

Apple Inc.

Recommendation **BUY** ★ ★ ★ ★ ★

Price
\$169.10 (as of May 01, 2018 4:00 PM ET)

12-Mo. Target Price
\$195.00

Report Currency
USD

Investment Style
Large-Cap Growth

Equity Analyst Angelo Zino, CFA

UPDATE: PLEASE SEE THE ANALYST'S LATEST RESEARCH NOTE IN THE RESEARCH NOTES SECTION

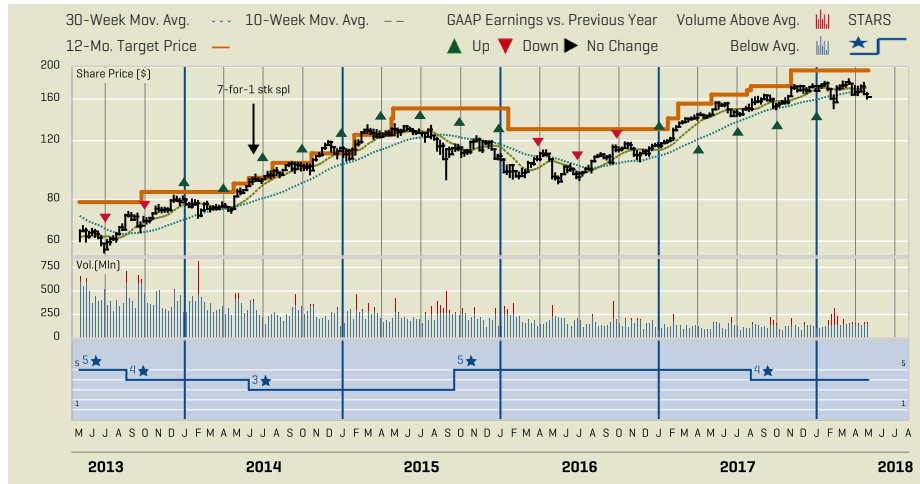
GICS Sector Information Technology
Sub-Industry Technology Hardware, Storage & Peripherals

Summary This company is a prominent provider of consumer computing devices, including the iPhone, iPad tablets, Mac computers, wearables and iPod digital media players.

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

52-Wk Range	\$183.50 - 142.20	Oper. EPS 2018E	11.46	Market Capitalization(B)	\$858.0	Beta	1.24
Trailing 12-Month EPS	9.70	Oper. EPS 2019E	12.72	Yield [%]	1.49	3-Yr Proj. EPS CAGR[%]	10
Trailing 12-Month P/E	17.04	P/E on Oper. EPS 2018E	14.42	Dividend Rate/Share	\$2.52	SPGMI's Quality Ranking	B+
\$10K Invested 5 Yrs Ago	\$30,062	Common Shares Outstg.(M)	5,074.0	Institutional Ownership [%]	59		

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 Equity Analyst **Angelo Zino, CFA** on May 01, 2018 05:19 PM, when the stock traded at **\$167.78**.

Highlights

- ▶ We project 14% revenue growth for FY 18 (Sep.) and a 5.0% increase for FY 19, following a 6.3% rise for FY 17. We anticipate iPhone sales rising in FY 18 and FY 19 as consumers upgrade to devices with higher average selling prices that possess more content [e.g. OLED displays, facial recognition and wireless charging]. We are encouraged by a recent growth in Services, up 18% in the December quarter, led by the App store and iCloud. We positively view recent Mac/iPad trends but are wary of sustainability. We see other hardware offerings [e.g. Watch, AirPods and HomePod] contributing to growth.
- ▶ We see the gross margin steady at 38% to 39% through FY 19 end. We see iPhone average selling prices up 14% in FY 18 and 3% in FY 19, but note elevated component costs. We see growth from the higher margin Services business supporting margins.
- ▶ While we acknowledge concerns about AAPL's ability to grow iPhone shipments amid a maturing smartphone industry and as consumers extend replacement cycles, we remain optimistic about a multi-year shift to higher priced devices. We believe that AAPL will accelerate efforts to return cash to shareholders, as it aims to be net cash neutral [currently \$163 billion net cash].

