Macroeconomic Overview

U.S. Markets

Index	Weekly % Change	YTD % Change
S&P 500	+0.96%	+1.96%
Dow Jones Industrial	+1.39%	+0.49%
NASDAQ Composite	+1.85%	+8.68%
Russell 2000	+3.22%	-0.41%
VIX	-4.91%	-25.36%

U.S equities recorded another strong week, as the S&P 500 posted a sixth consecutive weekly gain, setting a record for the year. The index gained 0.96% through Friday, as investors start to accept the reality of a December interest rate hike. Small-

cap stocks clearly outperformed their larger counterparts last week, with the Russell 2000 gaining 3.22% to close just shy of the 2,000 mark last crossed on August 19. The small cap benchmark's year-to-date performance remains negative, whereas the DJIA finally climbed back into positive year-to-date territory, finishing the week at 17,910.33 after gaining 1.39%. The tech-heavy NASDAQ Composite had another strong week, advancing 1.85% to close at 5,147.12. U.S stocks were pushed higher by generally bullish



S&P 500, DJIA, NASDAQ Composite, Russell 2000 5-day chart.

economic data, with vehicle sales setting another record at 18.2 million units and, more importantly, a very strong employment situation report on Friday. Nonfarm payrolls increased a massive 271K, widely surpassing the 190K consensus, and the unemployment rate fell another 10 bps to 5.0%, reaching a 7.5-year low. Another very positive sign is that wages are finally starting to grow, with October average hourly earnings up

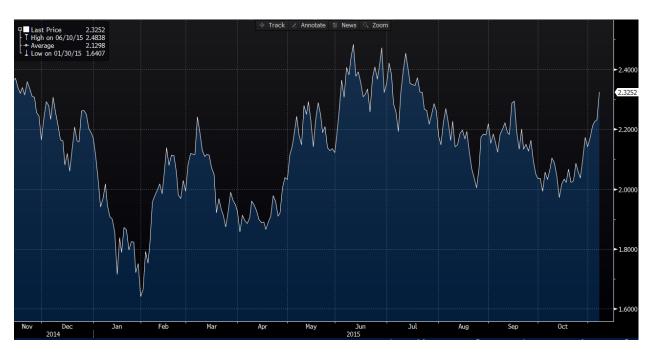
0.4% against September, double the consensus that called for a 0.2% increase. These positive data reports coupled with the increased probability of a rate hike in December caused volatility to decrease, as measured by the VIX which lost -4.91% last week. The strong jobs report also sent gold tumbling to a 2-month low of \$1,089.90 an ounce, losing -4.58% over the week as demand for safe haven assets decreased. Silver followed gold sharply lower, losing -4.95% to close at \$14.78/ounce, while crude oil prices were hit by the strong EIA report on Thursday. Crude oil inventories rose 2.85 million barrels last week, and production increased by 48K daily barrels, which sent Brent and WTI down sharply to finish the week at \$47.42 and 44.20 a barrel, down -4.32% and -4.94% respectively. In corporate news, earnings have continued to roll in last week, with over 100 reports from S&P 500 companies last week including Walt Disney (DIS), Ralph Lauren (RL) and Time Warner (TWX). More mergers were announced last week, with British healthcare firm AstraZeneca (AZN) offering to acquire ZS Pharma (ZSPH) for \$2.7 billion in cash, or a 42% premium over Thursday's closing price. In the technology industry, video-games maker Activision Blizzard (ATVI) announced on Tuesday that it was acquiring Candy Crush editor King Digital Entertainment (KING) for \$5.7 billion in cash. M&A activity has been spectacular this year, with \$4.8 trillion worth of deals announced since the start of the year, as companies use their record cash piles to finance inorganic growth. Investors will not have much data to digest next week, apart from the usual weekly reports from the EIA and the Department of Labor, who will release petroleum inventories and the JOLTS report on Thursday. October retail sales will be released on Friday, and analysts expect a 0.3% increase over September, and a 0.4% increase when excluding auto sales.

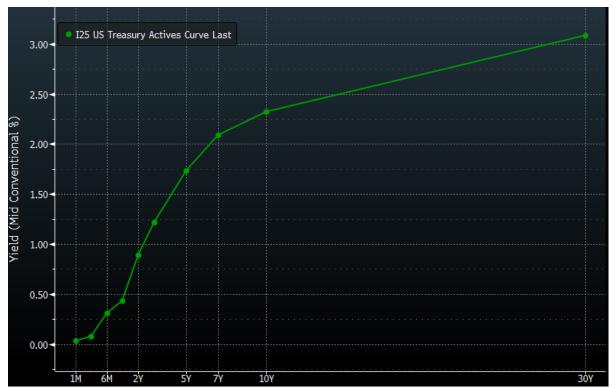
International Markets

International equity markets underperformed their US peers, with most European and Asian benchmarks posting losses last week. The U.K's FTSE 100 Index finished the week -0.68% lower, as the Bank of England vowed to leave interest rates unchanged until next year, while France's CAC 40 lost -0.46%. The Bloomberg European 500 posted a 1.15% increase, helped by Zodiac Aerospace (ZC.FP) and airline Ryanair (RYA.ID), while the Stoxx Europe 600 gained 1.19%. In Asia, Japan's Nikkei 225 gained 2.37% to reach a level not seen since August 24. Chinese stocks had yet another strong week, with the Shanghai Composite and Shenzhen Composite gaining 6.13% and 6.83% respectively. Several economic reports are du next week, notably from China, who will release its industrial production report on Wednesday. The Eurozone will also release industrial production figures on Thursday, followed by the region's flash GDP data on Friday. The United Kingdom will also release unemployment figures for September, which is expected to remain steady at 5.4%. France and Germany will also release third quarter GDP figures on Friday morning.

Bond Report

This Week, short-term Treasury yields climbed to their highest level in five years after the Labor Department reported on Friday 6th November that the U.S. economy had created 271,000 new jobs in October, well ahead the economist estimations of 190,000 which marked the largest monthly increase for the year 2015. Investors were all focusing on this report to be able to gauge and anticipate the FED next move. This astonishing jobs report led to a huge selloff in the market, which made the short-term yields rising, as it has been perceived by investors as a signal that the FED has enough reason to rise its interest rates during its December meeting. This stellar move in short-term maturities yields can be explained as they are more sensitive to change in the FED rates. The two-year treasury yield rose to its highest level since April 2010 to 0.890%, an increase of 4.8 bps compared to its last week level of 0.73%. The yield on the 10-year Treasury note gained 8.8bps from 2.15% to 2.33%, its highest level in four month. Among longer maturities, the 30-year bond yield gained 7.8 bps from 2.93% to 3.09%. It became rationale for investors that the FED is going to rise its interest rates during its December meeting unless something harmful occurs in the economy.





What's next and key earnings

On Tuesday November 10th the Imports and Exports Prices report will be released. Import and export's prices have been in contradiction and analyst are expected a further contraction for the month of October by 0.1% and 0.3% respectively. This is not exclusively due to oil as non-petroleum imports have been in contraction as well. The contraction in imports is mainly due to the strong dollar, U.S buyers can get more with their dollars. The contraction in export prices is the consequence of a global deflationary trends.

On Thursday November 12th, the Treasury Budget report will be released. This report will be followed as there is a relationship between the size of the budget deficit and the supply or Treasury securities. Bonds prices and yields are affected by this report since the government must sell more treasuries to finance its operations in case of a budget deficit. In case where the deficit is falling, the government needs to sell less bonds which led the price of Treasury bond higher. On the same day the JOLTS report will be release. It will provides additional information on the labor market by providing the number of Job Openings on the last business day of the month.

On Friday November 13th, The Retail Sales report will be released. It is expected to increase to a 0.3% gain in October compare to a disappointing 0.1% gain in September. Unit auto sales were strong and robust for the month of October. Gas priced firmed for the month of October. This should help gas station where sales were weak which led total sales lower. Concerning core retail sales, they are expected to rise by 0.3%. Seasonal good are however supposed to be weak since the unusual warm whether for October may have hurt them. On the same day, the Producer Price Index report will be released. Final demand are expected to rebound to a positive level of 0.2% for the month of October. The Consumer Sentiment will be released as well. This has been solid this year, November reading are expected to increase by 2.0 point to 92 from October. This report would underline the strength in the current job market.



