

Long Idea

Price: \$236.75

Last Price Date: 11/17/2023

Huntington Ingalls is a U.S. defense contractor with an emphasis on shipbuilding.

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Business Segments



Segments – Brief Overview

- Newport News (~55%)
 - Constructs nuclear subs and aircraft carriers
- Ingalls (~23%)
 - Non-nuclear ships for the USN and USCG
 - Amphibious assault ships, national security cutters, and warfare ships
 - US DoD Arleigh Burke-class destroyer awarded to HII and GD (\$185Mn)
- Mission Technologies (~22%)
 - Tech products and solutions to government and commercial markets
 - \$1.6Bn in bookings for 3Q means more than 20% sequential backlog growth
 - Mission Tech YTD topline growth of 10% is in line of management's \$2.55Bn guide

3Q23 Earnings

- \$50mn bump to mid-point top line guidance
 - Driven by strength at Ingalls
 - US DoD Arleigh Burke-class destroyer awarded to HII and GD (\$185Mn)
- CF Guidance raised to \$500mn (400-450mn prior)
 - \$75mn pulled forward into 2023
- Strong demand outlook for shipbuilding and Mission Technologies
 - Mission Tech YTD topline growth of 10% is in line of management's \$2.55Bn guide
 - \$1.6Bn in bookings for 3Q means more than 20% sequential backlog growth
- Continuing to de-lever allowing more cash to be returned to shareholders

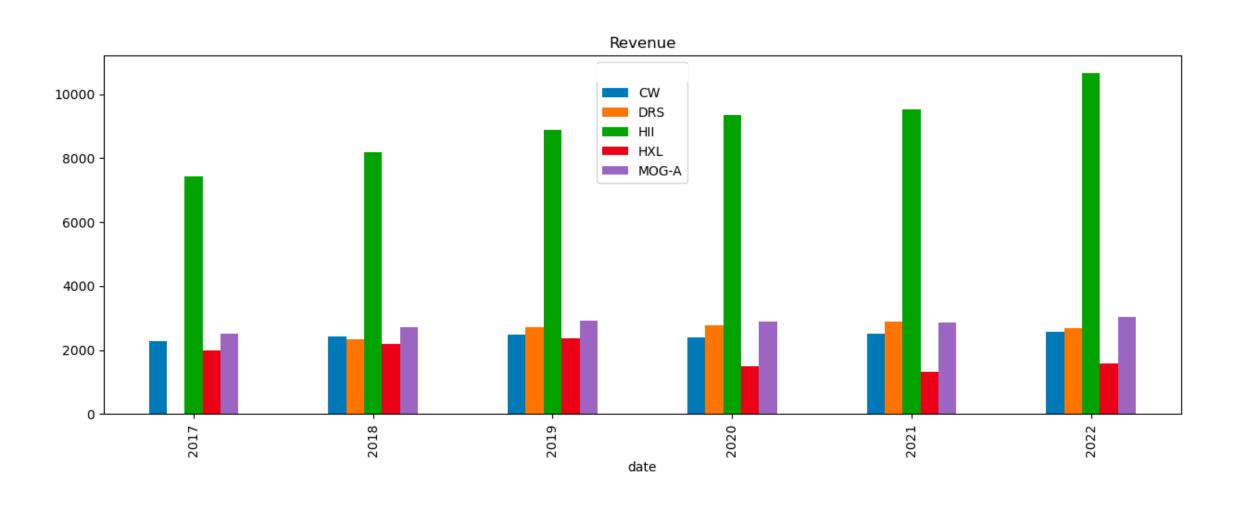
Financials vs Comps



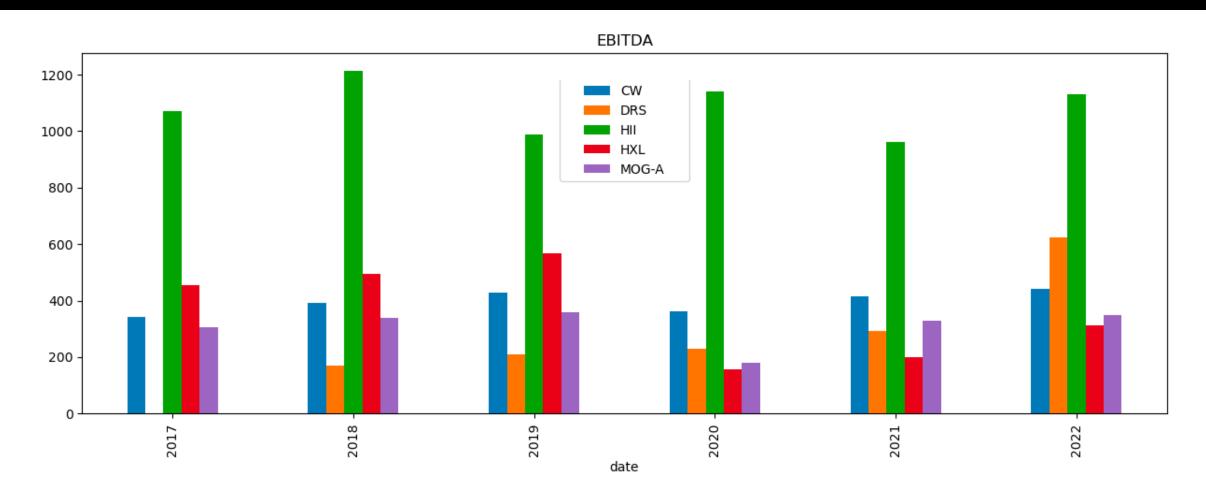
Financials vs Competitors

- Trades at discount with relatively low expenses that has been deleveraging
- Produces free cash flow that surpasses almost all defense contractors
- Specializes in shipbuilding that will continue to win contracts as the Navy seeks an entirely new fleet more geared towards unmanned ships
 - From Navy F24 Budget Request Briefing
 - Navy has an aging fleet with new geopolitical risks in different parts of the world
 - "We are at an inflection point, with critical choices to make to meet the pacing challenge posed by the People's Republic of China, the acute threat of Russia, as well as the persistent threats of Iran, North Korea and other malign actors."
 Erik Rayen
 - The F.Y. '24 president's budget request is \$255.8 billion. This is an \$11 billion, or 4.5 percent increase above our recently-enacted F.Y. '23 budget.

