

March 23, 2018

EchoStar Corporation: SATS

Matt Lucarelli

Sector: Telecommunications

Industry: Communications Equipment

Current Price: \$55.20

Target Price: \$72.72

Company Description: EchoStar Corporation is headquartered in Englewood, Colorado and are global provider of communication solutions. They consist of two segments, Hughes Network systems and EchoStar Satellite Services. These segments operate a total of 25 satellites which are either owned or leased, providing broadband internet service to consumers and businesses. In addition, EchoStar delivers innovative network technologies, managed services, and various communications solutions for aeronautical, enterprise and government customers.

BUY

Current Price:	\$55.20
Target Price:	\$72.72
Market Cap:	\$5.29B
52 Week Range:	\$52.11-\$62.50
Beta:	1.020
ROE:	9.94%
WACC:	10.20%
ROIC:	2.40%
EBITDA Margin:	39.30%

Catalysts:

- **Short Term (within the year):** Positive earnings announcement 05/09/18. Continued growth in foreign operations.
- **Mid Term (1-2 years):** Global Eagle's adoption of Hughes. JUPITER Aero system.
- **Long Term (3+):** Continue to pursue strategic opportunities, both organically and through acquisitions to diversify their current portfolio.

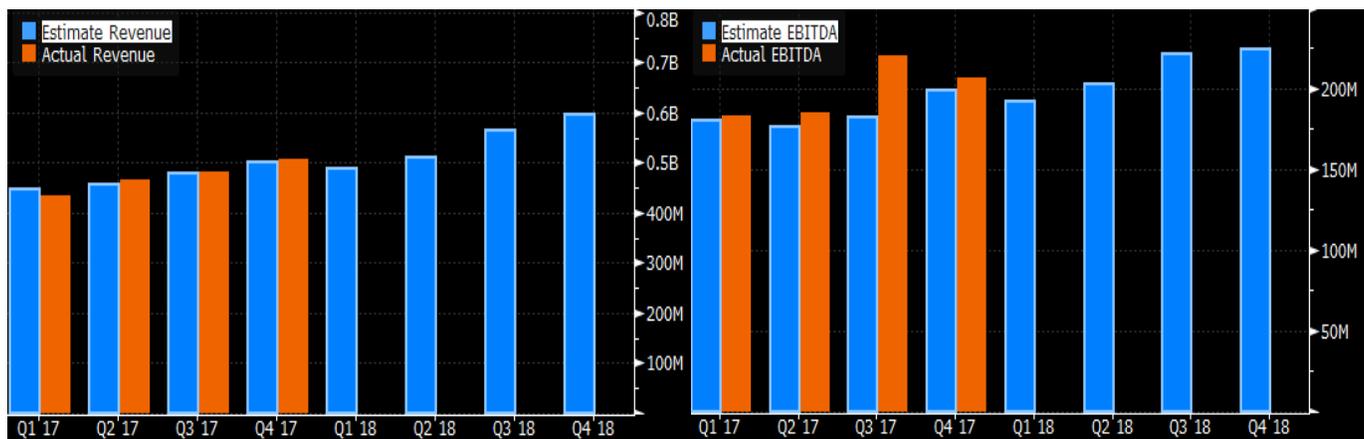


Thesis:

EchoStar operates in two main business segments. Hughes provides broadband satellite technologies and broadband internet services to domestic and international home and small office customers, while EchoStar Satellite Services uses certain of their owned and leased in-orbit satellites and related licenses to provide satellite service operations and video delivery solutions on a full-time and occasional-use basis primarily to DISH Network Corporation. With a potential optimistic earnings announcement on 05/09/18, this will positively impact investor confidence and will positively affect EchoStar. Recently, EchoStar announced two major enhancements to Global Eagle's global connectivity network that bring more capacity and faster speeds to airlines and their passengers. With growing passenger demand, Hughes and Global Eagle are working together to increase the bandwidth and performance of the Hughes JUPITER Aero system, which will double capacity, enabling airlines to accommodate growing passenger demand and delivering superior speed and performance for the array of applications passengers use. In the long-term, EchoStar is determined to obtain a larger market share in their industry against their larger competitors through diversifying their portfolio, both organically and through future acquisitions.