Investment Rationale/Risk

- ▶ Our Buy opinion reflects AAPL's compelling valuation, superior ecosystem, high customer retention rates and robust free cash flow generation/cash position. We note AAPL's significant market position in key areas, high customer satisfaction and switching costs. We see a growing installed base benefiting future product replacement cycles. We note net cash per share nearly \$32, which we see increasingly employed for dividends, stock repurchases and small bolt-on acquisitions. We expect services growth to remain robust given AAPL's growing installed base [1.3 billion active installed base] and potential to sell original content. We view AAPL as among the biggest beneficiaries from foreign cash repatriation and are encouraged by lower planned tax rate of 15%.
- ▶ Risks to our recommendation and target price include weaker end-market demand, pricing pressures, competitive handset and tablet offerings gaining traction, less success with product launches/innovations and longer than expected hardware replacement cycles.
- ▶ Our 12-month target price of \$195 is based on a P/E of 15.3X our FY 19 EPS estimate of \$12.72, or about 12.8X excluding net cash, above hardware peers, but below the S&P 500 Technology sector.

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
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Our risk assessment reflects our view of a seemingly ever-evolving market for consumer-oriented technology products, potential challenges associated with the company's growing size and offerings and possible changes in the pace or success of product innovations as the smartphone space matures. These concerns are partly offset by AAPL's significant cash position and free cash flow potential.

Revenue/Earnings Data

Revenue (Million U.S. \$)	1Q	2Q	3Q	4Q	Year
2018	88,293	--	--	--	--
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
2014	57,594	45,646	37,432	42,123	182,795
2013	54,512	43,603	35,323	37,472	170,910

Earnings Per Share (U.S. \$)

	1Q	2Q	3Q	4Q	Year
2019	E 4.51	E 2.97	E 2.41	E 2.83	E 12.72
2018	3.89	E 2.75	E 2.20	E 2.62	E 11.46
2017	3.36	2.10	1.67	2.07	9.21
2016	3.28	1.90	1.42	1.68	8.31
2015	3.06	2.33	1.85	1.96	9.22
2014	2.07	1.66	1.28	1.41	6.45

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 (\$)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.63	Feb 01	Feb 09	Feb 12	Feb 15 '18
0.63	Nov 02	Nov 10	Nov 13	Nov 16 '17
0.63	Aug 01	Aug 10	Aug 14	Aug 17 '17
0.63	May 02	May 11	May 15	May 18 '17

Dividends have been paid since 2012. Source: Company reports.

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

Forecasts are not reliable indicator of future performance.

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Apple Inc.

Business Summary November 03, 2017

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 62% of FY 17 revenues, with over 216 million units sold. AAPL sold over 211 million iPhones in FY 16, contributing 63% of revenues. We note that iPhone sales grew 3.4% in FY 17 after witnessing its first ever year-over-year decline ever in FY 16. While we expect the rate of growth to slow in the coming years as the business becomes larger and more mature, we still see substantial opportunities related to international, enterprise and education markets. We note the fall 2017 introductions of the next generation iPhone 8 and the iPhone 8 Plus devices as well as release of the iPhone X device, which includes a OLED screen and 3D sensing technology. We note all three devices come with wireless charging capabilities.

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. In FY 17, about 44 million iPads were sold (8% of sales), but showed a decline from the 46 million units shipped (10% of sales) the previous fiscal year.

Sales of AAPL's computers, commonly known as Macs, made up 11% of revenues in FY 17, similar to its representation in FY 16. On a unit shipment basis, we expect Macs to perform better than the overall PC industry, which we think is in the midst of a secular decline.

Revenue from Services and other hardware products comprised for about 19% of sales in FY 17 versus 16% in FY 16. Other hardware products includes sales of the Apple TV, Apple Watch, AirPods, Beats products, iPod and Apple-branded and third-party accessories. We note Services alone was 13% of FY 17 sales and grew an impressive 23%. Services includes revenue from the App Store, iCloud, AppleCare, licensing and other services.

