Apple Inc.

Recommendation	Price	12-Mo. Target Price	Report Currency	Investment Style
BUY ★★★★★	USD 119.26 (as of market close Nov 13, 2020)	USD 145.00	USD	Large-Cap Growth

Equity Analyst Angelo Zino, CFA

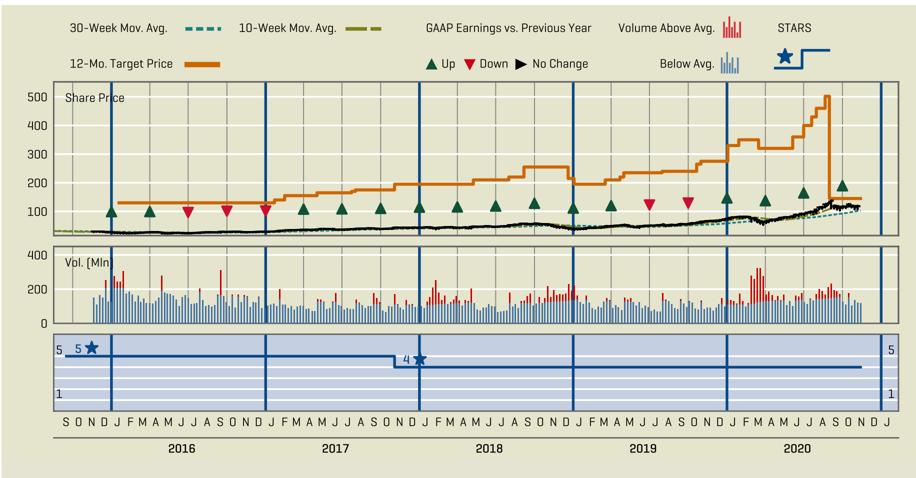
GICS Sector Information Technology
Sub-Industry Technology Hardware, Storage and Peripherals

Summary Apple is a prominent provider of consumer computing devices, including the iPhone, iPad tablets, Mac computers, and wearables.

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)

52-Wk Range	**USD 134.18 - 56.09**	Oper.EPS2021**E**	**USD 3.94**	Market Capitalization[B]	**USD 2027.63**	Beta	**1.35**
Trailing 12-Month EPS	**USD 3.28**	Oper.EPS2022**E**	**USD 4.27**	Yield [%]	**0.69**	3-yr Proj. EPS CAGR[%]	**10**
Trailing 12-Month P/E	**36.36**	P/E on Oper.EPS2021**E**	**30.27**	Dividend Rate/Share	**USD 0.82**	SPGMI's Quality Ranking	**A-**
USD 10K Invested 5 Yrs Ago	**42329.0**	Common Shares Outstg.[M]	**16,977.00**	Institutional Ownership [%]	**52.0**		

Price Performance



Source: CFRA, S&P Global Market Intelligence
Past performance is not an indication of future performance and should not be relied upon as such.
Analysis prepared by **Angelo Zino, CFA** on Oct 30, 2020 11:52 AM ET, when the stock traded at **USD 109.55**.

Highlights

- We expect sales to rise 14% in FY 21 (Sep.) and 4.7% in FY 22 (down 3% in FY 20). We think recent results were hurt by customers holding off on iPhone purchases ahead of its 5G launch (delayed 4-6 weeks), specifically in China (sales down 29% in Sep-Q), but should add fuel to demand in the Dec-Q/Mar-Q as we are bullish on a 5G upgrade cycle. We note iPads and Macs grew 46% and 29% in the Sep-Q and remain supply constrained, as both segments benefit from the work from home and learn from home themes, but we question the sustainability of these trends. We have high conviction on Services growth given our outlook for a rising installed base and new paid subscriptions on pace for 600M by CY end. We also see greater penetration for wearables (up 21% in Sep-Q), driven by Apple Watch and AirPods demand.
- We see the gross margin steady at 38% through end-FY 21. We like recent Services margin expansion (66.9% in Sep-Q vs. 64.1% a year ago) but expect this to be largely offset by hardware margin compression near term.
- We like AAPL's net cash position of $84 billion (aims to be net cash neutral over time), with our view of annual free cash flow potential of $60 billion plus driving share repurchases.

Investment Rationale/Risk

- Our Buy reflects our view of AAPL's ecosystem, high customer retention rates, and free cash flow generation partly offset by near term economic concerns surrounding Covid-19. While we acknowledge iPhone replacement cycles are extending, we think a rising and older installed phone base approaching 1 billion (1.5 billion plus total active base) creates the potential for stabilization/growth in this category given a planned 5G launch in October. We are encouraged by margin expansion within Services and think this business can sustainably grow at a mid-teens pace over the next two years while Wearables can sustain a 15%-20% growth pace.
- Risks to our recommendation and target price include weaker end demand, pricing, and competitive pressures, less success with product launches/innovations, and longer-than-expected hardware replacement cycles.
- Our 12-month target of $145 is based on a P/E of 34x our FY 22 EPS estimate of $4.27, above peers and the 5-year forward historical average of 14.8x. Our long-term thesis remains intact, on expanding addressable market in Services/ Wearables, improving replacement cycles from a 5G launch, and robust free cash flow aiding growth initiatives/shareholder return.

