



Analyst Report | Darrus Lee | 14 May 2020 | NYSE Ticker: AAPL

Apple Inc.

Price (as of May 14, 2020 1:00pm PST)
\$309.54

12-Mo. Target Price (34.07%)
\$415.00

Sector: Technology
Industry: Consumer Electronics

Recommendation

BUY

Strong
Sell

Sell

Hold

Buy

Strong
Buy

Key Stock Statistics (Source: Charles Schwab, Yahoo Finance, www.CNBC.com)

Details and Earnings TTM (GAAP)

Price	310.20	1M Return	7.83%
52 Week High	327.85	6M Return	-4.72%
52 Week Low	170.27	52 Wk Return	64.07
Beta (5Y)	1.16	YTD Return	5.41%

Shares

Common Outstanding Shares (M)	4,300
Cash and Equivalents (M)	4.88
Market Capitalization (M)	1,300,000
Total Debt (M)	108.05
Preferred Equity	0.0

Apple Price Volume Graph



Highlights and Investment Rationale

- Apple bought NextVR to further enhance their products in VR and AR capabilities of their products
- Apple is looking to release their computerized glasses in 2022 to create AR experience to consumers
- Apple is set to release new late 2020 products with mini LED and Apple's own Mac chip instead of Intel
- Apple is planning to produce an electric car and is expected to release 2023-2025

Investment Risk Analysis

Low

Medium

High

- The threat of the trade war with China might result in Apple to raise iPhone products by 10%
- The company accounts for 4.9% of the S&P 500 index
- Sales for iPhone SE model expected to drop 20-25% in Quarter 2 due to COVID-19

Revenue (in US \$, Millions)

	1Q	2Q	3Q	4Q	Year
2019	58,015	53,809	64,040	91,819	260,174
2018	61,137	53,265	62,900	84,310	265,595
2017	52,896	45,408	52,579	88,293	229,234
2016	50,557	42,358	46,852	78,351	215,639

Earnings Per Share (in US \$)

	1Q	2Q	3Q	4Q	Year
2019	2.46	2.18	3.07	4.99	11.89
2018	2.73	2.34	2.95	4.18	11.91
2017	2.10	1.67	2.08	3.89	9.21
2016	1.90	1.42	1.71	3.36	8.31



Apple Inc.

Corporate Information

Address

1 Apple Park Way
Cupertino, CA
95014

Telephone

(408) 996 - 1010

Website

www.apple.com

Key Executives

*Timothy D. Cook, CEO &
Director*

Luca Maestri, CFO & Sr. VP

Jeffery E. Williams, COO

*Katherine L. Adams, Sr. VP,
Gen. Counsel & Sec.*

*Deidre O'Brien, Sr. VP of
People & Retail*

Board of Directors

*Timothy D. Cook
Arthur D. Levinson
Andrea Jung
Albert A. Gore
Ronald D. Sugar
Susan L. Wagner
James A. Bell*

Business Description

Apple, Inc. was founded by Steven P. Jobs, Ronald G. Wayne, and Stephen G. Wozniak in 1976 and is headquartered in Cupertino, CA. Apple, Inc. operates throughout geographical segments: Americas, Europe, Greater China, Japan, and Rest of the Asia Pacific. The Americas segments includes North and South America. The Europe segment consists of European countries including India, the Middle East, and Africa. The Greater China segment consists of China, Hong Kong, and Taiwan. The Rest of Asia Pacific segment consists of Australia and Asian countries. Apple, Inc. engages in the design, manufacture, and sale of smartphones, personal computers, tablets, wearables and accessories, and other variety of related services. The company offers iPhones, Mac, iPad, AirPods, Apple TV, Apple Watch, Beats products, iCloud, streaming, and licensing services. Also, the company offers other services such as Apple Arcade, Apple Card, Apple News+, and Apple Pay. The company sells its products through its retail and online stores, third-party cellular network carriers, wholesalers, retailers, and resellers. Apple, Inc. collaborated with Google LLC to track the spread of COVID-19 using Bluetooth technology on mobile devices.