AVG Technology

AVG: NasdaqGS

Analyst: Sector:

Peter Ostrowski Information Technology

BUY Price Target: \$25.70

Key Statistics as of 11/5/2015

\$19.82 Market Price: Software Industry: \$1.06B Market Cap: 52-Week Range: \$16.88-29.15

.88

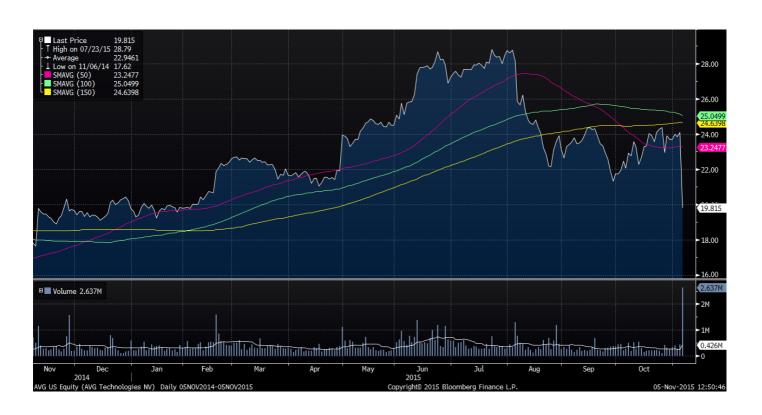
Beta:

Thesis Points:

- Malware will continue to increase the number of attacks and adapt as number of internet users grows
- Continued investment in current projects will create future value for AVG
- Acquisition of Privax will lead to a strategic position in evolution of security and privacy

Company Description:

AVG Technologies NV provides antivirus and internet security products. The Company produces and develops software for threat detection, prevention, and risk analyzes. AVG Technologies operates worldwide.

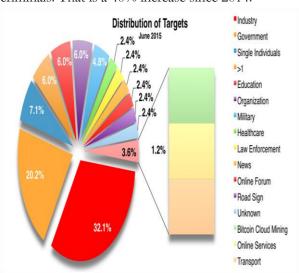




AVG is a leader in antivirus software. This industry is rapidly growing as cyberattacks increase and the amount malicious malware and viruses on the web grow. As these attacks are largely directed at businesses it is important for antivirus software to adapt and stop these issues before they occur. There is a high cost when a business is attacked by cybercriminals; so businesses are willing to pay for a higher quality product. AVG constantly demonstrates that there products are superior through awards and reviews. They are continuing to invest their current projects to ensure a higher quality and increasing customer satisfaction. AVG also recently acquired Privax which will lead to a strategic position in the evolution of security and privacy.

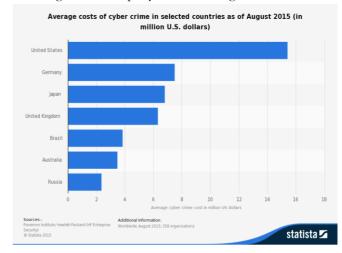
Macroeconomic factors

Cybercrime is one of the biggest threats to modern business and has no plans of slowing down. As technology increases and more information is made available through the internet, cloud or public wifi; cybercriminals are adapting and hacking this information at growing rates. Cyber thieves are constantly working faster than companies are able to defend themselves. This year 5 out of 6 large companies were targeted were targeted by cyber criminals. That is a 40% increase since 2014.



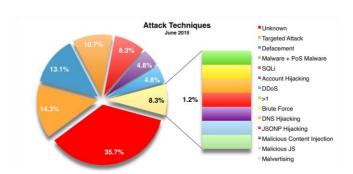
As shown in the graph above 32.1% of cyber-attacks were directed towards industries in June. . These attacks prove to be extremely costly as well. The graph

below demonstrates the monetary impact a cyberattack against a company has on average.



It is shown on this graph that the United States companies are effected the most with an average cost of \$15.42 million per attack.

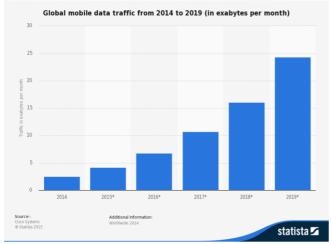
Last year nearly one million new threats were released each day. The diversity of these attacks is shown in the chart below.



The issue with this chart is that almost 36% of attack techniques are unknown. This means that these viruses and threats are adapting and changing faster than businesses. The ultimate reason why this is important is because the cyber security and antivirus sectors are going to have to grow and adapt to fight these new cyber-attacks.

The amount of internet users has been exponentially increasing since the inception. It is estimated that by 2017 the amount of mobile users on the internet will double. The amount of data that is being added to the internet is increasing at an even faster rate as shown in the graph below.





This increase in data traffic is exponential. This means that cybercriminals data traffic will also increase exponentially. More malware, viruses and cyberattacks means that cyber-security must update and adapt to this cyber war.

Investment in Current Projects

AVG has been increasing investments in 3 key growth areas. These areas include Location Labs, SMB and AVG Zen. Location Lab is a mobile app that supplies AntiVirus and Cloud backup to protect data on phones. This product is family oriented. Its location lookup feature allows parents to see where there children are through the gps tracker. Each year this product accounts for one billion "look ups". The drive safe component is able to detect when a phone is moving and can be locked by either the guardian or the child. This product is currently being marketed through a free to paid technique within AVG.

AVG Zen is built right into your laptop, tablet and phone. It is a very easy way to monitor the protection, performance and privacy among one's family devices.



AVG Zen is currently up 50% in users from previous quarter. Increasing from 11 million to 17 million users. This increase was driven from a move to comprehensive systematic deployment through broader availability and distribution.

AVG's small medium business segment is based primarily on the AVG Business Managed Workplace 9.2 product. This product won a gold medal by channel pro network. AVG recently scored 100% with AV. This was due to their 100% detection rate of widespread malware. The new features of this product includes premium remote control, integrated backup and disaster recovery, AVG device manager for Mac OS X and integrated AntiVirus enhancements.



SMB has recently recorded 13% topline growth. Their revenue increased from \$14.7m last year to \$16.6m for the third quarter.

Acquisition of Privax

In May of this year, AVG acquired Privax for \$40 million and will pay up to an additional \$20 million in cash consideration based on the performance of Privax. Privax is a leading provider of digital privacy services to consumers. Their product HMA! Is able to bypass online restrictions to access foreign websites like a local. One can also enjoy complete security, even on public wifi connections. This allows its users to evade hackers. It also allows one to surf the web privately by changing the IP address. This will protect one's data from snooping. Privax will be incorporated into AVG Zen to provide further privacy.

AVG currently has 200 million existing monthly users. By adding Privax's HMA! Product to their portfolio;



AVG can now market Privax at close to zero marginal cost to all of its customers. Privax has more than 250,000 paying subscribers worldwide using its virtual private network encryption service, while its popular free web-based browser proxy service attracts a global audience of over eight million visitors per month.

Privax's competitive advantages are largely related to the security and stability it offers. Privax currently has servers in over 190 companies. Other VPN services can slow down internet connection, Privax's VPN keeps connection fast. It can be used on multiple devices simultaneously and offers 24/7 customer support. This year it is estimated that Privax will generate \$10 million in revenue.

The third quarter showed a 50% growth in users signing up for recurring billing plans.

Porter's Five Forces

The bargaining power of suppliers for antivirus software is low. This is mainly because volume is critical to suppliers and the distribution channel is diverse. The bargaining power of customers is neutral because there are a large number of antivirus companies; however buyers often require special customization and there are a large number of buyers. The intensity of existing rivalry is high. this is because there are a large number of competitors. The threat of substitutes is neutral. There are a high number of alternate methods to antivirus software; however, these methods are not necessarily higher quality and there is a high cost for businesses to switch to an alternative. The threat of new competitors is low. Strong brand names are highly important and there is a high learning curve to establish a business in the industry.

Conclusion

I recommend a buy for AVG. This is mainly due to the macroeconomic factors associated with the industry. The internet is growing rapidly and cyber threats are also increasing. Cyber security is going to need to grow and adapt to combat these issues. AVG has a competitive advantage in the diversification of its products and their knowledge to invest in emerging products.