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
■		

Our risk assessment reflects our view of Apple's ability to shift towards higher-margin and more recurring Service offerings, which reduces the future earnings volatility of the company. In addition, we have a favorable view of the company's scale, enormous cash position, and free cash flow potential. Despite a seemingly ever-evolving market for consumer-oriented technology products and need to rely on the success of product innovations, we forecast Apple's ecosystem will continue to sustain retention rates above 90%.

Revenue/Earnings Data

Revenue (Million USD)

	1Q	2Q	3Q	4Q	Year
2020	91,819	58,313	59,685	64,698	274,515
2019	84,310	58,015	53,809	64,040	260,174
2018	88,293	61,137	53,265	62,900	265,595
2017	78,351	52,896	45,408	52,579	229,234
2016	75,872	50,557	42,358	46,852	215,639
2015	74,599	58,010	49,605	51,501	233,715

Earnings Per Share (USD)

	1Q	2Q	3Q	4Q	Year
2022	**E** 1.51	**E** 0.93	**E** 0.84	**E** 0.99	**E** 4.27
2021	**E** 1.39	**E** 0.86	**E** 0.76	**E** 0.93	**E** 3.94
2020	1.25	0.64	0.64	0.74	3.28
2019	1.04	0.62	0.54	0.76	2.97
2018	0.97	0.68	0.58	0.73	2.98
2017	0.84	0.52	0.42	0.52	2.30

Fiscal Year ended Sep 30. EPS Estimates based on CFRA's Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount (USD)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.2050	Oct 29	Nov 06	Nov 09	Nov 12 '20
0.2050	Jul 30	Aug 07	Aug 10	Aug 13 '20
0.2050	Apr 30	May 08	May 11	May 14 '20
0.1925	Jan 28	Feb 07	Feb 10	Feb 13 '20

Dividends have been paid since 2012. Source: Company reports
Past performance is not an indication of future performance and should not be relied as such.
Forecasts are not reliable indicator of future performance.

Apple Inc.

Business Summary Oct 30, 2020

CORPORATE OVERVIEW. Apple makes smartphones, tablet devices, computers and portable digital media players, and sells a variety of related software, services, and accessories.

AAPL's iPhone directly accounted for 50% of FY 20 revenues, with iPhone sales falling 3%, largely reflecting lower units amid a tough geopolitical landscape due to Covid-19. In October 2020, AAPL announced its next generation of iPhones (4 opposed to 3 the prior year), all which will possess 5G capabilities, OLED screens, a new A14 processor, and a host of new colors. The smaller 5.4-inch iPhone 12 mini (starts at $699) and 6.1-inch iPhone 12 ($799) feature a new aluminum flat-edge design, ceramic shield front cover, and duel camera system. The 6.1-inch iPhone 12 Pro ($999 start) and 6.7-inch iPhone 12 Pro Max ($1,099) include a LiDAR Scanner for better AR capabilities, begins with 128 GB memory, and boosts better camera functionality. AAPL also said it will remove the power adapter and EarPods from iPhone packaging and announced a host of accessories related to its MagSafe Charger and Leather Wallet.

Released in April 2010, the iPad quickly became the best-selling tablet computer by far. Before the iPad, unit sales for similar computing devices were less than 200,000 units, according to market researchers. In FY 10, the first year of availability, AAPL sold over 7 million iPads, accounting for around 8% of total revenues. During FY 20, iPad sales (9% of revenue) grew 11%, largely reflecting Apple benefiting from a surge in demand from the work from home and learn from home themes during the pandemic.

Sales of AAPL's computers, commonly known as Macs, made up 10% of revenues in FY 20, with revenue increasing 11%. Macs saw a similar benefit amid the pandemic as iPads.

Revenue from Services and other hardware products comprised for about 31% of sales in FY 20 versus 27% in FY 19. Wearables, Home and Accessories products (11% of FY 20 revenue and grew 25%) includes sales of the Apple TV, Apple Watch, AirPods, Beats products, HomePod, and iPod as well as Apple-branded and third-party accessories. We note Services were 20% of FY 20 sales and grew an impressive 16%. Services includes revenue from the App Store, iCloud, Apple TV+, AppleCare, licensing and other services. In September 2020, AAPL announced Apple Fitness+ ($9.99 per month or $79.99 per year) and its Apple One Subscription Plan (priced from $14.95 to $29.95 monthly), which offers bundling options for a host of its services. We believe AAPL's bundle strategy will provide greater recurring revenue opportunities.

