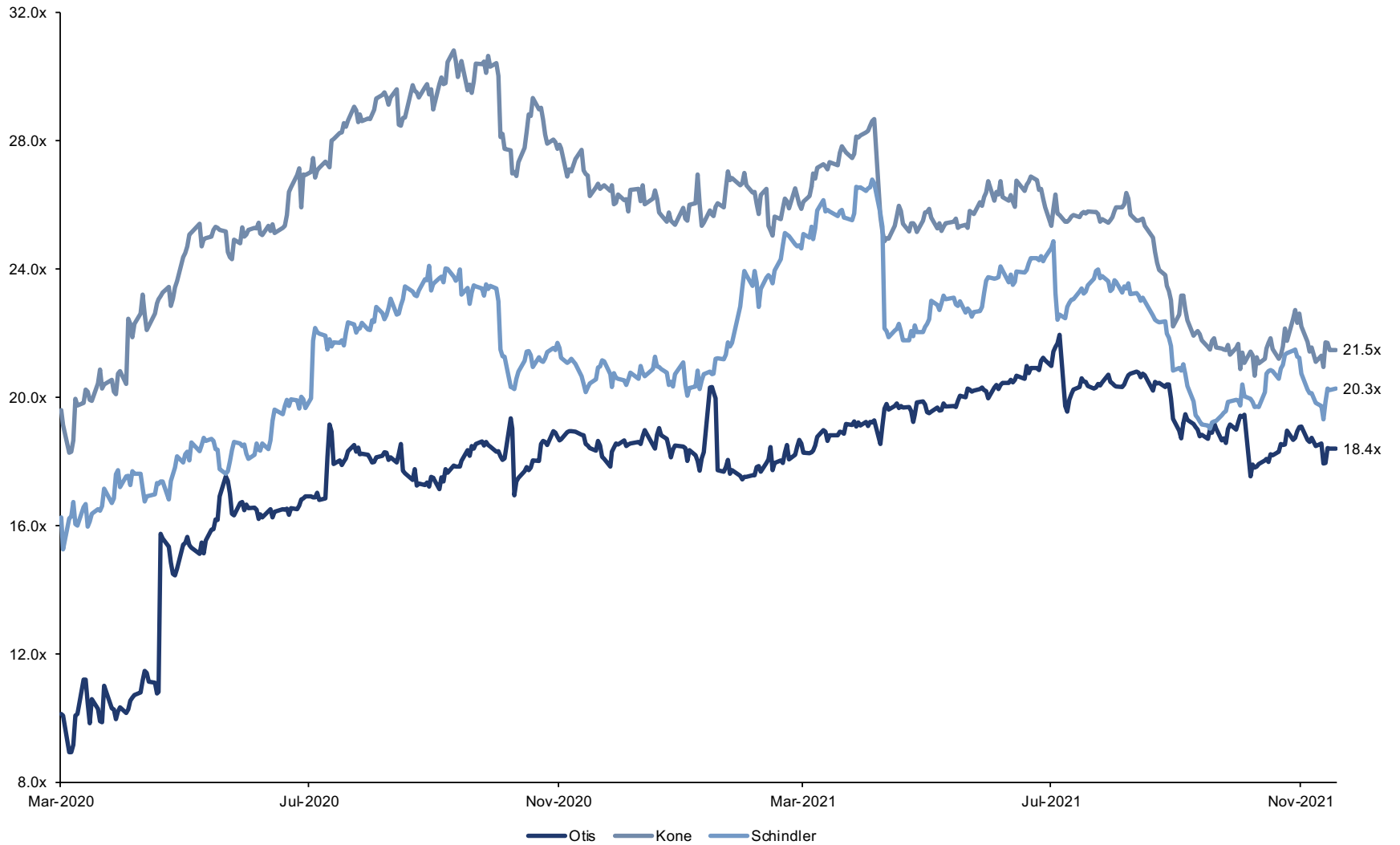


Major Elevator Players Organic Revenue Growth



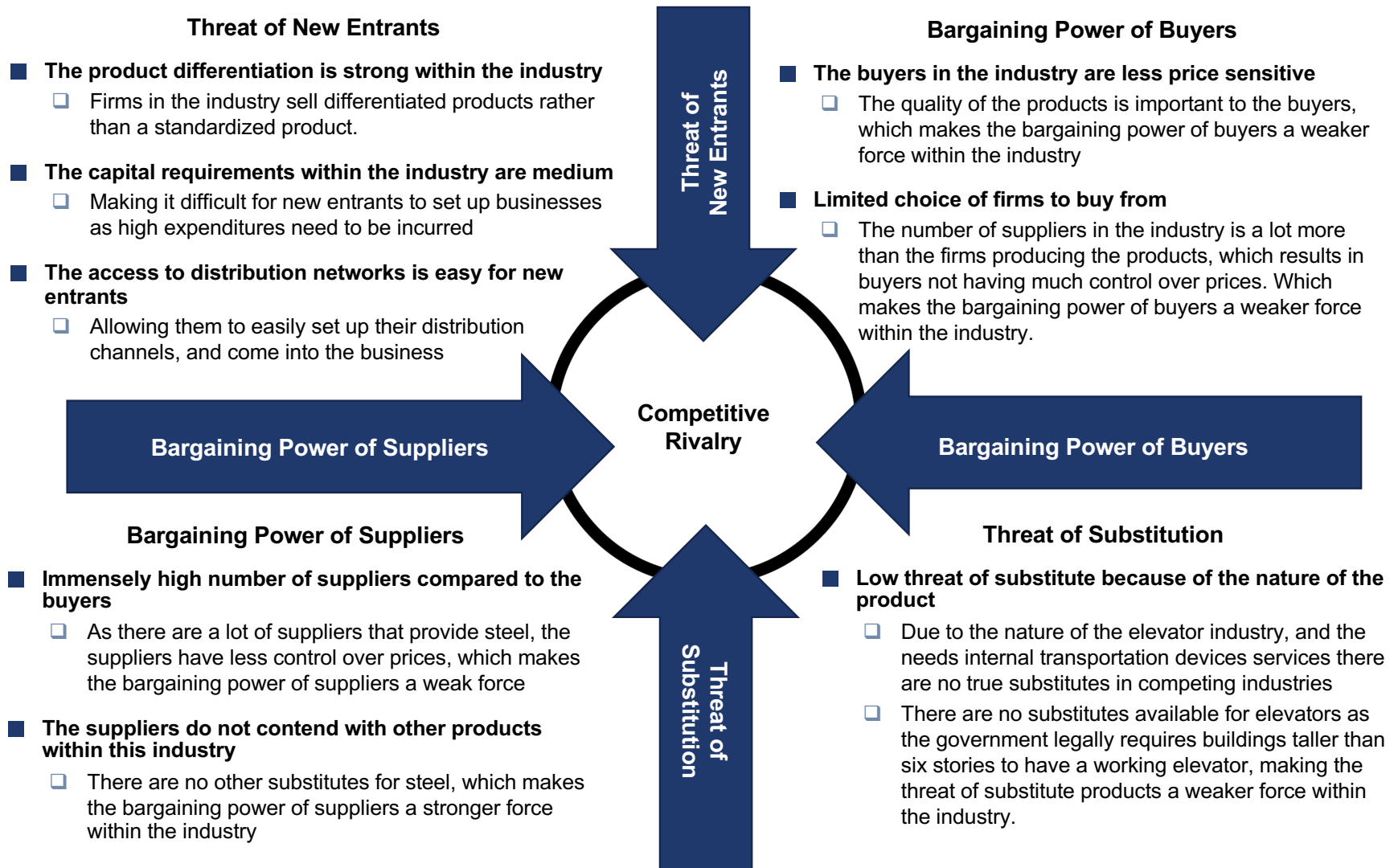
Source(s): Company Filings, Bloomberg, S&P Capital IQ, HSBC

EV/LTM EBIT of Otis Vs Peers Since Inception



Porter's 5 Forces

Elevator industry competitive forces



Valuation

Discounted Cash Flow

Sensitivity analysis base case DCF

Share Price (Perpetuity Growth)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$85.54	\$91.33	\$98.27	\$106.76	\$117.38
	7.5%	\$77.65	\$82.36	\$87.92	\$94.60	\$102.76
	8.0%	\$70.90	\$74.78	\$79.31	\$84.65	\$91.07
	8.5%	\$65.06	\$68.30	\$72.03	\$76.38	\$81.52
	9.0%	\$59.97	\$62.69	\$65.79	\$69.38	\$73.57