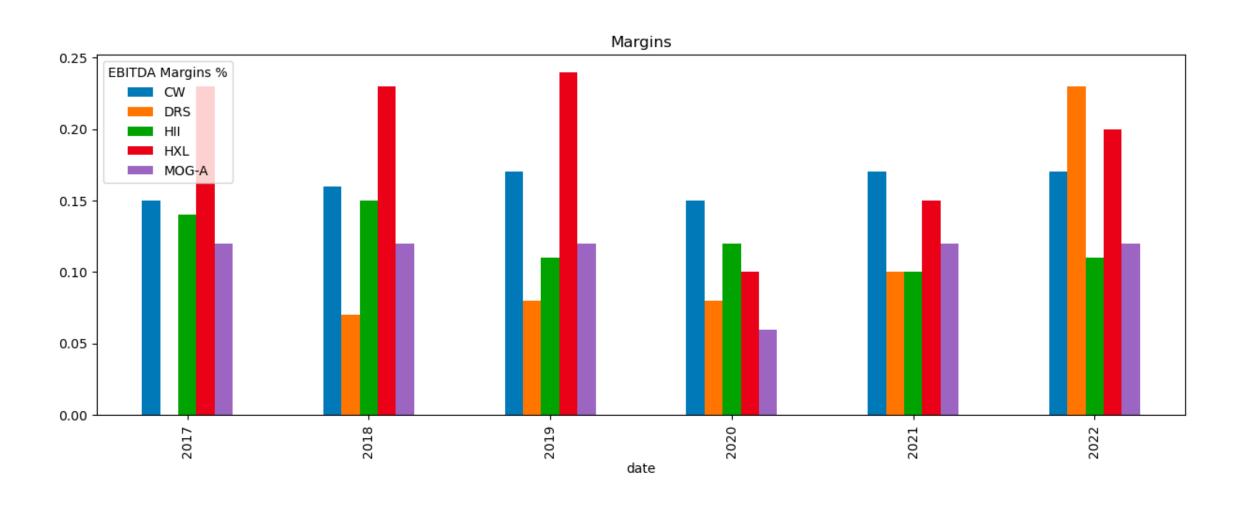
Steadily Growing Top Line



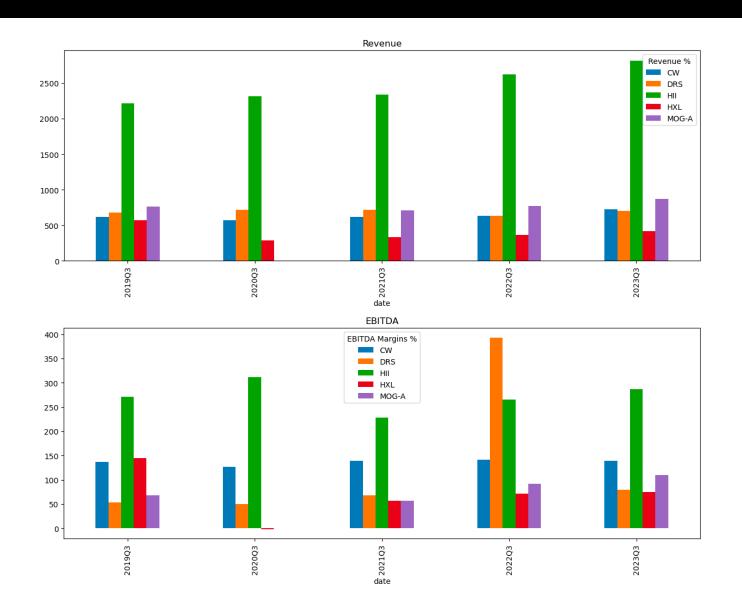
EBITDA - Annual Comparison



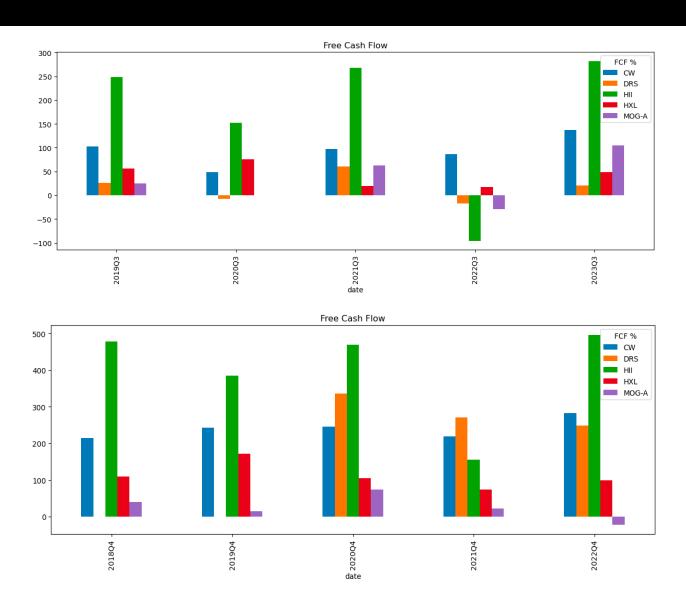
Margins - Consistent



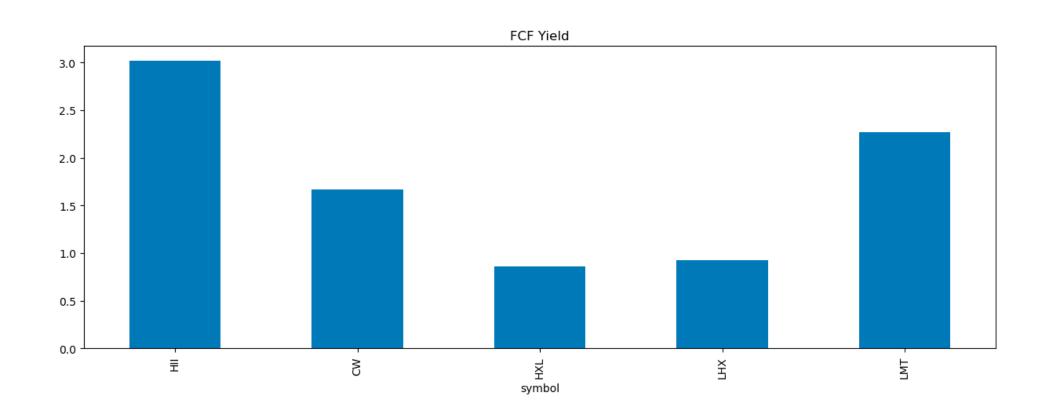
Quarterly Low Volatility of Top-Line and EBITDA



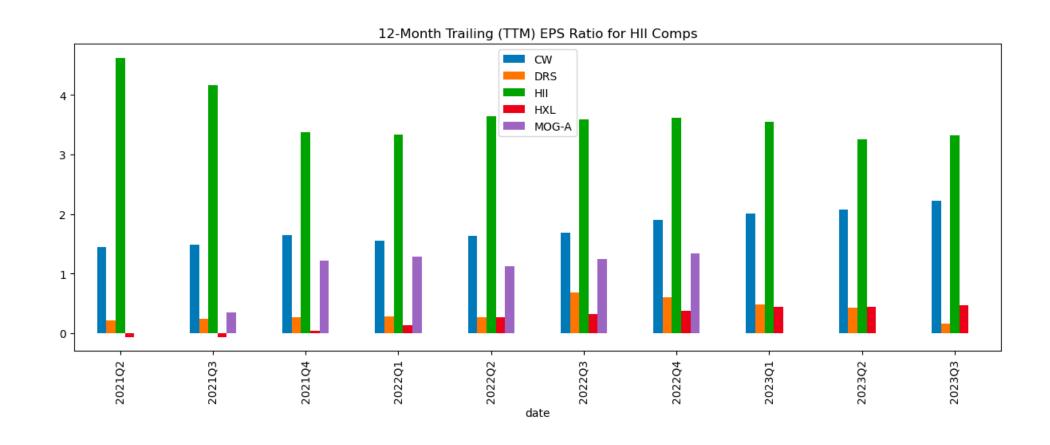
Free Cash Flow



Free Cash Flow Yield (11/17/2023)