			CENTED	EOD CLODAL EINA	NCIAL CTUDIES			
				FOR GLOBAL FINA				
AVG Technologies		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield	1-y Return: 26.84%	NEUTRAL
N.V.		Peter Ostrowski	\$20.26	\$25.31	\$25.70	0%		NEUTRAL
	General Info	Peers	Market Cap.			Managemen		
Sector	Information Technology			Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Software	FireEye, Inc.	\$4,642.25	Kovaes, Gazy	Chief Executive Officer and Managing Directo	\$0	\$2,605,569	\$7,436,330
Last Guidance	November 4, 2015			Little, John	Chief Financial Officer and Managing Director		\$1,095,529	\$1,633,435
Next earnings date	February 18, 2016	Cheetah Mobile Inc.	\$2,840.68	Levi, Shaul	Chief Scientist	\$0	\$0	\$0
	Market Data	NQ Mobile Inc.	\$362.06	Anderson, Harvey	Chief Legal Officer	\$0	\$0	\$0
Enterprise value	\$1,179.19	Imperva Inc.	\$2,262.66	Brown, Jeff	Vice President of Corporate Development	\$0	\$0	\$0
Market Capitalization	\$1,058.24	SolarWinds, Inc.	\$4,182.15	Scheers, Steven	Chief People Officer	\$0	\$0	\$0
Daily volume	4.37				Past Earning Surprises			
Shares outstanding	52.23	Barracuda Networks, Inc.	\$1,094.76		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	52.59	Blucora, Inc.	\$403.36	Last Quarter	-1.66%	1.49%	-12.50%	4.24%
% shares held by institutions	76.71%	Current Cap	ital Structure	Last Quarter-1	0.08%	-7.00%	2.17%	2.78%
% shares held by insiders	1.92%	Total debt/Common Equity (LTM)	0.25	Last Quarter -2	2.62%	45.33%	24.32%	12.33%
Short interest	3.90%	Cost of Borrowing (LTM)	0.00%	Last Quarter -3	4.80%	15.21%	6.90%	3.18%
Days to cover short interest	0.00	Estimated Cost of new Borrowing	4.84%	Last Quarter -4	1.97%	23.00%	27.27%	7.82%
52 week high	\$29.15	Altman's Z	2.58	Standard error	1.1%	9.1%	7.3%	3.93%
52-week low	\$16.88	Estimated Debt Rating	BAA	Standard Error of Revenues prediction	1.1%		Industry Outloo	ok (Porter's Five Forces)
5y Beta	0.83	Current levered Beta	0.94	Imputed Standard Error of Op. Cost prediction		Bargaining Power of Sup	pliers (100th Percentile), Bargaining F	Power of Customers (71th Percentile), Intensity of Existing Rivalry (33th
6-month volatility	30.47%	LTM WACC	6.86%	Imputed Standard Error of Non Op. Cost predicts	io: NM	Percentile), Threat o	Substitutes (67th Percentile), Threat	of New Competition (75th Percentile), and Overall (86th Percentile).
				Proforma Assumptions				
Convergence Assumptions	General Assu	•		Items' Forecast Assum	•			Other Assumptions
	Money market rate (as of today)	0.40%		Base year (LTM)	Convergence period (Sub-industry)	Adjustment per year	*	80%
	Risk-Free rate (long term estimate)	3.00%	Operating Cash/Rev.	34.50%	34.50%	0.0%	Excess cash reinvestment	Money market rate
converge towards the Sub-	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	-9.79%	-9.79%	0.0%	Other claims on the firm's assets	\$0.00
industry ratios over an	Marginal Tax Rate	25.0%	NPPE/Rev.	4.77%	5.00%	0.0%		Capitalization
explicit period of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	111.98%	100.00%	-1.2%	100% of all rent expenses are capitals	ized and amortized 'straightline' over 10 years
			NOPAT MARGIN	25.81%	21.62%	-0.4%	100% of all R&D expenses are capita	alized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	69.49%	69.11%	0.0%	E&P expenses are not capitalized	
LTM		\$418.96	SBC/Rev.	2.95%	2.63%	0.0%	SG&A expenses are not capitalized	
FY2015	1.9%	\$426.92	Rent Exp./Rev.	1.78%	1.30%	0.0%		Valuation Focus
FY2016	10.4%	\$471.32	R&D/Rev.	20.07%	15.21%	-0.5%	DCF Valuation	100%
FY2017	7.9%	\$508.54	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2018	5.4%	\$536.24	SG&A/Rev.	46.12%	36.36%	-1.0%	Distress Valuation	0%
FY2019	4.2%	\$558.89	ROIC	39%	27.90%	-1.08%		onte Carlo Simulation Assumptions
FY2020	3.6%	\$579.08	EV/Rev.	3.07x	2.53x	-0.05x	Revenue Growth deviation	Normal (0%, 1%)
FY2021	3.3%	\$598.22	EV/EBITA	10.22x	8.78x	-0.14x	Operating expense deviation	Normal (0%, 1%)
FY2022	3.2%	\$617.09	Debt/Equity	25%	67%	4.2%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2023	3.1%	\$636.07	Unlevered beta	0.80	1.11	0.03	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2024	3.0%	\$655.40	Dividends/REV	0%	4%	0.4%	Intrinsic value σ(ε)	\$0.06
Continuing Period	3.0%	\$675.06		Valuation			1-year target price σ(ε)	\$0.07
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	38.7%	6.9%	\$417.72	\$1,862.29	\$389.56	52.23	\$25.28	
FY2015	35.7%	7.1%	\$414.41	\$1.842.61	\$376.65	52.23	\$25.52	
FY2016	31.5%	7.6%	\$448.60	\$1,886.23	\$316.98	52.23	\$27.25	
FY2017	31.2%	8.2%	\$473.27	\$1,925.51	\$248.10	52.23	\$29.10	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$25.31; the $3\sigma(\epsilon)$ -adjusted
FY2018	31.0%	8.6%	\$486.66	\$1,957.85	\$173.36	52.23	\$31.01	target price is \$25.7; and the analysts' median target price is \$29
FY2019	31.2%	8.9%	\$493.76	\$1,988.14	\$92.53	52.23	\$33.02	
FY2020	31.8%	9.3%	\$497.38	\$2,019.44	\$11.73	52.23	\$35.11	
FY2021	32.4%	9.6%	\$498.97	\$2,053.56	-\$71.34	52.23	\$37.32	Sensitivity Analysis
FY2022	33.2%	9.9%	\$499.29	\$2,091.71	-\$156.73	52.23	\$39.69	Revenue growth variations account for 95.9% of total variance
FY2023	34.0%	10.2%	\$498.70	\$2,134.75	-\$246.90	52.23	\$42.24	Risk premium's variations account for 2.5% of total variance
FY2024	35.0%	10.5%	\$497.36	\$2,183.50	-\$327.78	52.23	\$44.80	Operating expenses' variations account for 1.4% of total variance
Continuing Period	34.0%	10.6%	\$523.13					Continuing period growth variations amount for 0.2% of total variance
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Energy

Dominick Iachetta



SunPower Corporation

NasdaqGs:SPWR

BUY

Price Target: \$32.72

Key Statistics as of 11/06/2015

Market Price: \$28.74

Industry: Solar Energy Equipment

Market Cap: \$3.75 B 52-Week Range: \$18.25-35.11

Beta: 1.89

Thesis Points:

• Offer the most efficient solar panel on the market

Analyst:

Sector:

- Emphasis on commercial segment will lead to increase in margins and revenue growth
- Profitability will increase in near future

Company Description:

SunPower Corporation is a solar products and services company headquartered in Silicon Valley. SunPower designs, manufactures and markets high performance solar electric panels to a diversified global portfolio including residential, commercial and utility markets. SunPower's business mission is to be the leader in stimulating the adoption of efficient and practices in the energy industry.





I am recommending a BUY on SPWR based on a strong, growth-oriented industry outlook, best in class solar panel technology, expansion into the business segment with their new product, Helix, and estimate-beating financial performance.

Industry Outlook

Demand for solar energy is expected to rise by year end in 2015. Solar energy consumption is diversifying from European locations, like Italy and Germany, towards Asia. China and Japan are now the lead expectations for growth within the industry. Along with Asian consumers, other emerging markets are opening up to the industry for the first time, including Brazil, Mexico and Chile. In response to this increase in global demand, solar companies are expected to expand production for the first time in two years. Global energy installations may reach up to 50-60 gigawatts by year end, up from 44 gigawatts in 2014. Overall, the global economy is beginning to make the transition to alternative energy options and solar presents one of the most cost effective solutions.

Solar Energy Annual Installs (Gigawatts)										
	2011	2012	2013	2014e	2015e					
Germany	7.5	7.6	3.3	1.9	1.2-1.6					
Rest of Europe	12.4	9.6	7.5	6.9-8.0	8.0-10.1					
USA	1.9	3.3	4.8	6.5-6.8	8.0-9.2					
Japan	1.3	2.5	6.8	9.0-10.0	9.5-11.5					
India	0.4	0.9	1.0	1.0	1.9-2.3					
China	2.5	4.8	12.9	12.5-13.5	14.0-16.0					
Other Regions	2.0	3.3	3.7	6.1-7.1	7.1-9.6					
Total:	28	32	40	44-48	50-60					

Industry Leading Efficiency

SPWR is ready to take advantage of the increase in global demand for solar energy due to the fact that they offer the most efficient solar panels on the market. SPWR's panels currently convert 21.5% of the sunlight they come in contact with into usable electricity, which is best in class. It takes 25 conventional solar panels to produce the same amount of energy as 18 SPWR panels. Although customers pay a premium for these extremely efficient panels, they ultimately result in increased savings over their 40 year useful life.