Share Price (Exit Multiple)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$97.00	\$101.94	\$106.87	\$111.81	\$116.74
	7.5%	\$93.04	\$97.76	\$102.48	\$107.20	\$111.92
	8.0%	\$89.25	\$93.77	\$98.29	\$102.81	\$107.32
	8.5%	\$85.64	\$89.96	\$94.28	\$98.61	\$102.93
	9.0%	\$82.18	\$86.32	\$90.46	\$94.60	\$98.74

Implied Returns (Perpetuity Growth)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	15.5%	21.3%	27.2%	33.1%	39.0%
	7.5%	10.7%	16.4%	22.0%	27.6%	33.2%
	8.0%	6.2%	11.6%	17.0%	22.4%	27.8%
	8.5%	1.9%	7.1%	12.2%	17.4%	22.5%
	9.0%	(2.2%)	2.7%	7.7%	12.6%	17.5%

Implied Returns (Exit Multiple)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	1.8%	8.7%	17.0%	27.1%	39.7%
	7.5%	(7.6%)	(2.0%)	4.7%	12.6%	22.3%
	8.0%	(15.6%)	(11.0%)	(5.6%)	0.8%	8.4%
	8.5%	(22.6%)	(18.7%)	(14.3%)	(9.1%)	(3.0%)
	9.0%	(28.6%)	(25.4%)	(21.7%)	(17.4%)	(12.4%)

Discounted Cash Flow—Assumptions

Bear, Base, Bull Case Assumptions

Assumptions (In \$ Millions)	Actuals				Projections									
	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
New Equipment Revenues Growth		2.6%	0.9%	(4.9%)	15.3%	7.0%	6.0%	5.0%	4.0%	3.0%	2.5%	2.2%	2.0%	1.7%
Bull Case					18.0%	10.0%	8.0%	6.0%	5.0%	3.8%	2.5%	2.2%	2.0%	1.7%
Base Case					15.3%	7.0%	6.0%	5.0%	4.0%	3.0%	2.5%	2.2%	2.0%	1.7%
Bear Case					14.0%	5.0%	2.0%	2.0%	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%
Revenue Per Maintenance Unit Growth		4.6%	0.2%	(3.5%)	3.8%	3.3%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Bull Case					5.0%	4.5%	4.0%	4.0%	4.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Case					3.8%	3.3%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Bear Case					3.0%	(1.5%)	(1.0%)	--	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Maintenance base Growth		1.5%	1.5%	2.4%	3.5%	3.5%	3.5%	3.0%	3.0%	2.5%	2.5%	2.0%	2.0%	1.5%
Bull Case					5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%
Base Case					3.5%	3.5%	3.5%	3.0%	3.0%	2.5%	2.5%	2.0%	2.0%	1.5%
Bear Case					3.0%	2.5%	2.5%	2.0%	2.0%	1.0%	1.0%	0.5%	0.5%	0.5%
Capture Rate		--	--	--	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Bull Case					2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Case					0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Bear Case					--	--	--	--	--	--	--	--	--	--
Renovation Revenues Growth		8.2%	3.7%	(0.9%)	4.0%	5.0%	6.0%	8.0%	10.0%	9.5%	9.0%	8.5%	8.0%	7.5%
Bull Case					5.1%	7.0%	8.0%	11.0%	11.0%	11.0%	10.0%	9.0%	9.0%	9.0%
Base Case					4.0%	5.0%	6.0%	8.0%	10.0%	9.5%	9.0%	8.5%	8.0%	7.5%
Bear Case					3.1%	3.0%	4.0%	5.0%	5.0%	5.0%	4.0%	3.0%	3.0%	3.0%
New Equipment Adj. Operating Margin	9.1%	7.3%	7.1%	6.5%	7.5%	7.5%	8.2%	8.2%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Bull Case					9.0%	9.0%	9.0%	8.5%	8.5%	8.5%	8.0%	8.0%	8.0%	8.0%
Base Case					7.5%	7.5%	8.2%	8.2%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Bear Case					6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Service Adj. Operating Margin	21.7%	20.8%	21.4%	22.5%	22.7%	23.2%	23.7%	24.2%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Bull Case					23.2%	23.6%	24.0%	24.4%	24.8%	25.2%	25.6%	26.0%	26.4%	26.8%
Base Case					22.7%	23.2%	23.7%	24.2%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Bear Case					22.5%	22.7%	23.2%	23.7%	24.2%	24.7%	24.7%	24.7%	24.7%	24.7%
General Corporate Expenses (% of Revenue)	(0.6%)	(0.7%)	(1.0%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)
Bull Case					(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)	(0.5%)
Base Case					(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)	(0.7%)
Bear Case					(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)	(1.0%)
Tax Rate	58.7%	36.1%	31.9%	30.1%	29.0%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
Depreciation and Amortization As a % of Revenue	1.4%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Capital Expenditures as a % of Revenue	(1.1%)	(1.3%)	(1.1%)	(1.4%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)
Increase / (Decrease) in NWC as a % of Revenue	--	0.3%	1.0%	(1.7%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)
Total Revenue Growth		4.8%	1.6%	(2.8%)	10.7%	7.1%	6.6%	6.1%	5.9%	4.7%	4.4%	4.0%	3.9%	3.5%
Total Maintenance and Repair Revenues		6.2%	1.7%	(1.2%)	8.1%	7.6%	7.3%	6.7%	6.7%	5.1%	5.1%	4.6%	4.6%	4.0%
Adjusted EBIT Margin	15.5%	14.3%	14.3%	15.0%	15.3%	15.6%	16.2%	16.6%	16.9%	17.0%	17.2%	17.3%	17.4%	17.5%