Business Segments

iPhone: The iPhone is known as Apple's core product. Apple's iPhone line of 2019 consists of three new iPhones: iPhone 11, iPhone 11 Pro, and iPhone 11 Max that are operating on its iOS system. iPhones releases their products in different colors. The product red iPhones help fight AIDS due to Apple contributing to fund research in AIDS at Africa. Due to the 2020 pandemic, Apple has shifted their product red iPhones to the Global Fund's COVID-19 Response. In 2019, iPhone had lower unit sales resulting in a 14% decrease in net sales.¹ The result of the net sales to decrease is due to Europe, Greater China, and Japan consumers not purchasing their product. In the US, the net sales of iPhones increased by 4%. The decrease during 2019 in other countries outside the US was due to the weakness in foreign currencies relative to the US dollar.² The decline in iPhone sales has also been attributed to the slowdown in China, longer phone replacement cycles, and other smartphone competitors. iPhone users are loyal consumers to Apple due to the Apple ecosystem with iMessage, FaceTime, and iCloud Storage. Apple's iPhone is an outstanding product of the company.

iPad: Apple's iPad is a multi-purpose tablet that operates on its iPad OS system. The 2019 iPad line released: iPad Pro, iPad Air, iPad mini, and 10.2-inch iPad. In 2019, iPad had a 16% net sales increase with mostly iPad Pro's being purchased.³ The company's tablet has been having more recognition and better sales throughout the years. In the fourth quarter of 2019, Apple's iPad held 36.5% share of the global tablet

market. The tablet offers multi-touch which works well on software's in the Apple's App Store. In addition, with many accessories that can be bought separately for the tablet, it could replace a laptop for some users. The tablet is more portable than a laptop and has the power of a computer due to Apple-designed chips. The new 2020 iPad Pro line offers a

¹ United States Securities and Exchange Commission Form 10-K. (n.d.). Retrieved from http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_AAPL_2019.pdf

² United States Securities and Exchange Commission Form 10-K. (n.d.). Retrieved from http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_AAPL_2019.pdf

³ United States Securities and Exchange Commission Form 10-K. (n.d.). Retrieved from http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_AAPL_2019.pdf



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LiDAR Scanner that can enhance augmented reality experience. In addition, the tablet is an amazing note taking tool with the Apple Pencil enhancing the note-taking experience. The tablet has been played a prominent role in the tablet industry.

Mac: Apple's personal computer is built from Mac that operates on MacOS system. The 2019 Mac line released: MacBook Air, MacBook Pro and Mac mini. In 2019, Mac had 2% net sales increase due to the MacBook Air. The net sales percentage is not high due to the lower net sales of the MacBook Pro.⁴ The Mac has been used as a personal computer for consumers and has been experiencing a slowdown in demand internationally due to competition and longevity of previous Mac products. The fourth quarter of 2019, Mac accounted for 11% of the company's revenue. The Mac is important to the company because it is interlinked to the iOS operating system and targeted less by malware.

Accessories: Apple has made many accessories for their products over the years such as AirPods and Apple Watch. The company's accessories had 41% net sales increase due to the success of AirPods and Apple Watches. All over the world, Apple accessories sales increased in 2019. Social media has made the company's AirPods very popular with nearly 60 million being sold in 2019 resulting in Apple to take up 71% of the wireless section.⁵ The company continues to improve their AirPods by applying noise-canceling for the AirPods Pro. The Apple Watch will have new mental health features that can detect abnormal breathing in advance of panic attacks.

Services: The company offers many services for consumers: Apple Music, AppleCare warranty, iCloud storage, Apple TV, and Apple Card. Year over year, the subscription service increased 40% with a net sales increase 16%.⁶ The app store and AppleCare warranty contributed to the increase in sales in 2019. The service of the company revenue was \$46.3 billion in 2019, and the first quarter of 2020 revenue \$12.72 billion. The Apple Card is a credit card that Apple offers with approximately 3.1 million Americans using the card. The card offers 3% cashback on Apple products and selected stores, 2% cashback using Apple Pay, and 1% cashback for every other purchase. The card is issued by Goldman Sachs Bank USA. The continued success and addition to more services offered to consumers plays a prominent role in the company.

