Apple Inc

Recommendation	Price	12-Mo. Target Price	Report Currency	Investment Style
STRONG BUY ★★★★★	$153.06 (as of May 19, 2017 4:00 PM ET)	$165.00	USD	Large-Cap Growth

Equity Analyst A. Zino-CFA

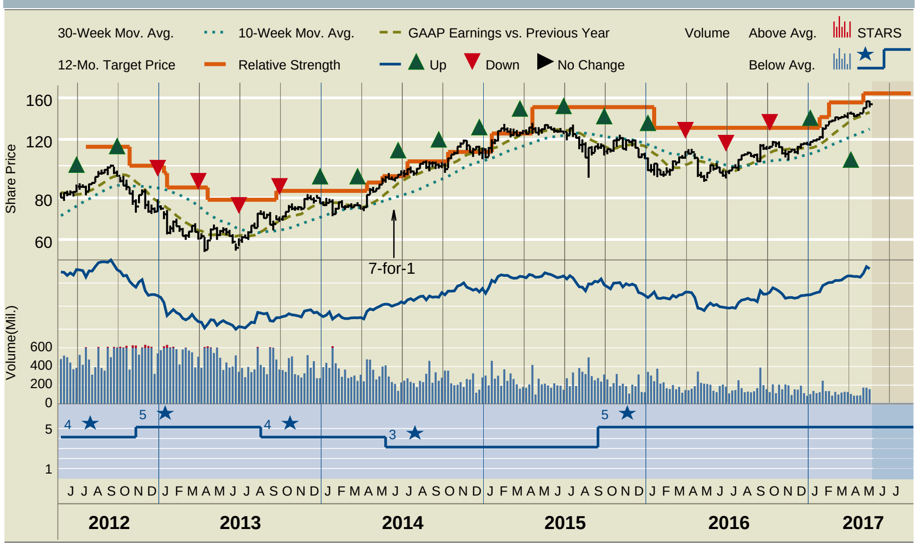
GICS Sector Information Technology
Sub-Industry Technology Hardware, Storage & Peripherals

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, Vickers, company reports)

52-Wk Range	**$156.65– 91.50**	Oper. EPS 2017**E**	**8.91**	Market Capitalization(B)	**$798.030**	Beta	**0.81**
Trailing 12-Month EPS	**$8.52**	Oper. EPS 2018**E**	**10.34**	Yield (%)	**1.65**	3-Yr. Proj. EPS CAGR(%)	**6**
Trailing 12-Month P/E	**18.0**	P/E on Oper. EPS 2017**E**	**17.2**	Dividend Rate/Share	**$2.52**	S&P Quality Ranking	**B+**
$10K Invested 5 Yrs Ago	**$22,365**	Common Shares Outstg. (M)	**5,213.8**	Institutional Ownership (%)	**67**		

Price Performance



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

Analysis prepared by Equity Analyst **A. Zino-CFA** on May 03, 2017 10:52 AM, when the stock traded at **$145.84**.

Highlights

- We project 5.2% revenue growth for FY 17 (Sep.) and 10% growth for FY 18. We anticipate near term softness, as consumers delay purchases ahead of the much anticipated iPhone X launch this fall. We see future product launches aided by an aging/larger iPhone installed base and added features that will appeal to many consumers (e.g. OLED displays, wireless charging, and 3D sensing). We think AAPL is poised to benefit from an improvement in the iPhone replacement cycle during FY 18, with the potential for more favorable selling prices/ margins. We positively view recent Mac growth but remain wary of recent iPad declines. We see other hardware offerings (e.g. Watch and AirPods) contributing to growth.
- We see the annual gross margin at 38% to 39% through the end of FY 18, which compares to the 39% margin posted in FY 16. We see the potential for higher volume and better mix from the next generation (fall 2017) iPhone launch, as well as from robust services growth.
- We expect services growth to remain robust given AAPL's growing installed base (over 1 billion active installed base) and potential to sell original content.