EPS TTM



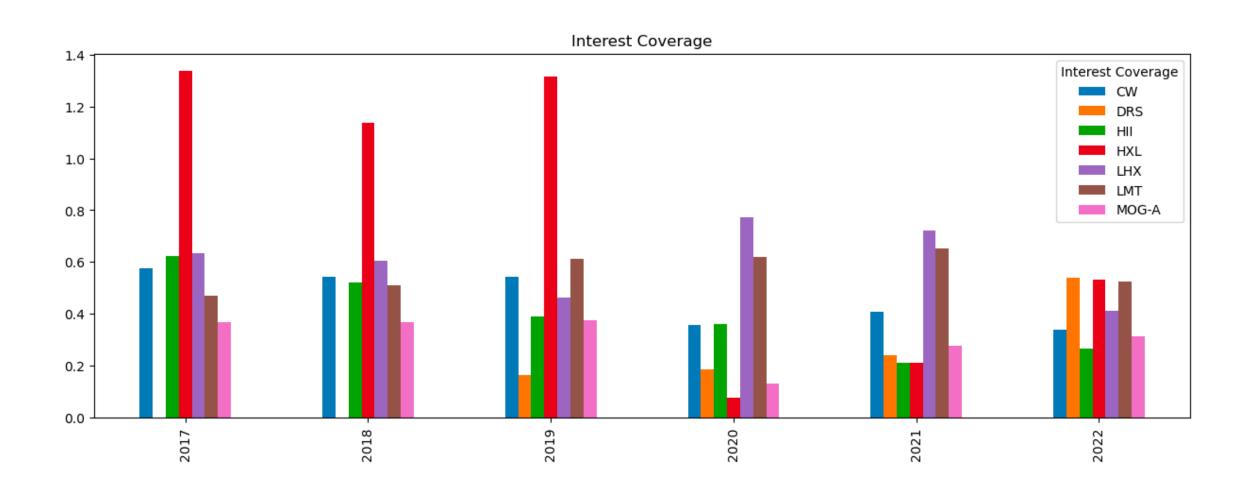
Earnings Surprises

	date	symbol	actualEarningResult	estimatedEarning	Surprise
0	2023-11-03	MOG-A	2.10	1.71	0.228070
1	2023-07-28	MOG-A	1.37	1.47	-0.068027
2	2023-04-28	MOG-A	1.42	1.43	-0.006993
3	2023-02-03	MOG-A	1.25	1.28	-0.023438
4	2022-11-04	MOG-A	1.36	1.45	-0.062069
5	2022-07-29	MOG-A	1.61	1.41	0.141844
6	2022-04-29	MOG-A	1.49	1.28	0.164062
7	2022-01-28	MOG-A	1.11	1.18	-0.059322
8	2021-11-05	MOG-A	1.07	1.20	-0.108333
9	2021-07-30	MOG-A	1.12	1.20	-0.066667
10	2021-04-30	MOG-A	1.51	1.09	0.385321
11	2021-01-29	MOG-A	1.17	0.88	0.329545
12	2020-11-06	MOG-A	0.81	0.65	0.246154

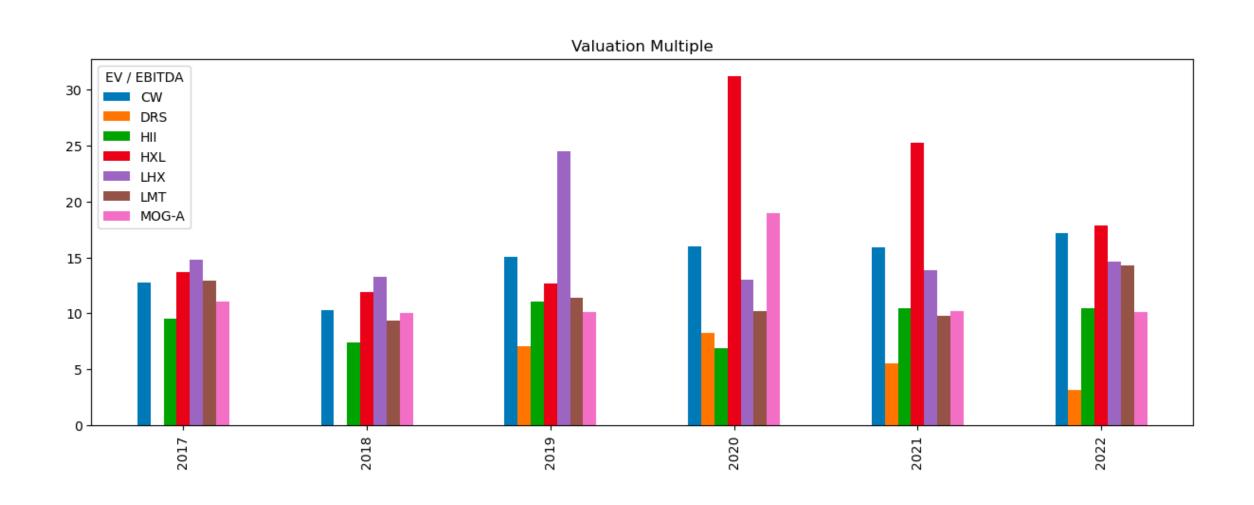
- HII has consistently met or exceeded EPS street consensus
 - Beat 12 out of last 13 Earnings
- Compared to Moog Inc
 - Beat 6 out last 13

	date	symbol	actualEarningResult	estimatedEarning	Surprise
0	2023-11-02	HII	3.70	3.39	0.091445
1	2023-08-03	HII	3.27	3.12	0.048077
2	2023-05-04	HII	3.23	2.90	0.113793
3	2023-02-09	HII	3.07	3.29	-0.066869
4	2022-11-03	HII	3.44	3.42	0.005848
5	2022-08-04	HII	4.44	3.35	0.325373
6	2022-05-05	HII	3.50	3.19	0.097179
7	2022-02-10	HII	2.99	2.97	0.006734
8	2021-11-04	HII	3.65	2.99	0.220736
9	2021-08-05	HII	3.20	2.51	0.274900
10	2021-05-06	HII	3.68	2.63	0.399240
11	2021-02-11	HII	6.15	4.56	0.348684
12	2020-11-05	HII	5.45	4.13	0.319613

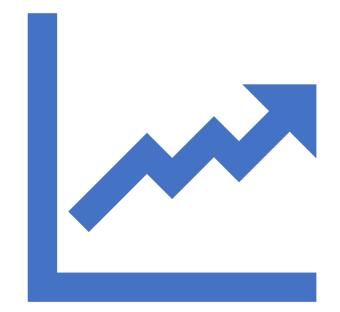
Low Interest Coverage - Higher for Longer



Cheaper Multiple



Most Recent Earnings
Call Highlights



3Q23 Earnings Call – Main Highlights

Main Financial Highlights

- YTD revenue growth of 5.3%
- Increased guidance on revenue and free cash flow for FY23
- Strong third-quarter revenue growth across all divisions.
- Record 3Q Revenue of \$2.8 Billion
- Diluted EPS of \$3.70

Backlog and Shipbuilding Milestones:

- New contract awards of \$5.4 billion, resulting in a backlog of approximately \$49 billion (future revenue).
- Successful shipbuilding milestones, including the launch of amphibious assault ship LHA 8 Bougainville and keel laying for LHA 9 Fallujah.

Various achievements at Ingalls, Newport News, and Mission Technologies divisions.

- Notable contracts, including the modernization of USS Zumwalt DDG 1000 and awards for Arleigh Burke-class destroyers.
- Describes the quarter as strong, showcasing progress in executing backlog and driving growth in Mission Technologies.

