



Firm Valuation and Analysis

Group 4

Background

- Headquarters: San Diego, CA
- Founded: 1994 by Massih and Masood Tayebi
- Leadership:
 - President and CEO: Eric DeMarco
 - VP and CFO: Deanna Lund
 - President of Defense and Rocket Support Services Division: Dave Carter
 - President of Unmanned Systems Division: Steven Fendley
 - President of Space, Training, and Cyber Division: Phil Carrai

Eric DeMarco



Steven Fendley



Phil Carrai



Kratos Defense & Security Solutions serves primarily serves as a contractor for the U.S. Department of Defense and operates the following segments...

Unmanned Systems

Aerial Systems

- *Tactical (Air Supremacy) Vehicles*
- *Swarming System Solutions*
- *Aerial Target Systems & Solutions*

Ground-based and Seaborne Systems

- *Ground Target & Training Systems*
 - *Leader/Follower Systems*
- *Automated Work Zone Systems*

Government Solutions

Microwave Electronics

Space Solutions

Training, Cybersecurity, & Warfare

Satellite Communications

C5ISR (Command & Control) Systems

Turbine Technologies

Defense Support Solutions

Products

High Mobility Ground Vehicle
Target



Aerial Targets



Tactical UAVs



MISSILE DEFENSE &
RADAR



COMMAND &
CONTROL



SUSTAINMENT SERVICES

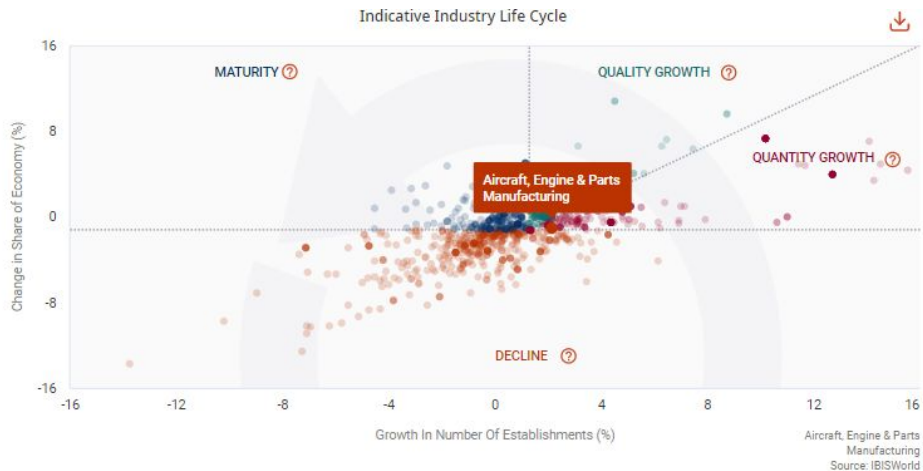


Primary Classification: Aerospace and Defense

A&D Maintenance and Services
Aircraft Systems, Components and Equipment
Defense Electronics
Guided Missiles and Components

Secondary Classification: Information Technology

Security, Control, Surveillance and Detection
Equipment (Radars, C5ISR, etc.)



\$169.4BN
REVENUE

Annual Growth 2015–2020

-5.8%

Annual Growth 2020–2025

9.0%

Annual Growth 2015–2025



Aircraft



Aircraft engines and engine parts



Other aircraft parts and auxiliary equipment

Risk Factors and Growth Prospects

- A large portion of Kratos's revenue comes from government contracts, meaning a change in how contracts are given out, a change in the amount of contracts given out, or a change in defense spending could have significant impact on the company
- Biden administration looks to slash Defense spending
- Multiple customers individually account for over 10% of the company's revenue, losing a single one of these customers would significantly affect cash flows
- Performance and earnings depend partially on other companies such as subcontractors and suppliers, no guarantee they can meet expectations
- Cash available can be used to increase R&D and improve technology as it is an important part of this industry
- Low inflation rate (under 2%) allows for market stability and therefore allows for credit to be issued at a lower rate to Kratos customers and easier funding

U.S. Defense Spending (Outlays)