Investment Rationale/Risk

- Our Strong Buy opinion primarily 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 over $32 and see the cash increasingly employed for dividends, stock repurchases and small bolt-on acquisitions. We would view AAPL as among the biggest beneficiaries from the possibility of foreign cash repatriation and/or lower tax rate by the new administration.
- Risks to our recommendation and target price include weaker end-market demand, pricing pressures, competitive handset and tablet offerings gaining traction, carrier efforts to reduce or eliminate subsidy payments, and less success with product launches/innovations.
- Our 12-month target price of $165 is based on a P/E of 16X our FY 18 EPS estimate 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

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 following recent management changes.

Revenue/Earnings Data

Revenue (Million U.S. $)

	1Q	2Q	3Q	4Q	Year
2017	78,351	52,896	--	--	--
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
2012	46,333	39,186	35,023	35,966	156,508

Earnings Per Share (U.S. $)

2017	3.36	2.10	**E**1.57	**E**1.89	**E**8.91
2016	3.28	1.90	1.42	1.67	8.31
2015	3.06	2.33	1.85	1.96	9.22
2014	2.07	1.66	1.28	1.42	6.45
2013	1.97	1.44	1.07	1.18	5.68
2012	1.98	1.76	1.33	1.24	6.31

Fiscal year ended Sep. 30. Next earnings report expected: NA. EPS Estimates based on CFRA Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount ($)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.570	Jul 26	Aug 4	Aug 8	Aug 11 '16
0.570	Oct 25	Nov 3	Nov 7	Nov 10 '16
0.570	Jan 31	Feb 9	Feb 13	Feb 16 '17
0.630	May 2	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.

Apple Inc

Business Summary May 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 63% of FY 16 revenues, with over 211 million units sold. AAPL sold over 231 million iPhones in FY 15, contributing 66% of revenues. We note that FY 16 represented the first year-over-year decline ever for the iPhone. While we expect the rate of growth to slow as the business becomes larger and more mature, we still see substantial opportunities related to international, enterprise and education markets. We note the fall 2016 introductions of the next generation iPhone 7 and the iPhone 7 Plus devices.

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 16, about 46 million iPads were sold (10% of sales), but showed a decline from the 55 million units shipped (10% of sales) the previous fiscal year. We think the tablet form factor will remain popular as it launches next-generation devices, but we see new entrants diluting AAPL's overall market share over time. Nonetheless, we expect AAPL to continue to dominate in the upper part of this fast-growing computing market.

Sales of AAPL's computers, commonly known as Macs, made up 11% of revenues in FY 16 compared to 11% in FY 15. 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 16% of sales in FY 16 versus 13% in FY 15. This includes revenue from the iTunes Store, the App Store, the Mac App Store, the iBooks Store, AppleCare, licensing and other services. It also includes sales of Apple TV, Apple Watch, Beats products, iPod and Apple-branded and third-party accessories. We note Services alone was 11% of FY 16 sales and grew an impressive 22%.

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 iTunes 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 portable media player markets, we expect unit shipments and average selling prices for Macs and iPods to decline. However, with anticipated growth in the smartphone and tablet 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 iPads 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 gross margins, as they make up a large percentage of total revenues. The company should benefit from operating leverage as sales increase faster than costs and expenses, supporting the upward trend of operating margins, which have widened from the single digits to over 30%.

AAPL has what we view as a very strong balance sheet, with about $257 billion in cash and investments, and about $85 billion in debt as of the end of March 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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T.D. Cook

SVP, Secy & General Counsel
D.B. Sewell

COO
J.E. Williams

Board Members
J. A. Bell
A. A. Gore, Jr.
A. Jung
R. D. Sugar
T. D. Cook
R. A. Iger
A. D. Levinson
S. L. Wagner

Domicile
California

Founded
1977

Employees
0

Stockholders
25,924

Apple Inc

Quantitative Evaluations

Fair Value Rank 3+

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 $158.20

Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that AAPL is slightly undervalued by $5.14 or 3.4%.

Investability Quotient Percentile

99

LOWEST = 1 — HIGHEST = 100

AAPL scored higher than 99% of all companies for which a Report is available.