Industry Overview

The consumer electronics industry is highly competitive internationally. The company designs, manufactures, and markets their personal computers, mobile phones, and portable devices. The company sells their products internationally through online stores, retail stores, third-party wholesalers, and resellers. Apple has been committed to bring the best experience to students, professors, and professionals worldwide with innovated hardware and software. Apple has been a powerhouse with their iPhones. Apple's manufacturing partner for chips is TSMC. TSMC has developed many powerful chips for Apple over the years with an A14 chip to be produced for the next coming products. The A14 chip would be the first arm-based mobile processor to exceed 3GHz. The new chip would have 25% more power for the single-core performance and 33% more power for multi-core performance. Apple plans to make their own Mac chips for 2021 for greater control over the performance of their devices to differentiate them from rivals.

Apple competes internationally with other phone, laptop, and tablet companies. The company's primary competitors are other computer manufactures: Dell Technologies (NYSE: DELL), Lenovo Group (OTCMKTS: LNVGY), HP Inc. (NYSE: HPQ), Sony Corp. (NYSE: SNE), and Asus (TPE: 2357). Samsung Electronics (KRX: 005930) is the only competitor that rivals Apple in both smartphone, computers, and tablets. Samsung Electronics is one of the main reasons

⁴ United States Securities and Exchange Commission Form 10-K. (n.d.). Retrieved from http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_AAPL_2019.pdf

⁵ Wood, C. (2020, January 16). Apple sold nearly 60 million AirPods in 2019, analysts estimate. Retrieved from <https://www.businessinsider.com/apple-sold-nearly-60-million-airpods-in-2019-strategy-analytics-2020-1>

⁶ United States Securities and Exchange Commission Form 10-K. (n.d.). Retrieved from http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_AAPL_2019.pdf



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why iPhone sales have been reduced. Huawei Technologies and Xiaomi (OTCMKTS: XIACF) are two other companies that have dropped iPhone sales in China due to their affordable products.

Changes in Consumer Lifestyle: The company has changed everyone's lifestyle with their iPhone. There are over 900 million active iPhone users, and the phone has many utilities that can help a person in their day-to-day life.⁷ The iPhone replaces notes, calendars, alarm clocks, cameras, navigation systems, and flashlights. Apple iPhones have great camera that created and inspired many people to pursue an interest in photography with apps like Instagram. Apple iPhones also created videographers and YouTubers with the device's camera recording. Touchscreen phones are mainstream in today's society making it feel like we non-touchscreen phones are ages ago. Apple iPhone has changed the industry of navigation systems as well. As long as you have a smartphone, you will be able to find your destination by inputting the address on the smartphone. There is no need to have a navigation system or map in the car anymore. This makes daily life simpler if people are lost or would like to see the real time traffic.

Innovation in Technology: Due to the high competition, innovation in technology and accessories has been increasing. All of the top competitors that dominate the consumer electronic industry invest a lot of money in technological innovation to improve consumer's experience. The progress of new devices also created ride sharing applications like Uber and Lyft. The creation of Uber and Lyft makes people's lives easier by being able to get to their destination with a tap away. Ride-hailing use has increased over the years with 45% urban residents using Uber or Lyft.⁸ These ride sharing applications are convenient for travelers and people without a vehicle. Without the high competition and innovation of advanced GPS tracking, companies like Uber and Lyft would cease to exist.

Trade War: The trade war between the U.S. and China poses a big threat to Apple with President Trump's 15% China tariffs on August 2019. Apple managed to dodge iPhone tariffs due to President Trump's phase on deal with China.⁹ Apple already pays 15% tariffs on their products; therefore, they did not raise prices in their United States products. This is a relief to the company due to 218 million iPhone were assembled in China. The US Trade Representative's office stated an "exclusion process for products subject to additional tariff."¹⁰ This indicates that technology companies are able to save their products from tariffs. The trade war has resulted in other industries that would result in the price to increase in other products that are not tech related.