Major Assumptions

Income Statement

	EV	LinR	x
Service Revenue Growth	4.97%	1.584%	0.079%
Sales Revenue Growth	11.55%	2.927%	0.338%
COSR (% of Service Revenue)	71.17%	1.942%	1.382%
COGS (% of Sales Revenue)	75.37%	2.036%	1.535%
R&D Expense (% of Revenue)	2.87%	0.080%	0.002%
SG&A Expense (% of Revenue)	19.68%	0.529%	0.104%
Other Oper. Expense (% of Revenue)	NM	NM	NM
D&A Core (% of Revenue)	3.40%	0.904%	0.031%
Net Non-Operating Expenses (% of Revenue)	0.63%	0.153%	0.001%
Stock Based Compensation (% of EBITDA)	25.12%	6.839%	1.718%
Net Interest Expense			
Taxes (% of EBT)	22.00%		0.50%

Balance Sheet & Other

	EV	LinR	x
Inventory (Turns)	11.21	-0.17	
AR (Turns - Sales)	2.67	0.06	
Prepaid Expenses (Turns - COGS)	48.17	1.20	
Other (Turns - Sales)	40.24	-2.17	
Operating RTU (Pure Growth)	-		
Net PP&E	Grown by CapEx-Depreciation		
Goodwill	455.93		
Net Intangibles (Change)	31.60		
Other Assets (Turns - Sales)	40.83	-12.35	
Accounts Payable (Turns - COGS)	10.03	0.06	
Other Current Assets (Turns - COGS)	10.71	0.97	
Accrued Expenses (Turns - COGS)	6.26	0.51	
Paper, Revolver, Curr. Other Liabilities (% CA)	0.0076	0.00369	
Other Liabilities (Turns - Sales)	13.81	-3.50394	
CapEx (% Sales)	3.76%	11.241%	0.423%
D&A (% Sales)	3.40%	-4.285%	-0.146%

Cost of Capital & Long-Term Growth

Cost of Debt (Kd)

Structure & Cost (Current)

* Light orange cells represent weighted average discount rates for each respective debt tranche

Source	Mkt Value	BV Out.	YTW or Cost*	Weight	Const. Cost
Senior U.	N/A	301	3.276%	77.537%	2.540%
Operating Lease Liab.	N/A	47.5	6.500%	12.236%	0.795%
Finance Lease Liab.	N/A	39.7	6.520%	10.227%	0.667%
		388.2			4.002%
			AT Kd		3.162%

Total Debt	\$ 388.200
Pre-Tax Cost	4.002%
Nominal Tax	21.00%
AT Kd	3.162%

WACC

	Total	Weight	Cost	Value
Debt	\$ 398.0	10.737%	3.162%	0.33948%
Equity	\$3,308.8	89.263%	5.194%	4.63597%
	\$3,706.8	1.000		4.975%

WACC	4.975%
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Cost of Equity (Ke)

(10yr Constant Maturity 5/1/21)	Rf	1.650%
(30yr Constant Maturity 5/1/21)	Rf	2.310%
Blended Yield	Rf	1.980%
(Damodaran 5/1/21 TTM)	EMRP	4.110%

(Beta - 5yr - Monthly - Calc.)	B	0.782
(Beta - 5yr - Monthly - YF)	B	0.760

10yr	Rf	1.650%
30yr	Rf	2.310%
Damadoran	EMRP	4.110%
Calc. Beta	B	0.782
Blended Yield	Ke (Effective)	5.194%
30Yr Rf	Ke	5.524%

Long-Term Growth

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nominal GDP (\$)	14,992.0	15,543.0	16,197.0	16,785.0	17,527.0	18,238.0	18,745.0	19,543.0	20,612.0	21,433.0
Growth (%)	3.76%	3.68%	4.21%	3.63%	4.42%	4.06%	2.78%	4.26%	5.47%	3.98%
Price Effect (%)										8.68%

LT Growth (%)	4.70%
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Competitors and Public Comparables

Aerospace and Defense Industry Spotlight

(in \$mm except for per share amounts)