Volatility

LOW	AVERAGE	HIGH

Technical Evaluation BULLISH

Since May, 2017, the technical indicators for AAPL have been BULLISH.

Insider Activity

UNFAVORABLE	NEUTRAL	FAVORABLE

Expanded Ratio Analysis

	2016	2015	2014	2013
Price/Sales	2.95	2.61	3.70	3.06
Price/EBITDA	9.03	7.39	11.18	9.37
Price/Pretax Income	10.38	8.41	12.64	10.42
P/E Ratio	13.94	11.42	17.11	14.11
Avg. Diluted Shares Outstg (M)	5,500.3	5,793.1	6,122.7	6,521.6

Figures based on calendar year-end price

Key Growth Rates and Averages

Past Growth Rate (%)	1 Year	3 Years	5 Years	9 Years
Sales	-7.73	9.89	14.42	30.62
Net Income	-14.43	9.76	10.95	36.37
Ratio Analysis (Annual Avg.)				
Net Margin (%)	21.19	21.88	22.80	21.50
% LT Debt to Capitalization	36.41	29.18	19.92	11.07
Return on Equity (%)	36.90	38.92	38.05	36.30

Company Financials Fiscal Year Ended Sep. 30

Per Share Data (U.S. $)	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Tangible Book Value	22.42	19.78	17.52	18.71	17.17	11.10	7.28	4.95	3.29	2.32
Cash Flow	10.22	11.16	7.75	6.72	6.80	4.23	2.32	1.41	0.84	0.61
Earnings	8.31	9.22	6.45	5.68	6.31	3.95	2.16	1.30	0.77	0.56
Core Earnings	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dividends	2.18	1.98	1.82	1.63	0.38	Nil	Nil	Nil	Nil	Nil
Payout Ratio	NA	21%	28%	29%	6%	Nil	Nil	Nil	Nil	Nil
Prices:High	118.69	134.54	119.75	82.16	100.72	60.96	46.67	30.56	28.61	28.99
Prices:Low	94.37	92.00	70.51	55.01	58.43	44.36	27.18	11.17	11.31	11.70
P/E Ratio:High	NA	15	19	14	16	15	22	24	37	52
P/E Ratio:Low	NA	10	11	10	9	11	13	9	15	21
Income Statement Analysis (Million U.S. $)										
Revenue	215,639	233,715	182,795	170,910	156,508	108,249	65,225	42,905	32,479	24,006
Operating Income	70,529	82,487	60,449	55,756	58,518	35,604	19,412	12,474	6,748	4,726
Depreciation	10,505	11,257	7,946	6,757	3,277	1,814	1,027	734	473	317
Interest Expense	1,456	733	384	136	Nil	Nil	Nil	Nil	Nil	Nil
Pretax Income	61,372	72,515	53,483	50,155	55,763	34,205	18,540	12,066	6,895	5,008
Effective Tax Rate	25.6%	26.4%	26.1%	26.2%	25.2%	24.2%	24.4%	31.8%	29.9%	30.2%
Net Income	45,687	53,394	39,510	37,037	41,733	25,922	14,013	8,235	4,834	3,496
Core Earnings	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Balance Sheet & Other Financial Data (Million U.S. $)										
Cash	67,883	41,995	25,158	40,590	29,129	25,952	25,620	23,464	24,490	9,352
Current Assets	106,869	89,378	68,531	73,286	57,653	44,988	41,678	31,555	34,690	21,956
Total Assets	321,686	290,479	231,839	207,000	176,064	116,371	75,183	47,501	39,572	25,347
Current Liabilities	79,006	80,610	63,448	43,658	38,542	27,970	20,722	11,506	14,092	9,299
Long Term Debt	75,427	53,463	28,987	16,960	Nil	Nil	Nil	Nil	Nil	Nil
Common Equity	128,249	119,355	111,547	123,549	118,210	76,615	47,791	31,640	21,030	14,532
Total Capital	207,176	175,318	140,534	140,509	118,210	76,615	47,791	31,640	21,705	15,151
Capital Expenditures	12,734	11,247	9,571	8,165	8,295	4,260	2,005	1,144	1,091	735
Cash Flow	56,192	64,651	47,456	43,794	45,010	27,736	15,040	8,969	5,307	3,813
Current Ratio	1.4	1.1	1.1	1.7	1.5	1.6	2.0	2.7	2.5	2.4
% Long Term Debt of Capitalization	36.4	30.5	20.6	12.1	Nil	Nil	Nil	Nil	Nil	Nil
% Net Income of Revenue	21.2	22.9	21.6	21.7	26.7	24.0	21.5	19.2	14.9	14.6
% Return on Assets	14.9	20.5	18.0	19.3	28.5	27.1	21.7	19.7	14.9	16.4
% Return on Equity	36.9	46.3	33.6	30.6	42.8	41.7	37.1	30.5	27.2	28.5