Mission Technologies Division:

- Third straight quarter of record revenue at \$685 million.
- Mission Technologies showcased a backlog book-to-bill of 2.4 and a potential total contract value of over \$5 billion year-to-date.
 - Significant contract wins, totaling over \$5 billion in potential contract value year-to-date.

3Q23 Earnings Call: Main Segment Highlights

Government Funding and Congressional Expectations:

- Express anticipation for Congress to proceed swiftly on appropriations for the second Columbia-class nuclear submarine construction.
- Look forward to Congress finalizing the fiscal year 2024 National Defense Authorization Act, emphasizing support for shipbuilding and national security priorities.
- Huntington Ingalls discussed the construction of the second Columbia-class submarine and emphasized the need for strong congressional support for shipbuilding.
 - Huntington Ingalls is eager to start constructing the second Columbia-class nuclear submarine and is hopeful for timely appropriations from Congress. They emphasize the importance of strong congressional support for shipbuilding and national security priorities

Newport News: Submarine Mix and Columbia-Class Impact:

- Columbia-class, while important, represents only 22% to 23% of the work at Newport News.
- The mix between Columbia-class and Virginia-class submarines doesn't dictate Newport News' margin performance, which is influenced more by Virginia-class program performance.
- Newport News met its goal of 7.4% margin for the quarter.

Financial Results by Tom Stiehle:

- Consolidated revenues of \$2.8 billion, a 7.2% increase from the previous year.
- Operating income increased by 31% to \$172 million, with a margin of 6.1%.
- Net earnings were \$148 million, and diluted earnings per share were \$3.70.
- Cash from operations was \$335 million, and free cash flow was \$293 million.

3Q23 Earnings Call Highlights: Guidance

Free Cash Flow and Guidance:

- An increase of \$75 million in the fiscal year '23 free cash flow guidance, primarily due to the conclusion of negotiations on COVID advances and positive cash flow contributions for Mission Technologies.
- Anticipation of distributing substantially all free cash flow to shareholders through 2024 after planned debt repayment.
- Timing-driven changes in free cash flow, with receipts flowing sooner than expected.
- The company expressed confidence in future growth prospects, with an expected inflection point in both shipbuilding and Mission Technologies.
- Focus on working capital improvement, with positive performance in Mission Technologies contributing to topline and cash collections.
- Increase in 2023 free cash flow guidance from good performance in Mission Technologies and navigating through COVID repay.
- 2024 free cash flow guidance remains at \$700 million, reflecting timing dynamics and performance considerations.

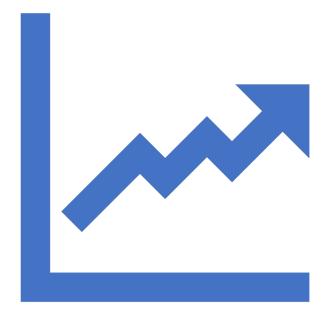
Revenue Guidance Increase:

- Shipbuilding revenue guidance midpoint increased by \$50 million, ranging from \$8.5 billion to \$8.6 billion.
- Mission Technologies revenue guidance increased by \$50 million, reaching approximately \$2.55 billion.
- Reaffirmation of shipbuilding and Mission Technologies margin guidance.

Shipbuilding Margin Outlook for 2024:

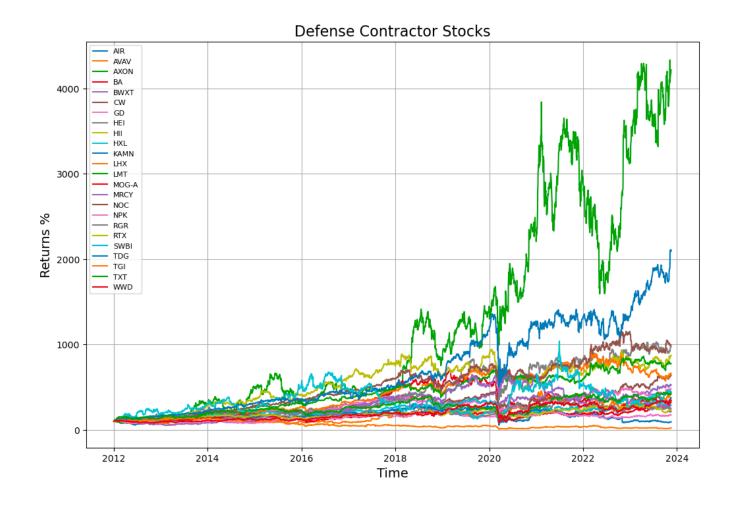
- Expected incremental improvement in shipbuilding margins in 2024.
- Focus on transitioning from Block IV to Block V and continuous improvement in Newport News.
- Recognition of large milestones in Q4 contributing to margin improvement.

Systematic Factors – Quick Back Test



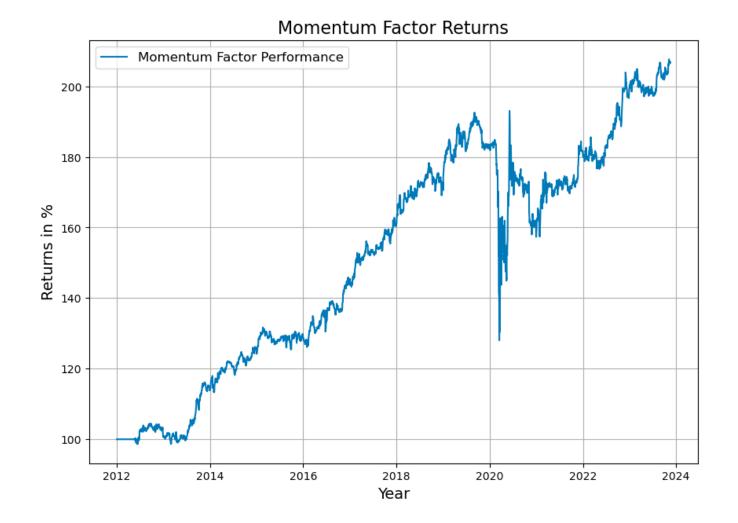
Systematic - Factors (2012-Present Day)

