Apple Inc AAPL ★★★ Jan 30, 2023

USD | NASDAQ | Prices updated as of Jan 31, 2023, 12:14 PM EST | BATS BZX Real-Time Price

Overview | Key Ratios | Trading Information | News

Last Close	Sector	Industry	Investment Style
143.00	Technology	Consumer Electronics	Large Growth
Day Range	**Year Range**	**Market Cap**	**Volume / Avg**
142.28 – 143.75	124.17 – 179.61	2.2681 Tril	23.2 Mil / 82.5 Mil
Price/Sales	**Price/Book**	**Forward Div Yield**	**Trailing Div Yield**
5.92	44.69	0.63%	0.64%

Morningstar's Analysis

Summary | Competitors | Bulls Say/Bears Say

Valuation Jan 20, 2023 — Currency in USD

AAPL is trading within a range we consider fairly valued.

★
★★
★★★
★★★★
★★★★★

Last Close
– 143.00

Fair Value
– 150.00
Uncertainty: High

1-Star Price
> 232.50

5-Star Price
< 90.00

Economic Moat
Wide
Trend: Stable

Capital Allocation
Exemplary

Apple’s Walled Garden Warrants a Wide Economic Moat; Raising Fair Value Estimate to $150

Author Photo

Abhinav Davuluri
Strategist

Analyst Note | by Abhinav Davuluri Updated Jan 20, 2023

We are upgrading our economic moat rating for Apple to wide from narrow, as we have greater confidence in the firm’s competitive advantages stemming from high customer switching costs, intangible assets, and network effects associated with its iOS ecosystem. We believe switching costs from iOS are as strong as ever thanks to more auxiliary products and services that make switching away from iOS more difficult over time. Regarding intangible assets, Apple’s differentiated user experience via iOS coupled with its expertise in hardware, software, and now semiconductor design allows the firm to build vertically integrated products more seamlessly. We also see network effects around iOS and its 1 billion-plus installed base with new app development favoring iOS.

We are raising our fair value estimate to $150 per share from $130 per share, as we expect the firm to earn excess returns on invested capital over a longer time horizon consistent with our wide-moat rating. While shares are modestly undervalued relative to our updated fair value, we expect the upcoming quarters to be challenging for Apple from both demand and supply perspectives. Consequently, we recommend prospective investors wait for a wider margin of safety.

Going forward, we expect Apple to better monetize its captive user base via supplemental products and services that will evolve into a more robust recurring revenue stream. We see no other technology titan with comparable expertise across consumer hardware, software, services, and chip design. In turn, we believe this integration allows Apple to build premium devices that command industry-leading average selling prices and margins—most notably the firm’s crown jewel, the iPhone.

Business Strategy and Outlook | by Abhinav Davuluri Updated Jan 20, 2023

Apple’s consumer hardware dominance stems from its ability to package hardware, software, services, semiconductors, and third-party applications into sleek, intuitive, and appealing devices. This expertise, coupled with its walled garden approach for its unique iOS ecosystem, enables the firm to capture a premium on its devices, unlike most of its peers that rely on open operating systems, Windows and Android, in particular. We see no other technology titan with comparable expertise across consumer hardware, software, services, and chip design. In turn, we believe this integration allows Apple to build premium devices that command industry-leading average selling prices and margins, most notably the firm’s crown jewel: the iPhone.

We think high customer switching costs, intangible assets, and network effects support Apple's wide economic moat. Switching costs from iOS are as strong as ever thanks to more auxiliary products and services that make switching away from iOS more difficult over time, while a non-Apple iOS experience does not exist, unlike computing platforms for the Windows or Android ecosystems that boast devices from a multitude of firms. Regarding intangible assets, Apple's differentiated user experience via iOS, coupled with its broad design expertise, allows the firm to build vertically integrated products more seamlessly. We also see network effects around iOS and its 1 billion-plus installed base with new app development favoring iOS.

We view the iPhone as a revolutionary product that created the smartphone ecosystem and transitioned computing habits away from the PC. The robust app store helped foster iPhone adoption and grow Apple's user base, with applications ranging from productivity, social media, shopping, gaming, music, and so on. Going forward, we expect Apple to better monetize its captive user base via supplemental products and services (Apple Watch, Apple Music, Apple TV+, AirPods, iCloud, Apple Pay, etc.) that will evolve into a more robust recurring revenue stream.

Economic Moat | by Abhinav Davuluri Updated Jan 20, 2023

We assign a wide economic moat rating for Apple that stems from the combination of switching costs, intangible assets, and network effects associated with its iOS ecosystem. Combined with an asset light business model, we think it is nearly certain that Apple will generate excess returns on capital over the next decade and more likely than not over the next 20 years.

