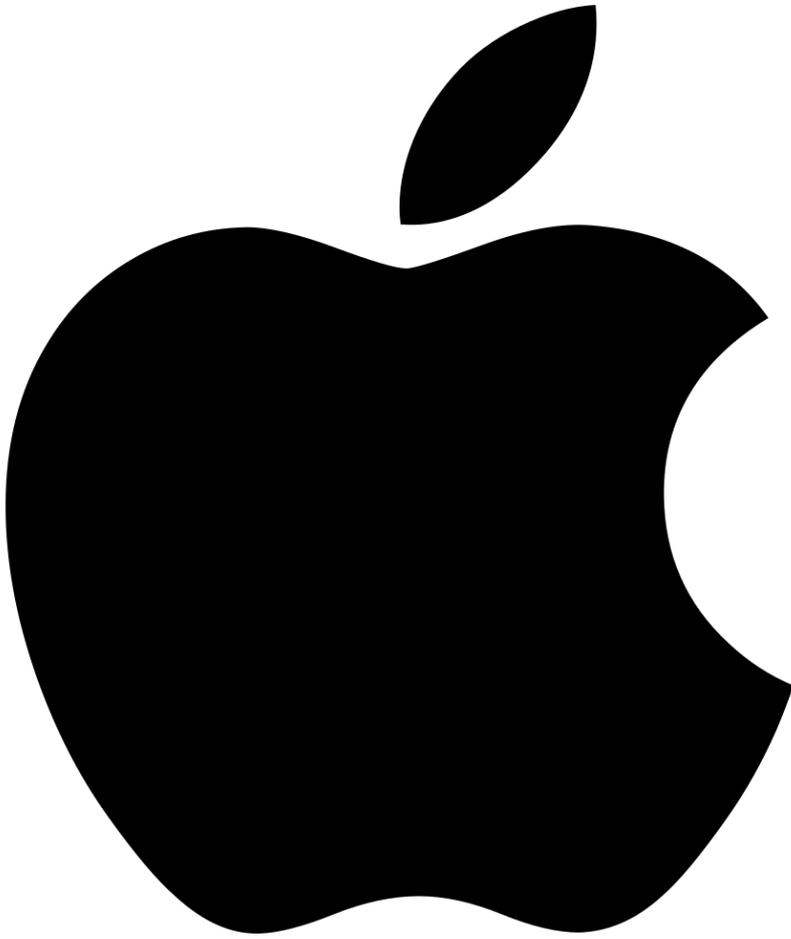


EXTENSIVE ANALYSIS — APPLE INC.





By: Investment Team
By order of: B.S.C. Duitenberg

Members of the Investment Team

- Harm Reurslag
- Gerk-jan Huisma
- ivan Molchanov
- Gleb Podorozhnyy
- Karol Fels
- Walt Schagen





Disclaimer

This information is in no way legally binding. This content is not intended as professional investment advice and information. The consequences of it in any manner whatsoever use of this information is entirely for your own account. Past performance doesn't provide any guarantees for the future.



1. Management summary

Company profile

Name:	Apple Inc
Ticker:	AAPL
Sector:	Consumer Goods - Electronic Equipment
Average volume:	39.34M
Market cap:	811.23B
Current price:	165.47 USD
52 Week high:	233.47 USD
52 Week low:	150.24 USD

Company introduction

Apple Inc. designs, manufactures, and markets mobile communication and media devices, and personal computers. It also sells various related software, services, accessories, and third-party digital content and applications. The company offers iPhone, a line of smartphones; iPad, a line of multi-purpose tablets; and Mac, a line of desktop and portable personal computers, as well as iOS, macOS, watchOS, and tvOS operating systems. It also provides iTunes Store, an app store that allows customers to purchase and download, or stream music and TV shows; rent or purchase movies; and download free podcasts, as well as iCloud, a cloud service, which stores music, photos, contacts, calendars, mail, documents, and others. In addition, the company offers AppleCare support services; Apple Pay, a cashless payment service; Apple TV that connects to consumers' TVs and enables them to access digital content directly for streaming video, playing music and games, and viewing photos; and Apple Watch, a personal electronic device, as well as AirPods, Beats products, HomePod, iPod touch, and other Apple-branded and third-party accessories. The company serves consumers, and small and mid-sized businesses; and education, enterprise, and government customers worldwide. It sells and delivers digital content and applications through the iTunes Store, App Store, Mac App Store, TV App Store, Book Store, and Apple Music. The company also sells its products through its retail and online stores, and direct sales force; and third-party cellular network carriers, wholesalers, retailers, and resellers. Apple Inc. was founded in 1977 and is headquartered in Cupertino, California.