Company	Production Module Efficiency
SunPower	21.5% (X-Series)
SunEdison	17.7% (Silvantis R)
Trina Solar	17.7% (HoneyM Plus)
JA Solar	17.4% (JAM6R)
Yingli Solar	17.2% (Panda60)
Renesola	16.9% (Mono-275)
JinkoSolar	16.8% (JKM275)
Canadian Solar	16.6% (CS6V)

SPWR's industry leading efficiency is made possible by its Maxeon solar cell. The Maxeon solar cell is fundamentally different than the standard cell for many different reasons. To start, Maxeon's thick copper backing adds massive strength and drastically reduces the effects of corrosion by 85% when compared to conventional cells. Solar cells lose power over time due to corrosion so this helps SPWR's products last longer than the competition. Also, Maxeon allows for more flexibility because it generates more electricity from a smaller area. This allows customers to expand energy production by simply utilizing additional roof space by adding more panels if necessary. Finally, aesthetically, Maxeon is more attractive than its competitors due to style and function alterations and blend much more naturally into rooftops. Overall the capability of the Maxeon cell, along with its top of the line 25 year warranty, SPWR offers the highest performing solar panel available on the market.

Commercial Expansion

Over the past 5 years, the residential sector has dominated the solar industry. SPWR has made solar much more accessible to millions of people by offering cost-saving energy solutions. Looking out into the future, commercial, as opposed to residential, solar will present large, value creating opportunities for SPWR. Currently, the gross margins made in the power plant and residential fields are extremely higher than those in the commercial business for SPWR.

Gross Margin by Segment								
Power Plant	16.50%							
Commercial	6.40%							
Residential	23.30%							



This inability to capitalize on commercial business will soon change with the introduction of SPWR's newest product, Helix. Launched on October 26, Helix is the world's first fully integrated commercial solar solution. Helix combines solar power production and energy management to be an extremely innovative offering by the company which will lead to long term growth.

Launched on October 26, Helix is a pre-engineered modular system that is built to last and easy to install. It produces 60% more energy from the same square space than a conventional solar panel, at the same time, leading the industry in environmental sustainability. It is the first and only solar panel to receive the Cradle to Cradle Silver designation. Helix also includes a plug and play system the only one of its type in the US commercial solar simplify the installation process, reduce labor costs and increase long term reliability. Along with the industry leading solar technology, Helix also has an energy management feature called EnergyLink. EnergyLink is a comprehensive energy intelligence software which quantifies immediate and lifetime savings from solar and identifies and alerts users on demand peaks and saving opportunities. Overall, Helix will allow SPWR, for the first time, to capitalize on the ever expanding demand for solar solutions in the commercial segment. One of Helix's first customers, Bed Bath & Beyond, will begin construction on eight location in early 2016. The success of this venture will be imperative for SPWR to expand Helix to more companies and finally become the top player commercial solar energy sphere. Going forward, SPWR has partnered with Apple to build two solar power projects in April of 2016. Many US companies with locations in China, like Apple, are investing in solar energy to offset the environmental impact of their business operations. This partnership, and Helix in general, offer a new route to China for SPWR.

Financials

SPWR's third quarter earnings, released on October 28, have caused the stock to increase 16.7% in the last week. Revenue for the quarter finished at \$441 million which topped estimates by \$12.5 million. EPS also significantly beat estimates finishing at \$0.13 for the quarter. This recent spike in the stock still leaves room for growth based on SPWR's strong fourth quarter guidance. The company is now expected to generate \$1.25-\$1.3 billion in revenue for the quarter, up from previous consensus

estimates of \$1.22 billion. Full year EBITDA guidance has been increased to \$500 million, up from \$425 million to \$475 million. From the shareholders' perspectives, the full year EPS target is now \$1.95 to \$2.05, up from the previous estimate of \$1.56. Overall, SPWR's very strong recent financial performance will continue when the full effects of their new projects are realized within the coming year.

Conclusion

Overall I am recommending a strong BUY on SPWR. The company has positioned itself to take advantage of the increase in global demand for the service they provide. Their best in class efficiency and new revenue generating projects partnered with increased profitability leave this stock undervalued. On November 12, SPWR is hosting their annual analyst day and will release additional forward looking statements regarding finances and future projects, which will be yet another catalyst for a rise in the stock price. In conclusion, the transition to solar energy is no longer the wave of the future but rather a cost effective, sustainable alternative which can be utilized today. SPWR is a company that is ready to capitalize on the new prospects throughout the industry and will increase profitability within the coming months.



			CENTER	R FOR GLOBAL FINA	NCIAL STUDIES			
		Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield		NIETITED AT
SunPower Corporation		Dom Iachetta	\$28.74	\$28.37	\$32.72	0%	1-y Return: 13.86%	NEUTRAL
	General Info	Peers	Market Cap.	· · · · · · · · · · · · · · · · · · ·	V	Managemen	•	
Sector	Information Technology	Trina Solar Limited	\$969.65	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Industry	Semiconductors and Semiconductor Equipment		\$6,021.84	Werner, Thomas	Chairman, Chief Executive Officer and Presid	\$4,900,212	\$8,845,546	\$4,986,614
Last Guidance	October 28, 2015	Yingli Green Energy Holding Co. Ltd.	* *	Bornton, Charles	Chief Financial Officer and Executive Vice Pre	\$2,000,593	\$2,758,314	\$1,914,990
Next earnings date	February 18, 2016	JA Solar Holdings Co., Ltd.	\$432.56	Neese, Marty	Chief Operating Officer	\$1,947,675	\$2,814,730	\$1,949,494
	Market Data	Canadian Solar Inc.	\$1,317.45	Bodensteiner, Lisa	Executive Vice President, General Counsel an	\$0	\$0	\$1,549,939
Enterprise value	\$4,678.70	TinkoSolar Holding Co., Ltd.	\$804.46	Wenger, Howard	President of Business Units	\$1,973,733	\$2,997,043	\$1,996,389
Market Capitalization	\$291.281.98	Maxim Integrated Products, Inc.	\$11.527.97	Brandeniz, Eric	Chief Accounting Officer, Senior Vice Presider	\$0	\$0	\$0
Daily volume	65.52	ReneSola Ltd.	\$144.26	;	Past Earning Surprises			,.
Shares outstanding	136.59	Cree, Inc.	\$2,551.40		Revenue	EBITDA	Norm, EPS	Standard Error of "Surprise"
Diluted shares outstanding	144.25	Xilinx Inc.	\$12.239.72	Last Quarter	2.92%	343.78%	NM	170.43%
% shares held by institutions	57.59%		pital Structure	Last Quarter-1	-22.49%	-1.34%	5.88%	8.51%
				•				
% shares held by insiders	0.56%	Total debt/Common Equity (LTM)	0.61 4.20%	Last Quarter -2	-2.93%	61.67%	62.50%	21.67%
Short interest	4.45%	Cost of Borrowing (LTM)		Last Quarter -3	0.59%	-12.85%	4.00%	5.14%
Days to cover short interest	4.56	Estimated Cost of new Borrowing	7.91% 1.53	Last Quarter -4	12.52%	32.69%	25.00% 13.6%	5.88%
52 week high	\$35.11	Altman's Z	1.55 C	Standard error	5.8%	66.1%		24.56%
52-week low	\$18.25	Estimated Debt Rating		Standard Error of Revenues prediction	5.8%		•	ook (Porter's Five Forces)
5y Beta	3.00	Current levered Beta	2.32	Imputed Standard Error of Op. Cost prediction	65.8%			Power of Customers (14th Percentile), Intensity of Existing Rivalry (67th
6-month volatility	47.09%	LTM WACC	11.91%	Imputed Standard Error of Non Op. Cost predict Proforma Assumptions	tio: NM	Percentile), Threat of	Substitutes (100th Percentile), Three	at of New Competition (17th Percentile), and Overall (69th Percentile).
C	General Assun			Items' Forecast Assur				Other Assumptions
Convergence Assumptions		•			•			•
	Money market rate (as of today)	0.32%		Base year (LTM)	Convergence period (Market)	Adjustment per year		80%
	Risk-Free rate (long term estimate)	2.92%	Operating Cash/Rev.	0.00%	1.90%	0.2%	Excess cash reinvestment	Money market rate
converge towards the Market	Annual increase (decrease) in interest rates	0.1%	NWV/Rev.	19.23%	11.82%	-0.7%	Other claims on the firm's assets	\$0.00
ratios over an explicit period	Marginal Tax Rate	37.5%	NPPE/Rev.	49.59%	48.76%	-0.1%		Capitalization
of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	10.94%	18.36%	0.7%	100% of all rent expenses are capita	alized and amortized 'straightline' over 10 years
			NOPAT MARGIN	6.84%	12.71%	0.6%	100% of all R&D expenses are capi	italized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	86.31%	77.75%	-0.9%	E&P expenses are not capitalized	
LTM		\$2,366.35	SBC/Rev.	2.37%	1.10%	-0.1%	SG&A expenses are not capitalized	1
FY2015	6.8%	\$2,526.71	Rent Exp./Rev.	0.00%	1.55%	0.2%		Valuation Focus
FY2016	14.1%	\$2,882.67	R&D/Rev.	3.47%	6.47%	0.3%	DCF Valuation	100%
FY2017	3.0%	\$2,969.15	E&D/Rev.	0.00%	2.04%	0.2%	Relative valuation	0%
FY2018	3.0%	\$3,058.22	SG&A/Rev.	11.85%	20.80%	0.9%	Distress Valuation	0%
FY2019	3.0%	\$3,149.97	ROIC	12%	21.15%	0.89%	1	Monte Carlo Simulation Assumptions
FY2020	3.0%	\$3,244.47	EV/Rev.	1.45x	1.97x	0.05x	Revenue Growth deviation	Normal (0%, 1%)
FY2021	3.0%	\$3,341.80	EV/EBITA	16.11x	9.68x	-0.64x	Operating expense deviation	Normal (0%, 1%)
FY2022	3.0%	\$3,442.06	Debt/Equity	61%	90%	2.8%	Continuing Period growth	Triangular (5.335%, 6%, 5.665%)
FY2023	3.0%	\$3,545.32	Unlevered beta	1.68	0.89	-0.08	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2024	3.0%	\$3,651.68	Dividends/REV	0%	3%	0.3%	Intrinsic value σ(ε)	\$0.09
Continuing Period	3.0%	\$3,761.23					1-year target price σ(ε)	\$0.10
				Valuation				
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	12.2%	11.9%	\$2,297.04	\$4,286.81	\$505.26	136.59	\$27.88	
FY2015	10.5%	11.8%	\$2,485.41	\$4,737.96	\$385.73	136.59	\$32.35	
FY2016	10.2%	11.3%	\$2,858.75	\$5,394.13	\$439.58	136.59	\$35.76	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$28.37; the $3\sigma(\epsilon)$ -adjusted
FY2017	9.4%	11.0%	\$2,993.97	\$5,854.47	\$330.43	136.59	\$39.62	target price is \$32.72; and the analysts' median target price is
FY2018	9.6%	10.7%	\$3,134.92	\$6,335.64	\$272.32	136.59	\$43.17	\$34.69
FY2019	9.7%	10.3%	\$3,281.85	\$6,830.50	\$213.77	136.59	\$46.74	
FY2020	9.8%	9.9%	\$3,434.96	\$7,341.04	\$153.83	136.59	\$50.32	
FY2021	9.9%	9.6%	\$3,594.51	\$7,864.59	\$91.99	136.59	\$53.90	Sensitivity Analysis
FY2022	10.0%	9.2%	\$3,760.74	\$8,398.02	\$27.96	136.59	\$57.45	Revenue growth variations account for 95.9% of total variance
FY2023	10.1%	8.8%	\$3,933.91	\$8,933.44	-\$38.46	136.59	\$60.90	Risk premium's variations account for 2.5% of total variance
FY2024	10.2%	8.5%	\$4,114.28	\$9,470.78	-\$107.42	136.59	\$64.22	Operating expenses' variations account for 1.4% of total variance
Continuing Period	21.1%	8.5%	\$2,259.93	473	£			Continuing period growth variations account for 0.2% of total variance
		3.270	¥2,227.70					S period grown variations account for v.2.77 or total variance