Competitive Positioning

Brand Recognition: The biggest competitive advantage that Apple has is its ecosystem. Mac users generally would own an iPhone, iPad, or Apple watch that works well with their computer. The Apple ecosystem syncs notes between all devices, enables texting text messages from computers, copy and paste between devices, iCloud photos on all devices, air drop, and much more. iMessage works well in a group text setting compared to SMS messaging. In addition, all the user needs to send an iMessage text is to have internet access. The company is the most recognized brand internationally by millennials. The logo has the ability to differentiate itself from competitors and distinguish themselves to have high quality products. The company has an excellent brand image with its high-quality products that meets the customers' needs. With the company's strong brand recognition and services that their products offered, they have many loyal customers that stick with their products for most of their life. The company's brand recognition is on the top of Forbes'

⁷ Kifleswing. (2019, December 18). The iPhone decade: How Apple's phone created and destroyed industries and changed the world. Retrieved from <https://www.cnbc.com/2019/12/16/apples-iphone-created-industries-and-changed-the-world-this-decade.html>

⁸ Jiang, J. (2019, January 4). More Americans are using ride-hailing apps. Retrieved from <https://www.pewresearch.org/fact-tank/2019/01/04/more-americans-are-using-ride-hailing-apps/>

⁹ Kifleswing. (2019, December 13). Apple dodges iPhone tariff after Trump confirms trade deal agreement with China. Retrieved from <https://www.cnbc.com/2019/12/13/apple-dodges-iphone-tariff-after-trump-confirms-china-trade-agreement.html>

¹⁰ Kifleswing. (2019, August 31). The trade war has already cost electronics companies \$10 billion and it gets worse on Sept. 1. Retrieved from <https://www.cnbc.com/2019/08/31/the-trade-war-has-already-cost-electronics-companies-10-billion.html>



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list of the world's most valuable brands for the ninth time in a row.¹¹ Apple's success is dependent upon its brand recognition and device compatibility.

Innovation: Apple has been innovative throughout the years to set-apart from competitors while increasing customer loyalty. The company did not have any game changing products from 2010 till 2017. The innovative technology that the company introduced in 2017 drew more consumers to turn to Apple. That year, Apple released wireless AirPods and Apple Watch Series 3. The success of the Apple Watch Series 3 was due to the processor that made it 70% faster than the Apple Watch Series 2. The Apple Series 3 watch was the first Apple Watch to be able to receive texts and phone calls without a mobile phone nearby due to their cellular feature. Apple AirPods changed the headphone market with the W1 chip that contains dual optical sensors and accelerometers.¹² The chip helps detect when the device is in the consumer's ears so they can play when the user wants to listen. In addition, there are special features on the AirPods that can access the volume and Siri. The AirPods also filters out external noises to make your voice clear during phone calls. Apple's constant innovation and focus on their customers have made their products and services more attractive to consumers that do not own Apple products.

Porter's 5 Forces Analysis

Threat of New Entrants: The threat of new entrants is low given due to the fact that Apple is an established brand with strong customer loyalty making it challenging for new entrants compete with the company.

Availability of Substitutes: The consumer technology is highly segmented and can be categorized in different ways emerging with a very high number of substitute availability. There many factors that make a consumer determine the electronic device: price, features, battery life, brand, camera quality, etc. Each of these different categories represent a potential substitute for Apple.

Bargaining Power of Buyers: Although customers do not have influence on the prices of Apple products, they have the ability to choose alternatives that may have influence on future pricings. Apple's CEO, Tim Cook, wanted to create a halo effect that makes people eager for new Apple products. The company made a bold move to price smartphones at USD \$1000, but the price did not stop consumers from purchasing the phone. This is due to Apple's brand recognition and loyal customer base that reduces the bargaining power of buyers.

Bargaining Power of Suppliers: Apple products are manufactured by third-party manufacturers with the bargaining power of suppliers to be low. The company is a major customer to suppliers that strengthens Apple's position in negotiating with manufactures. Apple is able to choose any company they want whereas the supplier companies have major competition amongst themselves.

Rivalry Against Existing Companies: Apple has remained to be one of the top brands for consumer electronics over the years with the industry to be extremely competitive. Apple is in direct competition with Google, Inc., Hewlett-Packard Company, Samsung Electronics Co., Amazon, Inc., and more. Apple must focus on developing new and unique products to increase its market share position.