We think the firm's primary moat source stems from high customer switching costs, based on a variety of aspects of Apple's hardware, software, and services. First, we think about the risk of customers moving away from today's electronic devices, such as smartphones. We view the smartphone as the most essential computing device for users, and despite innovations in other types of electronic devices like smart speakers, AR/VR headsets, and the Internet of Things, we don't see the smartphone going away anytime soon. The smartphone has already replaced a host of standalone electronics devices (standalone cameras, MP3 players, portable game consoles, etc.) while emerging as the primary portal with an intuitive interface for many other digital services (email, books, web browsing, shopping, social media, videos, and more) in a pocket-sized form factor. Apple's iPhone fostered the industry, has maintained its position as the premier smartphone, and we expect the firm to increasingly monetize its valuable installed base with the iPhone as the catalyst.

Beyond the iPhone, Apple's other key hardware products such as the iPad, Mac, Watch, and AirPods each fill a computing niche that enhances the experience of the user. We do not foresee Apple's primary electronic devices (smartphones, tablets, PCs, wearables, hearables) becoming irrelevant. Concerning the risk of iOS losing ground to new and existing operating systems, most notably Google's Android, the world's largest mobile operating system in terms of users, we view Apple's market position as secure.

Perhaps the stickiest aspect of the Apple iPhone is the integration of iOS across multiple devices. Users of ancillary products (including the iPad, Mac, Watch, and AirPods) lose significant functionality when paired with a smartphone other than the iPhone. For example, an iMessage will show up on an iPhone, iPad, Mac, and Watch if all are owned by a customer. We do not believe these other hardware products (iPad, Mac, Watch, AirPods) are wide-moat businesses in and of themselves, but together with the iPhone they create a formidable customer lock-in as the experience between multiple devices diminishes if one is not on iOS. Wearables such as AirPods and the Apple Watch have also disrupted their respective predecessor industries and have created another expensive hook to keep customers tied to Apple's ecosystem. Apple's active installed base (iPhone, Mac, and iPad) reached 1.8 billion at the end of 2021, up 9% from a year prior, highlighting the growing adoption of multiple iOS products by individuals.

Furthermore, if an iPhone user were to switch away to an Android device, they would lose significant functionality with other iOS users (i.e. iMessage texts from Android OS turning green or lack of AirDrop to share files conveniently). iMessage, FaceTime, Apple Pay, Apple Music, and Apple TV+ are just some of Apple's services which, to varying degrees, provide users with a seamless experience that ties them to iOS. As Apple adds more software and services to its iOS ecosystem over time, the risk of disruption here for each user only intensifies.

We also see other areas where the time, effort, expense, and risk of switching away from iOS precludes most users from switching. We believe this inertia is driven by a disinclination for learning a new user interface, re-downloading apps, risking data loss, re-logging into accounts, and other headaches of disrupting an essential device like a smartphone.

For all these reasons, we think existing iPhone users are relatively locked in to the iOS ecosystem. We have seen little evidence of disruption to iOS stickiness on the services front in recent years, and we see no signs of this dynamic changing. A variety of survey data shows that iPhone customers are not even contemplating switching brands today. In a 2021 survey by Consumer Intelligence Research Partners, over 90% of U.S.-based iPhone users said they planned to remain loyal to future Apple devices. An October 2022 survey from 451 Research indicated iPhone customer satisfaction of 98%.

Beyond switching costs, we believe Apple's expertise in hardware, software, semiconductors, and services represents an intangible asset that even the strongest of tech firms have struggled to replicate. While the Android cohort has replicated a similar feel of apps, app stores, and integrated experience, we have not seen third parties within the Android ecosystem work well enough together to deliver devices and services that are clearly superior to Apple. Competitors such as Samsung (Galaxy smartphone) and Google (Android OS) specialize in hardware and software, respectively, with Samsung boasting leadership in mobile device units and Google's Android OS serving as the pervasive smartphone OS. However, neither Samsung nor Google has been able to offer a comprehensive and integrated product like the iPhone on its own, though both have attempted to develop software/operating systems (Samsung's Tizen OS) and hardware (Google's Pixel smartphone), with subpar results.

We view Apple's chip design expertise and tightknit partnership with TSMC as another intangible asset instrumental to its success. Powering all its devices are Apple's internally designed processors (A-series in iPhone and iPad and M-series in Mac). Apple has an ARM architecture license and designs the CPUs found in its devices from the ground up. Given Apple has a tighter product lineup compared with its peers, we believe it can design more powerful chips to better handle the demands of iOS and MacOS, in contrast to chips from Qualcomm or Intel that must address a wider array of devices and operating systems. Perhaps even more critical to Apple's performance leadership in chip benchmarks is its close relationship with foundry leader TSMC. Apple's scale enables it to demand dedicated capacity in TSMC's most advanced fabs while its large chip orders enable TSMC to ramp production of its leading-edge process technology more economically. For example, Apple's iPhone 15 will be the first device to feature chips made on TSMC's 3-nanometer process technology in 2023. Apple's chip design efforts aren't limited to the CPU either, as the firm also designs its own GPU, dedicated AI neural engine chip, and is attempting to develop its own cellular modem, Bluetooth, and Wi-Fi chips in-house.