MSG Networks, Inc.

MSGN: NYSE

Analyst: Sector:

Matthew Schilling Consumer Discretionary

BUY
Price Target: \$30.70

Key Statistics as of 11/05/2015

Market Price: \$20.29 Industry: Media Market Cap: \$1.2B

52-Week Range: \$16.90 - \$87.27

Beta: 0.86

Thesis Points:

- Increasing revenue from more television viewership due to coverage of relevant sports teams
- Future growth opportunity from coverage of teams in emerging sports markets
- Diversity from coverage of multiple teams in numerous leagues
- Highest operating income of any segment of MSG before spin-off

Company Description:

MSG Networks, Inc. is a media company that has two sports and entertainment networks, MSG and MSG+. The company is now the operating media section of the former conglomerate MSG and is considered the parent company regardless of the ticker change. They provide live coverage of nine local sports teams, the New York Knicks; New York Rangers; New York Liberty; New York Islanders; New Jersey Devils; Buffalo Sabres; Major League Soccer's Red Bulls and the Westchester Knicks, and exclusive non-game coverage of the New York Giants. In addition the company airs original shows, various NCCA sporting events, UEFA soccer matches and other miscellaneous sports.





MSG Networks, Inc. provides live coverage of increasingly relevant sports teams. These teams are climbing to the pinnacle of their respective sports and as a result television viewership is climbing on MSG Networks. This growth is poised to increase commercial prices, ultimately increasing revenues for MSGN. They also cover teams in emerging sports markets which will lead to long term growth opportunities. Due to the variation in teams that they cover, a drop in one team's success will not cause overall viewership to plummet. Lastly, MSGN was formerly the media segment of MSG. The segment had the highest operating income and largest margins in comparison to any other segment within MSG. The combination of high margins and projected growth in revenues will lead to a stock price of \$30.70 in one year.

Increasing Television Viewership

The New York Rangers, a professional ice hockey team, have made the playoffs in each of their last five seasons. The team's core and coaching has changed throughout the past five seasons but their success has not wavered, winning their division twice, making the conference final twice and making the Stanley cup final once. All this success only to fall short of bringing the Stanley cup trophy back to New York. The late success has triggered a large growth in fans as the Rangers have sold out 100% of their games since the 2010-2011 season where they sold out 99.5% of their games. In 2011, on MSG Network, the Rangers averaged a Nielsen score of 0.85 HH during the regular season. This score represents the percentage of total households that tuned in to watch the game. That means on average, when the Rangers are on MSG Network, .85% of all households tuned in to watch the game. The increased relevance of the Rangers has sparked their ratings to increase further achieving ratings such as a 4.45 HH for playoff game one of the 2015 divisional series, the highest rating they have ever had for a game one. In addition, the series averaged a rating of 4.74 HH which was up 74% from last year's ratings. Every year the Rangers keep up their impressive play, the viewership increases. As of today (11/04/2015) the Rangers lead the Metropolitan division by one point over the New York Islanders (another team that has become increasingly relevant that MSG broadcasts). As the push towards the playoffs continue both teams will increase the viewership of MSG Networks.

The New York Islanders are the next team that is up and coming in the hockey world. This is currently their inaugural season in the Barclays Center, the recently built stadium in the epicenter of Brooklyn, creating a lot of hype around the team. The team made the playoffs last year, under the captainship of locally born star John Tavares, for the second time in the last 8 years. The progression of the team led to playoff ratings of 4.47 HH, on MSG Networks, which was up 65% from their last playoff series. As the battle continues between the Rangers and Islanders for first place in the Metropolitan division ratings will climb for both teams.

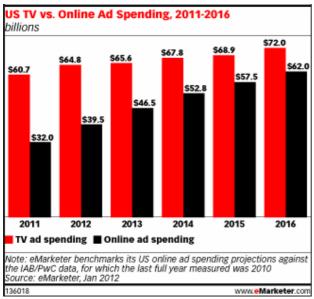
Switching over to their coverage of a team in a different league the New York Knicks, there is even more potential for viewership growth. The Knicks have not made the playoffs in two years and have only made it three times in the last eleven years. The team finished next to last in the eastern conference last year due to a fire sale of semi-important players. This sale freed up enough cap space to sign starting caliber players such as, Aaron Afflalo, Robin Lopez, and Derrick Williams. In addition, the Knicks drafted future cornerstones in Kristaps Porzingis and Jerian Grant. These new pieces combined with a healthy star in Carmelo Anthony the Knicks are projected to be in the mix for the 7th and 8th playoff spots in the weaker eastern conference as three .500 winning percentage or below teams made the playoffs last year. MSG Networks had peak ratings up to 7.34 HH on MSG for certain regular season games in 2012 when the team made the playoffs last. This year's team is poised for the playoffs which will expectedly increase the overall viewership of the team.

Benefits of Increasing Viewership

Television broadcasting companies make the majority of their revenues through commercials and advertisements. MSG Networks sells commercial time to numerous companies, local and worldwide, that operate in many different business segments. The cost of this commercial time is variable based on the time of day and the show or event that is being televised. Shows and events that play at prime times and have higher viewership ratings cost more to run commercials



during. An example would be primetime drama television. The widely known drama "The Blacklist" costs about \$198,667 per 30 second spot in 2014 and had received an average Nielsen HH rating of 6.6. A similar but more popular show "The Big Bang Theory" has an HH of around 9 and a 30 second spot costs \$326,260. There is a clear correlation between ratings and commercial price. These shows air on major television networks that broadcast to the entire country so their cost per commercial spot is going to be higher. Nevertheless, the correlation between viewership and commercial price is directly proportional. There is also a trend for continual growth in spending on television advertisement as it is expected to increase from \$68.9B in 2015 to \$72.0B in 2016.