Discounted Cash Flow

Bull Case Valuation

Discounted Cash Flow Analysis (In \$ Millions)	Historical				Projections									
	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Running the Bull Case														
Total New Equipment Revenues	5,453	5,596	5,648	5,371	6,338	6,972	7,529	7,981	8,380	8,699	8,916	9,112	9,294	9,452
Total Maintenance and Repair Revenues	5,667	6,017	6,120	6,047	6,712	7,412	8,142	8,942	9,816	10,565	11,261	11,999	12,783	13,615
Revenue Per Maintenance Unit (In thousands)	2.85	2.98	2.99	2.88	3.02	3.16	3.29	3.42	3.55	3.63	3.70	3.77	3.85	3.92
Maintenance Base	1.99	2.02	2.05	2.10	2.22	2.35	2.48	2.62	2.76	2.91	3.05	3.18	3.32	3.47
Installed Base Opportunity Held by ISPs				2.00	1.99	1.97	1.96	1.94	1.93	1.91	1.90	1.88	1.87	1.85
Total Renovation Revenues	1,203	1,302	1,350	1,338	1,406	1,505	1,625	1,804	2,002	2,222	2,445	2,665	2,905	3,166
Total Revenues	12,323	12,915	13,118	12,756	14,456	15,888	17,297	18,726	20,198	21,486	22,621	23,776	24,982	26,233
Total Operating Income														
New Equipment Adj. Operating Income	498	406	402	348	570	627	678	678	712	739	713	729	744	756
Service Adj. Operating Income	1,490	1,526	1,599	1,658	1,883	2,104	2,344	2,622	2,931	3,223	3,509	3,813	4,141	4,497
General Corporate Expenses and Other	(74)	(88)	(129)	(87)	(72)	(79)	(86)	(94)	(101)	(107)	(113)	(119)	(125)	(131)
Adjusted EBIT	1,914	1,844	1,872	1,919	2,382	2,652	2,935	3,207	3,542	3,854	4,109	4,423	4,760	5,122
Tax Rate	58.7%	36.1%	31.9%	30.1%	29.0%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
NOPAT	790	1,178	1,275	1,341	1,691	1,949	2,157	2,357	2,604	2,833	3,020	3,251	3,499	3,765
Plus: Depreciation and Amortization	177	190	180	191	216	238	259	280	302	322	339	356	374	393
Less: Capital Expenditures	(133)	(172)	(145)	(183)	(217)	(238)	(259)	(281)	(303)	(322)	(339)	(357)	(375)	(394)
Less: Increase / (Decrease) in NWC	--	35	135	(216)	(29)	(32)	(35)	(37)	(40)	(43)	(45)	(48)	(50)	(52)
Unlevered Free Cash Flow	834	1,231	1,445	1,133	1,662	1,917	2,122	2,319	2,563	2,789	2,974	3,202	3,448	3,712
UFCF Growth Rate		47.6%	17.3%	(21.6%)	46.6%	15.4%	10.7%	9.3%	10.5%	8.9%	6.6%	7.7%	7.7%	7.6%
Discount Period					0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Discount Rate					8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Discount Factor					0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow					1,599	1,708	1,751	1,771	1,812	1,827	1,803	1,798	1,793	1,787
Shares Outstanding		433.1	433.1	434.6	430.6	430.6	428.4	426.3	424.2	422.0	419.9	417.8	415.7	413.6
Share Buybacks					4.0	0.0	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
% of Shares Outstanding					0.9%	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