Earnings Performance:

For the end of 2017, EchoStar reported a 2017 consolidated annual revenue of \$1.89 billion, which was accurate with the estimated total consolidated revenue in 2017. The actual consolidated EBITDA for 2017 had outperformed the estimated EBITDA, at \$795 million. In the 3rd quarter of 2017, EchoStar's actual consolidated EBITDA significantly outperformed its estimated EBITDA. This was directly because the contract they signed in July 2017, with Wideband Communications Architecture Study (WCAS), which will support the U.S. Department of Defense (DoD) plan for resilient, cost-effective satellite communications (SATCOM) capabilities. For 2018, the estimated revenue and estimated EBITDA are expected to continue to increase, which is due to increasing customer demand for EchoStar's services. Currently, the company has approximately 1.2 million Hughes broadband subscribers as of December 31, 2017 and is projected to continue to grow in 2018.



A large portion of their revenue comes directly from DISH Network Corporation. DISH Network accounted for 23.7%, 26.1% and 29.4% of their total revenue for the years ended December 31, 2017, 2016 and 2015, respectively. For their Hughes segment, DISH Network accounted for 5.6%, 7.7% and 7.8% of their total

Hughes segment revenue for the years ended December 31, 2017, 2016 and 2015, respectively. For their EchoStar Satellite Service segment, DISH Network accounted for approximately 87.9%, 85.7% and 86.3% of their total ESS segment revenue. If EchoStar were to lose DISH as a customer, which is highly unlikely, it may be difficult for them to replace, in whole or in part, their historical revenue from DISH Network because there are a relatively small number of potential customers for their specialized services, and they have had limited success in attracting such potential new customers in the past. As for their foreign revenue, sales outside the U.S. are growing and accounted for approximately 19.3%, 18.2% and 17.3% of other revenue for the years ended December 31, 2017, 2016 and 2015, respectively. Collectively, they expect their foreign operations to continue to represent a significant and growing portion of the business. Over the last 10 years, they sold products in over 100 countries and began offering broadband internet services to consumers in Brazil and Colombia and intend to continue to do so in other Central and South American countries.

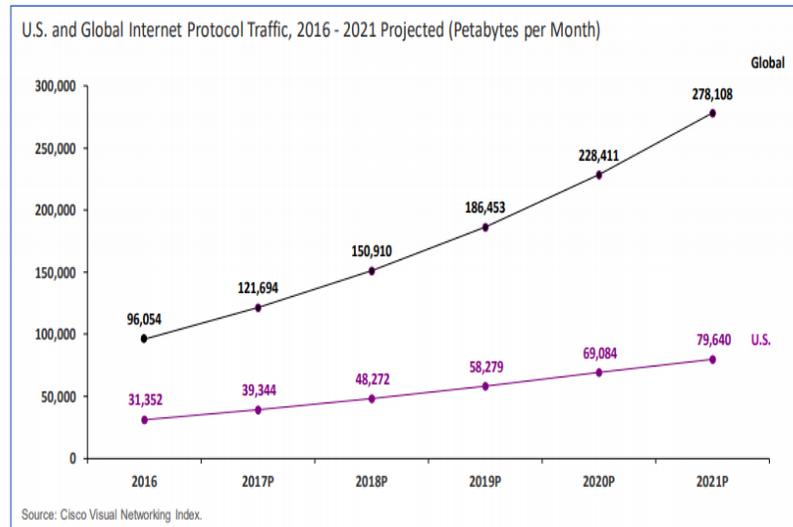
Industry Outlook:

Based off increasing consumer demand for products offered by EchoStar, the communications equipment industry is growing and has the potential to grow to around 4% to 6% in 2018. Since EchoStar deals directly with DISH, their main customer, it is important to not only understand the macroeconomic industry factors of the telecom sector, but also the how DISH is performing. The chart to the right depicts how DISH is moving with the telecommunications index and the S&P 500. DISH's stock price may be decreasing, is due to the loss of subscribers to Sling TV. The number of subscribers had dropped from 13.7 million to 13.2 in 2017. As the pay-tv industry has matured and bundled offers combining video, broadband and/or wireless services have become more prevalent and competitive, DISH faces intense and increasing competition from providers of video, broadband and wireless services, which may require them to further increase subscriber acquisition and retention spending or accept lower subscriber activations and higher subscriber churn. However, DISH is expected to rebound from its current state by making upgrades and add on services which will help their profitability. While many customers are beginning to switch to pay-tv companies like Netflix or Sling TV, these large powerhouse cable providers still maintain a large number of the customers. Cable providers are looking into making adjustments to retaining their customers from switching to pay-tv companies. By 2022, the broadband-only home subscribers should grow by 14%. While things are expected to pick up, we are also in a rising interest rate environment. Since companies in the telecommunications sector generally use high levels of borrowing and have steady cash flows, they will be negatively impacted when interest rise. However, with increasing customer demand and the necessity for telecommunication services, companies with strong balance sheets, quality services or products, and loyal customers will be fine if interest rate continue to rise.



The U.S. Is a Global Leader in IP Traffic

The growth of EchoStar, including aeronautical, businesses relies heavily on global economic conditions and the competitive landscape for pricing relative to competitors and alternative technologies. Service costs related to ongoing support for their direct and indirect customers and partners are typically impacted most significantly by our growth. When analyzing the chart to the right, IP traffic is projected to increase tremendously, which would cause less efficient network services due to the heavy IP traffic. This will create an increased demand for companies like EchoStar who provide services in this industry.



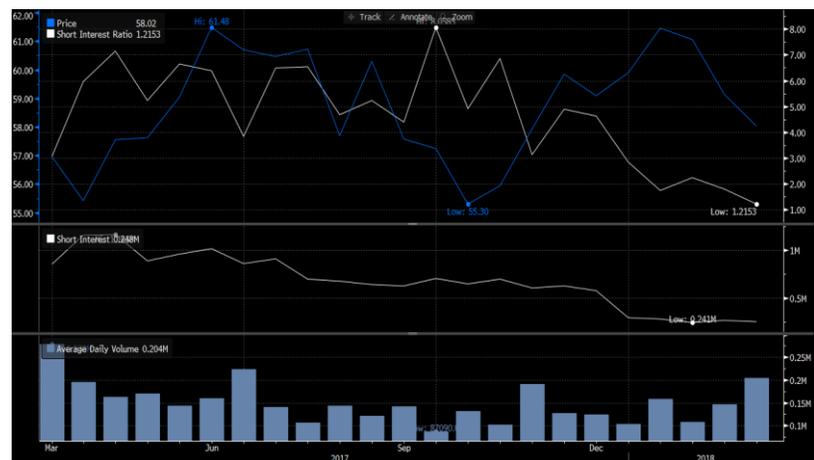
The U.S. is home to 4.4% of the world's population, but it generates nearly one-third of global IP traffic

Management/Ownership:

The ownership of the company is heavily weighted towards both Investment advisors and hedge fund managers. In the past year, there has been little change in ownership, with investment advisors increasing their ownership at 1.98%. The top investment advisors consist of Putnam Investments at 24.88%, Vanguard Group at 6.71%, and Blackrock at 4.34%. The current percentage of float held is equal to 95.44%, which increased by 1.20% over the past year.

54) Ownership Type	03/19/17	Curr	Change
41) Investment Advisor	71.39	73.37	+1.98
42) Hedge Fund Manager	21.21	19.96	-1.25
43) Pension Fund	2.73	2.61	-0.12
44) Individual	2.99	1.67	-1.32
45) Sovereign Wealth Fund	0.80	1.21	+0.41
46) Insurance Company	0.21	0.45	+0.24
47) Bank	0.38	0.38	0.00
48) Government	0.17	0.18	+0.01
49) Brokerage	0.05	0.10	+0.05

As for the short interest for the company, it has decreased in the past couple of months. This illustrates that hedge fund managers may have exercised their short position. In the past year, the short interest was highest at 8.05 and recently reached a low of 1.21.