Finally, Apple's intangible assets in hardware, software, services, and chip design give us confidence that the company is unlikely to be left too far behind if any revolutionary technology were to emerge. In smartphones, we have often seen innovative features arise in the Android ecosystem before Apple (foldable screens is a recent example) and we would never bet on a single firm (even one as large as

Apple) being the only firm to come to market with new technologies. Although recent Android innovations have not led to massive share loss for Apple, we think Apple has seemingly perfected the fast follower strategy in which others come first-to-market before Apple addresses the weaknesses in the new technology and comes to market with a superior implementation.

In other types of technologies, others may come to market first, but only once Apple introduces its own flavor of a product or feature does a market inflect upwards (none of the Mac, iPhone, iPad, Apple Watch, or AirPods were the first of their kind). We may see this play out in the years ahead in AR/VR headsets (of which there are many existing products but none that have reached an inflection point of adoption).

Network effects represent another source of Apple's wide moat. As iOS users gravitate to the App Store to purchase new applications, the increasing size of Apple's installed base attracts developers to build new apps for iOS. Apple's integration of hardware and software also supports its developer networks, as Apple knows that iOS will be loaded on to only a handful of screen sizes or iPhone models, versus the hundreds of devices and manufacturers that support Android. This leads to a more fragmented Android ecosystem, which we believe is relatively harder for developers to support. Apple consistently touts when the majority of its user base is on the latest operating system, which in turn allows developers to build for the latest version of iOS and know that their apps are optimized for most of Apple's user base.

Although the Google Play store that supports the Android user base also achieves a similar network effect, we think the iOS user base is more valuable from a developer perspective given this user base skews to richer consumers (the iPhone unit market share is in the midteens globally but about 50% in the U.S.), making them more likely to spend money on in-app purchases. According to data from SensorTower, global consumer spending on mobile games per download was about $6 on iOS versus $0.70 on Android OS in 2022.

We concede Apple’s competitive advantages are not insurmountable, illustrated by the rise and fall of former mobile device titans such as Nokia, Motorola, and BlackBerry, all of which failed to keep up with smartphone innovation (though we argue the iPhone has become materially more vital to users than the preceding mobile devices). The short product cycles for phones and the inability of these firms to sufficiently innovate left each one struggling after the debut of Apple’s iPhone and its subsequent proliferation. Apple is not immune to these pitfalls, as consumer sentiment for technology gadgets can be unforgiving, with one buggy or subpar product potentially driving customers to other companies’ offerings, which have been increasingly competitive.

Based on these three moat sources, we don’t foresee Apple’s captive user base scaling its walled garden anytime soon. We believe switching costs from iOS are as strong as ever thanks to more auxiliary products and services and greater inertia for users, making switching away from iOS more difficult over time. Regarding intangible assets, Apple’s differentiated user experience via iOS coupled with its expertise in hardware, software, and now semiconductor design allows the firm to build vertically integrated products more seamlessly. We also see network effects around iOS and its 1 billion-plus installed base with new app development favoring iOS. Going forward, we expect Apple to better monetize its captive user base via supplemental products and services that will evolve into a more robust recurring revenue stream. We see no other technology titan with comparable expertise across consumer hardware, software, services, and chip design.

In turn, we believe this integration allows Apple to build premium devices that command industry-leading average selling prices and margins, most notably the firm's crown jewel: the iPhone. Although Apple's midteens market share in the smartphone space doesn't seem excessive, the firm does enjoy the lion's share of industry profits (we estimate 25% operating margins for the iPhone versus about 10% for Samsung's mobile device segment). In an industry where the greatest concern a decade ago was commoditization of the smartphone, we've actually seen Apple lift its iPhone average selling prices, or ASPs, in recent years much higher than ASPs within the Android device space.

Fair Value and Profit Drivers | by Abhinav Davuluri Updated Jan 20, 2023

Our fair value estimate is $150 per share. Our estimate implies a forward GAAP price/earnings ratio of 24 times. In fiscal 2023, we expect total revenue to be up 3% thanks to strength in iPhone, wearables, and services sales, partially offset by weaker Mac and iPad revenue following multiple strong years associated with work- and learning-from-home trends due to COVID-19. We expect services to grow at a 7% CAGR over the next five years, while wearables, home, and accessories revenue should also generate strong high-teens growth. We assume Apple launches a new AR or VR headset in the coming years that also contributes to the wearables growth. Following robust growth years in fiscal 2021 and fiscal 2022, we believe iPhone sales will record modest growth, with total revenue growth in the midsingle digits.