They currently operates in a local media market (New York) where they are the leader of providing sports coverage. The market is niche but has the highest amount of households with televisions. New York is the biggest of the local media markets by a significant margin.

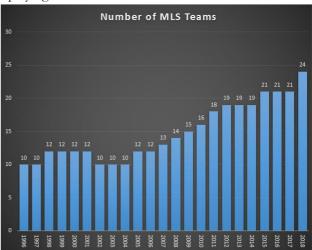
Rank	Designated Market Area	a (DMA) TV Homes	% of US
1	New York	7,368,320	6.503
2	Los Angeles	5,489,810	4.845
3	Chicago	3,475,220	3.067

The increasing relevance and viewership of the teams being covered by the network combined with the growth in ad spending will ultimately lead to increased revenues for MSGN.

Growth of Major League Soccer to Increase Future Revenue Generation

The league is currently in its 20th season and is currently growing faster than any other United States

major professional sport. The league added two new franchises this year, New York City FC and Orlando City SC, to meet the growing demand for domestic soccer. Social media conversation about the MLS is up 34% from 2014 which was up 64% from 2013 (the pre world cup era of MLS). International names such as, Pirlo, Drogba, Villa, and Lampard, are coming to play in the U.S. as a result of the league's new designated player policy. The trend of acquiring bigger names will continue as players such as Cristiano Ronaldo have expressed their interest of playing in the MLS.



The increased league interest is leading to further team expansion as there are plans in place to unveil new teams in Atlanta, Minnesota, and possibly Miami. Television viewers per game in 2015 on Sunday games is up 18% from 2014. MSG Networks will profit on this rise in the MLS through the coverage of the New York Red Bulls. The Red Bulls and MSG Network have been partners for 18 years as MSGN has held telecast rights and recently the two parties reached a multi-year extension. The deal consists of broadcasting 22 of their 34 regular season games including pregame and postgame coverage. As the MLS grows and continues to captivate national attention, the television viewership will increase leading to long term revenue growth for MSG Networks.

Diversity in Coverage

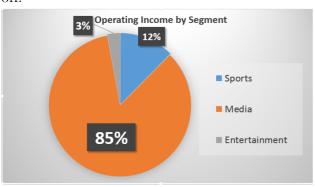
MSG Networks currently provides live game coverage of nine teams: Knicks, Rangers, Liberty, Islanders, Devils, Sabres, Red Bulls and Knicks (D-League, Westchester Knicks). The company also has rights to provide live coverage of several UEFA



champions league matches, NCAA basketball games (Including the tournament, Men's and Women's), NCAA football, horse racing, concerts and various original shows. The vast coverage allows the company to generate viewership from teams that are performing well and make up for the teams that are not generating viewership. In 2012-2013, the Knicks finished 2nd in the eastern conference and made it to the conference final. Along with the Knicks success, the Rangers and Islanders made the post season. Revenues grew from \$614.2 in 2012 to \$677.7M in 2013 as the team success grew. However in the 2013-2014, the Knicks collapsed, the Devils continued to struggle, the Islanders missed the post season but revenues managed to grow to \$714.5M in 2014 due to the success of other covered teams. The Rangers had their first Stanley Cup Final appearance since 1994, the Red Bulls won the Supporters' Shield (most points in the MLS) and MSG Networks was able to sustain a growth in revenue. The diversified coverage stabilizes revenue generation, currently the outlook for the majority of their teams is positive and will lead to continual revenue growth. In addition to the variety of sports covered, regardless of how bad a team is there will still be some viewership due to the loyalty of sport fan bases. The Knicks finished next to last in the east last year, their one star Carmelo Anthony played in under 20 games, and yet the team had a 100% attendance report at home games. This shows that down years for their sports teams do not affect revenue generation as much as up years do, making MSG Networks a company with huge upside potential and limited risk.

Highest Operating Income before Spin-off

MSG's media segment accounted for just 38.9% of the total revenues generated in 2015 before the spin-off.



However, the segment accounted for 85% of the total operating income, bringing in \$514.3M in operating income in the 2015 fiscal year. The spinoff itself separates the media segment from the other two segments and is currently traded as MSGN on the NYSE. The segment has experienced growth in revenues in every year except from 2014-2015, this drop was due to the awful season in which the Knicks killed their television ratings. However even with the dip in revenue the company was able to decrease capital expenditures and increase their overall operating income. The new company, as a result of the spin-off, currently has no debt and beat the estimates of analysts according to their earnings report today. With the current margins the company operates within, the projected increases in revenue will lead to an increasing stock price.

Other Notable Items



Last year MSG Networks released a mobile application called MSG Go that enables a person to watch live games on their phone, tablet, and computer. This is one of the innovative trends that MSG Networks is acting upon. Such a product allows them to run more ads by having multiple platforms for users to watch games. In addition, it allows viewership to increase because people that cannot watch the game on a television can still tune in via these mobile applications.

Conclusion

MSG Networks is a buy. The company has shown its profitability within the conglomerate company for several years. They are poised for future revenue growth due to increasing television viewership. There is low risk in investing in the company due to the diversity of its operations. All of which will lead to an increase in future stock price.