COMPETITIVE LANDSCAPE. The company 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.

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. Considering the maturity of the computer and tablets markets, we expect unit shipments and average selling prices for Macs and iPads to trend down over time but note quarterly mix and new product releases could result in volatility. However, with anticipated growth in the smartphone and wearables markets, and considering our view that AAPL will largely sustain notable share in these areas, we see increasing shipments of and revenues from iPhones and the Apple Watch over the next couple of years.

We think iPhones and Mac products offer margins above the level of the company as a whole, and this should support the gross margin, as they make up a large percentage of total revenues.

AAPL has what we view as a very strong balance sheet, with about \$269 billion in cash and investments, and about \$116 billion in debt as of the end of September 2017. AAPL boasts return metrics, such as return on equity, 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. Under the existing program (announced May 2017), Apple plans to spend \$300 billion of cash by the end of March 2019 and currently pays a quarterly dividend of \$0.63 per share.

In June 2014, a 7-for-1 stock split was implemented.

Corporate Information

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K. L. Adams

COO & Senior VP

L. Maestri

COO & Senior VP

J. E. Williams

CEO & Director

T. D. Cook

Vice President of Technology

K. M. Lynch

Non-Executive Chairman of the Board

A. D. Levinson

Senior Director of Corporate Accounting

C. Kondo

Board Members

A. A. Gore

A. D. Levinson

A. Jung

J. A. Bell

R. A. Iger

R. D. Sugar

S. L. Wagner

T. D. Cook

Domicile

California

Auditor

Ernst & Young LLP

Founded

1977

Employees

123,000

Stockholders

25,333

Apple Inc.

Quantitative Evaluations						
Fair Value Rank	5					
	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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	\$210.24 Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that AAPL is undervalued by \$41.14 or 24.3%.					
Volatility	<table border="1"> <tr> <td>LOW</td> <td>AVERAGE</td> <td>HIGH</td> </tr> </table>	LOW	AVERAGE	HIGH		
LOW	AVERAGE	HIGH				
Technical Evaluation	NEUTRAL Since April, 2018, the technical indicators for AAPL have been NEUTRAL.					
Insider Activity	<table border="1"> <tr> <td>UNFAVORABLE</td> <td>NEUTRAL</td> <td>FAVORABLE</td> </tr> </table>	UNFAVORABLE	NEUTRAL	FAVORABLE		
UNFAVORABLE	NEUTRAL	FAVORABLE				

Expanded Ratio Analysis				
	2017	2016	2015	2014
Price/Sales	3.53	2.87	2.84	3.37
Price/EBITDA	11.32	8.79	8.06	10.20
Price/Pretax Income	12.63	10.10	9.16	11.53
P/E Ratio	16.73	13.56	12.44	15.62
Avg. Diluted Shares Outsg. (M)	5252	5500	5793	6123

Figures based on fiscal year-end price

Key Growth Rates and Averages				
Past Growth Rate [%]		1 Year	3 Years	5 Years
Sales		6.30	7.84	7.93
Net Income		5.83	6.96	2.99
Ratio Analysis [Annual Avg.]				
Net Margin [%]		NM	NM	NM
% LT Debt to Capitalization		38.93	NA	NA
Return on Equity [%]		36.87	NA	NA

Company Financials Fiscal year ending Sep. 30

Per Share Data [U.S. \$]	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Tangible Book Value	24.59	22.42	19.78	17.52	18.71	17.17	11.10	7.28	4.95	3.50
Free Cash Flow	9.74	9.56	12.13	8.20	6.88	6.33	4.65	2.59	1.43	1.36
Earnings	9.21	8.31	9.22	6.45	5.68	6.31	3.95	2.16	1.30	0.97
Earnings (Normalized)	7.62	6.98	7.82	5.46	4.81	5.27	3.26	1.79	1.19	0.89
Dividends	2.40	2.18	1.98	1.82	1.64	0.38	NA	NA	NA	NA
Payout Ratio [%]	26	27	22	28	29	6	NA	NA	NA	NA
Prices: High	164.94	123.82	134.54	103.74	96.68	100.72	60.41	41.93	26.99	28.99
Prices: Low	104.08	89.47	92.00	67.77	55.01	50.61	39.29	25.81	11.17	16.49
P/E Ratio: High	18.3	15.1	18.4	NM	NM	NM	NM	NM	NM	NM
P/E Ratio: Low	11.3	9.9	14.8	15.1	62.0	83.8	NM	NM	NM	NM