- Python Script provided in Appendix



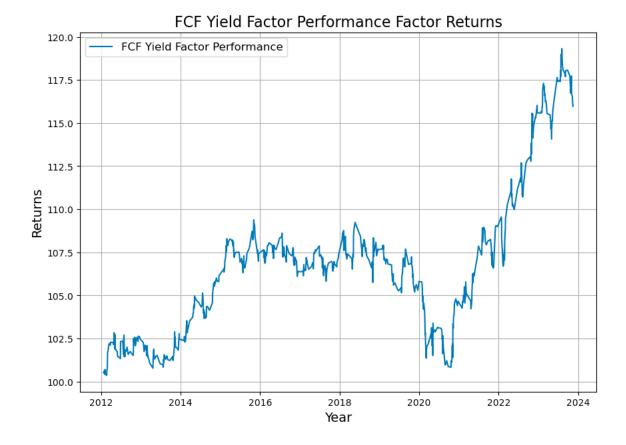
Momentum

- Hurst Exponent
 - Long the 100-day Rolling Window Hurst greater than 0.55
 - Over 0.55 means a trending stocks (persistent price increase)
 - Short the Hurst less than 0.45
 - Under 0.45 means the stock is not trending up and is mean-reverting
- Stocks with a persistent trend outperform mean reverting price action
 - Single Factor shows a high MDD during the COVID shock