			CENTER	FOR GLOBAL FINA	NCIAL STUDIES			
		Analyst	Current Price		Target Value	Divident Yield		DITTION
MSG Networks Inc.		Matthew Schilling	\$20.88		\$30.70	0%	1-y Return: 47.01%	BULLISH
	General Info	Peers	Market Cap.		¥	Management		
Sector	Consumer Discretionary	AMC Networks Inc.	\$5,345.41	Professional	Title	Comp. FY2013	Comp. FY2014	Comp. FY2015
Industry	Media	Starz	\$3,480.70	Dolan, James	Executive Chairman	\$4,000,310	\$4,028,957	\$4.046,855
Last Guidance	(Invalid Identifier)	Scripps Networks Interactive, Inc.	\$7,487.50	Burian, Lawrence	Executive Vice President, General Counsel an	\$2,081,487	\$2,118,399	\$3,266,861
Next earnings date	November 5, 2015	Lions Gate Entertainment Corp.	\$5,771.97	Greenberg, Andrea	Chief Executive Officer and President	\$0	\$0	\$0
	Market Data	Discovery Communications, Inc.	\$17,380.82	Richter, Bret	Chief Financial Officer and Executive Vice Pre	\$0	\$0	\$0
Enterprise value	\$1,364.40	Viacom, Inc.	\$19,114.77	Darino-Gorski, Dawn	Principal Accounting Officer, Senior Vice Presi	\$0	\$0	\$0
Market Capitalization	\$1,583.08	Twenty-First Century Fox, Inc.	\$58,984.48	Seibert, Gregg	Vice Chairman and Vice Chairman of The Ma	\$0	\$0	\$0
Daily volume	1.74	The Walt Disney Company	\$190,727.95		Past Earning Surprises			
Shares outstanding	75.82	Cablevision Systems Corporation	\$8,951.19		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"
Diluted shares outstanding	77.09	Dish Network Corp.	\$29,342.80	Last Quarter	0.71%	-36.02%	5.88%	13.19%
% shares held by institutions	72.25%	Current Cap	ital Structure	Last Quarter-1	8.85%	29.97%	62.16%	15.50%
% shares held by insiders	19.43%	Total debt/Common Equity (LTM)	0.36	Last Quarter -2	1.15%	14.05%	18.60%	5.23%
Short interest	5.82%	Cost of Borrowing (LTM)	0.00%	Last Quarter -3	4.00%	9.16%	-12.68%	6.59%
Days to cover short interest	0.00	Estimated Cost of new Borrowing	4.31%	Last Quarter -4	8.52%	-1.79%	-30.30%	11.61%
52 week high	\$175.59	Altman's Z	3.16	Standard error	1.7%	11.0%	15.7%	5.98%
52-week low	\$16.95	Estimated Debt Rating	A	Standard Error of Revenues prediction	1.7%		Industry Outloo	ok (Porter's Five Forces)
5y Beta	0.18	Current levered Beta	0.86	Imputed Standard Error of Op. Cost prediction	10.9%	Bargaining Power of Sup	pliers (100th Percentile), Bargaining P	ower of Customers (43th Percentile), Intensity of Existing Rivalry (50th
6-month volatility	189.16%	LTM WACC	7.77%	Imputed Standard Error of Non Op. Cost predicts	io: 11.2%	Percentile), Threat of	Substitutes (67th Percentile), Threat	of New Competition (58th Percentile), and Overall (82th Percentile).
				Proforma Assumptions				
Convergence Assumptions	General As	sumptions	-	Items' Forecast Assum	nptions			Other Assumptions
	Money market rate (as of today)	0.40%		Base year (LTM)	Convergence period (Industry Group)	Adjustment per year	Tobin's Q	80%
All base year ratios linearly	Risk-Free rate (long term estimate)	3.00%	Operating Cash/Rev.	10.24%	2.32%	-0.8%	Excess cash reinvestment	Money market rate
converge towards the	Annual increase (decrease) in interest rates	0.0%	NWV/Rev.	0.00%	6.62%	0.7%	Other claims on the firm's assets	\$0.00
Industry Group ratios over	Marginal Tax Rate	37.5%	NPPE/Rev.	2.83%	28.60%	2.6%		Capitalization
an explicit period of 10 years	Country Risk Premium	6.0%	Dpr/NPPE	20.00%	17.67%	-0.2%	100% of all rent expenses are capitali	ized and amortized 'straightline' over 10 years
	•		NOPAT MARGIN	34.22%	12.19%	-2.2%	100% of all R&D expenses are capita	alized and amortized 'straightline' over 10 years
Forecast Year	Revenue Growth Forecast	Revenue (\$) Forecast	Op. Exp./Rev.	32.70%	77.38%	4.5%	E&P expenses are not capitalized	
LTM		\$631.00	SBC/Rev.	2.38%	1.05%	-0.1%	SG&A expenses are not capitalized	
FY2016	5.0%	\$662.55	Rent Exp./Rev.	6.60%	1.88%	-0.5%		Valuation Focus
FY2017	4.5%	\$692.36	R&D/Rev.	0.00%	2.36%	0.2%	DCF Valuation	100%
FY2018	4.5%	\$723.52	E&D/Rev.	0.00%	0.00%	0.0%	Relative valuation	0%
FY2019	4.3%	\$754.63	SG&A/Rev.	54.13%	26.43%	-2.8%	Distress Valuation	0%
FY2020	4.2%	\$786.33	ROIC	26%	46.82%	2.11%	M	onte Carlo Simulation Assumptions
FY2021	3.7%	\$815.42	EV/Rev.	8.32x	1.86x	-0.65x	Revenue Growth deviation	Normal (0%, 1%)
FY2022	3.5%	\$843.96	EV/EBITA	15.90x	9.53x	-0.64x	Operating expense deviation	Normal (0%, 1%)
FY2023	3.2%	\$870.97	Debt/Equity	36%	165%	13.0%	Continuing Period growth	Triangular (5.82%, 6%, 6.18%)
FY2024	3.1%	\$897.97	Unlevered beta	0.71	0.70	0.00	Country risk premium	Triangular (2.91%, 3%, 3.09%)
FY2025	3.0%	\$924.91	Dividends/REV	0%	2%	0.2%	_Intrinsic value σ(ε)	\$0.09
Continuing Period	3.0%	\$952.65		Valuation			1-year target price σ(ε)	\$0.10
Forecast Year	ROIC	WACC	Invested Capital	Implied Enterprise Value	Net Claims on Assets and Dilution Costs	Shares Outstanding	Price per Share	Monte Carlo Simulation Results
LTM	25.7%	7.8%	\$82.94	\$2,020.00	\$1,819.28	75.82	\$2.77	
FY2016	27.2%	7.7%	\$65.25	\$2,129.15	-\$194.98	75.82	\$30.77	
FY2017	413.5%	-0.3%	\$66.69	\$1,858.56	-\$406.42	75.82	\$29.99	
FY2018	387.3%	-15.9%	\$79.14	\$1,323.18	-\$608.53	75.82	\$25.59	The $3\sigma(\epsilon)$ -adjusted intrinsic value is \$5.61; the $3\sigma(\epsilon)$ -adjusted
FY2019	309.4%	29.6%	\$96.88	\$1,495.68	-\$797.17	75.82	\$30.35	target price is \$30.7; and the analysts' median target price is \$31.89
FY2020	237.0%	15.0%	\$117.82	\$1,520.71	-\$969.69	75.82	\$32.95	
FY2021	179.7%	12.0%	\$138.85	\$1,524.35	-\$1,124.15	75.82	\$35.03	
FY2022	138.2%	10.7%	\$160.52	\$1,529.72	-\$1.258.94	75.82	\$36.87	Sensitivity Analysis
FY2023	105.9%	10.1%	\$181.94	\$1,546.63	-\$1,372.53	75.82	\$38.59	Revenue growth variations account for 95.9% of total variance
FY2024	80.5%	9.6%	\$203.85	\$1,581.33	-\$1,463.42	75.82	\$40.24	Risk premium's variations account for 2.5% of total variance
FY2025	59.4%	9.3%	\$226.13	\$1,638.94	-\$1,530.11	75.82	\$41.87	Operating expenses' variations account for 1.4% of total variance
Continuing Period	46.8%	9.1%	\$247.94	• •	• •		•	Continuing period growth variations account for 0.2% of total variance



Symantec Corp.

SYMC

Analyst: Sector: Kyle Ritchie Information Technology

BUY on SYMC Price Target: \$24.29

Key Statistics as of 11/8/15

Market Price: \$20.57

Industry: Information Technology

Market Cap: \$13.9 B

52-Week Range: \$19.07 - \$27.32

5 Year Beta: 1.05

Thesis Points:

- Increasing Cyber-Awareness Trend demonstrates positive industry outlook
- Sale of Veritas Technologies for \$8 billion creates certain shareholder value
- Consistent value creation and improving margins

Company Description:

Symantec Corporation provides security, backup, and availability solutions to help businesses and consumers protect their information worldwide. The company's products and services protect people from the mobile device and enterprise data center and also to cloud-based systems. Symantec operates through three primary segments: Consumer Security, Enterprise Security, and Information Management. It markets and sells its products and related services through a variety of channels which include their direct sales force, system builders, Internet service providers, wireless carriers, retailers, original equipment manufacturers, and retail and online stores. Symantec is a Fortune 500 company and a member of the S&P 500 stock index. The company was founded in 1982 by Gary Hendrix and is headquartered In Mountain View,



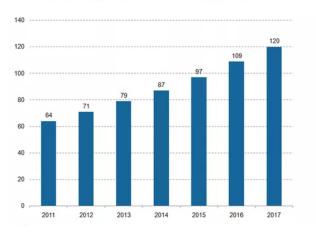


Symantec Corp is a leading provider of cyber-security software and has proven to be a profitable company for many years. The increasing cyber-awareness trend along ongoing demand for technological advancements in security software proves substantial room for growth. Earlier this year on August 11 Symantec announced its sale of Veritas Technologies for \$8 B in cash, an information management company previously acquired in 2005. This sale is expected to close on January 1, 2016 and will provide Symantec with \$6.3 billion in net cash proceeds demonstrating certain value creation for its shareholders. Funds from the sale of Veritas will also allow Symantec to realign their focus on capital expenditures and potential acquisitions in the ever-growing cybersecurity market. Symantec's years of experience in this industry along with their notable market share pose an opportune time for investors to buy. This report includes an analysis and forecast of the SYMC cyber-security stock price after the separation.

Industry Outlook

The cyber-security industry has been in a continuous growing demand over the past few years and there are no indications of this trend slowing down. This industry is driven by the growing number of cybercrimes along with the realization of how important it is for corporations to protect themselves. The increasing awareness is fueled by the infamous cyberattacks that have occurred over the years. Corporations that have endured substantial losses both internally and externally include: Visa and MasterCard in 2012, Target in 2013, Home Depot in 2014 and JP Morgan & Chase announced a data breach also in 2014. The result of these major attacks on notable corporations being publicized increases awareness across the globe. The ultimate outcome is increasing spending on cybersecurity. According to the research firm Gartner, a credible information technology research and advisory company, cybersecurity spending has grown 11.5% since 2014 and is expected to grow another 12.4% in 2016. The following chart demonstrates the forecasted spending in billions for cybersecurity software.

Cybersecurity growth 2011-2017 (\$ billions)



Cyber-security spending is estimated to be \$97 billion in 2016 due to the increasing awareness of security threats.