Income Statement Analysis [Million U.S. \$]	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Revenue	229,234	215,639	233,715	182,795	170,910	156,508	108,249	65,225	42,905	37,491
Operating Income	61,344	60,024	71,230	52,503	48,999	55,241	33,790	18,385	11,740	8,327
Depreciation + Amortization	10,157	10,505	11,257	7,946	6,757	3,277	1,814	1,027	709	469
Interest Expense	2,323	1,456	733	384	136	NA	NA	NA	NA	NA
Pretax Income	64,089	61,372	72,515	53,483	50,155	55,763	34,205	18,540	12,066	8,947
Effective Tax Rate	24.6	25.6	26.4	26.1	26.2	25.2	24.2	24.4	31.8	31.6
Net Income	48,351	45,687	53,394	39,510	37,037	41,733	25,922	14,013	8,235	6,119
Net Income (Normalized)	39,994	38,412	45,322	33,427	31,347	34,852	21,378	11,588	7,541	5,592

Balance Sheet and Other Financial Data [Million U.S. \$]	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Cash	74,399	67,883	41,995	25,158	40,590	29,129	25,952	25,620	23,464	22,111
Current Assets	128,645	106,869	89,378	68,531	73,286	57,653	44,988	41,678	31,555	30,006
Total Assets	375,319	321,686	290,345	231,839	207,000	176,064	116,371	75,183	47,501	36,171
Current Liabilities	100,814	79,006	80,610	63,448	43,658	38,542	27,970	20,722	11,506	11,361
Long Term Debt	97,207	75,427	53,329	28,987	16,960	NA	NA	NA	NA	NA
Total Capital	249,727	215,281	183,696	146,842	140,509	118,210	76,615	47,791	31,640	22,297
Capital Expenditures	12,451	12,734	11,247	9,571	8,165	8,295	4,260	2,005	1,144	1,091
Cash from Operations	63,598	65,824	81,266	59,713	53,666	50,856	37,529	18,595	10,159	9,596
Current Ratio	1.28	1.35	1.11	1.08	1.68	1.50	1.61	2.01	2.74	2.64
% Long Term Debt of Capitalization	38.9	35.0	29.0	19.7	12.1	NA	NA	NA	NA	NA
% Net Income of Revenue	21.1	21.2	22.8	21.6	21.7	26.7	23.9	21.5	19.2	16.3
% Return on Assets	11.0	12.3	17.1	15.0	16.0	23.6	22.0	18.7	17.5	16.9
% Return on Equity	36.9	36.9	46.2	33.6	30.6	42.8	41.7	35.3	30.5	33.2

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.

Apple Inc.

Sub-Industry Outlook

Our fundamental outlook for the technology hardware, storage & peripherals sub-industry for the next 12 months is positive. 2018 is shaping up to be another exciting year, we think, for the technology hardware space given anticipated next generation devices from the largest manufacturers in the world. We believe the hardware space is well positioned to witness growth across most end markets over the next year.

We expect the smartphone space to see healthy growth in 2018 and 2019. We anticipate that Apple will witness mid-single-digit percentage growth, in terms of unit volume, for 2018 and we see new features in next generation devices (e.g. facial recognition, wireless charging, and OLED screens) supporting customer future upgrade cycles. We expect average selling prices for smartphones to rise between 3% and 5% in 2018 and be flat in 2019, driven by the ongoing shift by Apple and Samsung to offer consumers more features (e.g. OLED screens, wireless charging, and 3D sensing technology). Despite greater smartphone adoption in emerging regions like India that gravitate to lower-priced phones, we think consumers in developed regions will be willing to pay a higher price point given the reliance on installment programs and appetite for new features.