COMPETITIVE LANDSCAPE. AAPL primarily competes in the handset, tablet, computer and media player markets. We think AAPL uses its ability to design and develop its own operating system, hardware, application software and services to differentiate itself from competitors. We see the appeal behind the products having a lot to do with its stated goal of providing customers with products that have superior ease of use, seamless integration and innovative industrial design. Reflecting what we view as AAPL's perceived quality and notable cachet, the company is able to compete in the middle to high-end segments of its target markets, and charge above-average prices for its products.

AAPL has a substantial hardware presence across key categories, and we think this helps garner interest from third-party application developers who continue to produce content and applications for the iPhone and iPad. We think AAPL's application business is one of the key elements that helps differentiate its devices from other products, and is very important to future sales growth and pricing power. Further, we view the App Store as an effective way of not only distributing content effectively, but also keeping the customer base entrenched. We think iCloud functionality encourages customers to buy more AAPL products and use them more regularly.

LEGAL/REGULATORY ISSUES. On April 17, 2019, Apple and QUALCOMM announced an agreement to end all legal issues between the two companies worldwide. QCOM and Apple agreed to a six-year license agreement, effective April 1, 2019, including a two-year option to extend, and a multiyear chipset supply agreement. We also note that the settlement includes an undisclosed payment from Apple to QUALCOMM. This case originated in January 2017 after Apple announced a lawsuit against QCOM, alleging QCOM used its commanding position as a maker of smartphone baseband chips to demand unfair terms for its technology.

FINANCIAL TRENDS. Although AAPL's sales are affected by broader macroeconomic conditions, we think the company has generally been less cyclical than peers, given its strong brand, innovative and high-quality products, loyal customer base and exposure to fast-growing markets. Thus, AAPL has been able to command significant pricing power for its offerings and has over time successfully increased prices for most of its product lines. While AAPL will see iPhone and wearables decline amid the Covid-19 pandemic, we see 5G potentially stabilizing iPhone shipments and see substantial growth potential within AAPL's wearables business and economic conditions improve, driven by greater consumer adoption.

AAPL has what we view as a very strong balance sheet, with about $192 billion in cash and investments, and about $107 billion in debt as of the end of September 2020. AAPL boasts return metrics, such as return on equity (74% in FY 20), that are relatively high compared with other large/mega-cap hardware and software companies. In March 2012, AAPL announced a dividend and a share repurchase plan. As of March 2020, we believe AAPL has returned over $435 billion of cash to shareholders and note the company began returning cash in calendar year 2012. On April 30, 2020, Apple announced a new $50 billion share authorization program and hiked its dividend by 6%.

In early November 2018, AAPL announced its decision to stop providing unit data for iPhones/iPads/Macs. While we think less clarity within hardware segments is a notable negative, we like greater margin transparency around Services.

AAPL executed a 4-for-1 stock split in August 2020 (its first since August 2014), which we expect will help support liquidity and attract new investors.

Corporate information

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Officers

Senior Director of Corporate Accounting
C. Kondo

Independent Non-Executive Chairman of the Board
A. D. Levinson

Senior VP, General Counsel & Secretary
K. L. Adams

Chief Operating Officer
J. E. Williams

CFO & Senior VP
L. Maestri

Chief Technology Officer
J. Wilson

CEO & Director
T. D. Cook

Board Members

A. A. Gore
A. D. Levinson
A. Jung
J. A. Bell
R. D. Sugar
S. L. Wagner
T. D. Cook

Domicile
California

Auditor
Ernst & Young LLP

Founded
1977

Employees
147,000

Stockholders
22,797

Apple Inc.

Quantitative Evaluations

Fair Value Rank

1	2	3	4	5
LOWEST				HIGHEST

Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued (1) to most undervalued (5).

