

Apple Stock Pitch (NASDAQ: AAPL)

ESG Breakdown Team:

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1	Investment Summary			
2	Industry & Company Overview			
3	Catalysts & Risks			
4	Valuations			
5	Final Recommendation			

Investment Summary



Catalyst Summary

1

Strong Service Segment Growth

Apple has over 935+ million paid subscribers across its services business segment with service revenue coming in at \$1B over analysts' Q4 2023 predictions of \$21.3B. Services are now responsible for 22% of the company's 2023 top-line revenue. This is because Apple has experienced 16.3% growth year-over-year in services revenue.

2

Vision Pro Release

Apple's Vision Pro is due to be released in Q1 of 2024. Apple's products have been historically competitive, typically outperforming their competitors with the iPhone, iPad and Mac. The Vision Pro presents an incredible opportunity to plant its flag in the AR/VR market and amass market share with a superior product.

3

Supply Chain Diversification

Apple iPhone maker Foxconn has announced it will be investing \$1.5B in India as it looks to build beyond China and Taiwan to fulfil its "operational needs". Foxconn plays a critical role in the iPhone assembly and has been a key partner for Apple for decades. This move presents a clear signal that Apple's future product lines will be less encumbered by geopolitical tensions between China and the US as well as supply line delays as a result of CCP pandemic mandates.

Metrics and Fundamentals

Current Price: \$ 189.89

Avg Buy Price: \$ 180.00

Target Price: \$220.00

Upside: 22.2%

Investment Period: 12 months

- Consumer electronics and technology
- Multinational target markets
- 154,000+ employees
- 2 billion+ iPhones sold worldwide
- IPO: December 12th, 1980
- World's first 3 trillion-dollar company

Nasdaq —	
Enterprise Value	2.96T
52 Week High	198.23
52 Week Low	124.17
PE Ratio	31.09
EV/EBITDA	23.25
TTM Revenue	383.29B
TTM Earnings	97B



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2	Industry & Company Overview
3	Catalysts & Risks
4	Valuations
5	Final Recommendation

Industry Overview: Premium Technology



Consumer Software and Electronics

The consumer software and electronics industry includes a diverse array of innovative hardware (smartphones, computers, tablets, wearables, and accessories) and digital offerings (digital/app stores, streaming platforms, care services, and licensing opportunities). The sector provides a comprehensive range of solutions that cater to the evolving needs of a growing digital-native consumer base.

Industry Drivers

- Product differentiation and the development of emerging technologies with interoperable capabilities to enhance and smooth the user experience.
- Al and machine learning is increasingly important in the software market. With access to increasing data volumes, Al will produce more accurate, actionable insights powerful in all data-driven industries.
- Advanced connectivity (5G/6G and LEO satellites) has strong potential to increase productivity across industries and enhance hardware capabilities.

Key Players







Trends and Future Outlook



Global smartphone shipments have continued to decline in 2023 by 1% YoY. However, the market may be recovering as QoQ growth was 5% as of October, which marks the first quarter of growth in 27 consecutive months of decline since June 2021. As you can see from the graph above Apple's market share in terms of quarterly shipments is cyclical. Shipments peak during festive seasons where consumer spending tends to be consolidated. This also coincides with Apple's yearly product releases and their Worldwide Developers Conference (WWDC) where they unveil their new innovative products and services to build demand and hype, as was the case with the recent WWDC 23 where the vision pro was first revealed.