We expect a stable PC environment in 2018 (flat shipments) and 2019 compared to a 1% decline in 2017. We see a flat environment as a positive phenomenon given that PC shipments have fallen 30% from peak levels in 2011. We expect demand to be sustained in 2018 and 2019 from the ongoing enterprise transition to Windows 10, with commercial notebooks seen as the biggest beneficiary. While we see areas of growth related to thinner and lighter devices as well as opportunities from gaming, we think longer replacement cycles will likely hinder

growth for the space. Wearables shipment growth will likely be 15% to 20% in 2018 and 2019, by our estimates. While adoption rates have risen, we expect growth to accelerate, driven by the emergence of untethered devices into the market (e.g. Apple Watch Series 3).

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.

We foresee growing demand for Internet-based computing solutions because they offer companies opportunities to reduce costs and improve customer service. Accordingly, servers and data-center computing hardware should benefit from rising demand. However, we also see price competition in servers. We think that hardware vendors have been seeking to offset the negative impact on profits by offering higher-margin services, software and storage products.

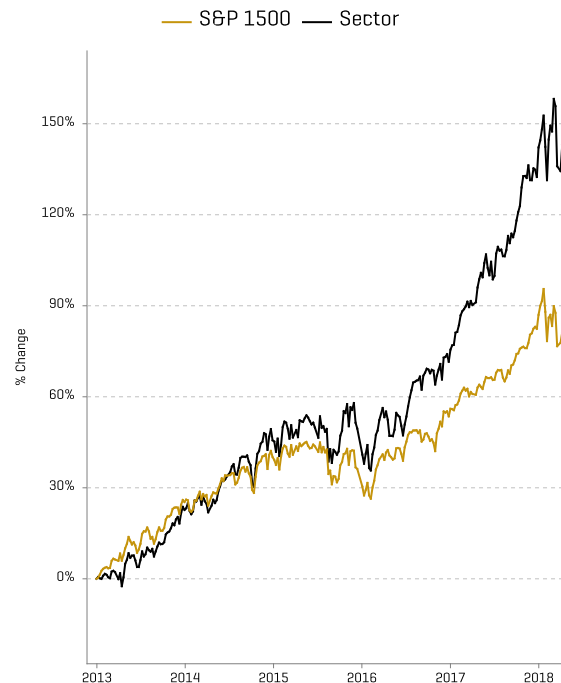
Year to date through April 6, 2018, the S&P 1500 Technology Hardware, Storage & Peripherals Index increased 0.7%, while the S&P 1500 fell 2.5%. The S&P 1500 Technology Hardware, Storage & Peripherals Index increased 41.3% in 2017, while the S&P 1500 rose 18.8%.

/Angelo Zino, CFA

Industry Performance

GICS Sector: Information Technology

Based on S&P 1500 Indexes
Five-Year market price performance through May 01, 2018



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: S&P Global Market Intelligence

Sub-Industry: Technology Hardware, Storage & Peripherals Peer Group*: Technology Hardware, Storage & 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	169.10	858,016	0.8	15.4	17	210.24	1.5	36.9	38.9
Canon Inc.	CAJ	NYSE	USD	34.40	37,188	-5.6	3.0	17	NA	4.3	8.4	13.6
FUJIFILM Holdings Corporation	FUJI.Y	OTCPK	USD	39.74	17,089	0.7	6.5	11	NA	Nil	6.5	15.4
HP Inc.	HPQ	NYSE	USD	21.82	35,815	-0.5	15.3	10	18.45	2.6	-69.2	152.8
Hewlett Packard Enterprise Company	HPE	NYSE	USD	17.18	26,684	-2.1	-8.3	19	18.44	2.6	1.6	27.1
NetApp, Inc.	NTAP	NasdaqGS	USD	67.85	18,179	10.0	68.9	NM	NA	1.2	18.0	15.2
Ricoh Company, Ltd.	RIKO.Y	OTCPK	USD	9.558	6,926	-2.0	23.6	46	NA	Nil	0.8	31.9
Seagate Technology plc	STX	NasdaqGS	USD	54.21	15,558	-7.4	28.5	25	54.56	4.6	52.2	78.6
Seiko Epson Corporation	SEKE.Y	OTCPK	USD	8.884	6,256	3.7	-15.4	20	NA	Nil	10.2	11.0
Western Digital Corporation	WDC	NasdaqGS	USD	79.79	23,742	-13.5	-9.0	NM	69.90	2.5	3.5	52.6
Xerox Corporation	XRX	NYSE	USD	32.29	8,223	12.2	14.3	45	33.72	3.1	3.9	47.5

*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.