Fundamental ratios

	x-4	x-3	x-2	x-1	x	Required
Stock Price					165.47	-
52 Week high					233.47	-
52 Week low					150.24	-
EPS	7.42	9.42	8.35	9.73	11.87	-
P/E	14.45	11.60	16.42	16.08	13.94	5<x<15
P/B					7.42	-
ROE		44.74%	35.62%	36.07%	48.70%	-
ROA		18.39%	14.2%	12.88%	16.00%	-
Operating margin		30.48%	27.84%	26.76%	26.70%	-
Net profit margin		22.85%	21.19%	21.09%	22.40%	>10%
D-E ratio		1.43	1.51	1.8	1.07	<0.8
Current ratio		1.11	1.35	1.28	1.10	>1
Quick ratio		1.08	1.33	1.23	1.10	-

Conclusion

the revenue is increasing and PE is rising. profit margins are stable. but these figures do not tell that the stock has dropped by 30% recently.



Content

1. Management summary	3
2. Introduction	5
3. General Information	6
3.1 Company profile:	6
3.2 Revenue breakdown by product and geographic:	6
3.3 Product	6
3.4 Customers/target group	7
3.5 Management ^[2. 5]	7
3.6 Major shareholders:	7
3.7 Important dates/ Business number agenda	8
3.8 Summary	8
3.9 Sources:	9
4. Fundamental Analysis	10
4.1 Qualitative analysis	10
4.2 Quantitative Analysis	12
4.3 Price targets & Stop loss levels	13
4.4 Summary	13
4.5 Sources:	13
5. Technical Analysis:	14
5.1 [Biggest index in country of headquarters]	14
5.2 [Company X]	14
5.3 Price targets & Stop loss levels	15
6. Conclusion & Advice:	16
6.1 Conclusion	16
6.2 Advice	16
7. Appendix	17



2. Introduction

This analysis is performed in order of B.S.C. Duitenberg by the investment team. It serves as an advice for the portfolio of the association. The analysis is based on this template for the analyses of stocks. In this template the following elements are treated in order to get a good picture of the stock: General information, Fundamentals, Macro economical and Technical. Every element contains a summary in order to get a succinct and concentrated analysis. The selection of stocks will be obtained by following the strategy of the investment commission. This strategy is based on the outcomes provided by the marketscanner. The last chapter of this template contains the final advice.