Data as originally reported in Company reports.; bef. results of disc opers/spec. items. Per share data adj. for stk. divs.; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Sub-Industry Outlook

Our fundamental outlook for the S&P Technology Hardware, Storage & Peripherals sub-industry for the next 12 months is positive. CFRA anticipates that revenue growth for the technology hardware, storage & peripherals industry will reaccelerate in 2017, following a challenging 2016. Slowing end-market demand for smartphones, uncertainty about growth in China, and tough year-over-year comparisons for industry bellwether Apple primarily attributed to the decline in 2016, in our view. Nonetheless, we expect growth to pick up in 2017, driven by new product introductions in the space and a still positive smartphone landscape. Consumers in Asia and emerging markets will likely see rising penetration for next-generation smartphones, while both Apple and Samsung will remain the key innovators of next-generation devices. We see smartphone shipments, the largest end-market for the hardware space, increasing 7% in 2017, following a 5% increase in 2016.

For the PC space, CFRA forecasts a "less bad" scenario in 2017 and thereafter (shipments to be down 3%-5% in 2017, following a decline of 7% in 2016), after a more than 25% decline in industry shipments from the peak in 2011. But we expect growth to remain elusive in the near term. Tablets, also in the midst of declining shipments since the end of 2014, are more inclined to see limited growth given the maturation of the market. We see tablet shipments falling by a mid-single digit percentage in 2017. We think the wearables space will see greater adoption and be a growth engine for the industry, as we envision growth of 20%-25% in 2017 and 2018. We think hardware vendors will continue their efforts to take costs out of their infrastructures as they strive for profitability despite price competition and rising component costs.

We think demand for data storage will be driven by content digitization of old media such as paper and film, growing popularity of social networking websites, and longer record retention for compliance with government regulations. 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.

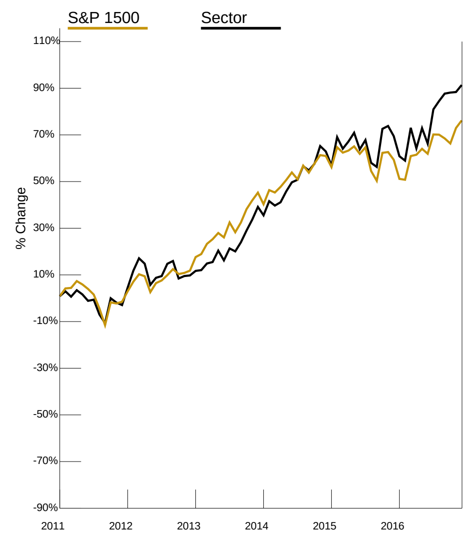
Year to date through March 31, 2017, the S&P 1500 Technology Hardware, Storage & Peripherals Index has risen 22.3% compared to a 5.2% increase for the S&P 1500. The S&P 1500 Technology Hardware, Storage & Peripherals Index increased 13.7% in 2016, while the S&P 1500 rose 10.6%.

--Angelo Zino, CFA

Industry Performance

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

Based on S&P 1500 Indexes
Five-Year market price performance through May 20, 2017



NOTE: 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.