As for the management of EchoStar, Anders Johnson, is the Chief Strategy Officer and President of EchoStar Satellite Services, with the responsibility for coordinating strategic initiatives and corporate development across the company as well as directing EchoStar Satellite Services. Pradman P. Kaula serves as the President of Hughes Network Systems, LLC ("HNS") and Hughes Communications, Inc. He holds numerous patents and has published articles and papers on a variety of technical topics concerning satellite communications. In addition, Mr. Kaul has been inducted as a member of the National Academy of Engineering. With over 37 years of experience at Hughes, Mr. Kaul has a deep knowledge and understanding of the satellite industry. Michael Dugan is the Chief Executive Officer and President of EchoStar. He has served as a member of the board of directors since October 2007, and previously served in several executive roles at the combined company from 1990 to 2004, prior to EchoStar's spinoff from DISH Network Corporation in January 2008. Mr. Dugan is also credited with being the chief architect behind the technological foundation for DISH Network and EchoStar. The compensation of the executives sits historically in line with the stock price and revenue of the company. Therefore, this displays that the executives are not taking advantage of their compensations and that they are dedicated to the company.

+ Name	Title Sort by Rank	FY 2013 (USD)	FY 2014 (USD)	FY 2015 (USD)	FY 2016 (USD) ▼
+ Kaul, Pradman P.	Director	1,497,795	1,605,088	1,527,882	1,435,032
+ Johnson, Anders N.	Chief Strategy Officer	448,833	454,664	548,058	902,069
+ Dugan, Michael T.	CEO, President & Director	794,401	944,245	879,055	867,989

Capital Allocation:

The capital structure of the company is comprised of a little more than a third of debt. The majority of this debt is long-term with a credit quality rating of bb-, which is actually higher than some of their competitor's ratings. Furthermore, in the telecommunications sector, high borrowing of debt is very common. However, EchoStar's cash has been increasing over the years. As mentioned early, the reason increasing cash is because they are motivated to acquire another company to grow their market share. The company's LTM adjusted ROIC is at 2.4% and their adjusted WACC is at 10.2%. Compared to their competitors, the LTM average adjusted ROIC and WACC are at 3.0% and 7.4%, respectively. While their ROIC/WACC may only be at .23, lower than their competitors at about .40, they have historically better ROIC/WACC. Since their cost of capital is greater than the industry average, it is something to be wary of because the cost to take on new projects will be more expensive compared to their competitors.



Profitability Comparison:

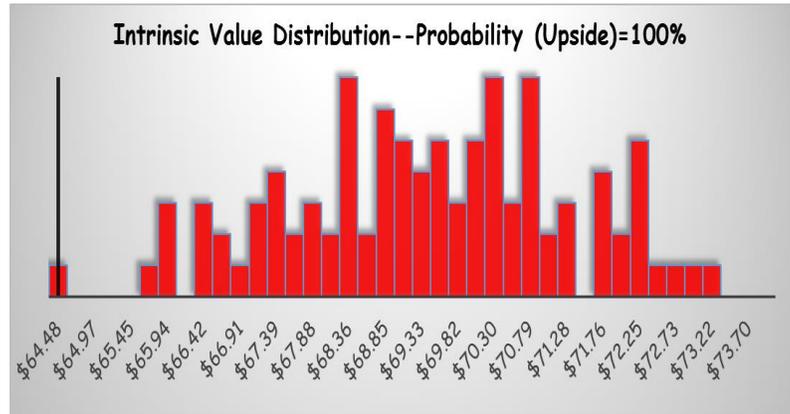
The network communications industry is highly competitive. As a global provider of network technologies, products and services, the Hughes segment competes with a large number of telecommunications service providers, which puts pressure on prices and margins. In their consumer markets, they compete against traditional telecommunications and wireless carriers, other satellite internet providers, as well as digital subscriber line (“DSL”), fiber and cable internet service providers offering competitive services in many markets they seek to serve. Cost, speed and accessibility are key determining factors in the selection of a service provider by the consumer. Their primary satellite competitor in our North American consumer market is ViaSat Communications, Inc. (“ViaSat Communications”), which is owned by ViaSat, Inc. (“ViaSat”). We seek to differentiate ourselves based on the ubiquitous availability of our service, quality, proprietary technology, and distribution channels. In the fixed satellite services market, the ESS segment competes against larger, well-established satellite service companies, such as Intelsat S.A. (“Intelsat”), SES S.A., Inmarsat plc, Telesat, Eutelsat Communications S.A. (“Eutelsat”), Asia Satellite Telecommunications Company Limited and the direct-to-home (DTH) satellite business of AT&T, Inc., in an industry that is characterized by long-term contracts and high costs for customers to change service providers. The chart below displays some of their competitors. When analyzing the chart, in the past 6 years, EchoStar has been outperformed by their competitors. However, in the past 12 months, the company has managed to have a higher net margin at 16% compared to their competitors at 13.4%. As EchoStar continues to expand into foreign markets and expand their customer base, the company will continue to grow. For the rest of 2018, EchoStar is projected to have an adjusted EBITDA margin of about 41.1% and an adjusted revenue growth of 13.6%, while their main competitor is projected to have an adjusted EBITDA margin of about 30.4% and an adjusted revenue growth of only 1.3%. When comparing them to larger competitors such as AT&T for the remainder of 2018, AT&T is projected to have an adjusted EBITDA margin of about 33% and an adjusted revenue growth looking to be negative at -0.1%.

COMMON SIZE VIEW				
	6-year Historical Median		Last 12 Months	
	sats	Competitors	sats	Competitors
COR/Rev	57.8%	56.8%	40.2%	56.2%
(SGA+Other)/Rev	16.1%	29.9%	26.7%	28.8%
DPR/Rev	15.4%		25.2%	0.0%
EBITA Margin	10.8%	13.3%	7.8%	15.0%
Interest exp/Rev	5.0%	9.1%	11.4%	9.0%
AMORT/Rev	3.0%		1.5%	0.0%
SBC/REV	0.7%		0.5%	0.0%
Other Non-Operating Exp/Rev	-2.5%	-2.6%	-26.3%	-7.2%
Taxes/Rev	1.2%	-1.0%	4.7%	-0.2%
Net Margin	3.5%	7.7%	16.0%	13.4%

Sensitivity Forecast:

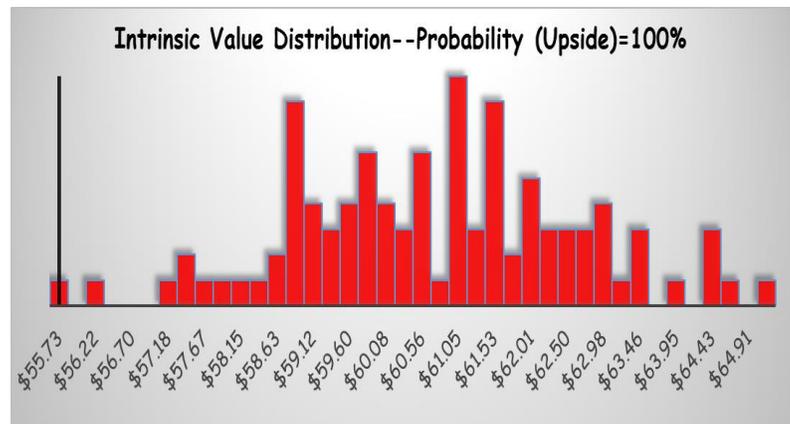
BASE CASE

The telecommunications sector and the overall market has been declining in the past couple weeks. EchoStar was affected as well, because the company is directly impacted and sensitive to macroeconomic factors. In my forecast, I estimated a 75% operating expense to revenue, which was based off a historical average and particular initiatives made by the company. With constant growing customer demand for EchoStar's services and products, increasing subscriber's year over year, and increasing revenue from foreign countries, I predicted the revenue growth to be 8.3%. As we can see, the probability of the price increasing presents 100% upside potential. The base case target price came out to \$72.72, presenting a 31.75% on year return.