Perpetuity Growth Method	
Cumulative PV of FCF	17,649.5
% of Enterprise Value	36.8%
Terminal Value	
Final Year UFCF	3,711.8
Perpetuity Growth Rate	2.0%
Terminal Value	63,099.9
PV of Terminal Value	30,374.1
% of Enterprise Value	63.2%
Total Enterprise Value	48,023.6
Plus: Cash	1,553.0
Plus: Short-term Investments	--
Less: Total Debt	(5,420.0)
Less: Preferred Stock	--
Less: Non-Controlling Interest	(559.0)
Less: Future Pension Obligation	(635.0)
Total Equity Value	42,962.6
Diluted Shares Outstanding	413.6
Implied Share Price	\$103.87
Current Share Price	\$84.01
Implied Margin of Safety	23.6%

Exit Multiple Method	
Cumulative PV of FCF	17,649.5
% of Enterprise Value	30.3%
Terminal Value	
Final Year EBIT	5,122.3
Exit EBIT Multiple	16.5x
Terminal Value	84,518.8
PV of Terminal Value	40,684.4
% of Enterprise Value	69.7%
Total Enterprise Value	58,333.9
Plus: Cash	1,553.0
Plus: Short-term Investments	--
Less: Total Debt	(5,420.0)
Less: Preferred Stock	--
Less: Non-Controlling Interest	(559.0)
Less: Future Pension Obligation	(635.0)
Total Equity Value	53,272.9
Diluted Shares Outstanding	413.6
Implied Share Price	\$128.80
Current Share Price	\$84.01
Implied Margin of Safety	53.3%

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$111.95	\$119.60	\$128.78	\$140.00	\$154.03
	7.5%	\$101.61	\$107.83	\$115.18	\$124.01	\$134.79
	8.0%	\$92.77	\$97.89	\$103.87	\$110.94	\$119.43
	8.5%	\$85.13	\$89.40	\$94.33	\$100.08	\$106.88
	9.0%	\$78.47	\$82.06	\$86.17	\$90.91	\$96.44
		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$126.94	\$133.46	\$139.97	\$146.48	\$152.99
	7.5%	\$121.80	\$128.03	\$134.26	\$140.49	\$146.72
	8.0%	\$116.88	\$122.84	\$128.80	\$134.76	\$140.73
	8.5%	\$112.18	\$117.89	\$123.59	\$129.30	\$135.01
	9.0%	\$107.70	\$113.16	\$118.62	\$124.08	\$129.54

DCF Sensitivities—Bull Case

Share Price (Perpetuity Growth)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$111.95	\$119.60	\$128.78	\$140.00	\$154.03
	7.5%	\$101.61	\$107.83	\$115.18	\$124.01	\$134.79
	8.0%	\$92.77	\$97.89	\$103.87	\$110.94	\$119.43
	8.5%	\$85.13	\$89.40	\$94.33	\$100.08	\$106.88
	9.0%	\$78.47	\$82.06	\$86.17	\$90.91	\$96.44

Share Price (Exit Multiple)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$126.94	\$133.46	\$139.97	\$146.48	\$152.99
	7.5%	\$121.80	\$128.03	\$134.26	\$140.49	\$146.72
	8.0%	\$116.88	\$122.84	\$128.80	\$134.76	\$140.73
	8.5%	\$112.18	\$117.89	\$123.59	\$129.30	\$135.01
	9.0%	\$107.70	\$113.16	\$118.62	\$124.08	\$129.54

Implied Returns (Perpetuity Growth)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	33.3%	42.4%	53.3%	66.7%	83.3%
	7.5%	20.9%	28.4%	37.1%	47.6%	60.4%
	8.0%	10.4%	16.5%	23.6%	32.1%	42.2%
	8.5%	1.3%	6.4%	12.3%	19.1%	27.2%
	9.0%	(6.6%)	(2.3%)	2.6%	8.2%	14.8%