We expect gross margins to normalize around 40%, thanks to Apple's exceptional premium pricing strategy and stable iPhone margins. We anticipate product gross margins tracking in the mid-30s and services gross margins hovering around 70%. Although we think the higher-margin services segment will grow nicely, we foresee lower-margin other products, such as the Apple Watch, serving as an offset. However, these other products remain vital to Apple being able to lock in iPhone customers with the likes of AirPods, Apple Watch, and other accessories that sell at a notable premium to non-Apple counterparts. The shift to internally designed ARM-based chips in lieu of chips from Intel for Apple's Mac PCs should help improve Mac margins. To remain king of the hill in the premium smartphone market, we model higher research and spending as Apple drives innovation and potentially ventures into new frontiers. We expect operating margins to remain around 30% over our five-year forecast period.

Risk and Uncertainty | by Abhinav Davuluri Updated Jan 20, 2023

As the largest firm in the world, Apple is prone to material competition. Over the course of its iPhone-fueled dominance, Samsung, Microsoft, and Google have taken their best shots at Apple, with fleeting success. Consumer hardware is inherently prone to cutthroat competition as short-product cycles and customers hungry for ever superior features make market leadership difficult to maintain. Although Apple has done well with its walled garden approach, the firm competes with Chinese OEMs and Samsung across all tiers.

We also suspect that many customers are holding on to their phones longer as premium devices are more than good enough for today's needs (web browsing, streaming, social media). Analogous to the decline of PCs, Apple faces the possibility of smartphone unit stagnation or even declines once emerging markets saturate or consumers gravitate to mid-tier devices. Should it be unable to innovate, Apple may lose its ability to charge premium prices for hardware that is no longer unique relative to devices from competitors.

Some peers are willing to sell hardware at essentially cost to drive market share and stickiness in other business segments. A notable example is Amazon with its Echo smart speaker, Fire TV, Prime Music, and Prime Video to attract and retain Prime customers. Should these devices supersede their iOS counterparts, Apple's devices may be at risk. A recent focus on AI assistants such as Google Assistant and Amazon Alexa has also put pressure on Apple's Siri that has fallen behind its peers in efficacy. Herein lies another area Apple may face headwinds if consumers further prioritize voice-recognition capabilities.

On the environmental, social, and governance front, the biggest issue we see for Apple is its app store commission structure that is facing legal and regulatory scrutiny as Apple is accused of using tactics that hurt competition. Apple's service revenue could be negatively impacted if any antitrust rulings go against it.

Capital Allocation | by Abhinav Davuluri Updated Jan 20, 2023

We assign Apple an Exemplary capital allocation rating. The rating reflects our assessments of a sound balance sheet, exceptional investments associated with the firm's strategy and execution, and relatively mixed shareholder distribution policies.

Apple has a relatively strong balance sheet, in our view, with $169.1 billion in cash and cash equivalents and marketable securities compared with $110.1 billion in total debt as of the end of its September 2022 quarter. We think the firm generates sufficient cash flow and has ample resources to meet its debt obligations, capital expenditure requirements, potential acquisitions, and shareholder returns. In terms of shareholder distribution policies, we applaud Cook's decision to initiate dividend and stock buyback programs as well as take on debt in order to fund such programs when most of its cash was trapped overseas. As of September 2022, Apple was authorized to purchase up to $405 billion of stock through its share repurchase program (of which $344.3 billion has been utilized). Apple continues to strive to achieve a net cash neutral position over time. That said, we think the firm's dividend has remained relatively lackluster, with a yield of only 0.7%.