Free Cash Flow Yield

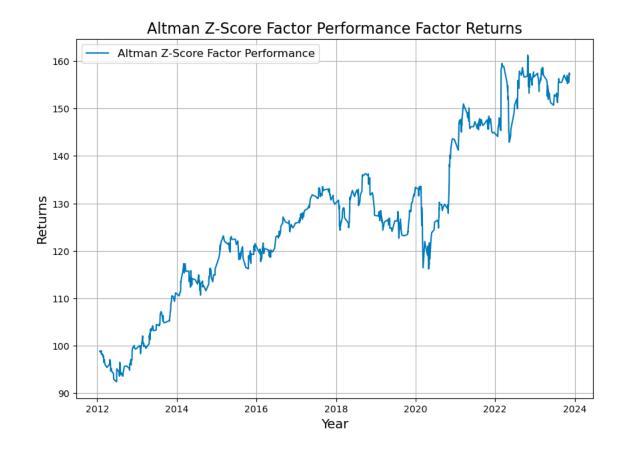
- FCF Yield
 - Long companies in the 60th percentile FCF Yield
 - High FCF yield means companies are producing a lot of cash relative to their market capitalization
 - Short companies in the 40th Percentile
 - Low FCF yield might mean a company that is overvalued in proportion to cash flow production
- Defense Contractor companies that are undervalued have outperformed since 2012
 - Single Factor shows high yielding companies outperform especially during the era where the central bank was pumping large amounts of liquidity into the market (post-covid)



```
df['workingCapRatio'] = (df['totalCurrentAssets_bs'] - df['totalCurrentLiabilities_bs']) / df['totalAssets_bs']
df['reinvestToAssets'] = df['retainedEarnings_bs'] / df['totalAssets_bs']
df['operatingEarningsToAssets'] = (df['ebitda'] - df['depreciationAndAmortization']) / df['totalAssets_bs']
df['leverage'] = df['totalEquity_bs'] / df['totalLiabilities_bs']
df['assetTurnover'] = df['revenue'] / df['totalAssets_bs']
df['Altman Z-Score'] = 1.2 * df['workingCapRatio'] + 1.4 * df['reinvestToAssets'] + 3.3 * df['operatingEarningsToAssets'] + 0.6 * df['leverage'] + 1.0 * df['assetTurnover']
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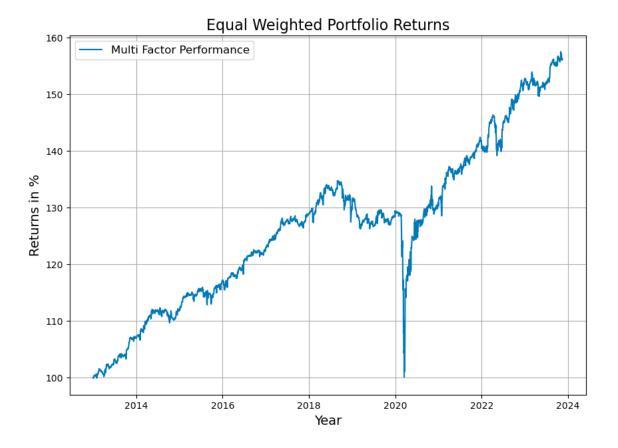
Altman Z-Score

- Common credit risk score
 - Companies with a higher Z-Score on average have better credit than lower Z-Scores
 - Long Companies with Average to High Altman Z-Scores
 - Short companies with Altman Z-Scores lower than 1.00
 - Low relative Altman Scores mean
- Defense Contractor companies that are undervalued have outperformed since 2012