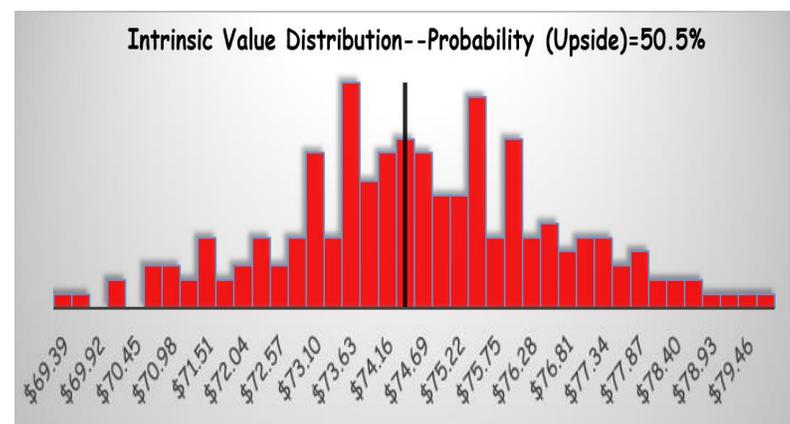
BEAR CASE

In a pessimistic scenario, holding all other factors constant and decreasing revenue due to an increasing loss of subscribers for DISH and potentially for EchoStar, the expected revenue was 4.1% with a decreased 1% in operating expenses to revenue and a 100% upside potential. In a bearish scenario, the target price is at \$61.07, providing a 10.63% one year return.



BULLISH CASE

In an optimistic scenario, holding all other factors constant and increasing revenue due to successful catalysts and a strong market outlook, the expected revenue was 11.3%, with 50.5% upside potential. I also decreased operating expenses to revenue by 1% considering that EchoStar would effectively use their satellites while increasing their capacity and efficiency while also reducing costs. In a bearish scenario, the target price is at \$79.50 with a 44.02% one year return.



Conclusion:

In conclusion, EchoStar Corporation is a buy at its current price. This is due to increasing customer demand, further expansion into foreign markets, and the continuation of advances in technology. In addition, the company has been steadily increasing their subscribers and retaining their customer's year over year. As seen in the Monte Carlo simulation, there is only upside to buying this stock. The company's one year target price of \$72.72 with a 31.75% one year return. With the proposed catalysts and positive macroeconomic factors, EchoStar has the ability to breach its 52 week high.

EchoStar Corporation (sats)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by **Matt Lucarelli**
3/23/2018

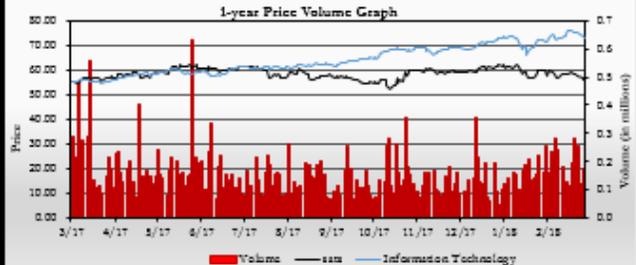
Current Price:
\$55.20
Dividend Yield:
0.0%

\$55.20
0.0%

Intrinsic Value
\$75.03
Target Price:
\$72.72

\$75.03
\$72.72

Target 1 year Return: **31.75%**
Probability of Price Increase: **100%**



Description
EchoStar Corporation provides satellite service operations and video delivery solutions worldwide.