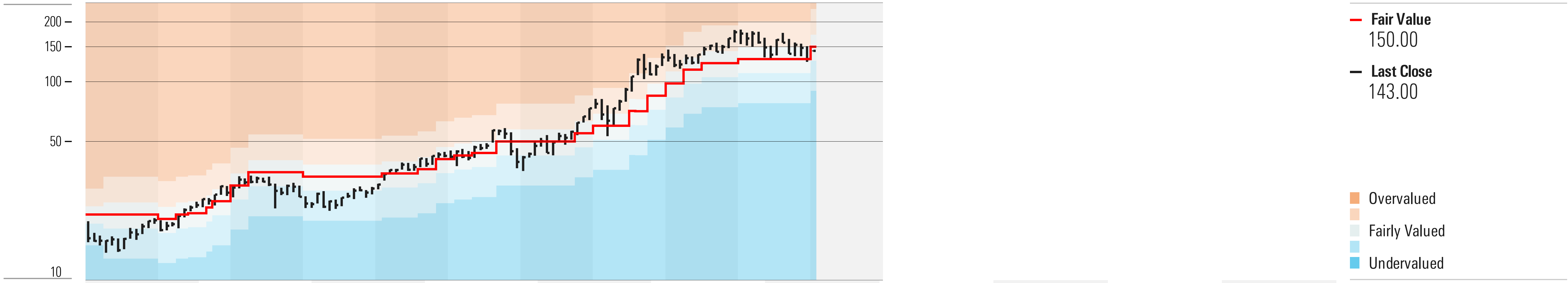
We think Apple's recent level of technological innovation has been adequate, though it has likely faced an unreasonably high bar for expectations after the debut of the iPhone. Many of the firm's recent innovations have been in software and services within iOS, such as Apple Pay, as well as under-the-hood improvements in semiconductors, rather than revolutionary devices like the iPod or the iPhone. We like how the firm designs its own chips for the CPU and artificial intelligence (A-series bionic neural engine), as this can create a better user experience since Apple also designs the operating system and can appropriately tailor the CPU or neural engine to its needs. Going forward, we expect the firm to also design its own GPU and 5G modem, which should enable performance differentiation.

Close Full Analysis

View Report Archive

Price vs. Fair Value

Advanced | Basic | Logarithmic | Linear



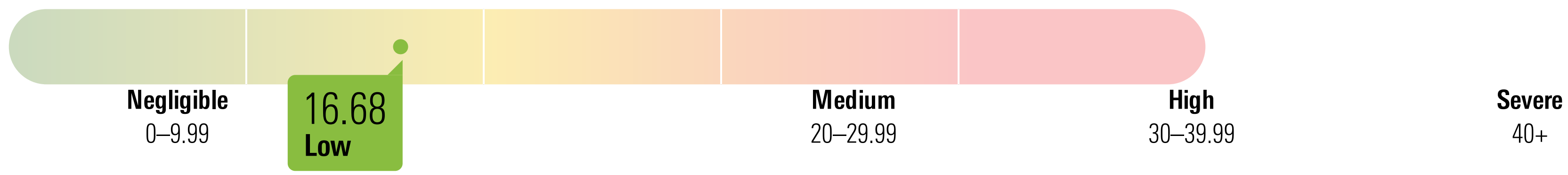
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Price/Fair Value	0.94	1.10	0.75	0.87	1.04	0.79	1.33	1.56	1.43	1.00	0.95
Total Return %	7.64	40.03	-2.80	12.15	48.24	-5.12	88.09	81.85	34.48	-26.32	10.06
Index Total Return %	33.13	12.85	0.69	12.44	21.47	-5.05	31.22	20.90	25.78	-19.43	5.17

USD | As of Jan 30, 2023 | Index: Morningstar US Market TR USD

Sustainability

ESG Risk Rating Assessment

ESG Risk Rating



Highest Controversy Level (1 = Low, 5 = Severe)

3 Significant

Incidents: Business Ethics, Social Supply Chain, Customer

Top 3 Material ESG Issues

Business Ethics
Overall

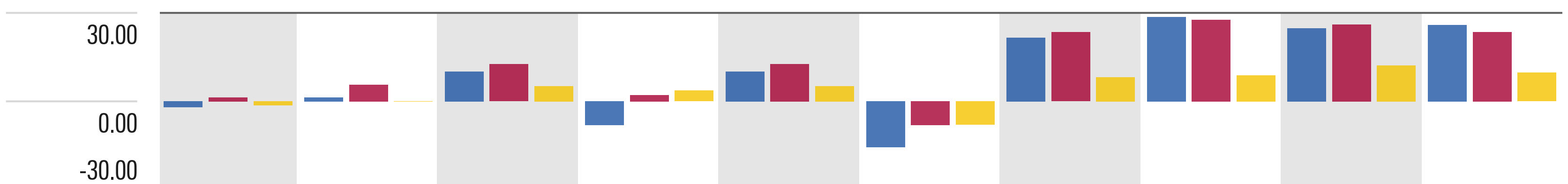
Human Capital
Overall

Data Privacy & Security
Overall

ESG Risk Rating is as of Jan 04, 2023. Highest Controversy Level is as of Dec 08, 2022. Sustainalytics Subindustry: Technology Hardware. Sustainalytics provides Morningstar with company ESG ratings and metrics on a monthly basis and as such, the ratings in Morningstar may not necessarily reflect current Sustainalytics' scores for the company. For the most up to date rating and more information, please visit: sustainalytics.com/esg-ratings/.