Sub-Industry : Technology Hardware, Storage & Peripherals Peer Group*: Based on market capitalizations within GICS Sub-Industry

Peer Group	Stock Symbol	Stk.Mkt. Cap. (Mil. $)	Recent Stock Price($)	52 Week High/Low($)	Beta	Yield (%)	P/E Ratio	Fair Value Calc.($)	S&P Quality Ranking	IQ %ile	Return on Revenue (%)	LTD to Cap (%)
Apple Inc	**AAPL**	**798,030**	**153.06**	**156.65/91.50**	**0.81**	**1.6**	**18**	**158.20**	**B+**	**99**	**21.2**	**36.4**
3D Systems	DDD	2,472	21.72	23.70/11.59	2.20	Nil	NM	16.70	C	66	NM	NA
Blackberry Ltd	BBRY	5,512	10.38	10.42/6.23	1.26	Nil	NM	5.20	B	20	NA	28.5
Canon Inc ADS	CAJ	37,076	33.95	34.09/27.18	0.77	3.7	23	31.80	NR	93	4.8	16.0
Diebold Nixdorf	DBD	1,976	26.30	31.85/21.05	1.29	1.5	NM	NA	B-	36	NM	60.6
Electronics For Imaging	EFII	2,161	47.02	51.15/39.35	1.54	Nil	47	47.70	B	90	4.6	27.8
FUJIFILM Holdings*ADR	FUJIY	16,157	36.92	41.53/34.69	0.77	1.2	16	41.40	NR	91	5.7	11.0
HP Inc	HPQ	34,045	19.00	19.48/11.48	1.50	2.8	13	14.10	B	76	5.5	231.4
Hewlett Packard Enterprise	HPE	32,289	18.53	24.88/15.87	NA	1.4	10	NA	NR	73	6.3	26.9
Logitech Intl	LOGI	5,685	35.15	36.12/14.75	1.17	1.1	30	31.70	NR	69	6.4	NA
NCR Corp	NCR	6,563	39.37	49.90/25.20	1.17	Nil	28	NA	B-	61	4.3	65.1
NetApp Inc	NTAP	12,056	39.53	43.14/22.89	1.43	1.9	36	55.90	B	75	4.1	34.1
Seagate Technology Plc	STX	12,610	42.51	50.96/20.41	2.65	5.9	17	46.90	NR	43	2.2	72.2
Western Digital	WDC	24,739	86.66	91.00/39.50	1.43	2.3	NM	128.90	B	71	1.9	54.3
Xerox Corp	XRX	7,785	7.00	10.35/6.46	1.69	3.6	NM	NA	B	76	5.7	46.7

NA-Not Available NM-Not Meaningful NR-Not Rated. *For Peer Groups with more than 15 companies or stocks, selection of issues is based on market capitalization.

Analyst Research Notes and other Company News

May 3, 2017
08:28 am ET ... CFRA MAINTAINS STRONG BUY OPINION ON SHARES OF APPLE INC. (AAPL 147.51*****): We up our 12-month target by $10 to $165, on a P/E of 16X our FY 18 estimate, above peers but below the S&P 500 Technology sector. We keep our FY 17 (Sep.) EPS estimate at $8.91 but raise FY 18's to $10.34 from $10.21. We view Mar-Q results as mixed, with the biggest positive being Services growth of 18%, led by the App Store (up 40%) and iCloud storage demand. We would look past disappointing iPhone sales, as consumers delay purchases ahead of an iPhone X launch (features to include OLED displays, wireless charging, and 3D sensing). We are optimistic about AAPL's pipeline. /A. Zino-CFA

May 2, 2017
05:42 pm ET ... CFRA MAINTAINS STRONG BUY OPINION ON SHARES OF APPLE INC. (AAPL 147.51*****): AAPL posts Mar-Q EPS of $2.10 vs. $1.90, over the $2.02 consensus. Sales rose 4.6%, below expectations, on lower than expected iPhone revenue (sales up 1.2% with shipments down 0.8%), as we think consumers delayed purchases before the "iPhone X" launch. Gross margin of 38.7% and 18% services growth matched our expectations. Mac sales rose 14% while iPad sales fell 12%. We positively view the announced 10.5% dividend hike and $50 billion increase to the capital return program ($300 billion by March "19). AAPL had cash of $257 billion (net cash of $172 billion or over $32/share). /A. Zino-CFA

