

DCF case study Apple Inc.

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Agenda

- About the company
- Macro environment
- Financial analysis
- SWOT
- FCFF forecasting
- DCF valuation
- Catalysis
- Recommendation





Apple (AAPL): About the company

Founded on April 1976.

One of the largest and most known companies with MCap beyond \$1T operating all over the world.

Sector: Technology (XLK) Industry: Hardware & Storage (XTH)

Key figures: Tim Cook (CEO), Arthur Levinson (Chairman), Jeff Williams (COO)

Main revenue sources:

- Selling devices (Mac, iPhone, iPad, Apple Watch, AirPods)
- Services (iTunes, iCloud, AppStore, Apple Music, Apple TV, etc.)

[Main competitors:](#)

- Dell, HP, Samsung, Huawei, Xiaomi

[Main suppliers:](#)

- Analog Devices (ADI), Jabil Circuits (JBL), Micron Technology (MU), Qualcomm (QCOM), etc.

Sector (XLK) outperformed the market (SPY) by ~10% annually on average over last 5 years

Macro Environment

- **COVID-19 and recession**
Currently, the most notable market mover. Expecting the market to bounce back but not to the previous levels
- **“+” exposure to US/China Stocks and Iron Ore, “-” exposure to Gold and Brazil Stocks**
Result of LASSO regression of AAPL returns on returns of a large pool of macro assets
- **Dependence on international outsource and supply chains**
Company’s net sales through its direct and indirect distribution channels accounted for 31% and 69%
- **US stock market volatility**
Being the largest company, AAPL is one of the most liquid stocks and thus is the first to be hit by equity market shocks
- **US policy and tax regulation**
Apple profits from current US protectionism policy
- **Ethics, Data Protection and Users Rights**
Apple is involved in certain scandals that are paid a lot of attention in national and international policies these days



Financial analysis

Ratios	Apple	Samsung	Xiaomi	Industry
Current Ratio	1.54	2.84	1.49	1.77
Quick Ratio	1.5	2.42	1.14	1.68
Total assets turnover	0.739	0.67	1.25	0.74
Receivables Turnover	11.284	6.68	32.81	16.49
Inventory Turnover	40.13	5.28	5.67	43.48
Net profit margin	0.21	0.09	0.05	0.17
Gross profit margin	0.38	0.36	0.14	0.44
Debt-to-equity ratio	2.74	0.07	0.22	0.53
ROA	0.16	0.06	0.06	0.15
ROE	0.56	0.08	0.13	0.19
EV/EBITDA	13.59	4.1	15.8	6.5

* as of Apr 6, 2020



SWOT

Strengths

- Innovative Products
- One of the most recognizable brands in the world
- Established robust global supply chain
- Large Loyal Customer Base

Weaknesses

- Overall perception of lower quality of newer products
- High prices leading to large elasticity of demand
- Data protection and ethics issues

Opportunities

- Qualified Professionals - R&D
- New realms of activity (e.g., services)
- Capturing new niches with own hardware - chips, etc.

Threats

- Rising amount of cheaper competitors in most areas of activity
- International trade disputes - China Tariffs
- Public health issues - COVID-19 Outbreak



FCFF Forecasting Scenarios

Pessimistic

- Severe crisis impact
- Delayed release of new products
- R&D suspended
- Trade war with China

Average

- Moderate crisis impact
- Product release as planned
- Same level of competition

Optimistic

- Moderate crisis impact
- Breakthrough innovative product
- Own chip production



FCFF Forecasting Scenarios

Scenario	Main Characteristics	Indicator	2020	2021	2022	2023	2024
Pessimistic	Severe crisis impact Delayed products release R&D and CapEx Suspension Trade war with China	Revenue growth	-30%	0%	5%	5%	2%
		CapEx					
		DA					
Average	Moderate crisis impact Product release as planned Normal R&D and CapEx	Revenue growth	-20%	10%	5%	5%	5%
		CapEx	-8,000	-9,000	-9,500	-10,000	-9,000
		DA	13,000	10,000	10,200	11,000	10,500
Optimistic	Moderate crisis impact Product release as planned Breakthrough product	Revenue growth	-20%	10%	15%	10%	5%
		CapEx					
		DA					
		Tax Rate	15.0%	14.5%	14.0%	14.0%	14.0%



FCFF Projection — Average Scenario

	2017	2018	2019	2020	2021	2022	2023	2024
FCFF	43,502	58,319	51,637	42,216	51,696	51,328	57,599	58,271
EBIT	61,344	70,898	63,930	51,144	56,258	59,071	62,025	65,126
DA	10,157	10,903	12,547	13,000	10,000	10,200	11,000	10,500
Taxes	(15,738)	(13,372)	(10,481)	(7,801)	(8,246)	(8,312)	(8,727)	(9,163)
CapEx	(12,451)	(13,313)	(10,495)	(8,000)	(9,000)	(9,500)	(10,000)	(9,000)
Change in WC	(190)	(3,203)	3,864	6,127	(2,684)	132	(3,301)	(808)

Assumptions:

- Numbers reflect our averaged view on company's future during COVID-19 crisis and further development
- COGS and OpEx predicted using 2019 Gross and Operating income margins
- Effective Tax rate gradually decreases to 14%

DCF valuation

EBITDA 2024	75,626
Current EV/EBITDA	13.66
Terminal Value	1,033,053
Net Present Terminal Value	760,615

[source link](#)

Fair EV	979,698
Debt	108,047
Fair Shareholders Equity	871,651
Shares Outstanding	4,375
Share Fair Value	199.23
Share Market Price	259.43

Year	2020	2021	2022	2023	2024
FCFF	42,216	51,696	51,328	57,599	58,271
Period	0.5	1.5	2.5	3.5	4.5
Discounted Cash Flow	40,804	46,681	43,300	45,394	42,903
Net Present Value of FCFF	219,083				

Cost of Capital (WACC) = 7,04% [source link](#)

Calculations can be found [here](#)

* as of Apr 7, 2020





Catalysis

[Mac](#)[iPad](#)[iPhone](#)[Watch](#)[Investor Relations](#)[Stock Price](#)

Investor Updates

FY 20 Second Quarter Results

Apple's conference call to discuss second fiscal quarter results is scheduled for Thursday, April 30, 2020 at 2:00 p.m. PT / 5:00 p.m. ET.

[Listen to the conference call webcast >](#)

Announcement of presentation date

[source link](#)

Recommendation



Sell

Thank you for
attention!



[Link for calculations](#)