Trailing Returns

Daily | Monthly | Quarterly



Total Return %	1-Day	1-Week	1-Month	3-Month	YTD	1-Year	3-Year	5-Year	10-Year	15-Year
AAPL	-2.01	1.34	10.06	-8.03	10.06	-15.51	21.60	28.64	24.81	25.92
Industry	1.38	5.63	12.58	2.18	12.62	-8.07	23.44	27.69	26.02	23.54
Index	-1.33	-0.02	5.17	3.65	5.17	-7.97	8.17	8.79	12.13	9.71

As of Jan 30, 2023 | Industry: Consumer Electronics | Index: Morningstar US Market TR USD

Key Statistics

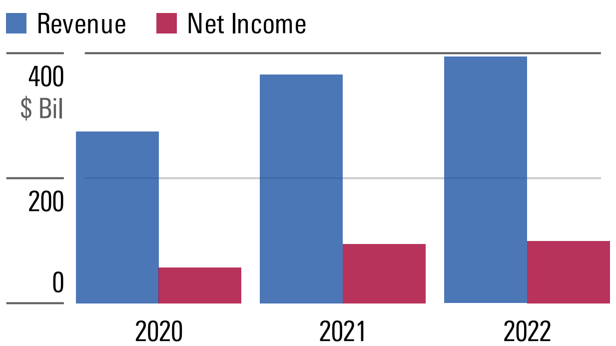
Overview | Growth | Operating and Efficiency | Financial Health | Cash Flow

There is no Overview data available.

Financial Statements

Income Statement | Balance Sheet | Cash Flow | Annual | As Originally Reported

Summary

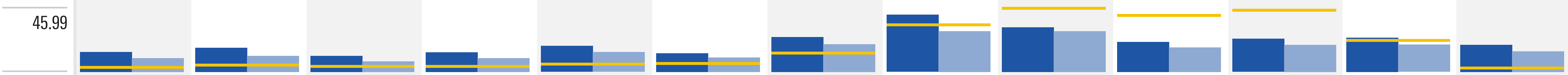


	2020	2021	2022	TTM	3-Yr Trend
Revenue (Bil)	274.52	365.82	394.33	394.33	
Operating Income (Bil)	66.29	108.95	119.44	119.44	
Net Income (Bil)	57.41	94.68	99.80	99.80	
EBITDA (Bil)	81.02	123.14	133.14	133.14	
Diluted EPS	3.28	5.61	6.11	6.11	
Normalized Diluted EPS	3.28	5.61	6.11	6.11	

Fiscal year ends in Sep 30 | USD in Bil except per share data

Expand Detail View

Valuation

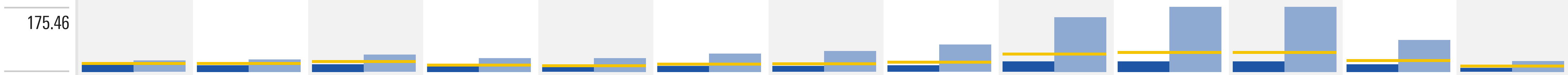


Calendar	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	5-Yr	Index
Price/Sales	3.06	3.70	2.61	2.95	3.88	2.97	5.25	8.47	8.19	5.38	5.92	5.60	2.26
Price/Earnings	14.11	17.11	11.42	13.94	18.37	13.24	24.70	40.45	31.65	21.27	23.40	24.20	19.23
Price/Cash Flow	9.74	11.32	7.50	9.68	13.97	10.19	19.67	28.83	28.78	17.37	19.11	19.28	14.60
Price/Book	4.05	5.77	4.89	4.75	6.42	6.96	14.23	34.16	45.99	40.79	44.69	23.18	3.61

USD | As of Jan 31, 2023 | Index: Morningstar US Market TR USD

More Valuation Data

Operating Performance



Fiscal	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TTM	5-Yr	Index
Return on Assets %	19.34	18.01	20.45	14.93	13.87	16.07	15.69	17.33	28.06	28.36	28.36	20.27	10.51
Return on Equity %	30.64	33.61	46.25	36.90	36.87	49.36	55.92	73.69	147.44	175.46	175.46	86.51	29.33
Return on Invested Capital %	26.08	26.20	31.32	21.95	19.86	24.41	25.75	30.11	51.70	55.72	55.72	34.52	18.81

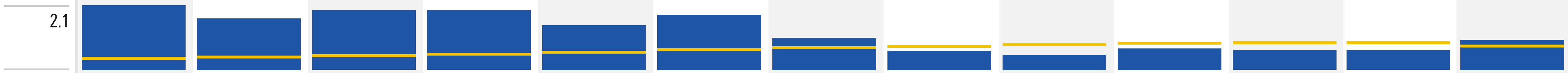
USD | Index: Morningstar US Market TR USD.

Operating Performance will be retired soon, please see Key Statistics for content.