Fair Value Calculation — **USD 68.13** — Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that AAPL is overvalued by USD 51.13 or 42.87%

Volatility — LOW | AVERAGE | HIGH

Technical Evaluation — **BULLISH** — Since November, 2020, the technical indicators for AAPL have been BULLISH"

Insider Activity — UNFAVORABLE | NEUTRAL | FAVORABLE

Expanded Ratio Analysis

	2020	2019	2018	2017
Price/Sales	7.17	3.91	4.25	3.53
Price/EBITDA	25.45	13.30	13.80	11.32
Price/Pretax Income	29.33	15.47	15.48	12.63
P/E Ratio	34.23	18.42	18.94	16.73
Avg. Diluted Shares Outstg. (M)	17528.21	18595.65	20000.44	21006.77

Figures based on fiscal year-end price

Key Growth Rates and Averages

Past Growth Rate (%)	1 Year	3 Years	5 Years
Net Income	3.90	5.89	1.46
Sales	5.51	6.19	3.27

Ratio Analysis (Annual Avg.)			
Net Margin (%)	20.91	21.52	21.37
% LT Debt to Capitalization	57.06	48.53	43.91
Return on Equity (%)	73.69	59.66	50.55

Company Financials Fiscal year ending Sep 30

Per Share Data (USD)	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Tangible Book Value	3.85	5.09	5.63	6.54	5.60	4.94	4.38	4.68	4.29	2.77
Free Cash Flow	4.23	3.19	3.23	2.48	2.44	3.03	2.05	1.72	1.58	1.16
Earnings	3.28	2.97	2.98	2.30	2.08	2.30	1.61	1.42	1.58	0.99
Earnings (Normalized)	2.39	2.21	2.28	1.91	1.74	1.96	1.36	1.20	1.32	0.82
Dividends	0.80	0.75	0.68	0.60	0.54	0.50	0.46	0.41	0.10	N/A
Payout Ratio (%)	25.00	26.00	23.00	26.00	27.00	22.00	28.00	29.00	6.00	NM
Prices: High	137.98	58.37	57.42	41.24	30.96	33.64	25.94	24.33	25.18	15.10
Prices: Low	53.15	35.50	37.56	26.02	22.37	23.00	16.94	13.75	12.65	9.82
P/E Ratio: High	42.10	19.70	19.30	17.90	14.90	14.60	16.10	17.10	16.00	15.30
P/E Ratio: Low	16.20	12.00	12.60	11.30	10.80	10.00	10.50	9.70	8.00	9.90

Income Statement Analysis (Million USD)										
Revenue	274,515	260,174	265,595	229,234	215,639	233,715	182,795	170,910	156,508	108,249
Operating Income	66,288	63,930	70,898	61,344	60,024	71,230	52,503	48,999	55,241	33,790
Depreciation + Amortization	11,056	12,547	10,903	10,157	10,505	11,257	7,946	6,757	3,277	1,814
Interest Expense	2,873	3,576	3,240	2,323	1,456	733.00	384.00	136.00	N/A	N/A
Pretax Income	67,091	65,737	72,903	64,089	61,372	72,515	53,483	50,155	55,763	34,205
Effective Tax Rate	14.40	15.90	18.30	24.60	25.60	26.40	26.10	26.20	25.20	24.20
Net Income	57,411	55,256	59,531	48,351	45,687	53,394	39,510	37,037	41,733	25,922
Net Income (Normalized)	41,881	41,105	45,564	40,056	38,358	45,322	33,427	31,347	34,852	21,378

Balance Sheet and Other Financial Data (Million USD)										
Cash	90,943	100,557	66,301	74,181	67,155	41,995	25,158	40,590	29,129	25,952
Current Assets	143,713	162,819	131,339	128,645	106,869	89,378	68,531	73,286	57,653	44,988
Total Assets	323,888	338,516	365,725	375,319	321,686	290,345	231,839	207,000	176,064	116,371
Current Liabilities	105,392	105,718	115,929	100,814	79,006	80,610	63,448	43,658	38,542	27,970
Long Term Debt	98,667	91,807	93,735	97,207	75,427	53,329	28,987	16,960	N/A	N/A
Total Capital	187,617	198,535	221,630	249,727	215,281	183,696	146,842	140,509	118,210	76,615
Capital Expenditures	7,309	10,495	13,313	12,451	12,734	11,247	9,571	8,165	8,295	4,260
Cash from Operations	80,674	69,391	77,434	64,225	66,231	81,266	59,713	53,666	50,856	37,529
Current Ratio	1.36	1.54	1.13	1.28	1.35	1.11	1.08	1.68	1.50	1.61
% Long Term Debt of Capitalization	57.10	46.20	42.30	38.90	35.00	29.00	19.70	12.10	N/A	N/A
% Net Income of Revenue	20.90	21.20	22.40	21.10	21.20	22.80	21.60	21.70	26.70	23.90
% Return on Assets	12.51	11.35	11.96	11.00	12.26	17.05	14.96	15.99	23.61	22.05
% Return on Equity	73.70	55.90	49.40	36.90	36.90	46.20	33.60	30.60	42.80	41.70

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Sub-Industry Outlook

Our fundamental outlook for the Technology Hardware, Storage & Peripherals sub-industry for the next 12 months is positive. While fundamentals in 2020 have had to contend with an unthinkable pandemic, we see pockets of strength emerging in many areas of the market. We like secular opportunities and prospects as we head into 2021, led by advancements in 5G, demand for wearables, and new services capabilities driving interest for next-generation devices. We also see easier comparables as we head into 2021.