3. General Information

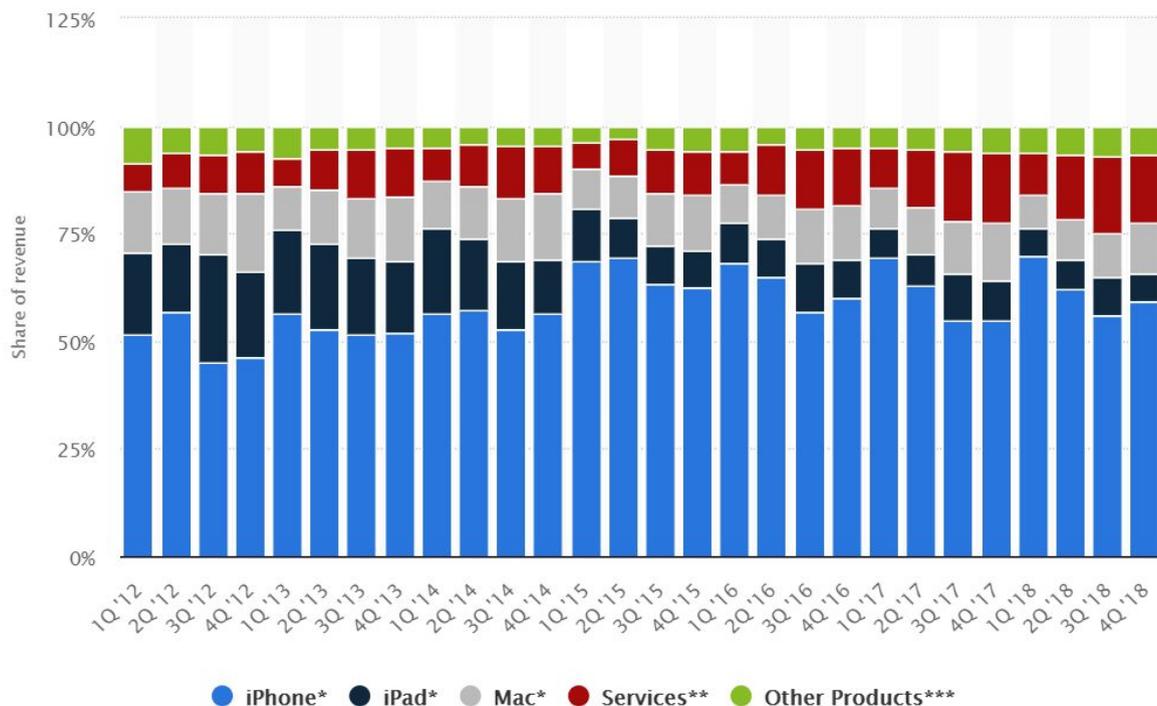
3.1 Company profile:

Name:	Apple Inc
Ticker:	AAPL
Sector:	Consumer Goods - Electronic Equipment
Average volume:	39.34M
Market cap:	811.23B
Current price:	165.47 USD
52 Week high:	233.47 USD
52 Week low:	150.24 USD

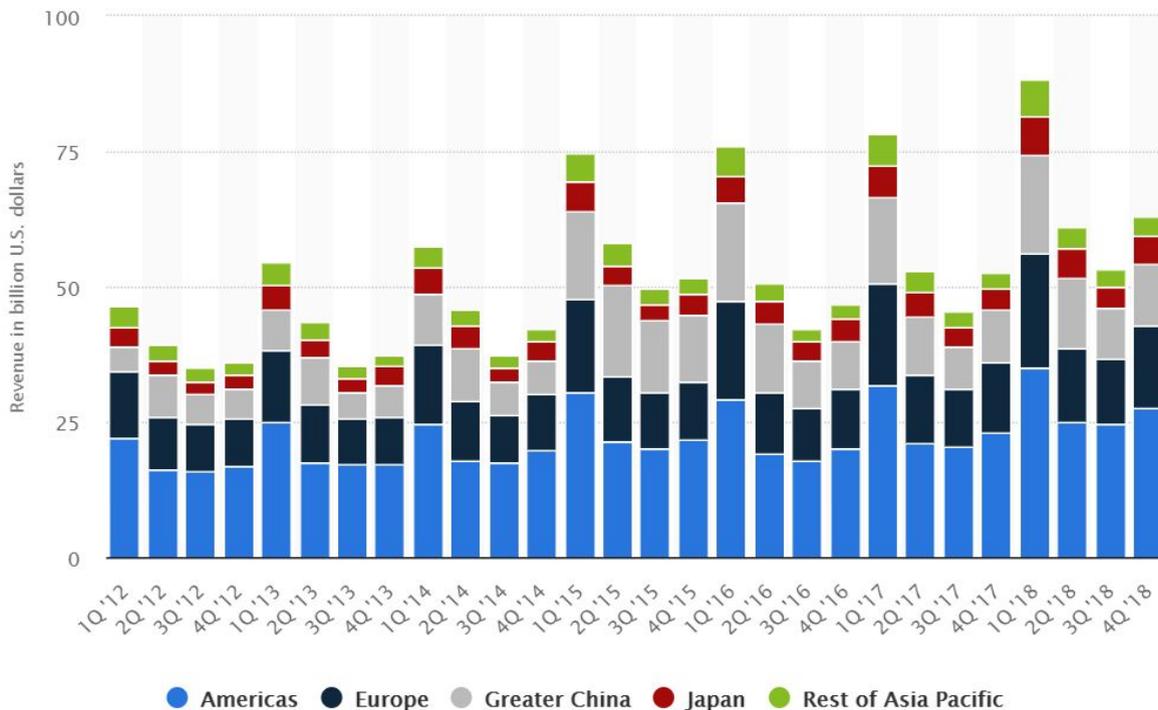
Company introduction

Apple Inc. is an American multinational technology company headquartered in Cupertino, California, that designs, develops, and sells consumer electronics, computer software, and online services.