April 28, 2017
08:52 am ET ... CFRA MAINTAINS BUY OPINION ON SHARES OF QUALCOMM CORP. (QCOM 53.21****): QCOM has been informed that Apple (AAPL 144 *****) is withholding payments for royalties owed until their pending dispute is resolved. As a result, QCOM updates Jun-Q guidance to reflect no royalties received from AAPL, a situation it didn't previously anticipate. QCOM now sees a 7%-21% revenue decline (down 12% to up 1% prior) and EPS of $0.75-$0.85 ($0.90-$1.15 prior). While we view the news as a negative, we do expect QCOM to receive payments upon settlement. Nonetheless, we expect pending legal issues/risks to QCOM's high margin royalty business to remain an overhang. /A. Zino-CFA

April 20, 2017
08:11 am ET ... CFRA KEEPS BUY OPINION ON SHARES OF QUALCOMM INC. (QCOM 52.61****): We cut our 12-month target to $66 from $70, on below peers P/E of 14.3X our FY 18 (Sep.) EPS view given legal issues with Apple (AAPL 141*****) and regulators. We keep our FY 17 EPS est. at $4.59 and adjust FY 18 to $4.63 from $4.76. QCOM posts Mar-Q EPS of $1.34, vs. $1.04, over the $1.20 consensus. We are optimistic about mobile demand in China and globally, earnings potential from the pending NXP Semiconductor deal (NXPI 104 ***), and data center penetration. Despite payments held back by AAPL suppliers and risks to QCOM's royalty business, we think concerns are overblown. /A. Zino-CFA

April 11, 2017
08:15 am ET ... CFRA KEEPS BUY OPINION ON SHARES OF QUALCOMM INC. (QCOM 56.52****): QCOM files a lawsuit against Apple (AAPL 143 *****), accusing it of mischaracterizing QCOM's business and encouraging regulatory attacks. AAPL previously stated QCOM charges excessive royalties and benefits from AAPL inventions not pertaining to its patents. We think legal issues with key customer AAPL and regulators (e.g., U.S., Europe, and South Korea) is a headwind and may result in pricing risks to patents. Nonetheless, we think QCOM is attractively valued and remain optimistic about potential earnings leverage from the pending purchase of NXP Semiconductor (NXPI 104 ***). /A. Zino-CFA

April 4, 2017
In# a bid to# boost its video and# music strategy, Apple# has hired former YouTube# and Spotify executive, Shiva Rajaraman. Rajaraman will report to Eddy Cue, Apple's senior VP of internet software and services. Rajaraman spent 8 years at YouTube, working to secure licensed content from companies like Disney# for streaming.# After his# tenure at YouTube, Rajaraman# spent two years at# Spotify working on its video and podcasting efforts, licensing content from Time Warner, Disney and NBC.

March 21, 2017
10:05 am ET ... S&P CAPITAL IQ KEEPS STRONG BUY OPINION ON SHARES OF APPLE INC. (AAPL 142.24*****): AAPL refreshes its iPad line-up with a 9.7" device including a faster processor (A9) at a lower price point ($329) and brighter Retina display. While most features remain unchanged, we think the lower price point is intended to help reignite sales from the struggling iPad segment (down more than 50% from its peak). AAPL unveils a red color option for its iPhone 7 and is doubling the iPhone SE memory capacity. We think AAPL is also enhancing its ecosystem with the launch of Clips, an app to enable users to combine video clips/photos/music and share via messages and social media. /A. Zino-CFA