Market Data			LTM Operating Data and Forward Projections								
Company	Market Cap	% of 52 Week High	Enterprise Value (EV)	LTM Revenue	Gross Margin	EBITDA Margin	EV/Sales LTM	EV/EBITDA LTM	P/E LTM	Proj. EBITDA Growth	Net Debt/EBITDA
Prime Contractors											
Textron Inc.	\$ 14,500	99.4%	\$ 17,086	\$ 11,697	14.3%	9.3%	1.5x	14.8x	42.2x	-16.7%	2.2x
Woodward, Inc.	7,881	96.3%	8,532	2,313	25.5%	17.5%	3.7x	20.1x	43.4x	-5.9%	1.4x
Meggitt PLC	5,009	83.0%	6,077	2,299	31.0%	16.1%	2.6x	15.4x	61.2x	-16.9%	0.0x
Spirit AeroSystems Holdings, Inc.	4,818	79.1%	6,892	3,405	-12.0%	-9.9%	2.0x	NM	NM	NM	NM
Mercury Systems, Inc.	4,224	46.4%	4,359	842	44.4%	18.2%	5.2x	26.7x	67.5x	16.4%	0.5x
Kaman Corporation	1,479	78.7%	1,582	784	31.3%	14.9%	2.0x	12.9x	86.7x	10.8%	0.8x
AAR Corp.	1,406	83.4%	1,573	1,631	12.4%	3.0%	1.0x	19.6x	NM	-38.5%	1.5x
Kratos Defense & Security Solutions, Inc.	3,309	62.9%	3,331	748	27.2%	7.5%	4.5x	49.0x	NM	3.9%	0.1x
Mean	5,617	80.9%	6,586	3,282	21.0%	9.9%	2.6x	18.2x	60.2x	-8.5%	1.1x
Median	4,818	83.0%	6,077	2,299	25.5%	14.9%	2.0x	17.5x	61.2x	-11.3%	1.1x

Company Name	LTM Gross Margin %
Mercury Systems, Inc. (NasdaqGS:MRCY)	44.4%
Kaman Corporation (NYSE:KAMN)	31.3%
Ducommun Incorporated (NYSE:DCO)	21.9%
Triumph Group, Inc. (NYSE:TGI)	21.3%
HEICO Corporation (NYSE:HEI)	37.8%
Hexcel Corporation (NYSE:HXL)	11.9%
Raytheon Technologies Corporation (NYSE:RTX)	14.8%
AAR Corp. (NYSE:AIR)	12.4%
Aerojet Rocketdyne Holdings, Inc. (NYSE:AJRD)	17.6%
AeroVironment, Inc. (NasdaqGS:AVAV)	40.1%
Kratos Defense & Security Solutions, Inc. (NasdaqGS:KTOS)	27.2%

Cashflow Build-Up and Equity Valuation

Free Cash Flow Buildup

\$mm	Projected Annual Financials				
	2021P	2022P	2023P	2024P	2025P
Period	1	2	3	4	5
Total Revenues	836.3	854.8	873.3	891.9	910.4
EBITDA	63.2	70.3	77.9	85.7	94.0
EBIT	33.9	40.9	48.1	55.8	63.8
Tax Rate	22.5%	23.0%	23.5%	24.0%	24.5%
EBIAT	26.3	31.5	36.8	42.4	48.2
Depreciation and Amortization	28.7	29.0	29.2	29.5	29.7
Change in NWC	(14.5)	(13.4)	(12.7)	(12.4)	(12.3)
Capital Expenditures	(35.0)	(39.4)	(43.9)	(48.6)	(53.5)
Unlevered Free Cash Flows	5.5	7.7	9.4	10.8	12.1
Discount Rate (WACC)	4.975%	4.975%	4.975%	4.975%	4.975%
Discount Factor	95.26%	90.75%	86.45%	82.35%	78.45%
Present Value of Free Cash Flows	\$ 5.23	\$ 6.96	\$ 8.09	\$ 8.91	\$ 9.50
Sum of Present Values of FCF's	\$ 38.69				

Terminal Value

Growth in Perpetuity

	LT Growth	EV/EBITDA	EV/Sales
LT Growth Rate or Multiple	4.700%	25.00	3.00
WACC	4.975%	4.975%	4.975%
Sum of PV of FCF's	\$ 38.69	\$ 38.69	\$ 38.69
Terminal Value	\$ 3,615.74	\$ 2,350.50	\$ 2,731.30
Present Value of Terminal Value	\$ 2,977.51	\$ 1,843.88	\$ 2,142.60

Enterprise Value

	LT Growth	Exit Value	
Sum of Present Values of FCF's	\$ 38.69	\$ 38.69	\$ 38.69
Present Value of Terminal Value	\$ 2,977.51	\$ 1,843.88	\$ 2,142.60
Enterprise Value	\$ 3,016.20	\$ 1,882.57	\$ 2,181.29
Enterprise Value	\$ 3,016.20	\$ 1,882.57	\$ 2,181.29
Debt	\$ (398.00)	\$ (398.00)	\$ (398.00)
Cash	\$ 380.8	\$ 380.8	\$ 380.8
Equity Value	\$ 2,999.00	\$ 1,865.37	\$ 2,164.09
Equity Value Per Share	\$ 24.24	\$ 15.07	\$ 17.49

