NVIDIA (NVDA)

Updated August 17th, 2018 by Jonathan Weber

Key Metrics

Current Price:	$257	**5 Year CAGR Estimate:**	8.4%	**Volatility Percentile:**	94.1%
Fair Value Price:	$181	**5 Year Growth Estimate:**	15.0%	**Momentum Percentile:**	94.9%
% Fair Value:	142%	**5 Year Valuation Multiple Estimate:**	-6.8%	**Valuation Percentile:**	7.8%
Dividend Yield:	0.2%	**5 Year Price Target**	$364	**Total Return Percentile:**	54.3%

Overview & Current Events

NVIDIA Corporation is a specialized semiconductor company that designs and manufactures graphics processors, chipsets and related software products. Its products include processors that are specialized for gaming, design, artificial intelligence, data science and big data research, as well as chips designed for autonomous vehicles and robots. NVIDIA was founded in 1993, is headquartered in Santa Clara, CA, and is valued at $159 billion.

NVIDIA reported its second quarter results on August 16. The company grew its revenues by 40% to $3.1 billion, with broad increases across all of its platforms. The company earned $1.94 per share during Q2, an increase of 92% compared to the prior year's second quarter. Both revenues and earnings per share declined slightly from Q1, though.

Growth on a Per-Share Basis

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2023
EPS	$0.29	$0.40	$0.65	$0.94	$0.90	$0.74	$1.12	$1.08	$2.57	$4.82	***$7.24***	***$14.56***
DPS	-	-	-	-	$0.08	$0.31	$0.34	$0.40	$0.49	$0.57	***$0.61***	***$1.25***

In recent years NVIDIA's growth exploded. Cryptocurrencies became more common, and miners who want to mine a significant amount of cryptocurrencies oftentimes do this with GPUs. This was one of the reasons why NVIDIA has been able to grow its GPU revenues by more than 60% during H1. Demand from miners is cyclical, though. During times when the price of cryptocurrencies is lower, a lower amount of crypto-miners upgrade their GPUs.

NVIDIA has also found out that its GPUs are very versatile in AI applications. This had, originally, not been intended and came as a surprise to NVIDIA as well. The company has immediately started to capitalize on this trend by offering GPUs that are optimized for deep learning purposes, where these GPUs act as the brain of computers, robots and self-driving cars. Those GPUs are utilized in professional visualization, data centers and automotive markets.

All of the markets NVIDIA supplies GPUs for have strong growth rates, which bodes well for NVIDIA's revenue outlook. Even without significant market share gains the company should easily be able to capitalize on growing demand from gamers, professionals, cryptocurrency miners and scientists.

NVIDIA recently has been able to grow its profits a lot faster than its revenues, which can be explained by operating leverage and improving economics of scale. Going forward this should help NVIDIA to achieve above-average earnings growth rates as well, although the 90%+ earnings growth rates from the most recent quarter will not be sustainable.

NVIDIA's forecasts see a total addressable market of $50 billion in data centers alone by 2023, which, compared with the company's trailing revenues of just $10 billion (across all businesses), shows that NVIDIA has a lot of room to grow over the coming years. Many tech companies drive their earnings-per-share growth by repurchasing shares, but even though NVIDIA has bought back shares occasionally, its share count has actually increased over the last five years.

Valuation Analysis

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Now	2023
Avg. P/E	49.8	31.3	21.3	17.4	14.8	19.6	16.9	22.6	23.5	33.3	***35.5***	***25.0***
Avg. Yld.	-	-	-	-	0.6%	2.1%	1.8%	1.6%	0.8%	0.4%	***0.2%***	***0.6%***

Disclosure: This analyst has no position in the security discussed in this research report, and no plans to initiate one in the next 72 hours.

NVIDIA's valuation has increased significantly starting in 2015. This was the point where NVIDIA transformed from a gaming-focused GPU producer into a company that sells its products to many different industries. The improved growth rates and outlook with a substantially bigger addressable market has led to a revaluation that has made NVIDIA's shares rise a lot. Its current valuation will likely not be sustainable in the long run, but due to its high growth rates and strong outlook NVIDIA will likely continue to trade at an above-average valuation for the foreseeable future.

Safety, Quality, Competitive Advantage, & Recession Resiliency

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2023
GP/A	34.9%	32.3%	29.0%	36.8%	35.2%	31.7%	36.2%	38.1%	41.3%	51.8%	***55.0%***	***50.0%***
Debt/A	28.2%	25.7%	29.1%	25.3%	24.8%	38.5%	38.6%	39.2%	41.4%	33.5%	***32.0%***	***28.0%***
Payout	-	-	-	-	8.9%	41.9%	30.4%	37.0%	19.1%	11.8%	***8.4 %***	***8.6%***
Std. Dev.	65.7%	54.0%	42.5%	56.1%	27.8%	17.6%	24.5%	29.4%	39.7%	44.2%	***35.0%***	***30.0%***

NVIDIA has a very strong balance sheet. Its total liabilities are about one third of its assets, and in eight of the last ten years its net interest expense was negative - they earned more interest than they paid. When the company increasingly supplied chips to other markets than the gaming market starting in 2015, its fundamentals improved further.