Implied Returns (Exit Multiple)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	51.1%	58.9%	66.6%	74.4%	82.1%
	7.5%	45.0%	52.4%	59.8%	67.2%	74.6%
	8.0%	39.1%	46.2%	53.3%	60.4%	67.5%
	8.5%	33.5%	40.3%	47.1%	53.9%	60.7%
	9.0%	28.2%	34.7%	41.2%	47.7%	54.2%

Discounted Cash Flow

Bear Case Valuation

Discounted Cash Flow Analysis (In \$ Millions)	Historical				Projections									
	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Running the Bear Case														
Total New Equipment Revenues	5,453	5,596	5,648	5,371	6,123	6,429	6,558	6,689	6,823	6,959	7,029	7,099	7,170	7,242
Total Maintenance and Repair Revenues	5,667	6,017	6,120	6,047	6,460	6,565	6,705	6,882	7,132	7,390	7,657	7,893	8,136	8,386
Revenue Per Maintenance Unit (In thousands)	2.85	2.98	2.99	2.88	2.97	2.92	2.89	2.89	2.92	2.98	3.04	3.10	3.16	3.23
Maintenance Base	1.99	2.02	2.05	2.10	2.18	2.25	2.32	2.38	2.44	2.48	2.52	2.55	2.57	2.60
Installed Base Opportunity Held by ISPs				2.00	1.99	1.97	1.96	1.94	1.93	1.91	1.90	1.88	1.87	1.85
Total Renovation Revenues	1,203	1,302	1,350	1,338	1,379	1,421	1,478	1,552	1,629	1,711	1,779	1,832	1,887	1,944
Total Revenues	12,323	12,915	13,118	12,756	13,962	14,415	14,740	15,122	15,584	16,060	16,465	16,825	17,193	17,571
Total Operating Income														
New Equipment Adj. Operating Income	498	406	402	348	398	418	426	435	443	452	457	461	466	471
Service Adj. Operating Income	1,490	1,526	1,599	1,658	1,760	1,793	1,837	1,893	1,967	2,043	2,118	2,184	2,250	2,319
General Corporate Expenses and Other	(74)	(88)	(129)	(87)	(140)	(144)	(147)	(151)	(156)	(161)	(165)	(168)	(172)	(176)
Adjusted EBIT	1,914	1,844	1,872	1,919	2,018	2,067	2,116	2,177	2,255	2,335	2,411	2,477	2,544	2,614
Tax Rate	58.7%	36.1%	31.9%	30.1%	29.0%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
NOPAT	790	1,178	1,275	1,341	1,433	1,519	1,555	1,600	1,657	1,716	1,772	1,820	1,870	1,921
Plus: Depreciation and Amortization	177	190	180	191	209	216	221	226	233	240	247	252	257	263
Less: Capital Expenditures	(133)	(172)	(145)	(183)	(209)	(216)	(221)	(227)	(234)	(241)	(247)	(252)	(258)	(264)
Less: Increase / (Decrease) in NWC	--	35	135	(216)	(28)	(29)	(29)	(30)	(31)	(32)	(33)	(34)	(34)	(35)
Unlevered Free Cash Flow	834	1,231	1,445	1,133	1,405	1,490	1,525	1,569	1,626	1,684	1,738	1,786	1,835	1,886
UFCF Growth Rate		47.6%	17.3%	(21.6%)	23.9%	6.1%	2.4%	2.9%	3.6%	3.6%	3.3%	2.7%	2.7%	2.7%
Discount Period					0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Discount Rate					8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Discount Factor					0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow					1,352	1,327	1,258	1,199	1,150	1,103	1,054	1,003	954	908
Shares Outstanding		433.1	433.1	434.6	430.6	430.6	428.4	426.3	424.2	422.0	419.9	417.8	415.7	413.6
Share Buybacks					4.0	0.0	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
% of Shares Outstanding					0.9%	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

Perpetuity Growth Method	
Cumulative PV of FCF	11,307.5
% of Enterprise Value	42.3%
Terminal Value	
Final Year UFCF	1,885.7
Perpetuity Growth Rate	2.0%
Terminal Value	32,057.4
PV of Terminal Value	15,431.3
% of Enterprise Value	57.7%
Total Enterprise Value	26,738.9
Plus: Cash	1,553.0
Plus: Short-term Investments	--
Less: Total Debt	(5,420.0)
Less: Preferred Stock	--
Less: Non-Controlling Interest	(559.0)
Less: Future Pension Obligation	(635.0)
Total Equity Value	21,677.9
Diluted Shares Outstanding	413.6
Implied Share Price	\$52.41
Current Share Price	\$84.01
Implied Margin of Safety	(37.6%)