Apple Inc.

Analyst Research Notes and other Company News

May 01, 2018

05:19 pm ET... CFRA KEEPS BUY OPINION ON SHARES OF APPLE INC. [AAPL 165.26****]: AAPL posts Mar-Q EPS of \$2.73 vs. \$2.10, beating the \$2.67 Capital IQ consensus estimate. Sales rose 16%, better than expected, driven by 19% growth in iPhones (62% of sales). While iPhone shipments rose 3%, we are encouraged by an 11% increase in average selling prices. AAPL's ongoing strategy towards selling higher priced phones remains intact heading into a new iPhone cycle later this year. We note iPad sales (7% of sales) increased 6%, aided by a 4% increase in selling prices while Mac sales (10% of sales) were flat. We are encouraged by 31% Services growth, an acceleration from the 18% figure in the prior quarter, as AAPL sees a significant increase in paid subscriptions within its ecosystem. Growth in other hardware devices/wearables also grew an impressive 38%. Concerns about China also appear overblown, with growth of 21%. While we positively view AAPL's new \$100B share repurchase authorization and a 16% dividend increase, both figures were below our expectations. /Angelo Zino, CFA

February 02, 2018

09:07 am ET... CFRA MAINTAINS BUY OPINION ON SHARES OF APPLE INC. [AAPL 167.78****]: We keep our 12-month target of \$195, on above-peer P/E of 15.3X our FY 19 (September) EPS view given its superior balance sheet. We up our FY 18 EPS estimate to \$11.46 from \$11.40 and FY 19 to \$12.72 from \$12.08. Despite lackluster Mar-Q guidance, we note a growing installed base to over 1.3B. We are positive on a multi-year shift to higher priced devices (iPhone ASP up 15% in Dec-Q), growth from higher margin services (up 18%), and representation from new products. We see AAPL accelerating cash return to shareholders as it aims to be net cash neutral (currently \$163B net cash). /Angelo Zino, CFA

February 01, 2018

05:38 pm ET... CFRA KEEPS BUY OPINION ON SHARES OF APPLE INC. [AAPL 167.43****]: AAPL posts Dec-Q EPS of \$3.89 vs. \$3.36, beating the \$3.85 consensus. Sales rose 13%, with iPhone sales growing 13%, as higher selling prices were partly offset by a decline in unit shipments. We positively view Services growth of 18% and Other products (e.g. Apple Watch), up 36%. We think AAPL executed well internationally, with Greater China rising 11% and Asia overall growing 15% (including Japan). While the Mar-Q revenue outlook of \$60B-\$62B was below our view, we think shares have largely discounted iPhone X softness. We view a 15% projected Mar-Q tax rate as a bright spot. /Angelo Zino, CFA

January 29, 2018

10:11 am ET... CFRA MAINTAINS BUY OPINION ON SHARES OF APPLE INC. [AAPL 168.6146****]: We keep our 12-month target of \$195, on a P/E of 16.1X our FY 19 (Sep.) EPS view, above hardware peers, but below the S&P 500 Technology sector. We raise our FY 18 EPS estimate to \$11.40 from \$11.33 and FY 19 to \$12.08 from \$11.91. Ahead of Dec-Q results on 2/1, we see EPS of \$3.84 vs. \$3.36. We acknowledge supply chain production cuts for the iPhone X, which places some concern on Mar-Q expectations. Yet, we remain positive on a multi-year shift to higher priced devices, growth from higher margin services, greater representation from new products, and EPS upside on tax reform. /Angelo Zino, CFA