Competitor Analysis



Smartphones

Services

SAMSUNG

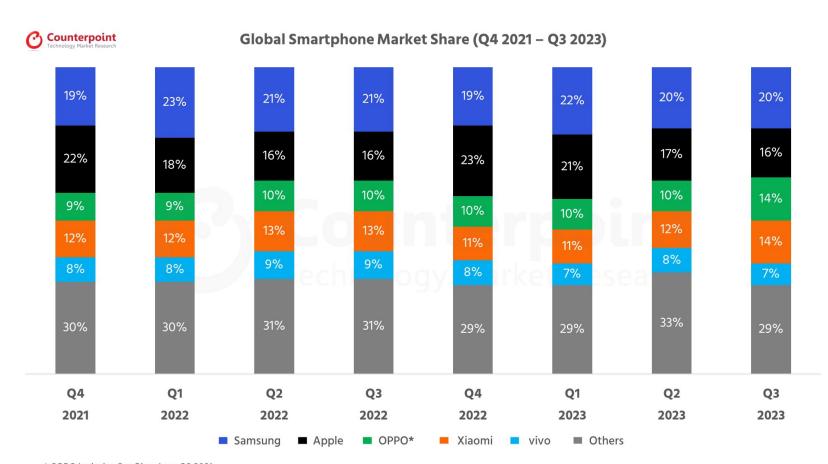






Smartphone Market





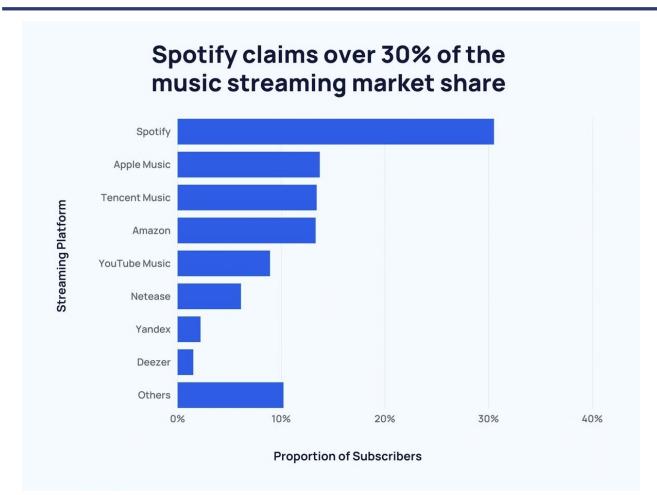
- Apple loses market share across the year and peaks in Q3 and Q4 due to seasonal spending.
- Apple's Revenue has been taking a hit due to shrinking business in China.
- Apple is still the premium product in the market and their market share is at risk due to growing competition and a maturing market.

Apple's Position

^{*} OPPO includes OnePlus since Q3 2021

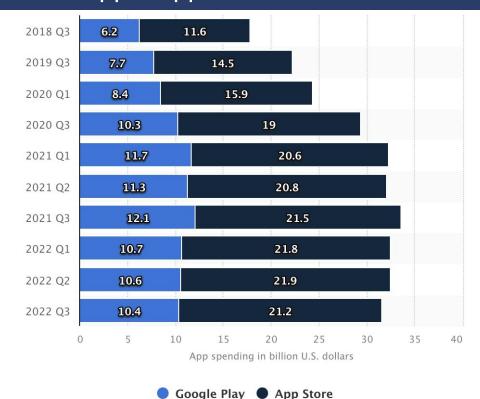
Services





Source: Exploding Topics, Music Streaming Services (2023), October 2023

Global Consumer spending in Google Play and Apple App Store as of Q3 2022



Source: Statista, Global Google Play and Apple App Store app revenues 2022, August 2023

Company Overview



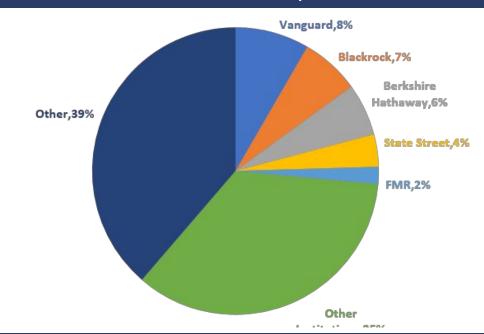
Vision and Mission Statements

In his 2019 manifesto, Tim Cook offered a vision for the company, "We believe that we are on the face of the earth to make great products, and that's not changing", to fulfil this, apple's mission is "to bring, the best user experience to its customers through innovative hardware, software and services".