Porter's Five Forces

Barriers to entry in the cybersecurity software industry is relatively low. History shows, and as evidenced by the substantial number of players that are currently competing in this industry, there are always potential new entrants. The barrier for this industry itself revolves around the strategic implementation and the development of an idea that competes and challenges current security protection methods. Threat of substitutes is low. There are high costs involved with switching from one software security to another. Customers in this industry require special customization which makes it difficult to switch providers. The bargaining power of suppliers is low. Volume is critical to security firms' suppliers and there are very little costs to switching suppliers. Bargaining power of customers is medium-low. As previously mentioned, customers pick their security software that best accommodates their needs. Usually, once a customer has invested in a software security they are not going to switch. The intensity of existing rivalry is high. The cybersecurity industry is a large industry with a number of wellestablished companies who are constantly seeking a competitive edge. While security companies continue to improve their technology, cyberattacks are also becoming more sophisticated.

Positive Outcome from Veritas Sale

Veritas Technologies specializes in storage management



and information backup/recovery software. Symantec acquired Veritas eleven years ago in order to unify cybersecurity software and information management into one division. The business strategy behind this acquisition was part of a larger consolidation trend in corporate software that many of Symantec's competitors were also adapting to. This trend was driven by a critical need for businesses to have a "one-stop provider" of tools for data storage, security and management. Symantec also benefitted from the acquisition from major cost cutting and being able to now offer a bundle of products. At the time, Symantec had 40% of the \$2.7 billion annual market for anti-virus software and the economic environment called for a change to sustain its position. On Dec 17, 2004, Symantec announced its plan to purchase Veritas, yet investors did not react the way the company had anticipated. Investors' concerns revolved around the complicated merging process, meaning the consolidation of product pipelines and corporate strategies would be difficult. During that same week, Microsoft announced its acquisition of Giant Software. The impact of Microsoft's announcement along with concerned investors resulted in an 8% decline in Symantec's shares. On October 9, 2014, Symantec announced that it would be separating into publicly traded companies and later announced on June 28, 2015, that the new entity would be traded under the name "Veritas Technologies." While in 2004 it was strategic to consolidate software products, the new era of the increasing need for data storage and cyber-security threats called for this separation. Also, Symantec was not the first billion-dollar tech competitor to announce a split. EBay Inc. and Hewlett-Packard Company both recently divested their corporation due to this change in the technological environment. The positive outcome of this separation is that Symantec will now have \$6.3 billion in net cash proceeds from the sale to realign its efforts on cyber-security and return substantial value to its shareholders. In August earlier this year, the Board of Directors for Symantec authorized an increase in its stock buyback program to \$2.6 billion demonstrating value creation.

Continued Commitment to a Balanced Capital Allocation



- Received board authorization to accelerate the return of \$2 billion to shareholders, beginning with a \$500 million accelerated share repurchase
- $\bullet~$ In August, Board authorized increase of stock buyback program to \$2.6B
- Retaining \$0.60 / share dividend per year, significantly increasing Symantec's dividend payout ratio post separation
- Expect to return ~120% of after-tax domestic cash sale proceeds through dividends and stock buybacks over the 18 months post closing
- Committed to strong balance sheet and investment grade rating
- Continue to evaluate alternatives for cash usage ranging from M&A to returning additional cash to shareholders

The points mentioned above in Symantec's capital allocation plan illustrates their continued focus on returning value to its shareholders. The company currently has a substantial cash balance and their capital allocation focuses on retaining \$0.60/share dividend per year after the separation from Symantec which is significantly greater than the historical payout.

Consistent Value Creation

The divestiture from Veritas itself is an example of inorganic growth but now leaves Symantec with over \$3.7 billion from the sale to invest in internal improvements such as product development. When analyzing the company's adjusted historical ROIC/WACC ratio proves consistent value creation to its shareholders. The company's 5-year average is 1.17.

ROIC	10%	11%	10%	10%	10%		
WACC	7%	9%	10%	9%	9%	5-Year Average	
ROIC/WACC	1.56	1.13	0.98	1.11	1.08	1.17	

Symantec's EBITDA and Profit Margin have been consistently improving year after year demonstrating continuous improvement in the company's operations. In 2011, the company's EBITDA margin and Profit Margin was 11.3% and 27.2% respectively while this year Symantec has been able to maintain respective margins of 29% and 16%.

Valuation

The valuation of Symantec Corp. is based on a valuation computed by a pro forma used a discounted cash flow method. Attached is an overview of the discounted cash flows year over year along with the underlying assumptions. When valuing Symantec a conservative approach has been used due to the transition from its recent separation. The growth rate in revenue with the exclusion of its recently spun off business segment is -5.12%. This is primarily due to the impact on exchange rates but also incurring separation costs. Analysts have forecasted their growth in revenue for the following years to increase year over year by about 60 basis points. The ability to maintain a strong customer base along with realigning its focus to organic growth illustrates steady growth. The financial metrics of the firm were made to converge with its competitors in the industry



based on a five year basis to reach the later continuing period. The pro forma calculated the inclusion of the proceeds from the Veritas sale computing an enterprise value of \$16.6 billion. Using this value the share price is estimated to be \$24.29 which amounts to a potential 18% return from its current price.

Conclusion

The analysis of Symantec's recent separation and historical performance leads me to believe this company is currently undervalued. Symantec has been a leading competitor in the cybersecurity sector for decades. The positive outlook for this industry along with the company realigning its focus on strengthening its software proves a positive future for the corporation. On November 5 the company announced earnings of \$0.44 per fully diluted share which beat it's expected by \$0.02 per share. The proceeds from the Veritas sale along with the substantial cash balance available for future investments demonstrates enormous room for growth. Analyzing the valuation of this company using the discounted cash flow method states this is an opportune time to BUY for investors.





Symanted Revenue Growth Rate Consumer Security Enterprise Security Total Revenue Cost of Revenue (%)	2011	n 2012										Years to Convergene	5
Consumer Security Enterprise Security Total Revenue	2011	2012											_
Consumer Security Enterprise Security Total Revenue	2011	2012										Terminal Growth Rate	2.50%
Consumer Security Enterprise Security Total Revenue			2013	2014	2015	2016	2017	2018	2019	2020	202 <mark>†</mark>	Discount Rate (WACC)	8.84%
Enterprise Security Total Revenue			2.52%	-2.67%	-5.12%	-0.50%	0.10%	1.20%	1.60%	2.30%	2.50%	Unlevered Beta	1.05
Total Revenue		2975	2109	2063	1887							D/E	0.3
Total Revenue		1197	2168	2100	2063							Revenue Growth Rate	Analysts
		4172	4277	4163	3950	3930	3934	3981	4045	4138			
			18:	18%	18%	18%	18%	18%	18%	18%			
Cost of Revenue			769.86	749.34	711	707	708	717	728	745			
Operating Costs:													
Selling and Marketing	48.70%	48.30%	46.4%	43.1%	41.0%								
R&D	14%	14.40%	14.7%	15.5%	18.5%								
Amortization	4.40%	4.30%	4.1%	2.3%	1.2%								
Restructuring and Separation	-	-	1.0%	4.0%	4.0%	-	-	-	-	-			
Total Op. Costs (%)	67.1%	67.0%	66.2%	64.9%	64.7%	64'.	64%	64%	64%	64%			
Total Op. Costs	01.10	01.071	2831	2702	2556	2515	2518	2548	2589	2648			
EBIT (Operating Income)			676	712	683	707	708	717	728	745			
			16%	17%	17%	18%	18%	18%	18%	18%			
Operating Margin			16%	10%	10%	10%	16%	10%	16%	10%			
Tax Rate		20.0%	25.0%	22.0%	20.0%	21.0%	21.0%	21.0%	21.0%	21.0%			
NOPAT			507	555	547	559	559	566	575	588			
Change in NWC	296	306	47	-283	-146	44.00	44.00	44.00	44.00	44.00			
5-year average			44										
% of Sales		7.3%	1.1%	-6.8%	-3.7%								
CAPEX	-1760	-318	-319	-583	-1,154	-293.1	-293.4	-297.0	-301.7	-308.6			
5-year average			-826.8										
% of Sales		-7.6%	-7.5%	-14.0%	-29.2%								
y or oales		1.02	1.071	14.07	20.27								
D&A	270	289	286	156	108								
% of Sales	2.10	6.9%	6.7%	3.7%	2.7%	197.5	197.6	200.0	203.2	207.9			
710,0465		0.071	5.0%	0.171	L. 17 .	101.0	101.0	200.0	200.2	201.0			
FCFF			0.071			507.2	507.7	513.2	520.7	531.7			
PV of FCFF						466.0	507.7	513.2	520.7	531.7			
Terminal Value						400.0	301.1	515.2	320.1	8,596.0			
Terminal Value										0,556.0			
PV of Terminal Value						5,628.0							
Value of the Firm						8,167.31							
Plus Cash					+	10,191.00							
Minus Debt					-	\$ 1,740.00							
Value of the Equity						16,618.31							
# of Shares Outstanding						684.20							
Price per Share						\$ 24.29							
Current Price						\$ 24.23 \$ 20.57							
% of Potential Return						¥ 20.5 r							