We believe that Apple and Chinese hardware makers remain on pace to launch a host of 5G devices ahead of the all-important holiday selling season. We expect the smartphone space to now decline by 10% in 2020, which would mark the fourth consecutive year of declines. For 2021, we see a 6% rebound, as a slew of 5G phone launches gets pushed out towards the latter half of the year and into 2021. Apple's transition to 5G iPhones this fall should provide some support for the industry. We ultimately believe 5G will help boost demand and improve replacement cycles within the broader smartphone space. While average selling prices for smartphones were flat to down for most vendors in 2019, we see industry prices increasing in 2020 and 2021, driven by the ongoing shift by high-end phone manufacturers to offer consumers more features and greater costs associated with producing a 5G device.

We believe both PCs and tablets have witnessed a surprise return to year over year growth in recent months, driven by more consumers working from home amid the Covid-19 pandemic, which has pulled in orders for commercial notebooks. In addition, we note the education space is placing significant orders as more students also learn from home. That said, annual PC shipments are still down more than 25% from peak levels in 2011. While we see opportunities related to thinner and lighter devices as well as from gaming, we think longer replacement cycles will likely hinder growth for the space. Ultimately, we expect PC and Tablet unit volume to normalize in early 2021 as work from home benefits appear unsustainable.

CFRA anticipates shipments for wearable devices to grow at a double-digit percentage basis through 2022, as we see future growth driven by greater adoption of smartwatches. Greater focus on health care initiatives will likely support long-term demand and open greater opportunities from corporate wellness programs, in our view. We also expect ear-worn devices like AirPods to gain traction with consumers, reflecting the ongoing shift away from wired devices.

Demand for data storage will be driven by content digitization of old media, such as paper and film, the growing popularity of social networking websites, and longer record retention for compliance with government regulations, in our view. We think the storage software market will be driven by business continuity and disaster recovery efforts, compliance and risk management activities, and the increasing prevalence of data mining and related analytics. We see demand for traditional storage offerings declining in the foreseeable future, while products related to all-flash arrays are seeing growing momentum within the data center space.

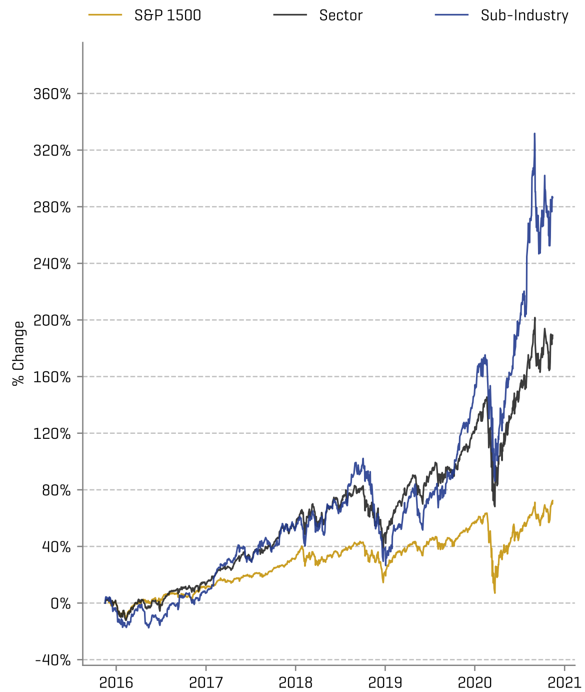
Year-to-date through October 2, 2020, the S&P 1500 Technology Hardware, Storage & Peripherals Index increased 47.1%, while the S&P 1500 rose 2.5%. The S&P 1500 Technology Hardware, Storage & Peripherals Index increased 79% in 2019, while the S&P 1500 rose 28.3%.

/ Angelo Zino, CFA

Industry Performance

GICS Sector: Information Technology
Sub-Industry: Technology Hardware, Storage and Peripherals

Based on S&P 1500 Indexes
Five-Year market price performance through Nov 14, 2020



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.

All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).

Past performance is not an indication of future performance and should not be relied upon as such.

Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Technology Hardware, Storage and Peripherals Peer Group*: Technology Hardware, Storage and Peripherals

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. (M)	30-Day Price Chg. (%)	1-Year Price Chg. (%)	P/E Ratio	Fair Value Calc.	Yield (%)	Return on Equity (%)	LTD to Cap (%)
Apple Inc.	**AAPL**	**NasdaqGS**	**USD**	**119.21**	**2,026,785.0**	**-1.6**	**80.3**	**36.0**	**68.13**	**0.7**	**73.7**	**57.1**
Canon Inc.	CAJ	NYSE	USD	17.72	18,755.0	9.0	-36.3	16.0	N/A	N/A	4.7	12.9
Dell Technologies Inc.	DELL	NYSE	USD	64.42	48,104.0	-8.6	17.6	11.0	50.17	N/A	499.7	80.1
FUJIFILM Holdings Corporation	FUJI.Y	OTCPK	USD	53.83	21,466.0	9.1	13.1	19.0	N/A	N/A	6.5	20.6
HP Inc.	HPQ	NYSE	USD	18.93	26,000.0	-3.8	-3.1	9.0	20.14	3.7	-344.1	121.2
Hewlett Packard Enterprise Company	HPE	NYSE	USD	9.67	12,439.0	-1.1	-43.9	13.0	10.49	5.0	5.5	30.3
Logitech International S.A.	LOGI	NasdaqGS	USD	81.85	12,350.0	1.5	96.0	31.0	N/A	N/A	33.7	1.3
Razer Inc.	RZZR.Y	OTCPK	USD	5.81	19,252.0	7.2	46.7	NM	N/A	N/A	-13.5	1.7
Seagate Technology plc	STX	NasdaqGS	USD	53.19	13,666.0	3.9	-8.5	14.0	62.06	5.0	50.8	69.5
Western Digital Corporation	WDC	NasdaqGS	USD	39.31	11,960.0	3.9	-23.0	NM	N/A	N/A	-2.6	48.7
Xiaomi Corporation	XIAC.Y	OTCPK	USD	15.37	81,639.0	3.5	182.5	248.0	N/A	N/A	13.2	5.3

*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.
NA-Not Available; NM-Not Meaningful.
Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

October 30, 2020
07:30 AM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 115.32****):
We keep our 12-month target at $145, on a P/E of 34x our FY 22 (Sep.) EPS estimate, above peers/historical averages. We increase our FY 21 EPS estimate to $3.94 from $3.85 and FY 22 to $4.27 from $4.18. Despite posting better-than-expected Sep-Q results last night (see prior research note for details), AAPL shares are indicated lower. We believe this likely reflects a miss on iPhone sales (about $1.5B), a sharper-than-expected 29% decline in China, lack of official guidance, and concerns about valuation. As we previously alluded, we think the iPhone and China misses are related as consumers held off ahead of a delayed 5G launch, which we anticipate will add fuel to what we expect to be a very successful 5G upgrade cycle. Despite the lack of guidance, we think initial indications on 5G unit shipments reaffirms our forecast than iPhone sales will grow 18% over the next year. Valuation should be supported by AAPL's ongoing transition to Services/Wearables, with iPhones eventually being sold "as a Service." / Angelo Zino, CFA

October 29, 2020
05:21 PM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 111.20****):
AAPL announces Sep-Q revenue of $64.7B and EPS of $0.73, both better than expectations of $63.3B and $0.70. IPhone sales of $26.4B were about $1.5B below our expectation, likely reflecting customers holding off on purchases ahead of the 5G launch, which was delayed to late October/early November. We think this was most blatant in China, where 5G service is more accessible, with sales in the region declining 29% -- also a bigger decline than we anticipated. We note that iPads and Macs grew 46% and 29%, respectively, both sharply ahead of our view, as the product segments benefited from the work from home and learn from home themes. Services growth of 16% was in line with our view as was a 21% rise from AAPL's Wearables, Home, and Accessories segment. We continue to remain optimistic about the AAPL story as we see compounded annual EPS growth of 10%-15% over the next three years, with upside potential from its recent 5G device launch along with an ongoing transition towards a more Services driven company. / Angelo Zino, CFA

October 13, 2020
04:28 PM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 124.40****):
AAPL hosted its October hardware event today, announcing 4 new iPhones (opposed to 3 last year), all possessing 5G, OLED screens, a new A14 processor, and a host of new colors. The smaller 5.4-inch iPhone 12 mini (starts at $699) and 6.1-inch iPhone 12 ($799) feature a new aluminum flat-edge design, ceramic shield front cover, and duel camera system. The 6.1-inch iPhone 12 Pro ($999 start) and 6.7-inch iPhone 12 Pro Max ($1,099) include a LiDAR Scanner, begin with 128 GB memory, and boast better camera functionality. AAPL will remove the power adapter and EarPods from iPhone packaging and announces new accessories related to its MagSafe Charger and Leather Wallet. Separately, AAPL unveiled the HomePod mini at $99, a smaller and more inexpensive version of its HomePod. While the event provided little surprise, we are optimistic about AAPL's ability to see a return to iPhone growth, given the combination of 5G, a host of features that will appeal to the consumer, and ability to sustain price points. / Angelo Zino, CFA