3.2 Revenue breakdown by product and geographic:



The revenue is split among different products but seems to have stayed very similar over the last years.



percentually the revenue per region stays very consistent and grows
interesting sidenote: every 1st quarter revenue rises and so does the stock price (we are now before the 1st quarter)

3.3 Product

[What are the products of the company? Are the products perishable? Fashion products? Finished goods? Semi-finished goods? Raw materials?

Apple sells both hardware and software companies. This includes, smartphones such as the iPhone, computers, tablets, smart watches and other hardware technologies. From the software side, apple sells products such as Final Cut pro which is an editing software.

The products are generally seen as long lasting and premium as they are made from glass and metals. It is all consumer goods that are positioned as a lifestyle and design product besides being a gadget.

Also analyse their products, are they a market leader technology wise? What are new products to look out to?

Apple has always been one of the market leaders in the technology field. As they have a strong combination of doing both the hardware and the software for their devices. Some new products that are rumoured to release are apple glasses, car and potentially more. Besides that they regularly release new updates of their products once a year.



]

3.4 Customers/target group

[Who are the customers of the company? B2B? B2C? Youth? Elderly?]

Apple is mainly B2C, currently focussing on providing consumer products to teenagers, business people, adults, students, children.

to most consumers this is seen as a luxury brand and therefore has better customers (with more money ;)

]

3.5 Management^[2. 5]

3.5.1 Management Board

Function	Title	Name	Surname
Auditor			
CEO		Tim	Cook
CFO		Luca	Maestri
Chairman (Board of Directors)		Arthur D	Levinson
Chief Design Officer		Jonathan	Ive
Senior Vice President of Retail		Angela	Ahrendts
Vice President of Communications		Steve	Downling
Senior Vice President of Worldwide Marketing		Philip W.	Shiller

[Use this section to give specific information about the board. Were members of the board present during the foundation of the company? Are their board members who are about to leave?]

tim cook is a smart guy and has a lot of experience (also he is gay and therefore will probably not have sex scandals etc.)

Sir Jonathan Paul "Jony" Ive made all the apple design stuff (which has sold very well in the past) seems like a board with competent people

]

3.5.2 Long term strategy of the board:

[Where does the current focus of the board lay on?]

All they say is the typical bullshit. not an interesting point.

]



3.6 *Major shareholders:*

3.6.1 **Total overview transactive insiders**

very small amount, irrelevant.



3.6.2 Individual transactions^[6]

Trading Date	Name	Title	Type	Shares Traded	Price
18 Nov 2018	Kondo (Christopher)	Officer	Sell	3,408	\$190.00
12 Nov 2018	Adams (Katherine L)	General Counsel	Buy	14,371	\$0.00
12 Nov 2018	Adams (Katherine L)	General Counsel	Sell	7,019	\$192.23
14 Oct 2018	Kondo (Christopher)	Officer	Buy	6,800	\$0.00
14 Oct 2018	Kondo (Christopher)	Officer	Sell	3,281	\$217.36
4 Oct 2018	Ahrendts (Angela J Couch)	Officer	Sell	14,194	\$227.96
3 Oct 2018	Maestri (Luca)	Chief Financial Officer	Sell	25,509	\$229.60
3 Oct 2018	Maestri (Luca)	Chief Financial Officer	Sell	1,600	\$231.48
3 Oct 2018	Maestri (Luca)	Chief Financial Officer	Sell	35,904	\$227.69
3 Oct 2018	Maestri (Luca)	Chief Financial Officer	Sell	5,485	\$230.22
3 Oct 2018	Maestri (Luca)	Chief Financial Officer	Sell	31,747	\$228.28
3 Oct 2018	Ahrendts (Angela J Couch)	Officer	Sell	25,000	\$230.78
2 Oct 2018	Williams (Jeffrey E)	Chief Operating Officer	Sell	16,610	\$232.70
2 Oct 2018	Williams (Jeffrey E)	Chief Operating Officer	Sell	45,388	\$232.19
2 Oct 2018	Ahrendts (Angela J Couch)	Officer	Sell	25,000	\$232.66