Company Description

- Description: Apple is a market leader in consumer electronics with a focus on building an ecosystem of interoperable products for their loyal consumer base, making significant technological advancements through innovative design and production of hardware, software, and digital services
- Year Founded: April 1st, 1976
- Headquarters: Cupertino, California
- Markets: Hardware, Software, General Consumer Electronics
- Outlook: Leverage its hardware business and ecosystem to further drive customer value in existing and new products and services

Ownership



Management Overview



Tim Cook - CEO

IBM Corporation

MBA Duke University Auburn University



Jeff Williams – COO

IBM Corporation

MBA Duke University North Carolina State



Katherine Adams – SVP

Honeywell

University of Chicago Brown University



Eddy Cue - SVP

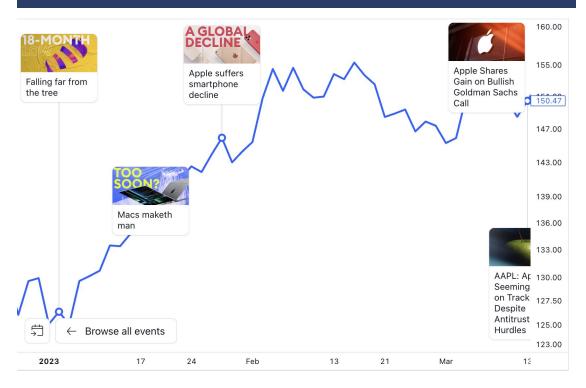
Apple (1989)

CS Duke University Econ Duke University

Company Overview



FY23 Stock Performance

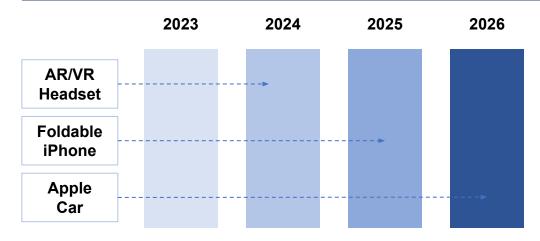


Source: Trading View, History of Apple Inc

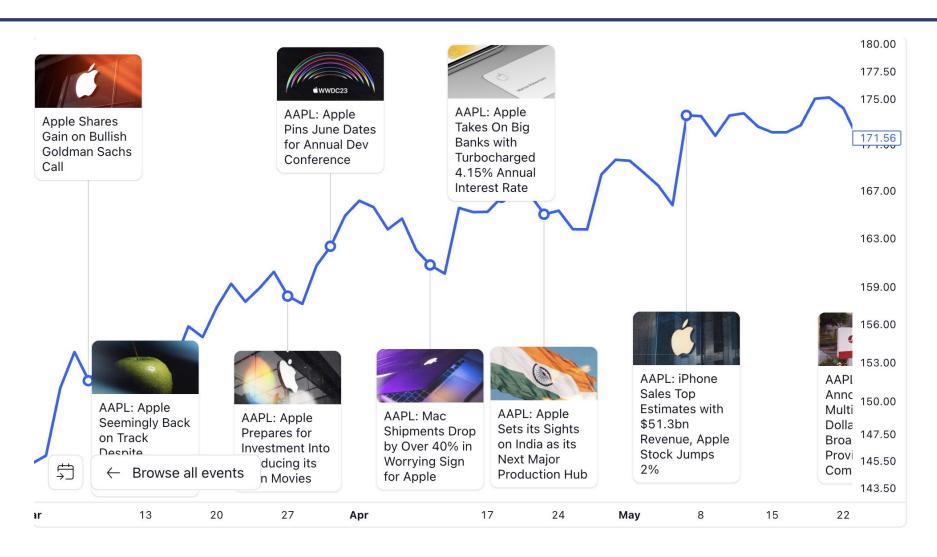
Product Pipeline News

Feb 2022	Foldable iPhone delayed to 2025 to shift focus to foldable Mac
Dec 2022	Apple car is being scaled back and pushed forward to 2026
Jun 2023	Vision Pro is officially announced
Nov 2023	Vision Pro release date delayed to March 2024
Dec 2023	Rumors about future Vision Pro iterations such as "SE" version