¹¹ Badenhausen, K. (2019, May 22). The Worlds Most Valuable Brands 2019: Apple On Top At \$206 Billion. Retrieved from <https://www.forbes.com/sites/kurtbadenhausen/2019/05/22/the-worlds-most-valuable-brands-2019-apple-on-top-at-206-billion/#372c1d9b37c2>

¹² Carnoy, D. (2016, September 7). Apple's AirPods may look weird, but they'll change the headphone market. Retrieved from <https://www.cnet.com/news/apples-airpods-may-look-weird-but-theyll-change-the-headphone-market-hands-on/>



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Investment Summary

Technology Security: Apple creates one of the best securities in the world for their devices. The company's devices generate passwords for consumers that are strong passwords to make it difficult for hackers to breach the account. The company's goal is to keep their customer's information safe. Due to COVID-19, the United States went into lockdown resulting in workers and students to hold discussions through Zoom. With many people using Zoom, this resulted in many hackers to hack into Zoom conference meetings that enables them to access people's mic and camera. This was a security issue that Zoom did not fix for 105 days, whereas Apple resolved the issue for people using their product in 1 day.¹³ The MacOS system has many built in security features to help protect their consumers. The company's T2 security chip safely stores fingerprint data and manages encrypted storage and enables Secure Boot. This results in Apple users to be able to be worry free because hackers are not able to access their mics and hear private conversations. In 2016, there was a San Bernardino shooter that used an iPhone product. The FBI wanted Apple to remove the guard dog on the iPhone so the government can gain access to the phone's information.¹⁴ Apple declined to help because they believe that they should not release personal information of their customers. The company also refused to add a backdoor system on the phone because they do not want people with the wrong hands to have them. Apple's security and loyalty to customer information resulted in more support loyal customers.

Technology Expansion: Apple has shifted focus to expand in augmented reality and virtual reality. The company has been developing smart glasses that can be a new innovative technology that will change the world. Analysts are predicting the smart glasses to be launched in 2022 and that it would offer a mixture of AR and VR experience for gaming, entertainment, and communication for its users.¹⁵ The glasses will include cameras that allow people to interact with surrounding areas. The glasses could have sales increase more than 50%. This would result in the company to make more than \$20 billion from the glasses alone. In addition, the company is building a new office in Austin, Texas. Texas will be the manufacturer for the MacBook Pro. The new office will be three million square foot that runs on 100% renewable energy and is to be completed in 2022. This will open new job opportunities for Texas and the new office can house up to 5,000 employees with the capacity to grow to 15,000.¹⁶ The company will also be able to avoid tariffs

Interaction Strategy: Apple emphasizes online channels, retail stores, and mobile apps to grow the interaction with consumers. The internet enables Apple to have a direct connection with customers by allowing them access to the company's product and to see what new features it entails. The Apple store and design is the same worldwide. Customers are able to interact with new products that might interest them. This can sell the product well because the new device catches their eyes while an Apple representative can talk about the new features and improvements that the company has done to the product. The company's service work believes that the most important component is not to sell, but to build relationships and make people's lives better.¹⁷ The employees at Apple are taught to build relationships and offer solutions to their problems to make their lives better. The company offers a back to university promotion that gives students or teachers free Beats Headphones and free Apple TV+. In addition, the company offers 10% off on education discounts to help students save money. All of these services are offered to help people's lives better.

¹³ Blake, A. (2019, July 13). Why the Zoom Hack Showed Apple's Strength, Not Its Weakness. Retrieved from <https://www.digitaltrends.com/computing/apple-security-zoom-hack-showed-its-strength/>

¹⁴ Staff, D. T. (2017, November 21). The Apple vs. FBI showdown is over! Here's a full timeline of events. Retrieved from <https://www.digitaltrends.com/mobile/apple-encryption-court-order-news/>

¹⁵ Eadicicco, L. (2020, May 15). Apple's long-rumored AR goggles, which could be its first step in replacing the iPhone, may launch in 2022 says a reliable analyst. Retrieved from <https://www.businessinsider.com/apple-glasses-release-2022-iphone-replacement-2020-5>