General Information
Sector: Information Technology
Industry: Communications Equipment
Last Guidance: February 12, 2018
Next earnings date: May 8, 2018

Market Assumptions
Estimated Equity Risk Premium: 5.60%
Effective Tax rate: 22%

Market Data

Market Capitalization	\$5,293.43
Daily volume (mil)	0.20
Shares outstanding (mil)	95.30
Diluted shares outstanding (mil)	96.74
% shares held by institutions	103%
% shares held by investments Managers	33%
% shares held by hedge funds	11%
% shares held by insiders	50.54%
Short interest	0.26%
Days to cover short interest	1.62
52 week high	\$62.50
52-week low	\$52.11
Volatility	23.66%

Past Earning Surprises

Quarter ending	Revenue
12/31/2016	-35.96%
3/31/2017	-3.44%
6/30/2017	2.62%
9/30/2017	0.76%
12/31/2017	0.55%
Mean	-7.09%
Standard error	0.9%

Market and Credit Scores

Recommendation (STARS) Value	--0
Recommendation (STARS) Description	--0
Quality Ranking Value	--B-
Quality Ranking Description	--Lower
Short Score	--0
Market Signal Probability of Default % (Non-Ratings)	--0.938%
CreditModel Score (Non-Ratings)	--bb-

Industry and Segment Information

LTM Revenues by Geographic Segment	LTM Revenues by Business Segment
United States--81%	Highest--78%
Canada and Mexico--5%	EchoStar Satellite Services--21%
All Other--14%	Corporate and Other--1%
--	--
--	--

Management

Name	Position
Dugan, Michael	CEO, President & Director
Rayner, David	Executive VP, CFO, COO, Treasurer & Principal Accounting Officer
Kilaru, Kranti	Executive Vice President
Johnson, Anders	Chief Strategy Officer
Ergen, Charles	Executive Chairman of the Board
Pearre, Michelle	Senior Vice President of Human Resources

Total Compensation Growth

Executive	5y Growth	2y Growth
CEO	15.6%	12.48%
Executive VP	-12.06%	12.48%
Executive Vice President	18.67%	-1.06%
Chief Strategy Officer	-100%	10.19%
Executive Chairman	-100%	-1.06%

Peers

Viasat, Inc.	Gilat Satellite Networks Ltd.
Intelsat S.A.	--
Comtech Telecommunications Corp.	Avist Networks, Inc.
--	KVH Industries, Inc.
--	--

Profitability

Ratio	sats (LTM)	sats Historical	Peers' Media (LTM)
Return on Capital (GAAP)	2.3%	4.37%	3.01%
Operating Margin	8%	10.78%	14.98%
Revenue/Capital (GAAP)	0.30	0.41	0.20
RDE (GAAP)	7.3%	3.2%	2.8%
Net margin	16.0%	4.2%	3.3%
Revenue/Book Value (GAAP)	0.46	0.75	0.83

Invested Funds

Ratio	sats (LTM)	sats Historical	Peers' Media (LTM)
Cash/Capital	35.6%	22.8%	11.3%
NWC/Capital	0.4%	1.8%	6.5%
Operating Assets/Capital	58.0%	67.4%	68.1%
Goodwill/Capital	6.1%	8.0%	14.1%

Capital Structure

Ratio	sats (LTM)	sats Historical	Peers' Media (LTM)
Total Debt/Market Capitalization	0.45	0.41	0.46
Cost of Debt	7.4%	8.0%	4.0%
CGFS Rating (F-score, Z-score, and default Prob)	B		
WACC	9.7%	10.5%	7.4%

Valuation

Intrinsic Value Distribution--Probability (Upside)=100%

The chart shows a distribution of intrinsic values, with the highest probability (around 10%) occurring between \$73 and \$75.



Forecast Assumptions

Assumption	Explicit Period (5 years)	Continuing Period
Revenue Growth CAGR	8%	2%
Average Operating Margin	26%	25%
Average Net Margin	0%	6%
Growth in Capital CAGR	1%	2%
Growth in Claims CAGR	0%	2%
Average Return on Capital	3%	6%
Average Return on Equity	1%	6%
Average Cost of Capital	6%	6%
Average Cost of Equity	8%	8%