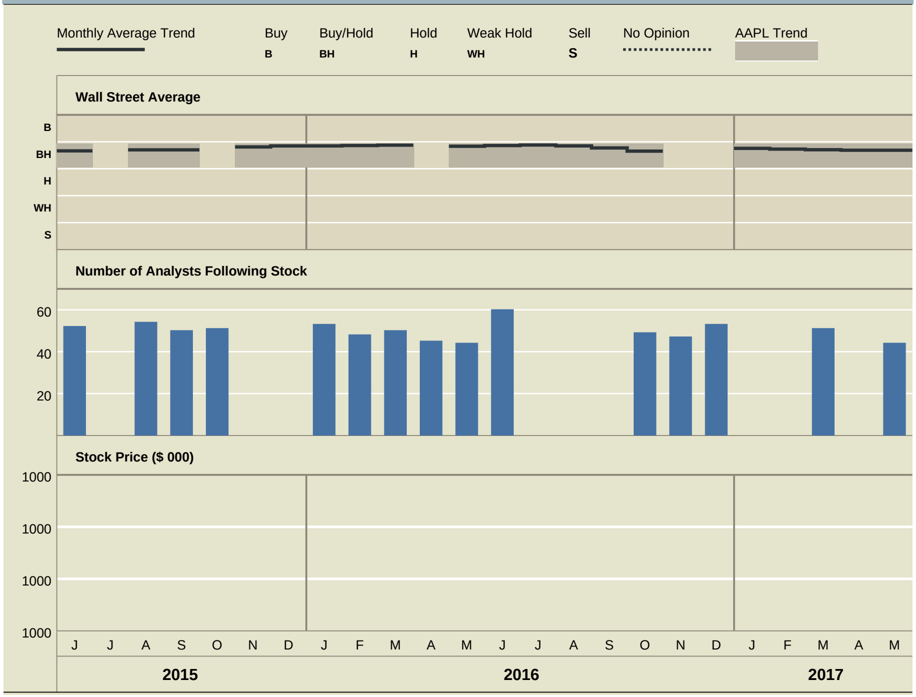
February 15, 2017
08:07 am ET ... S&P CAPITAL IQ MAINTAINS STRONG BUY OPINION ON SHARES OF APPLE INC. (AAPL 135.02*****): We up our 12-month target by $15 to $155, on above peers P/E of 15.2X our FY 18 (Sep.) EPS view to reflect AAPL's net cash per share over $31. Berkshire Hathaway more than tripled its stake in AAPL to $6.6B in the Dec-Q, which we think could spark more interest from value investors. We see upside to FY 18 consensus views, as expectations for the September '17 iPhone launch appear conservative given a larger/aging installed base and new features (e.g. OLED, wireless charging, and augmented reality). We see robust services growth and tax reform/repatriation as potential catalysts. /A. Zino-CFA

February 9, 2017
Apple Inc. has appointed Timothy Twerdahl, the former head of Amazon.com Inc.'s Fire TV unit, as a vice president in charge of Apple TV product marketing and shifted the executive who previously held the job to a spot negotiating media content deals. Twerdahl joined Apple in February 2017. He had been general manager and director of Amazon's Fire TV business since 2013. At Apple, Twerdahl reports to Greg Joswiak, a vice president in charge of marketing for the iPhone. Twerdahl's hiring frees Pete Distad, who previously occupied the role, to help lead Apple's content deal efforts, headed by Eddy Cue, the person added. Distad joined Apple in 2013 after serving as a senior vice president of content distribution at video streaming service Hulu.

February 1, 2017
08:32 am ET ... S&P CAPITAL IQ MAINTAINS STRONG BUY OPINION ON SHARES OF APPLE INC. (AAPL 121.35*****): We reiterate our 12-month target at $140, on a P/E of 13.7X our FY 18 (Sep.) EPS view, above peers to reflect AAPL's net cash per share over $31. We trim our FY 17 EPS estimate to $8.91 from $9.05 and keep FY 18's at $10.21. Despite largely expected near-term softness, we think AAPL should benefit from an improvement in the iPhone replacement cycle in FY 18, with the potential for higher selling prices/margins. We see robust services growth given a growing installed base and potential to sell content. We see foreign cash repatriation and a lower tax rate as possible catalysts. /A. Zino-CFA