¹⁶ Daniel Brightmore. (2019, November 25). Apple breaks ground on \$1bn Austin campus expansion. Retrieved from <https://www.manufacturingglobal.com/technology/apple-breaks-ground-1bn-austin-campus-expansion>

¹⁷ Gallo, C. (2015, April 10). How The Apple Store Creates Irresistible Customer Experiences. Retrieved from <https://www.forbes.com/sites/carminegallos/2015/04/10/how-the-apple-store-creates-irresistible-customer-experiences/#36ff7eb917a8>



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The recommendation on the company's stock is a **Buy** with a twelve-month target price of \$415. Apple is already one of the largest companies in the world with room to improve. The company's new plans for future products is expected to be the key to increase revenue and growth of the company. As the world shifts toward technology to assist them in work and education, the company makes it easier for consumers to make their lives better and efficient. Apple has been one of the most innovative company in their industry and adapting to consumer's needs. The company continues to have a gradual increase in loyal customers due to their services. The constant growth in revenue throughout the year's despite with Apple's brand name, size, market share, and innovation indicate a strong growth in the future despite COVID-19.

Financial Analysis

Revenue: Apple has been growing consistently throughout the years. Although there was a decline in 2016, it is known that big companies will see a negative growth in revenue once in a while. In 10 years, Apple nearly quadrupled their revenue from \$65,225 million in 2010 to \$260,174 million in 2019. The company earns on average \$258 per user per year.¹⁸ Apple is able to maintain positive growth rates for the next few years due to their innovation and customer loyalty.

Revenue (US \$ in Billion)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenue	65.23	108.26	156.51	170.91	182.80	233.72	215.64	229.23	265.60	260.17
Growth (%)		65.97	44.57	9.20	6.96	27.86	-7.74	6.30	15.87	-2.04

Source: Apple Financial Statements 2005-2020: AAPL. (n.d.). Retrieved from <https://www.macrotrends.net/stocks/charts/AAPL/apple/financial-statements>

Sales Growth: Apple has been innovating and improving its products. The recent sales and expansion have been through digital sales due to COVID-19. The company's market share for online electronics is 10-15%. Apple is ranked second, bringing more than 5 billion dollars via online sales.¹⁹ While the whole world is on lockdown, Apple released their iPhone SE model that costs \$400. The company stepped in the right direction by making a price friendly smartphone due to the poor economy and unemployment rate. The SE model will enable new customers to experience Apple's ecosystem at a lower price during these tough times. In addition, the company is using iPhone SE sales to redirect 100% of the proceeds to RED to the Global Fund's COVID-19 Response.²⁰ Apple is expected to see more sales growth through their online platform due to COVID-19 that prevents customers to enter retail stores for purchases.

Operating Income: Over the years, Apple has shown some fluctuations on their operating income. The company's average operating profit from 2010 to 2019 is 19% compared to the average electronic sector that is 6.7%. Thus, Apple shows to have more efficiency in its operations. The most recent profit margin was -9.83% which is significantly lower than the overall margin of the company due to the trade war tension of China and US. The company's operating income is expected to increase throughout the years due to the company's new plans and projects in the new future.

¹⁸ Cybart, N. (2019, May 30). Apple's Billion Users. Retrieved from <https://www.aboveavalon.com/notes/2019/5/30/apples-billion-users>

¹⁹ ecommerceDB. (n.d.). apple.com revenue. Retrieved from <https://ecommercedb.com/en/store/apple.com>

²⁰ Apple is Arming (PRODUCT)RED in The Fight Against COVID, The New iPhone SE Plays a Big Role. (2020, April 16). Retrieved from <https://www.news18.com/news/tech/apple-is-arming-productred-in-the-fight-against-covid-the-new-iphone-se-plays-a-big-role-2579787.html>

**Apple Inc.****Operating Income (US \$ in Billion)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Inc	18.39	33.79	55.24	49.00	52.50	71.23	60.02	61.34	70.90	63.93
Growth (%)		83.74	63.48	-11.30	7.14	35.68	-15.74	2.20	15.59	-9.83