2 Oct 2018	Ahrendts (Angela J Couch)	Officer	Sell	25,000	\$232.66
30 Sep 2018	Williams (Jeffrey E)	Chief Operating Officer	Sell	68,530	\$227.26
30 Sep 2018	Williams (Jeffrey E)	Chief Operating Officer	Buy	130,528	\$0.00
30 Sep 2018	Maestri (Luca)	Chief Financial Officer	Buy	130,528	\$0.00
30 Sep 2018	Maestri (Luca)	Chief Financial Officer	Sell	66,334	\$227.26
30 Sep 2018	Ahrendts (Angela J Couch)	Officer	Sell	66,334	\$227.26
30 Sep 2018	Ahrendts (Angela J Couch)	Officer	Buy	130,528	\$0.00
26 Aug 2018	Cook (Timothy D)	Chief Executive Officer	Sell	18,090	\$218.54
26 Aug 2018	Cook (Timothy D)	Chief Executive Officer	Sell	56,324	\$216.96
26 Aug 2018	Cook (Timothy D)	Chief Executive Officer	Sell	190,746	\$217.96
23 Aug 2018	Cook (Timothy D)	Chief Executive Officer	Buy	560,000	\$0.00

Number of Insider Trades



3.6.3 Major shareholder positions

[Look up what currently are the biggest shareholders.]



Top Institutional Holders

Holder	Shares	Date Reported	% Out	Value
Vanguard Group, Inc. (The)	347,890,172	Jun 29, 2018	7.20%	64,067,455,349
Blackrock Inc.	311,719,812	Jun 29, 2018	6.45%	57,406,321,719
Berkshire Hathaway, Inc	251,955,877	Jun 29, 2018	5.22%	46,400,195,231
State Street Corporation	191,494,434	Jun 29, 2018	3.96%	35,265,615,666
FMR, LLC	103,652,293	Jun 29, 2018	2.15%	19,088,606,658
Northern Trust Corporation	62,005,181	Jun 29, 2018	1.28%	11,418,874,360
Geode Capital Management, LLC	57,294,309	Jun 29, 2018	1.19%	10,551,320,155
Norges Bank Investment Management	50,785,599	Dec 30, 2017	1.05%	8,688,400,369
Bank Of New York Mellon Corporation	49,427,723	Jun 29, 2018	1.02%	9,102,609,648
Invesco Ltd.	48,627,807	Jun 29, 2018	1.01%	8,955,297,115

Interesting positions

3.7 Important dates/ Business number agenda

[Look up important dates, like quarterly result, dividend payments and product announcements]

Date	Activity
30-1-2019	earnings ← this is a big one

3.8 Summary

AAPL is owned for a big portion by big holders. their product sales are very stable by region and by different product. they seem to be a very stable company based on these figures. combined with a dropping price this is a good thing

3.9 Sources:



4. Fundamental Analysis

4.1 Qualitative analysis

4.1.1 Recent news:

[Look up news relevant for decision making, news about competitors can also be of interest.]

- Stock has fallen by 27% over the last quarter.
- Due to Apple's weaker-than-expected revenue after release of the quarter report, Apple announced that they will not release the amount of sold products anymore
- working on developing a car, expected release year is 2023 <= irrelevant to us right now

]

4.1.2 Banks and other financial facilities

[Give an overview of the recommendations by banks and other financial institutions.]



Analyst Firms Making Recommendations

B OF A M L	BAIRD R W	DAVIDSON D A
EDWARD JONES	JEFFERIES & CO.	JP MORGAN SECUR
KEYBANC CAP MKT	MORGAN STANLEY	OPPENHEIMER HLD
PIPER JAFFRAY	RAYMOND JAMES	WEDBUSH SECURIT
WELLS FARGO SEC		

The overall recommendation for the apple stock is currently to buy according to many institutions. However most institutions and experts state it to be of medium risk.