Apple Inc

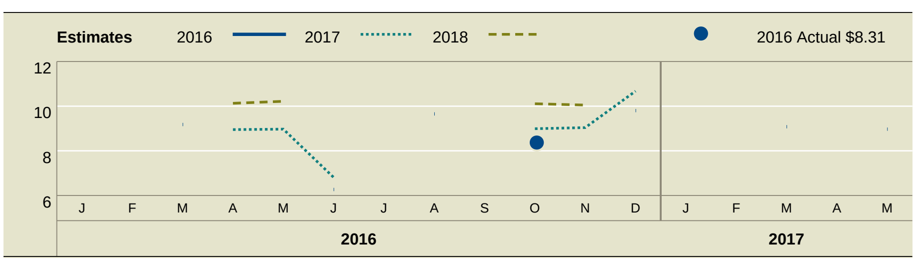
Analysts' Recommendations



Of the total 48 companies following AAPL, 47 analysts currently publish recommendations.

	No. of Recommendations	% of Total	1 Mo. Prior	3 Mos. Prior
Buy	19	40	19	0
Buy/Hold	13	28	13	0
Hold	11	23	11	0
Weak Hold	0	0	0	0
Sell	0	0	0	0
No Opinion	4	9	4	0
Total	**47**	**100**	**47**	**0**

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2017	10.40	12.05	9.00	42	14.7
2016	8.94	9.33	8.64	41	17.1
2017 vs. 2016	▲ 16%	▲ 29%	▲ 4%	▲ 2%	▼ -14%
Q3'17	1.94	2.35	1.59	26	78.9
Q3'16	NA	NA	NA	0	NM
Q3'17 vs. Q3'16	**NA**	**NA**	**NA**	**NA**	**NA**

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.

Wall Street Consensus Opinion

BUY/HOLD

Companies Offering Coverage

Over 30 firms follow this stock; not all firms are displayed.
Accountability Research Corporation
Arete Research Services LLP
Argus Research Company
Atlantic Equities LLP
BMO Capital Markets Equity Research
BTIG
Barclays
BofA Merrill Lynch
CLSA
Canaccord Genuity
Citigroup Inc
Cleveland Research Company
Cowen and Company
Credit Suisse
Daiwa Capital Markets America Inc.
Daiwa Securities Co. Ltd.
Deutsche Bank
Drexel Hamilton
Eugene Investment & Securities Co Ltd.
FBN Securities, Inc.
Goldman Sachs
Guggenheim Securities, LLC
Hilliard Lyons
JP Morgan
Kaufman Bros., L.P.
Longbow Research LLC
Macquarie Research
Maxim Group
Mirae Asset Daewoo Securities Co., Ltd.
Mizuho Securities USA, Inc.

Wall Street Consensus vs. Performance

For fiscal year 2016, analysts estimate that AAPL will earn US$ 8.94. For the 2nd quarter of fiscal year 2016, AAPL announced earnings per share of US$ 1.90, representing 21% of the total annual estimate. For fiscal year 2017, analysts estimate that AAPL's earnings per share will grow by 16% to US$ 10.40.

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 Capital IQ 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 Capital IQ'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 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.

Core Earnings

Core Earnings is a uniform methodology for adjusting operating earnings by focusing on a company's after-tax earnings generated from its principal businesses. Included in the definition are employee stock option grant expenses, pension costs, restructuring charges from ongoing operations, write-downs of depreciable or amortizable operating assets, purchased research and development, M&A related expenses and unrealized gains/losses from hedging activities. Excluded from the definition are pension gains, impairment of goodwill charges, gains or losses from asset sales, reversal of prior-year charges and provision from litigation or insurance settlements.

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 and 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 wide 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 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 wide 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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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.

STARS Stock Reports and Quantitative Stock Reports:

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STARS Stock Reports:

Global STARS Distribution as of December 30, 2016

Ranking	North America	Europe	Asia	Global
Buy	38.9%	31.5%	40.6%	37.9%
Hold	51.3%	47.1%	41.7%	49.4%
Sell	9.8%	21.4%	17.7%	12.7%
Total	100%	100%	100%	100%

Analyst Certification

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Apple Inc

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