Expected Product Pipeline

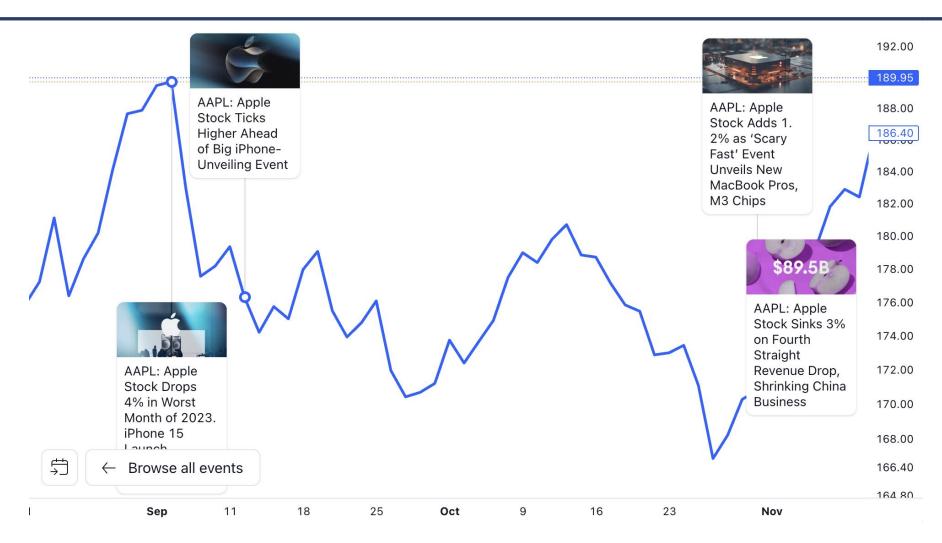






Source: Trading View, History of Apple Inc





Source: Trading View, History of Apple Inc

Company ESG Overview



ESG Vision

"We now have our strongest lineup of products ever heading into the holiday season, including the iPhone 15 lineup and our first carbon-neutral Apple Watch models, a major milestone in our efforts to make all Apple products carbon neutral by 2030." – Tim Cook

ESG Risk Rating COMPREHENSIVE 2

1 7 0 LOW



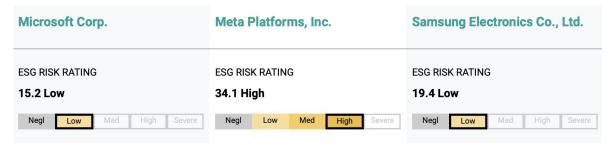


Figure 1: Apple vs Competitors in Sustainalytics ESG Risk Rating

- As we see in Figure 1, Apple has a low ESG risk rating on Sustainalytics which
 means that the firm doesn't have many concerning issues regarding ESG. Also,
 Apple's risk rating is lower than competitors like Meta and Samsung, displaying
 that Apple outperforms them in the ESG aspect.
- Apple has made considerable progress in becoming more environmentally sustainable. As of 2023, the company reduced its carbon footprint by 45% since 2015
- Apple became carbon neutral for their corporate operations in 2020 by implementing energy efficient initiatives, sourcing renewable energy and securing carbon offsets
- Apple's board and governance structure is committed to conducting business honestly and following all applicable laws and regulations. Apple is the largest taxpayer in the world and has paid over \$120 billion in corporate taxes and their average annual effective tax rate was 22%
- Although, Apple has had issues regarding labour rights and unions in the past with there being complaints from US federal regulators and employees



1	Investment Summary
2	Industry & Company Overview
3	Catalysts & Risks
4	Valuations
5	Final Recommendation

Catalyst 1: Strong Service Segment Growth



Key Performance Indicators

Apple currently has over 935 **million** paid service subscribers (Including in-app subscriptions).

The service business segment earned Apple a record \$22.3 billion of revenue in Q4 of 2023.

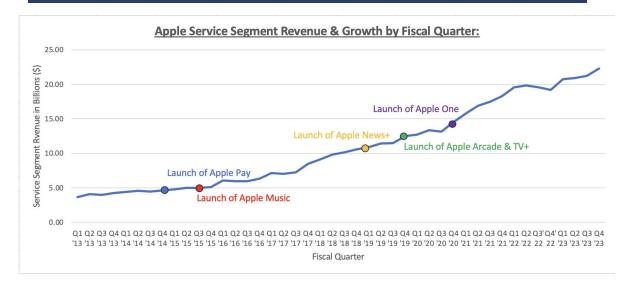
Service revenue now accounts for over 20% of Apple's top line revenue

Apple was able to double its service revenue from \$5 billion per year in 2010 to \$10 billion in 2013.