Source: Apple Financial Statements 2005-2020: AAPL. (n.d.). Retrieved from

<https://www.macrotrends.net/stocks/charts/AAPL/apple/financial-statements>

EPS: Apple's EPS throughout the year has been somewhat consistent over the past few years. The average growth rate of EPS from 2010 to 2019 is 24.36%. The most recent year, 2018 to 2019, EPS growth rate dropped 0.17% which marks a significant drop from their EPS growth in 2017 to 2018 (29.32%). Apple's EPS is expected to have a minimal decrease due to COVID-19 that is expected to have the customer's purchase less of the company's products due to unemployment rates.

Earnings Per Share (EPS)

	2015	2016	2017	2018	2019
EPS	\$9.22	\$8.31	\$9.21	\$11.91	\$11.89
Growth (%)		-9.87	10.83	29.32	-0.17

Capital Cash: Apple has a market capitalization of \$1.3 trillion and a total revenue of \$260.17 billion in 2019. Apple has a highly leveraged capital structure with over \$91 billion in cash in the first quarter of 2020. The company has \$108 billion in total debt and this is due to Apple taking advantage of low interest rates that rises the debt to fund its growing capital return program.²¹ Over the years Apple has changed its capital structure to increase debt to reduce cash through its capital return program. By adding more debt, the company is able to pay less taxes as well with a long-term debt rating AA1.

Cash on Hand (US \$ in Billions)

	2016	2017	2018	2019
Cash on Hand	67.16	74.18	66.30	100.56
Growth (%)		10.45	-10.62	51.67

Source: Apple Balance Sheet 2005-2020: AAPL. (n.d.).

Retrieved from

<https://www.macrotrends.net/stocks/charts/AAPL/apple/balance-sheet?freq=A>

Valuation

Valuation Method: The 12-month target price was estimated through a multiple valuation, market trends, and predicted future growth of the company. The company has had their revenues increase at a steady rate throughout the years. Apple's fourth quarter in 2019 had \$64 billion in revenue which is a 2% increase from the fourth quarter in 2018 with earnings per diluted share increasing by 4% with international sales to account for 60% of the quarter's revenue.²² The high earning fourth quarter was due to the success of iPad, accessories, and services that Apple offered to consumers. Luca Maestri, Apple's CFO, declared a strong business performance with Q4 EPS of \$3.03 and operating cash flow of \$19.9 billion. Maestri also noted that the company returned over \$21 billion to shareholders that will have the company reach a net cash neutral position in the future.²³ I believe there will be a 3% growth rate for next year, which is slightly above average than the current growth rate, 2.2%, for the consumer electronics industry. The company's growth rate will be higher than the

²¹ Team, T. (2020, February 3). A Closer Look At Apple's Debt & Changing Capital Structure. Retrieved from

<https://www.forbes.com/sites/greatspeculations/2020/02/03/a-closer-look-at-apples-debt--changing-capital-structure/#1f5a71ec7b65>

²² Apple Reports Fourth Quarter Results. (2020, May 11). Retrieved from <https://www.apple.com/newsroom/2019/10/apple-reports-fourth-quarter-results/>

²³ Apple Reports Fourth Quarter Results. (2020, May 11). Retrieved from <https://www.apple.com/newsroom/2019/10/apple-reports-fourth-quarter-results/>



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average due to the new products that Apple is working on that will help consumers work from home while the whole world is on lockdown. In addition, the consumer electronic industry has been resistant to COVID-19 despite the unemployment rate and economy.

Multiples Valuation: The competitors in the consumer electronic industry were analyzed through multiple valuation. The main competitors were Samsung, Microsoft, Dell, and Hewlett Packard. All the companies dominate the industry with more than \$30 billion in total assets. Apple's total assets are significantly higher than their competitors. Apple has \$338.5 billion in total assets with the next highest total asset to be Microsoft with \$286.6 billion in total assets. The multiple valuation used to analyze the competitors and the industry are average sales, ROE, Debt/Equity, revenue growth, and EPS growth. Apple's stock is overpriced compared to its competitors due to its strong power in the market.