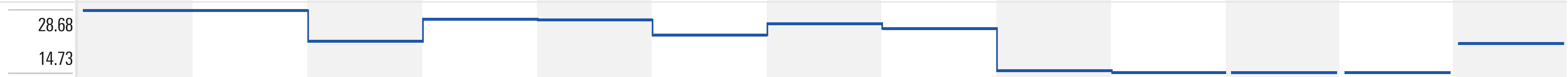
More Operating Performance Data

Dividends & Splits

Dividends | Splits



Calendar	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	TTM	5-Yr Avg
Dividend Per Share	0.42	0.46	0.51	0.56	0.62	0.71	0.76	0.81	0.87	0.91	0.92	0.92	0.81
Trailing Dividend Yield %	2.10	1.67	1.93	1.93	1.45	1.79	1.04	0.61	0.49	0.70	0.64	0.64	0.98
Buyback Yield %	4.46	6.88	5.95	4.80	3.76	9.66	5.13	3.20	2.92	4.33	3.95	3.95	4.89
Total Yield %	6.56	8.55	7.88	6.73	5.21	11.45	6.17	3.81	3.41	5.03	4.59	4.59	5.87
Payout Ratio %	28.68	28.08	21.48	26.23	26.06	22.84	25.23	24.24	15.15	14.73	14.73	14.73	21.01



Ex-Dividend Date	Declaration Date	Record Date	Payable Date	Dividend Type	Amount
▼ 2022					
Nov 04, 2022	Oct 27, 2022	Nov 07, 2022	Nov 10, 2022	Cash Dividend	0.2300
Aug 05, 2022	Jul 28, 2022	Aug 08, 2022	Aug 11, 2022	Cash Dividend	0.2300
May 06, 2022	Apr 28, 2022	May 09, 2022	May 12, 2022	Cash Dividend	0.2300
Feb 04, 2022	Jan 27, 2022	Feb 07, 2022	Feb 10, 2022	Cash Dividend	0.2200
▶ 2021					
▶ 2020					
▶ 2019					
▶ 2018					

Dividend Yield (TTM)
0.64%

Div Reinvestment Plan
No

USD | As of Jan 31, 2023

Ownership

Major | Concentrated | Buying | Selling | Funds | Institutions

Name	Morningstar Rating	% Total Shares Held	% Total Assets	Trend Prev. 8 Qtrs	Current Shares	Change Amount	Change %	Date
Vanguard Total Stock Mkt Idx Inv	★★★	2.89	5.17		459,623,200	↓ -575,775	↓ 0.13%	Dec 31, 2022
Vanguard Instl Ttl Stck Mkt Idx Tr	★★★	2.87	5.95		455,847,701	↑ 2,503,443	↑ 0.55%	Sep 30, 2022
Vanguard 500 Index Investor	★★★★	2.17	6.03		345,657,708	↓ -476,968	↓ 0.14%	Dec 31, 2022
SPDR® S&P 500 ETF Trust	★★★★	1.04	6.02		164,993,165	↓ -952,086	↓ 0.57%	Dec 31, 2022
Fidelity® 500 Index	★★★★	1.03	6.03		163,848,744	↑ 38,652	↑ 0.02%	Dec 31, 2022
Total (for Top 5)		9.99			1,589,970,518	↑ 537,266		