Service Segment News

- Nov 29th Apple has approached Goldman Sachs with terms to wind down their credit card and savings account consumer offerings mere months after the savings account went live.
- The term sheet would only go into effect if Apple is able to find an alternative provide for the two services.
- · Future growth in this area of Apple's service segment will guaranteed by creating a more creative strategic partnership with another financial institution. The potential value that could be created by offering this service to Apple's millions of users, 75% of whom use Apple Pay cannot be understated.

Service Revenue Growth (Billions)



Service Segment Details

- Apple's service business segment is predominantly carried by its App store and Apple music revenues. The segment is further supported by a variety of other sources (AppleCare, Apple Pay, iCloud storage, etc.)
- The Apple One bundle subscription has increased company revenues with minimal additional costs. The bundled service has helped customers navigate the growing complexities of Apple's multiple streaming services.

Catalyst 2: Vision Pro Release



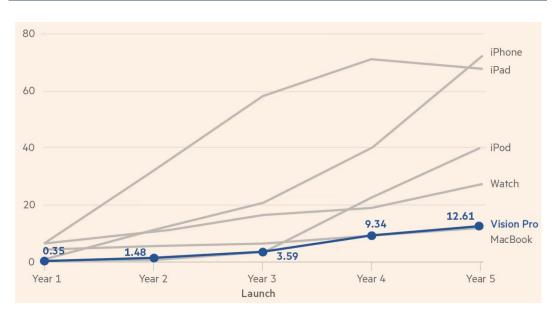
Product Overview

The Apple Vision Pro is a headset that acts as a spatial computer and is capable of augmented reality (AR) and virtual reality (VR) headset that runs on visionOS which uses two Apple Silicon chips, M2 Ultra and R1. It works with hand and eye movement as well as voice commands. It is set to be released in Q1 of 2024 and will retail at \$3,499.

Impact of Release

- The Vision Pro may be the catalyst to creating a new market for Apple within virtual reality, leading to a sharp increase in stock price.
- Although the market had a slightly negative reaction to the Vision Pro headset being announced, this may be an overreaction due to high expectations.
- However, as Apple continues to develop the headset with more known technology, past products have shown they consistently build innovative products, leading to higher sales, which will encourage investors to invest in Apple stock.

Apple Device Shipment and Forecasts by category, units (mn)



Source: Financial Times, Apple financials; Canalys estimates and forecasts, June 2023

Catalyst 3: Supply Chain Diversification



Supply Chain Operations

The simplified Apple supply chain consists of 3 key steps:

- ✓ Components and materials are purchased from multiple suppliers
- Parts are shipped to be assembled in China
- ✓ Finished products are shipped directly to consumers or retail distributors

Components & Materials

Factory Assembly

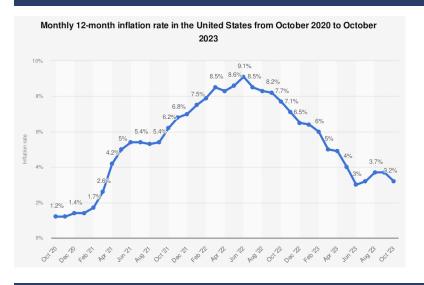
Ship to Customer

Supplier Relationships

Apple is well-known for imposing its quality standards and pricing requirements on affiliated suppliers. Many suppliers are willing to give way to Apple given that a healthy relationship with the company can lead to consistent long-term order contracts as products are continuously developed and updated.

- Apple has over 200 reported supplier relationships. This gives the company high levels of flexibility and negotiation power when it comes to who provides a specific part at a specific cost.
- China accounts for 156 of Apple's 615 total production facilities by physical location. Apple's work towards diversifying its supplier geography further gives the company the upper hand when negotiating at the global level.

Rising Inflation



The annual US inflation rate has ramped up to a high of 9.1% in June 2022. Labor shortages, energy costs, and supply disruptions are cited to be the biggest contributors.

Source: Statista, Bureau of Labor Statistics

Apple's Top Suppliers

Hon Hai Foxconn HQ: Taiwan 35+ locations Wistron HQ: Taiwan 5+ locations Pegatron
HQ: Taiwan
18+ locations

Taiwan is estimated to hold 63% of the total semiconductor market

Risks and Mitigants



Dependence on iPhone Sales

Risks

In Q1 of 2023, iPhone sales made up 56% of the company's revenue which shows that Apple still mainly relies on the iPhone to generate revenue. And so as the new iPhone designs' innovation becomes more stagnant, consumers have less incentive to purchase the next generation iPhones.