 - Single Factor shows companies with higher working capital, more reinvestment into total assets, higher earnings to total assets, less leverage, and higher asset turnover outperform on average since 2012



Equal Weighted: Altman Z-Score, FCF Yield & Momentum Factors

- Each factor was equally weighted
 - Momentum Hurst > 0.55 minus Hurst < 0.45
 - FCF Yield 60th Percentile minus FCF Yield 40th Percentile
 - Altman Z Score > 1.00 minus Z-Score < 1.00
- Altman Z Score was very correlated to the other two factors, so it won't be used in the analysis going forward

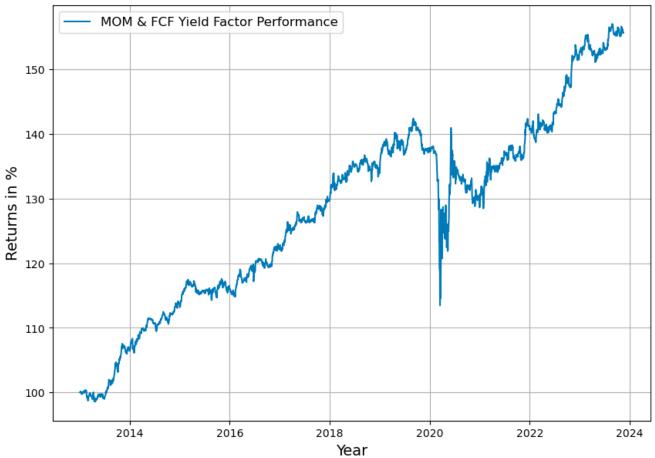


	Momentum Factor	Altman Z-Score Factor	FCF Yield Factor
Momentum Factor	1.000000	0.852953	0.652756
Altman Z-Score Factor	0.852953	1.000000	0.757166
FCF Yield Factor	0.652756	0.757166	1.000000

Equal Weighted: FCF Yield & Momentum Factors

- High Altman Z-Score minus Low Altman Z-Score
- High FCF Yield minus Low FCF Yield
- Equal Weighted factors portfolio outperforms with a smaller drawdown





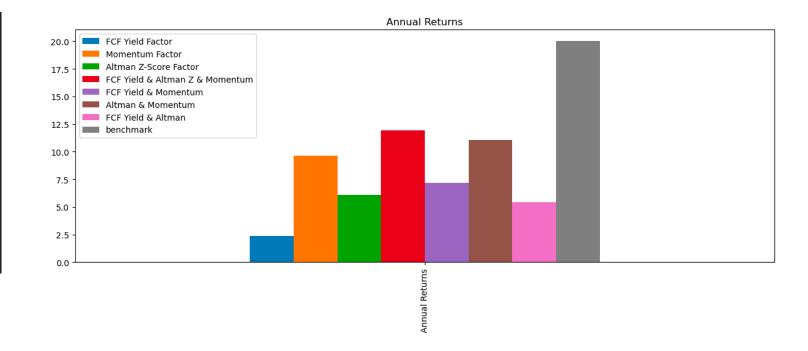
Systematic Long Only

– Quick Back Test



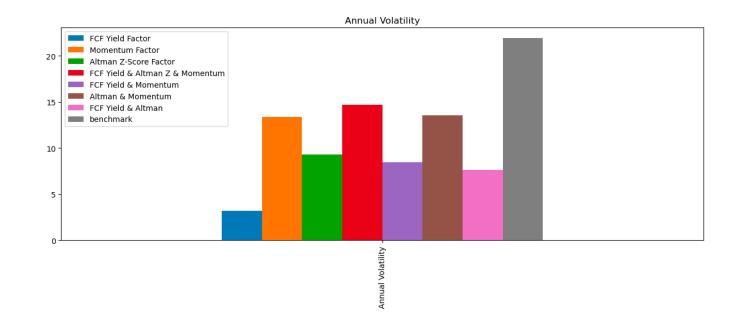
Annual Returns

	Annual Returns
FCF Yield Factor	2.36
Momentum Factor	9.63
Altman Z-Score Factor	6.07
FCF Yield & Altman Z & Momentum	11.96
FCF Yield & Momentum	7.18
Altman & Momentum	11.06
FCF Yield & Altman	5.43
benchmark	20.04



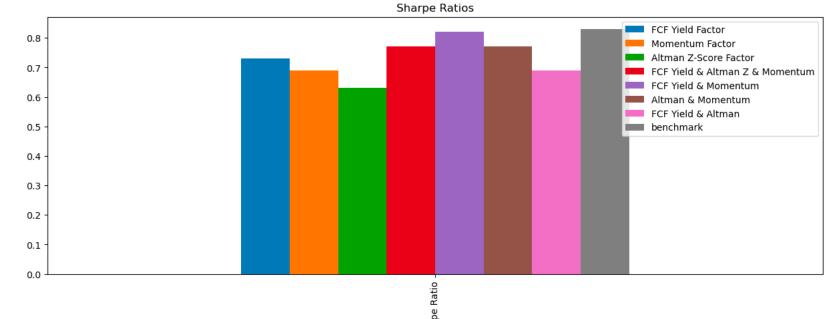
Volatility

	Annual Volatility
FCF Yield Factor	3.19
Momentum Factor	13.34
Altman Z-Score Factor	9.31
FCF Yield & Altman Z & Momentum	14.68
FCF Yield & Momentum	8.47
Altman & Momentum	13.55
FCF Yield & Altman	7.62