Recent Share Price	\$ 26.74	\$ 26.74	\$ 26.74
30 Day Moving Average	\$ 27.09	\$ 27.09	\$ 27.09
DCF Premium (Discount) to Recent Price	-9.36%	-43.62%	-34.60%
DCF Premium (Discount) to 30d MA	-10.53%	-44.35%	-35.44%

Sensitivity and Scenario Analysis

		LT Growth Rate (g)						
		4.550%	4.600%	4.650%	4.700%	4.750%	4.800%	4.850%
WACC	5.425%	7.44	7.88	8.38	8.95	9.61	10.37	11.26
	5.175%	10.56	11.47	12.56	13.87	15.48	17.53	20.22
	5.075%	12.65	13.97	15.60	17.67	20.37	24.05	29.37
	4.975%	15.72	17.80	20.52	24.24	29.60	38.02	53.19
	4.875%	20.68	24.42	29.82	38.31	53.59	89.25	
	4.775%	30.05	38.61	54.00	89.93			
	4.675%	54.42	90.62					

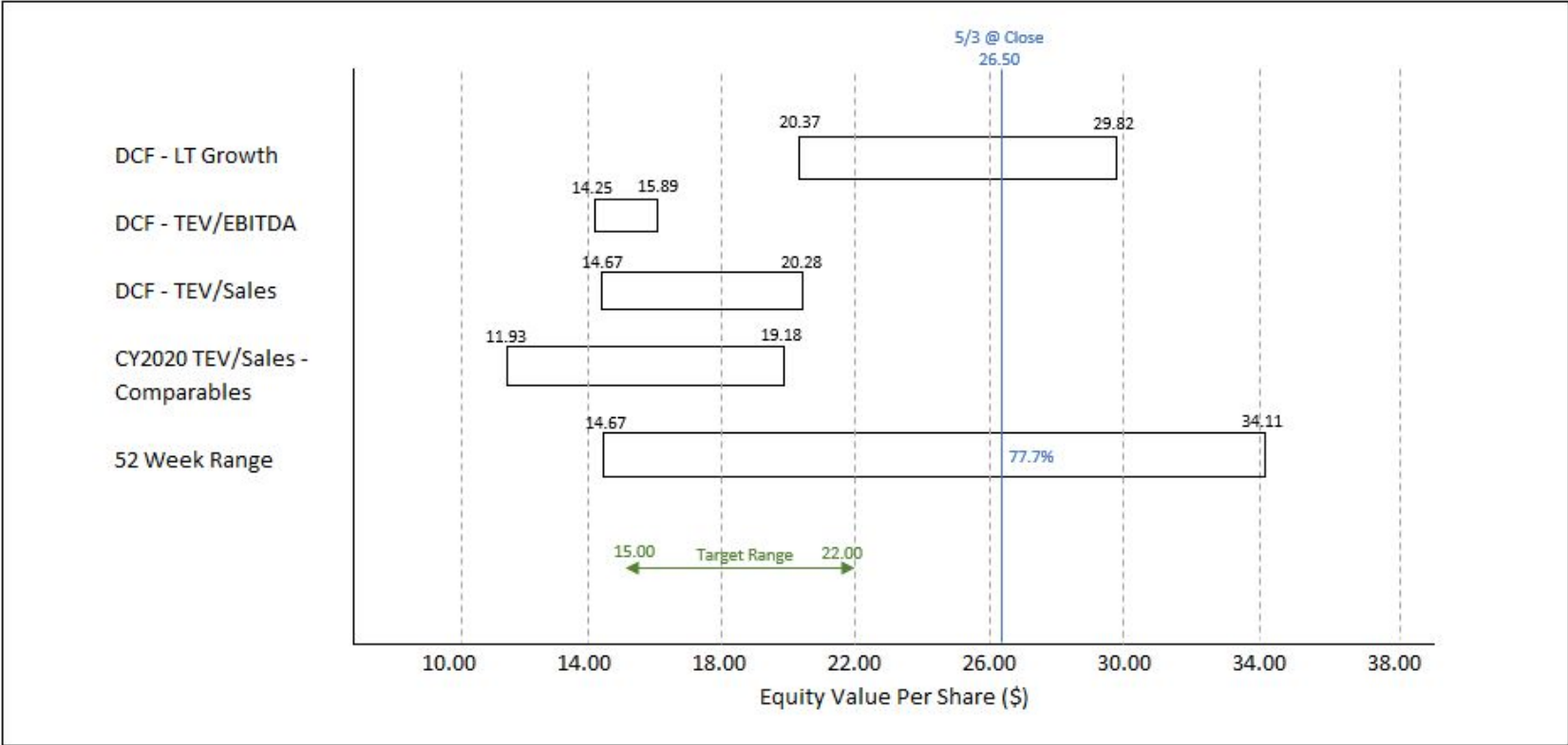
		TEV/EBITDA						
		20.50x	22.00x	23.50x	25.00x	26.50x	28.00x	29.50x
WACC	5.425%	12.13	13.00	13.88	14.76	15.63	16.51	17.38
	5.175%	12.27	13.16	14.05	14.93	15.82	16.70	17.59
	5.075%	12.33	13.22	14.11	15.00	15.89	16.78	17.67
	4.975%	12.39	13.29	14.18	15.07	15.97	16.86	17.76
	4.875%	12.45	13.35	14.25	15.15	16.05	16.94	17.84
	4.775%	12.51	13.41	14.32	15.22	16.12	17.02	17.93
	4.675%	12.57	13.48	14.39	15.29	16.20	17.11	18.01