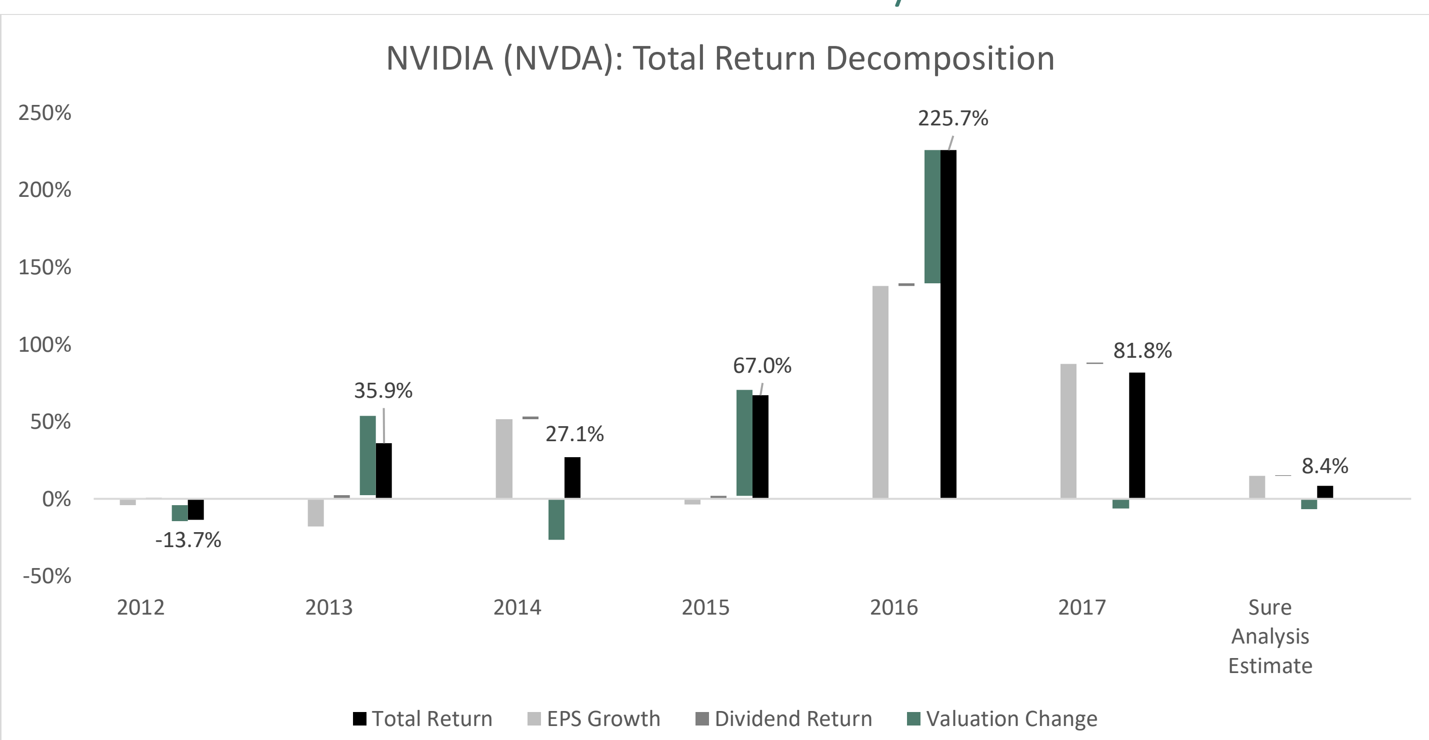
NVIDIA's business is cyclical, the gaming market is impacted by disposable income, demand from crypto miners is dependent on cryptocurrency prices and demand from businesses is dependent on the stage of the economy. NVIDIA has been able to remain profitable even during the last financial crisis, though, thus it seems unlikely that its profits would evaporate completely even in an adverse scenario.

In the gaming market NVIDIA is the producer with the best tech, and it was NVIDIA who basically established the GPU-for-AI market. It is likely that NVIDIA will remain the market leader in these two growth markets.

Final Thoughts & Recommendation

NVIDIA targets attractive, high-growth markets that can be somewhat cyclical, though. This means that NVIDIA's results could decline substantially in an adverse macro environment as well. The current valuation does not look sustainable, but thanks to a high forecasted earnings per share growth rate NVIDIA's share price will likely still rise over the coming years. Due to the high valuation shares are not a buy right here, even though we like the company fundamentally.

Total Return Breakdown by Year



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