September 15, 2020
03:00 PM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 115.36****):
Today, AAPL unveiled new Apple Watch and iPad models (2 each). The Series 6 can measure oxygen levels, includes more colors and bands/solo loop (priced at $399 and available Friday). The Apple Watch SE comes at a more affordable price point of $279 while AAPL keeps its Series 3 but at a low $199 price, which we believe will further help adoption for the device. AAPL also plans to remove the USB power adapter from the Apple Watch. The 8th generation iPad is largely the same as its predecessor but with a more powerful processor while the iPad Air has a number of new features (e.g. more colors, enhanced/more speakers, and improved cameras). Most important were the announcements of Apple Fitness+ ($9.99 per month or $79.99 per year) and its Apple One Subscription Plan (priced from $14.95 to $29.95 monthly), which offers bundling options for a host of its services. We believe AAPL's bundle strategy will provide greater recurring revenue opportunities and could support upside potential to our Services estimates. / Angelo Zino, CFA

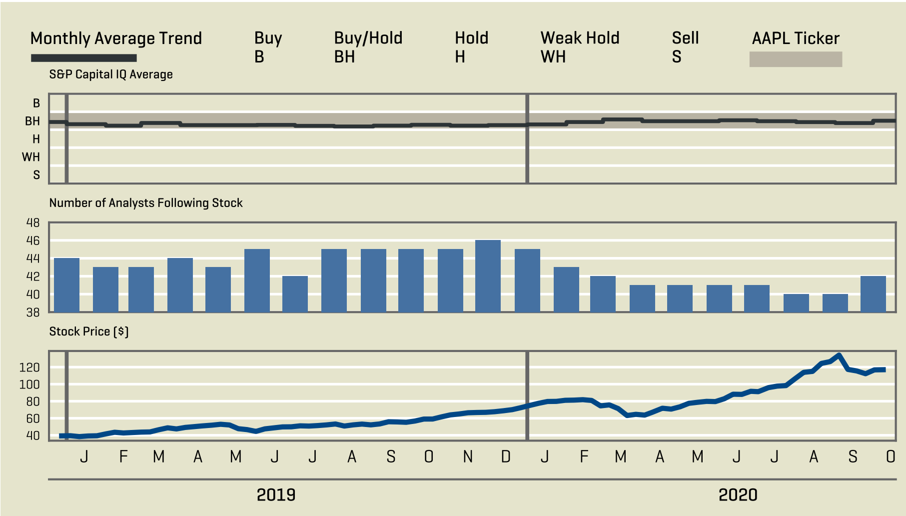
September 14, 2020
01:31 PM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 112.00****):
Ahead of AAPL's event tomorrow, we think the biggest unveilings on the product side will come via its next generation Watches and iPads as it is increasingly looking likely that the company will refrain from announcing its 5G iPhones until October. We expect the Apple Watch Series 6 to have the same design as its predecessor but featuring an upgraded processor for better performance and battery life. New capabilities such as detecting blood oxygen levels and high levels of stress may also be announced while we think AAPL also replaces the Series 3 with a new lower priced device (likely similar to Series 4). We think the possibility of AAPL beginning to bundle different Services (e.g. Music and TV+) will be the most important item to look for at the event, which we think would be a catalyst for shares. Whether it be tomorrow or next month, we see AAPL launching four 5G models (starting at $699) and be available by October end, with all possessing OLED displays, an upgraded processor, and more color options. / Angelo Zino, CFA

August 31, 2020
04:19 PM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 124.81****):
After AAPL's 4-for-1 stock split today, we reduce our 12-month target to $145 from $502, on a P/E of 34.7x our FY 22 (Sep.) EPS estimate of $4.18 (previously $16.72), above peers and historical averages to represent Services exposure. We cut our '20 EPS estimate to $3.22 from $12.88 and '21's to $3.85 from $15.40. Today's stock split would mark the fifth since the company went public and follows a 7-for-1 on June 9, 2014, as well as splits on a 2-for-1 basis on February 28, 2005; June 21, 2000; and June 16, 1987. We note that performance on AAPL shares have been mixed in the 12-months following an announced split, with the share price rising more than 35% after its split in 2014, but declining more than 60% after its 2000 split. While we acknowledge recent multiple expansion has gone further than we expected, we see significant upside to consensus expectations while Services growth is likely to remain robust as it looks to potentially begin bundling offerings, focusing on a more subscription-based model. / Angelo Zino, CFA