Mitigants

- Apple is experiencing rapid growth in their service segment and represents 22% of 2023 growth which shows that their business model is expanding.
- The possible development of a foldable iPhone or iPad could lead to growing sales

Supply Chain Disruptions

Risks

Apple produces over 95% of its products in China however there are tensions between the US and China with a trade war occurring during Trump's presidency. Thus, there have been issues with shipments in the past due to COVID-19 restrictions in China which slowed the shipments of the iPhone 14 in 2022 and there a possible risk that such disruptions are likely to occur again.

Mitigants

Foxconn Technology which a major Apple supplier with operations in China has invested more than \$1.5 billion in an Indian construction project which is meant to meet Apple's operational needs. This would mean that Apple becomes less reliant on production in China, suggesting a more secure supply chain.

Excess Cash

Risks

Apple has been criticized for having too much cash on its balance sheet. In 2023, its operating cash flow was \$113 billion (TTM) and so this excess cash has led Apple to heavily utilise stock repurchases, buying back \$77.55 billion in their stock in fiscal 2023. This can be seen as an inefficient use of capital.

Mitigants

In 2018, Apple set the goal to become net cash neutral whereby any excess cash is balanced by its total debt. Also, the company has been investing more into research and development for example, in 2022 they put \$26 billion into R&D equivalent to 7% of sales which is a 3.45% increase from 2015.



1	Investment Summary
2	Industry & Company Overview
3	Catalysts & Risks
4	Valuations
5	Final Recommendation

Discounted Cash Flow (DCF) Summary



Based on 10 year estimates of Free Cash	r Flow (FCF):	
Discount Rate	9.4%	11%
Growth Rate (Growth Stage)	14.10%	14.10%
Terminal Growth Rate	4%	4%
Fair Value	\$153.14	\$132.34
Stock Price	~ \$190.00	~ \$190.00
Overvaluation	19.40%	30.30%

Source: GuruFocus AAPL DCF Valuation

We can see that according to this DCF analysis, the fair price of AAPL stock is lower than the current price suggesting that the stock is overvalued by 30.3%. However, the DCF valuation of a stock relies on assumptions such as the future value of cash flows which isn't possible to accurately predict. Therefore, the true intrinsic value of a company can be difficult to say. For example, when considering the discount rate (the rate of return used to discount future cash flows back to their present value), if the discount rate was in actuality lower than 11% for example taking the WACC at 9.4% [1], then the stock would only be considered 19.4% overvalued.

Relative Valuation Summary



Relative Analysis table

Company	Ticker	Stock price (\$)	Enterprise Value (\$B)	Revenue TTM (\$M)	EV/Revenue
Meta	META	332.	846.	127.	6.67
Amazon	AMZN	146.	1590.	554.	2.87
Microsoft	MSFT	378.	2790.	218.	13.
Alphabet	GOOGL	137.	1630.	297.	5.50
Apple	AAPL	190.	3010	339.	7.86
Implied Share Price (Market Cap/ Outstanding Shares) (\$)	189.7505				

Figure 1: Relative Analysis Table – Data from Yahoo Finance

Relative Analysis

Apple stands out with the highest enterprise value of \$3.1T among its peers, indicating robust market confidence. Its EV/Revenue ratio of 7.86, higher than Meta and Alphabet, underscores a premium valuation due to its strong brand and diversified product range, though it suggests a higher price relative to sales.

What does this indicate about Apple?

Apple's high price-to-sales ratio, typically signalling overvaluation, is justifiable by its consistent track record of innovation, loyal customer base, and strong financial health. Apple's ability to continuously lead in technology trends and expand into new markets, like AR, assures investors of its potential for sustained growth and profitability.