		TEV/Sales						
		1.50x	2.00x	2.50x	3.00x	3.50x	4.00x	4.50x
WACC	5.425%	8.64	11.47	14.29	17.12	19.94	22.77	25.59
	5.175%	8.75	11.61	14.46	17.32	20.18	23.04	25.90
	5.075%	8.79	11.66	14.53	17.41	20.28	23.15	26.02
	4.975%	8.83	11.72	14.60	17.49	20.37	23.26	26.15
	4.875%	8.87	11.77	14.67	17.57	20.47	23.37	26.27
	4.775%	8.92	11.83	14.74	17.66	20.57	23.48	26.40
	4.675%	8.96	11.89	14.81	17.74	20.67	23.60	26.52

		Sales Growth						
		-0.750%	-0.500%	-0.250%	0.00%	0.250%	0.500%	0.750%
WACC	5.425%	6.09	7.04	8.00	8.95	9.91	10.86	11.81
	5.175%	9.46	10.93	12.40	13.87	15.33	16.80	18.27
	5.075%	12.07	13.94	15.80	17.67	19.53	21.40	23.27
	4.975%	16.58	19.13	21.68	24.24	26.79	29.34	31.90
	4.875%	26.24	30.26	34.29	38.31	42.34	46.36	50.39
	4.775%	61.66	71.08	80.51	89.93	99.36		
	4.675%							

		Expense Rates						
		-1.500%	-1.000%	-0.500%	0%	0.500%	1.000%	1.500%
WACC	5.425%	14.56	12.69	10.82	8.95	7.08	5.21	3.34
	5.175%	22.48	19.61	16.74	13.87	10.99	8.12	5.25
	5.075%	28.61	24.96	21.32	17.67	14.02	10.37	6.73
	4.975%	39.20	34.21	29.22	24.24	19.25	14.26	9.27
	4.875%	61.89	54.03	46.17	38.31	30.45	22.59	14.73
	4.775%				89.93	71.54	53.15	34.76
	4.675%							

Valuation Summary



Recommendation to Investors



S&P Net Advantage: [Kratos Defense & Security Solutions, Inc. \(NasdaqGS:KTOS\) > Public Company Profile \(lehigh.edu\)](#)

S&P Net Advantage: [Aerospace and Defense > Industry Profile \(lehigh.edu\)](#)

Yahoo Finance: [Kratos Defense & Security Solut \(KTOS\) Stock Historical Prices & Data - Yahoo Finance](#)

IBISWorld: [Industry at a Glance - 33641a Aircraft, Engine & Parts Manufacturing in the US - MyIBISWorld \(lehigh.edu\)](#)

Damodaran Risk Profile: [Damodaran On-line Home Page \(nyu.edu\)](#)

Constant Maturity Rates: [10-Year Treasury Constant Maturity Rate \(DGS10\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

GDP Growth Rates (before inflator & spending adjustments): [Gross Domestic Product | U.S. Bureau of Economic Analysis \(BEA\)](#)

Kratos Financial Statements: [Financial Information | Kratos Defense & Security Solutions, Inc](#)

Kratos General Information: [Technology innovation for national security | Kratos \(kratosdefense.com\)](#)