January 17, 2018

02:49 pm ET... CFRA MAINTAINS BUY OPINION ON SHARES OF APPLE INC. [AAPL 177.9****]: AAPL says it will pay a repatriation tax of about \$38B, near our expectations, assuming slightly under \$250B in overseas investments (total cash and investments stood at \$269B at the end of September). These figures are roughly in line with our expectations. We anticipate AAPL to potentially repurchase as much as 10% of its shares over the next 12-18 months with the higher U.S. cash but see more clarification on its capital allocation strategy in late April/early May. AAPL also announces a number of other initiatives that will accelerate U.S. investments and spur job creation. /Angelo Zino, CFA

December 26, 2017

10:12 am ET... CFRA REITERATES BUY OPINION ON SHARES OF APPLE INC. [AAPL 170.28****]: According to an unconfirmed report from Taiwan's Economic Daily News, cited by Reuters and others, some see disappointing demand for the iPhone X. A Reuters analysis of Chinese social media is consistent with this concern.

We note high expectations, but think worries related to iPhone X demand are being overblown, and think AAPL will be able to continue to shift its users towards higher-priced smartphones. We remain bullish on the shares, in light of improving smartphone average selling prices (ASPs), services growth, new offerings, and potential usage of overseas cash. Angelo Zino, CFA, Scott Kessler

November 03, 2017

08:33 am ET... CFRA MAINTAINS BUY OPINION ON SHARES OF APPLE INC. [AAPL 168.11****]: We up our 12-month target price to \$195 from \$175, on a P/E of 16.4X our FY 19 (Sep.) EPS view or 13.9X ex. net cash, above peers, but below the S&P 500 Technology sector. We increase our FY 18 EPS estimate to \$11.33 from \$11.08 and start FY 19 at \$11.91. Last night, AAPL posted Sep-Q results and offered Dec-Q guidance that exceeded our expectations. We think AAPL is poised to benefit from higher selling prices through FY 19, on robust iPhone X demand, and an acceleration of growth from its higher-margin services business (up 24% after removing a one-time favorable adjustment). /Angelo Zino, CFA

November 02, 2017

05:35 pm ET... CFRA KEEPS BUY OPINION ON SHARES OF APPLE INC. [AAPL 168.11****]: AAPL posts Sep-Q EPS of \$2.07 vs. \$1.67, beating the \$1.87 consensus. Sales rose 12.2%, better than expected. iPhone sales grew 2.4%, on a 2.6% increase in unit shipments. We are excited about an acceleration of AAPL's Services business, which grew 34%, while Greater China grew 12% after 6 consecutive quarters of YoY declines. We note 14% growth in iPad sales and a 13% rise in Mac sales, as both businesses benefited from a refresh in product offerings. We are optimistic about iPhone prospects over the next year and believe concerns about supply constraints were likely overdone. /Angelo Zino, CFA