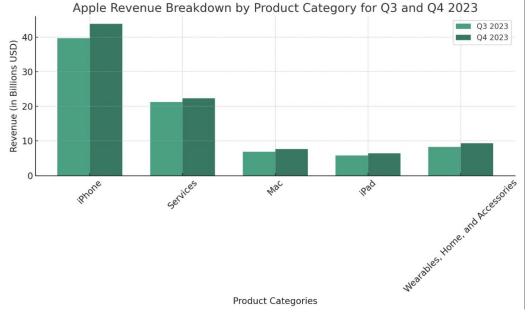
Revenue Streams



Revenue Streams Breakdown

Overall, Apple generated a total revenue of \$383.93 billion in 2023, with these segments constituting the major parts of its revenue streams:

iPhone Sales	iPhones remain Apple's largest revenue source, contributing 52% of total revenue in 2023. In the fourth quarter of 2023, iPhone revenue increased to \$43.8 billion from \$42.6 billion in the same quarter of the previous year.				
Services	The Services division, which includes the App Store, Apple Music, iCloud, Apple Pay, and other services, is the second-largest division, responsible for 22% of Apple's revenue in 2023. In the third quarter of 2023, Services evenue was reported at \$21.21 billion, up from \$19.60 billion.				
Мас	Revenue from Mac computers was \$7.61 billion in the fourth quarter of 2023, down year-on-year from \$11.5 billion. In the third quarter of 2023, Mac revenue was reported at \$6.84 billion, down from \$7.38 billion.				
iPad	iPad revenue was \$6.43 billion in the fourth quarter of 2023, down from \$7.17 billion in the same period the previous year. In the third quarter of 2023, iPad revenue was \$5.79 billion, down from \$7.22 billion.				
Wearables, Home, and Accessories	This category includes products like AirPods, Apple Watch, HomePod, and other accessories. In the fourth quarter of 2023, revenue for this segment reached \$9.32 billion, down year-on-year from \$9.65 billion. In the third quarter of 2023, this segment brought in \$8.28 billion, up from \$8.08 billion. It's estimated that AirPods alone are a \$10 billion business, with Apple Watch potentially contributing between \$14 billion to \$18 billion a year.				



Cash Flows



Cash Flow Analysis

- Apple's operating cash flow has remained positive for the past 5 years.
- The shift in their investing cash flow has shown variability in recent years, with the most recent being
 positive; this indicates they are investing less than they can afford.
- Apple's financing cash flow has been fluctuating, the most recent being negative; this suggests they are struggling to afford the best capital they deserve.
- Apple has experienced a relatively stable free cash flow during these years, consistently positive except for 2023, where it decreases slightly over 2022 due to the tech crash

Breakdown	TTM	29/09/2023	29/09/2022	29/09/2021	29/09/2020
> Cash flows from operating activ	113,072,000	110,543,000	122,151,000	104,038,000	80,674,000
> Cash flows from investing activi	94,000	3,705,000	-22,354,000	-14,545,000	-4,289,000
> Cash flows from financing activ	-112,129,000	-108,488,000	-110,749,000	-93,353,000	-86,820,000
Net change in cash	1,037,000	5,760,000	-10,952,000	-3,860,000	-10,435,000
Cash at beginning of period	28,861,000	24,977,000	35,929,000	39,789,000	50,224,000
Cash at end of period	29,898,000	30,737,000	24,977,000	35,929,000	39,789,000
> Free cash flow	100,987,000	99,584,000	111,443,000	92,953,000	73,365,000

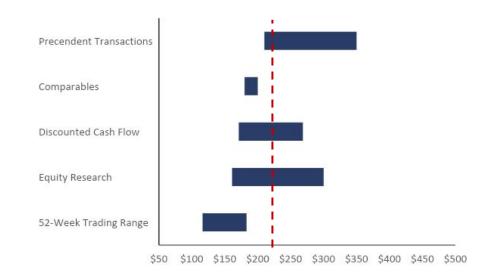


Investment Summary
Industry & Company Overview
Catalysts & Risks
Valuations
Final Recommendation

Final Recommendation – BUY



Football Field Valuation



Investment Thesis

1 Strong Service Segment Growth

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2 Vision Pro Release

Apple's Vision Pro is due to be released in Q1 of 2024. Apple's products have been historically competitive, typically outperforming their competitors with the iPhone, iPad and Mac.

3 Supply Chain Diversification

Apple iPhone maker Foxconn has announced it will be investing \$1.5B in India as it looks to build beyond China and Taiwan to fulfil its "operational needs".

Target Price

Current Price: \$189.89

Target Price: \$220.00

Upside: 22.2%

Investment Period: 12 Months