August 21, 2020
08:20 AM ET... CFRA Maintains Buy Opinion on Shares of Apple Inc. (AAPL 473.10****):
We raise our 12-month target to $502 from $460, on a P/E of 30x our FY 22 (Sep.) EPS estimate of $16.72, above peers and historical averages to represent AAPL's exposure to Services. While AAPL's planned 4-for-1 stock split appears to be generating significant interest from investors, we are turning our attention to AAPL's all-important event in September, which will lay out the company's new hardware devices (e.g. phones and wearables)/business prospects for the next year. Like most, we expect AAPL to launch four 5G models this fall (starting at $699), all with OLED displays, better battery life and processors, among other features. We think the possibility of AAPL beginning to bundle different Services (e.g. Music and TV+), which could be announced next month, would be a bigger catalyst and support recent multiple expansion to the shares. We believe AAPL's ultimate path in Services is to create a recurring-based model similar to Amazon Prime and the start of bundling would allow that to begin to take form. / Angelo Zino, CFA

Apple Inc.

Analysts Recommendations



	No. of Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	18	42	18	18
Buy/Hold	7	16	7	7
Hold	11	26	11	10
Weak hold	2	5	2	1
Sell	1	2	1	3
No Opinion	4	9	3	1
Total	43	100	42	40

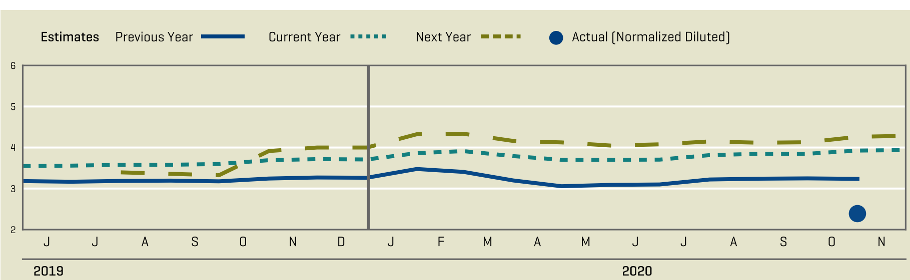
Wall Street Consensus Opinion

NO_MATCH

Wall Street Consensus vs. Performance

NO_MATCH

Wall Street Consensus Estimates



Fiscal Year	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2022	4.29	4.81	3.55	35	27.82
2021	3.94	4.45	3.41	39	30.29
2022 vs. 2021	**▲ 9%**	**▲ 8%**	**▲ 4%**	**▼ -10%**	**▼ -8%**
Q1'22	1.48	1.59	1.39	15	80.34
Q1'21	1.38	1.58	1.23	33	86.34
Q1'22 vs. Q1'21	**▲ 7%**	**▲ 1%**	**▲ 13%**	**▼ -55%**	**▼ -7%**

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs (American Depositary Receipts), and ADSs (American Depositary Shares) based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS (Stock Appreciation Ranking System), equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark (e.g., a regional index (MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index)), based on a 12-month time horizon. STARS was designed to meet the needs of investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

(also known as **S&P Capital IQ Earnings & Dividend Rankings**) - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsulize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+	Highest	B	Below Average
A	High	B-	Lower
A	Above	C	Lowest
B+	Average	D	In Reorganization
NC	Not Ranked		

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus (average) EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

CFRA Equity Research

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Abbreviations Used in Equity Research Reports

CAGR - Compound Annual Growth Rate
CAPEX - Capital Expenditures
CY - Calendar Year
DCF - Discounted Cash Flow
DDM - Dividend Discount Model
EBIT - Earnings Before Interest and Taxes
EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization
EPS - Earnings Per Share
EV - Enterprise Value
FCF - Free Cash Flow
FFO - Funds From Operations
FY - Fiscal Year
P/E - Price/Earnings
P/NAV - Price to Net Asset Value
PEG Ratio - P/E-to-Growth Ratio
PV - Present Value
R&D - Research & Development
ROCE - Return on Capital Employed
ROE Return on Equity
ROI - Return on Investment
ROIC - Return on Invested Capital
ROA - Return on Assets
SG&A - Selling, General & Administrative Expenses
SOTP - Sum-of-The-Parts
WACC - Weighted Average Cost of Capital

Dividends on American Depository Receipts (ADRs) and American Depository Shares (ADSs) are net of taxes (paid in the country of origin).

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ **5-STARS (Strong Buy):**
Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★☆ **4-STARS (Buy):**
Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

★★★☆☆ **3-STARS (Hold):**
Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★☆☆☆ **2-STARS (Sell):**
Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price is not anticipated to show a gain.

★☆☆☆☆ **1-STAR (Strong Sell):**
Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:
In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.

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Quantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of June 28, 2019

Ranking	North America	Europe	Asia	Global
Buy	34.4%	29.0%	41.1%	33.5%
Hold	56.1%	54.8%	46.4%	54.6%
Sell	10.5%	16.2%	12.5%	11.9%
Total	100.0%	100.0%	100.0%	100.0%

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