Market Value: Apple's stock is considered to be overvalued but considering the company's brand position and new innovated products in development, the company's value will increase.

Conclusion: The market trend, brand positioning, service, and innovation results in the 12-month target price to be \$415, making the recommendation of this stock a **buy**.

Investment Risks

COVID-19: Apple had to shut down all retail stores, offices, and contact centers globally due to the lockdown restriction and global pandemic. Apple's main suppliers, Foxconn and Pegatron, were forced to shut down for several weeks. With this chaos, Apple was unable to function their factories up to full speed resulting into many delays in shipping to customers. Apple announced that their March quarter would fall short due to the outbreak.²⁴ Apple is still continuing to release products, but customers will not be able to test to products in person due to the strict guidelines of retail stores across the world. The lack of interaction with a new product results in many buyers to be hesitant to spend a lot of money on a product they may not enjoy.

Industry Competition: Apple is a well-established company in their industry that is competing with Samsung Electronics (KRS: 005930), Dell Technologies (NYSE: DELL), Lenovo Group (OTCMKTS: LNVGY), HP Inc. (NYSE: HPQ), Sony Corp. (NYSE: SNE), and Asus (TPE: 2357), Xiaomi (OTCMKTS: XIACF), and Huawei Technologies. The consumers' preference to buy competing brands could impact Apple's performance. Xiaomi and Huawei offer smartphones for a lower price that rivals the iPhones in performance and features. Samsung has been able to compete with iPhones that resulted in iPhone sales to drop. Dell upgraded their laptops in 2020 with their XPS line by slimming the bezels resulting in a better display screen and having modern Intel processors that overpower the MacBook Pro. The high competition in the industry results puts Apple to the test to see if the company can produce the most innovative products in their industry.

Valuation: Apple's stock is overvalued due to the increasing revenue over the years. The revenue for the company is expected to grow with their iPhone SE that will be the key driver to their growth. In addition, Apple has an aggressive repurchase program that will decline share counts resulting in the stock price to go up.

Brand Image: Consumer electronics products improve every year with Apple being the leader for starting trends. Apple got rid of the headphone jack, priced smartphones at \$1000, and created wireless earbuds. After Apple made those big changes to their products, many other companies followed what Apple did. Apple's innovation, marketing, and customer loyalty leads to a new trend. The issue is that many consumers have been complaining about the heavy price with recent smartphones. Therefore, other companies developed cheaper line products to cater to the needs of those customers. Due to

²⁴ Clover, J. (2020, May 14). COVID-19 Coronavirus: Impact on Apple's iPhone, Mac and WWDC. Retrieved from <https://www.macrumors.com/guide/covid-19-coronavirus/>



Apple Inc.

COVID-19 that resulted in over 30 million Americans filing for unemployment, Apple will need to start developing price friendly items with the chance of another Great Depression.

Global Sales Decline: Huawei has been dominant in China that resulted in Apple to lose a lot of sales. Huawei was successful due to the smartphone's quality, features, and low-cost. Apple is launching their price iPhone SE model which has not been refreshed since 2016. Apple is hoping that the iPhone SE will reboot Apple sales in Asia due to their high-priced smartphones with little improvement from predecessors.

Behind Competition: Apple is known to be innovative with the products they have released throughout the past years. With more competition emerging in the consumer electronics industry, Apple has been falling behind in some areas. Asian countries have created many powerful smartphones with more features than iPhones. Companies from China such as Huawei, Xiaomi, Oppo, and Vivo are becoming top competitors in the consumer electronic industry. Huawei surpassed Apple to be the world's second largest cellphone maker behind Samsung. Apple fell to third place in the largest cellphone maker and may continue to go down the ranks due to new companies emerging. Apple's competitors have made all of their smartphones to be OLED display, whereas Apple only provides OLED display for their high-end smartphones. In addition, Apple fell behind the screen display competition resulting them to pay Samsung to manufacturer iPhones OLED display smartphones. Android smartphones released in 2019 are all 5G ready, whereas Apple has not created a smartphone that is 5G equipped.