benchmark	21.94



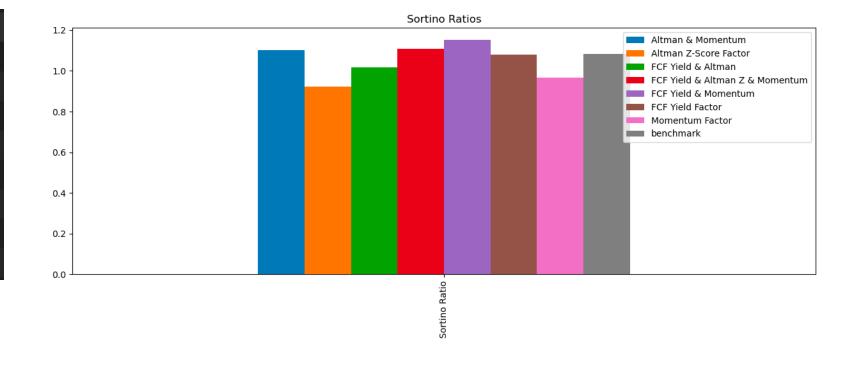
Sharpe Ratio

	Sharpe Ratio
FCF Yield Factor	0.73
Momentum Factor	0.69
Altman Z-Score Factor	0.63
FCF Yield & Altman Z & Momentum	0.77
FCF Yield & Momentum	0.82
Altman & Momentum	0.77
FCF Yield & Altman	0.69
benchmark	0.83



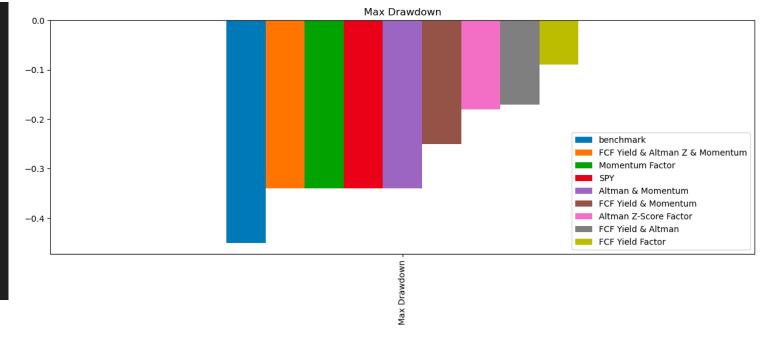
Sortino Ratio

	Sortino Ratio
FCF Yield Factor	1.08
Momentum Factor	0.97
Altman Z-Score Factor	0.93
FCF Yield & Altman Z & Momentum	1.11
FCF Yield & Momentum	1.16
Altman & Momentum	1.11
FCF Yield & Altman	1.02
benchmark	1.15



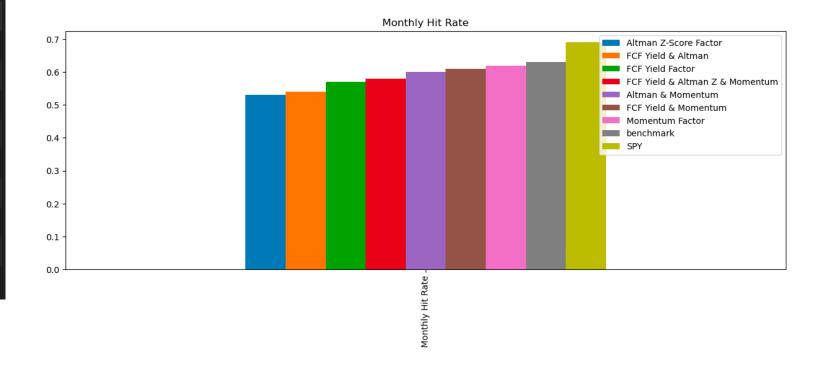
Maximum Drawdown

	Max Drawdown
benchmark	-0.45
FCF Yield & Altman Z & Momentum	-0.34
Momentum Factor	-0.34
SPY	-0.34
Altman & Momentum	-0.34
FCF Yield & Momentum	-0.25
Altman Z-Score Factor	-0.18
FCF Yield & Altman	-0.17
FCF Yield Factor	-0.09



Hit Rate

	Monthly Hit Rate
Altman Z-Score Factor	0.53
FCF Yield & Altman	0.54
FCF Yield Factor	0.57
FCF Yield & Altman Z & Momentum	0.58
Altman & Momentum	0.60
FCF Yield & Momentum	0.61
Momentum Factor	0.62
benchmark	0.63
SPY	0.69

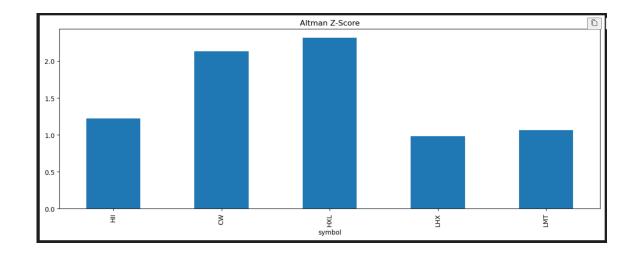


HII Factor Exposures

- FCF Yield: 2.99 (ranked out of 24) Highest FCF Yield among Ext. Peers
- Momentum: 0.57 (over 0.55) Ranked 17 out of 24 (71st percentile)
- Altman Z-Score: 1.22 (Over 1.00) Ranked 9th out of 24 (37.5th percentile)

	2023-11-17
symbol	
HII	24.0
MOG-A	23.0
LMT	22.0
RTX	21.0
CW	20.0
WWD	19.0
GD	18.0
SWBI	17.0

	2023-11-17
symbol	
HII	2.99
CW	1.69
HXL	0.86
LHX	0.91
LMT	2.27



Code

HII Systematic Code:

https://github.com/RyanFineganTradingProjects/2023-11-27-Trades/blob/main/QD%20Trading%20Strat%20HII.ipynb