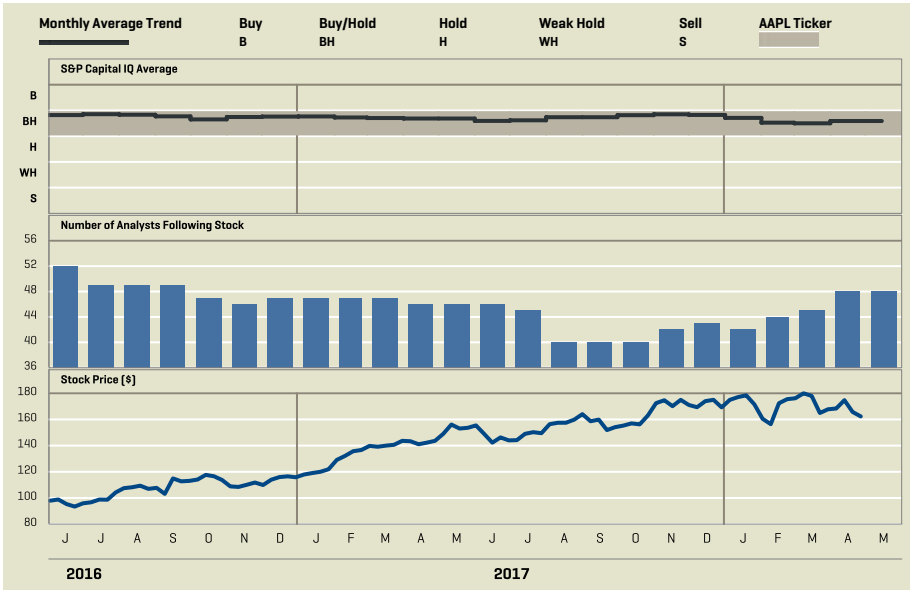
October 24, 2017

02:19 pm ET... CFRA MAINTAINS BUY OPINION ON SHARES OF APPLE INC. [AAPL 157.145****]: We keep our 12-month target of \$175, on a P/E of 15.9X our FY 18 (Sep.) EPS view or 12.9X ex. net cash, above peers, but below the S&P 500 Technology sector. We adjust our FY 17 EPS estimate to \$9.00 from \$9.02 and up FY 18 to \$11.08 from \$10.63. Ahead of Sep-Q results on 11/2, we see EPS of \$1.87 vs. \$1.67. While we assume higher selling prices for FY 18, we see potential push-outs of iPhone X shipments given supply constraints. An unconfirmed Nikkei report says AAPL will ship 20M iPhone X units in the Dec-Q, half of what it originally planned, due to TrueDepth camera issues. /Angelo Zino, CFA

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.

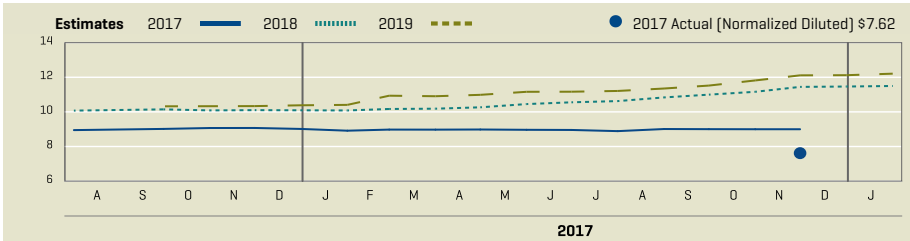
Apple Inc.

Analysts' Recommendations



	No. of Recommendations	% of Total	1 Mo. Prior	3 Mos. Prior
Buy	21	44	21	17
Buy/Hold	7	15	7	7
Hold	17	35	17	16
Weak Hold	0	0	0	0
Sell	0	0	0	0
No Opinion	3	6	3	4
Total	48	100	48	44

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2019	12.86	14.95	10.80	41	13.1
2018	11.39	12.88	10.40	43	14.9
2019 vs. 2018	▲13%	▲16%	▲4%	▼-5%	▼-12%
Q2'19	2.91	3.27	2.57	20	58.1
Q2'18	2.67	2.80	2.44	33	63.3
Q2'19 vs. Q2'18	▲9%	▲17%	▲5%	▼-39%	▼-8%

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.

Wall Street Consensus Opinion

BUY/HOLD

Wall Street Consensus vs. Performance

For fiscal year 2018, analysts estimate that AAPL will earn USD \$11.39. For the 1st quarter of fiscal year 2018, AAPL announced earnings per share of USD \$3.89, representing 34.2% of the total revenue estimate. For fiscal year 2019, analysts estimate that AAPL's earnings per share will grow by 13% to USD \$12.86.

Apple Inc.

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 [S&P Asia 50 Index, S&P Europe 350® 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 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 encapsulate 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 Average	C	Lowest
B+	Average	D	In Reorganization
NR	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 Depositary Receipts (ADRs) and American Depositary 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 S&P Europe 350 Index and the S&P Asia 50 Index, respectively.

Apple Inc.

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Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

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 March 31, 2018

Ranking	North America	Europe	Asia	Global
Buy	38.2%	31.0%	36.8%	36.9%
Hold	56.4%	55.2%	43.7%	54.8%
Sell	5.3%	13.7%	19.5%	8.4%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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