Exit Multiple Method	
Cumulative PV of FCF	11,307.5
% of Enterprise Value	35.3%
Terminal Value	
Final Year EBIT	2,614.1
Exit EBIT Multiple	16.5x
Terminal Value	43,132.2
PV of Terminal Value	20,762.3
% of Enterprise Value	64.7%
Total Enterprise Value	32,069.9
Plus: Cash	1,553.0
Plus: Short-term Investments	--
Less: Total Debt	(5,420.0)
Less: Preferred Stock	--
Less: Non-Controlling Interest	(559.0)
Less: Future Pension Obligation	(635.0)
Total Equity Value	27,008.9
Diluted Shares Outstanding	413.6
Implied Share Price	\$65.30
Current Share Price	\$84.01
Implied Margin of Safety	(22.3%)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$56.67	\$60.56	\$65.22	\$70.93	\$78.05
	7.5%	\$51.34	\$54.50	\$58.23	\$62.72	\$68.20
	8.0%	\$46.77	\$49.37	\$52.41	\$56.00	\$60.31
	8.5%	\$42.81	\$44.98	\$47.49	\$50.41	\$53.86
	9.0%	\$39.35	\$41.18	\$43.27	\$45.68	\$48.49
		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$64.51	\$67.83	\$71.15	\$74.48	\$77.80
	7.5%	\$61.80	\$64.98	\$68.16	\$71.34	\$74.52
	8.0%	\$59.22	\$62.26	\$65.30	\$68.34	\$71.39
	8.5%	\$56.75	\$59.66	\$62.57	\$65.48	\$68.39
	9.0%	\$54.39	\$57.17	\$59.96	\$62.75	\$65.53

DCF Sensitivities—Bear Case

Share Price (Perpetuity Growth)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	\$56.67	\$60.56	\$65.22	\$70.93	\$78.05
	7.5%	\$51.34	\$54.50	\$58.23	\$62.72	\$68.20
	8.0%	\$46.77	\$49.37	\$52.41	\$56.00	\$60.31
	8.5%	\$42.81	\$44.98	\$47.49	\$50.41	\$53.86
	9.0%	\$39.35	\$41.18	\$43.27	\$45.68	\$48.49

Implied Returns (Exit Multiple)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	\$64.51	\$67.83	\$71.15	\$74.48	\$77.80
	7.5%	\$61.80	\$64.98	\$68.16	\$71.34	\$74.52
	8.0%	\$59.22	\$62.26	\$65.30	\$68.34	\$71.39
	8.5%	\$56.75	\$59.66	\$62.57	\$65.48	\$68.39
	9.0%	\$54.39	\$57.17	\$59.96	\$62.75	\$65.53

Implied Returns (Perpetuity Growth)

		Perpetuity Growth Rate				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC	7.0%	(32.5%)	(27.9%)	(22.4%)	(15.6%)	(7.1%)
	7.5%	(38.9%)	(35.1%)	(30.7%)	(25.3%)	(18.8%)
	8.0%	(44.3%)	(41.2%)	(37.6%)	(33.3%)	(28.2%)
	8.5%	(49.0%)	(46.5%)	(43.5%)	(40.0%)	(35.9%)
	9.0%	(53.2%)	(51.0%)	(48.5%)	(45.6%)	(42.3%)

Implied Returns (Exit Multiple)

		Exit EBITDA Multiple				
		14.5x	15.5x	16.5x	17.5x	18.5x
WACC	7.0%	(23.2%)	(19.3%)	(15.3%)	(11.3%)	(7.4%)
	7.5%	(26.4%)	(22.7%)	(18.9%)	(15.1%)	(11.3%)
	8.0%	(29.5%)	(25.9%)	(22.3%)	(18.6%)	(15.0%)
	8.5%	(32.5%)	(29.0%)	(25.5%)	(22.1%)	(18.6%)
	9.0%	(35.3%)	(31.9%)	(28.6%)	(25.3%)	(22.0%)