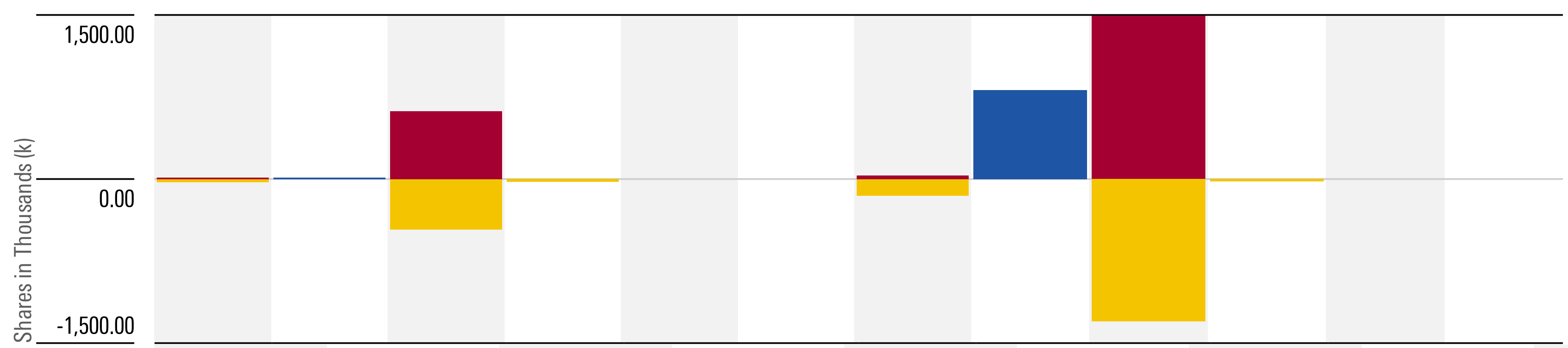
More Ownership Data

Executive Team

Key Executives | Board of Directors

Name (Age)	5-Year Trend	2022	2021	2020	2019	2018
Timothy D. Cook (62) Director and Chief Executive Officer		99,420,097	98,734,394	14,769,259	11,555,466	15,682,219
Luca Maestri (59) Senior Vice President and Chief Financial Officer		27,151,798	26,978,503	26,253,270	25,209,637	26,509,692
Deirdre O'Brien (56) Senior Vice President, Retail and People		27,151,798	27,020,811	26,272,371	19,159,780	—
Jeffery Williams (59) Chief Operating Officer		27,150,352	26,977,057	26,251,824	25,207,919	26,543,706
Katherine L. Adams (58) Senior Vice President, General Counsel and Secretary		27,147,223	26,974,153	26,248,997	25,231,800	26,700,660
Chris Kondo (—) Senior Director, Corporate Accounting and Principal Accounting Officer	—	—	—	—	—	—
Total Compensation for all Key Executives USD		**208,021,268**	**206,684,918**	**119,795,721**	**106,364,602**	**95,436,277**

Transaction History



	02-2022	03-2022	04-2022	05-2022	06-2022	07-2022	08-2022	09-2022	10-2022	11-2022	12-2022	01-2023
Buy (k)	—	—	—	—	—	—	—	—	—	—	—	—
Acquisition (k)	—	13.48	—	—	—	—	—	814.34	—	—	—	—
Option Exercise (k)	14.39	—	620.56	—	—	—	31.90	—	1,492.15	—	—	—
Disposition (k)	1.45	—	315.50	1.28	—	—	16.53	—	755.89	—	—	—
Sell (k)	26.99	—	143.10	25.00	—	—	137.10	—	541.79	20.20	—	—

Transaction Initial Date	Name	Title	Transaction Type	Shares	Market Value

22-Nov-22	Chris Kondo	Senior Director, Corporate Accounting and Principal Accounting Officer	Sale at $148.72 per share.	20,200	3,004,144.00
28-Oct-22	Luca Maestri	Senior Vice President and Chief Financial Officer	Sale at $154.70 per share.	14,274	2,208,187.80
28-Oct-22	Luca Maestri	Senior Vice President and Chief Financial Officer	Sale at $157.20 per share.	7,200	1,131,840.00
28-Oct-22	Luca Maestri	Senior Vice President and Chief Financial Officer	Sale at $156.46 per share.	69,678	10,901,819.88
28-Oct-22	Luca Maestri	Senior Vice President and Chief Financial Officer	Sale at $155.63 per share.	85,147	13,251,427.61
17-Oct-22	Deirdre O'Brien	Senior Vice President, Retail and People	Sale at $142.45 per share.	8,053	1,147,149.85
15-Oct-22	Chris Kondo	Senior Director, Corporate Accounting and Principal Accounting Officer	Disposition	6,399	885,493.62
15-Oct-22	Chris Kondo	Senior Director, Corporate Accounting and Principal Accounting Officer	Exercise	13,136	0.00
15-Oct-22	Deirdre O'Brien	Senior Vice President, Retail and People	Disposition	8,559	1,184,394.42
15-Oct-22	Deirdre O'Brien	Senior Vice President, Retail and People	Exercise	16,612	0.00

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USD | Acquisition and Disposition are non-open market transactions. Transaction Initial Date reflects date initiated by employee.

Company Profile

Business Description

Apple designs a wide variety of consumer electronic devices, including smartphones (iPhone), tablets (iPad), PCs (Mac), smartwatches (Apple Watch), and AirPods. The iPhone makes up most of Apple's total revenue. In addition, Apple offers its customers a variety of services such as Apple Music, iCloud, Apple Care, Apple TV+, Apple Arcade, Apple Fitness, Apple Card, and Apple Pay, among others. Apple's products include internally developed software and semiconductors, and the firm is well known for its integration of hardware, software, semiconductors, and services. Apple's products are distributed online as well as through company-owned stores and third-party retailers. The company generates roughly 40% of its revenue from the Americas, with the remainder earned internationally.

Contact

One Apple Park Way, Cupertino, CA 95014
T +1 408 996-1010
tgala@apple.com
www.apple.com

Sector

Technology

Industry

Consumer Electronics

Most Recent Earnings

Sep 30, 2022

Fiscal Year End

Sep 23, 2023

Employees

164,000
As of Sep 24, 2022