]

4.1.3 Sector outlooks

[Give an outlook for the sector in which the company is operating as a whole.]

Phones market share : 15.6%

Tablets market share 26.6%

laptop market share 6.4%

]

4.1.4 Company outlook

[Give an outlook for the company.]

The company has a lot going on, but that is not wierd for such a big company. qualcomm is having trouble with apple but this is not out of the ordinary. there is talk of iphone sale drops, this could be a very bad thing if it breaks the companies network effects. in the case that apple would keep a similar earnings pattern it is a good buy.

]



4.1.5 SWOT

[Make a SWOT analysis of the company:

Strengths:

- *Unique ability to design and develop proprietary hardware, software, applications and services*
- *Powerful brand supported by strong advertising and marketing capabilities*
- *Brand loyalty*

Weaknesses:

- *Dependence on few products (iphone)*
- *Not always matching customer expectations - > result in sales drop*

Opportunities:

- *Lot is going on in the tech world.*
- *new apple devices*

Threats:

- *Google phones*
- *Customers finding an other brand they want.*

]

4.2 Quantitative Analysis

4.2.1 General Macro-Economic figures

[Look up relevant macro-economic figures. For example, if their products are mainly sold to the middle class in China, employment figures, buying power etc. can be seen as relevant.

this is discussed earlier in chapter 3.



]

4.2.2 Sector comparison

[Compare company fundamentals with those of competitors.

No company is truly a competitor of apple. As it is the only one that delivers the software and hardware for their own devices at a full spectrum range. The closest would be to compare google, however they do not have a dedicated laptop software and instead use chromebooks which can be seen as their own product.

Mobile:

Mobile competitors range from Huawei and Samsung to smaller players. However these companies all use the software of Google therefore there is a large dependence on separate parties performing really well.

Tablet:

In the world of tablets, Apple virtually does not have competition and is a giant dominant of the market.

Computer:

The major competitor can be seen Microsoft all together right now as they have started to manufacture their own hardware besides the software. They have been performing very well recently with sales going up especially in the surface books.

Overall, no company has such a range of devices where they control every single aspect of it. Therefore Apple has the most coherent ecosystem that is constantly improving while other companies are currently trying to achieve.

]

4.2.3 Latest quarterly figures

4.3 Price targets & Stop loss levels

[Based on your fundamental analysis, come up with target price(s) and a stop loss level.

if we assume that the earnings grow to 13 per share and expect a PE ratio of 15 we target 195 per share. this earnings assumption is made based on previous earnings and a light growth.



]

4.4 Summary

[Summarize this chapter

Apple has a very strong position without real competitors. their recent price drop made it easier to step into this company. based on the assumption that the earnings will stagnate or increase this company is a good buy

]

4.5 Sources:



5. Technical Analysis:

5.1 Apple

Time frame: Past two months



Price is in a down channel. Over the past month a falling wedge has been forming. This indicates that a reversal might be due.

Time frame: Past year (2018)



Price is at resistance major resistance level. RSI is giving an oversold signal and it is forming a higher low, while the price made a lower low when comparing it with the price at the previous RSI low. This divergence of price and indicator signals that a reversal might be due. On top of this a inverted hammer candle just formed, which also signals reversal.



5.2 Price targets & Stop loss levels

[Based on your technical analysis, come up with target price(s) and a stop loss levels.]

based on the first resistance level we expect it to bounce back to 182

no stop loss because we think that it will be a detriment to the profits if it goes off and bounces back (less likely than that it completely collapses)



6. Conclusion & Advice:

6.1 Conclusion

[

]

6.2 Advice

We, the Investment Team, give Student Investment Club Duitenberg a **[positive]** advice to buy **[Apple]** based on the previous stated information given.

[[When advice is positive] We suggest buying **[2-3]** shares for a price of **€[165]** per stock, which would amount to an investment of **€[330-505]**.

We suggest placing a stop loss order at **€[no stoploss]**.

We suggest a target price of **€[195]**.

This should be evaluated every **[1] month.**

7.



Appendix
