

Equity Research

February 1, 2018

Walter Piecyk

(646) 450-9258
wpiecyk@btig.com

Joseph Galone

(212) 527-3523
jgalone@btig.com

TMT

Apple, Inc.

Revenue Guidance As Low As Feared. No Change To Apple EPS Est Or Target Thanks To Lower Tax Rate

- We are not changing our 2018 CY EPS estimate of \$12.00 or price target of \$198 as a lower tax rate assumption of 15% vs prior estimate of 19% was offset by lower gross margin estimates and lower contribution from Other income and expenses.
- As we previewed in our note last week ([Link](#)), FQ2 revenue guidance was \$60 billion compared to a consensus estimate of \$68 billion just a week ago. The consensus estimate implied a sequential rise in ASP in FQ2, but CFO Luca Maestri poured cold water on that theory during the call. We now estimate a 6.5% q/q decline in ASP in FQ2 versus our prior estimate of a 3.9% decline and yet CFO Luca Maestri appeared to be guiding to an even lower ASP.

"For ASPs, there's also another element that we need to consider. As you know, our newest products this year have higher ASPs than they had in the past. And so as a result, as we reduce inventories of these newest products, the overall ASPs for iPhone in Q2 will naturally decline sequentially by a higher percentage than we have experienced historically." -Luca Maestri, Apple CFO, 2/1/18, FQ1 2018 conference call

AAPL

\$167.78

12 month target

\$198.00

BUY

52 week range

\$128.53 - \$179.26

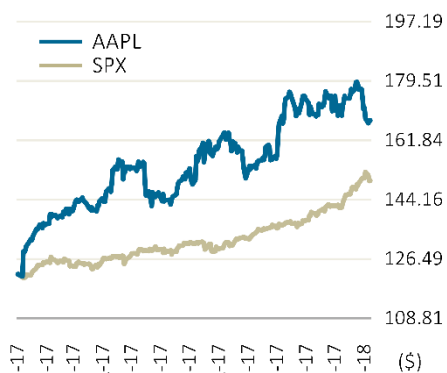
Dividend Yield

1.2%

Market Cap (m)

\$869,702

Price Performance



Source: IDC

Estimates

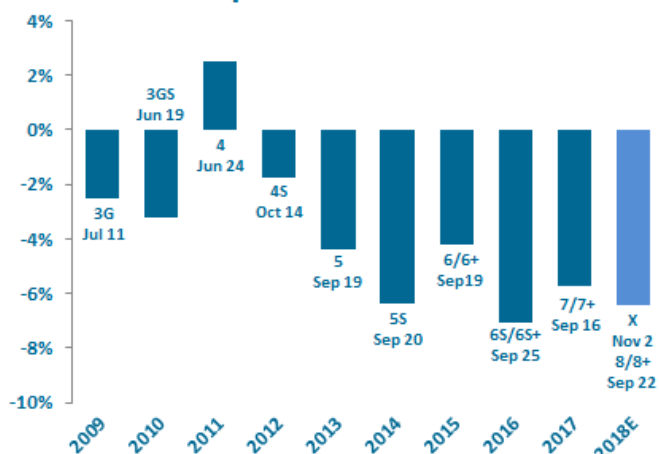
	1Q16 A	2Q16 A	3Q16 A	4Q16 A	FY16 A	1Q17 A	2Q17 A	3Q17 A	4Q17 E	FY17 E	FY18 E
Sales	75,872	50,557	42,358	46,852	215,639	78,351	52,896	45,408	52,579	229,234	257,417
Gross Margin (%)	40.1%	39.4%	38.0%	38.0%	39.1%	38.5%	38.9%	38.5%	37.9%	38.5%	38.3%
Diluted EPS (Adj.)	3.28	1.90	1.42	1.67	8.28	3.36	2.10	1.67	2.07	9.19	11.07
DPS	0.52	0.52	0.57	0.57	2.18	0.57	0.57	0.63	0.63	2.40	2.64
EPS Growth (%)	7.1%	(18.4%)	(23.0%)	(14.6%)	(10.0%)	2.3%	10.4%	16.9%	23.7%	11.0%	20.5%

Source: BTIG Estimates and Company Documents (\$ in millions, except per share amount)

Company reports and BTIG estimates

Please Read: Important disclosures and analyst's certification appear in Appendix

iPhones: Sequential ASP Growth in CQ1



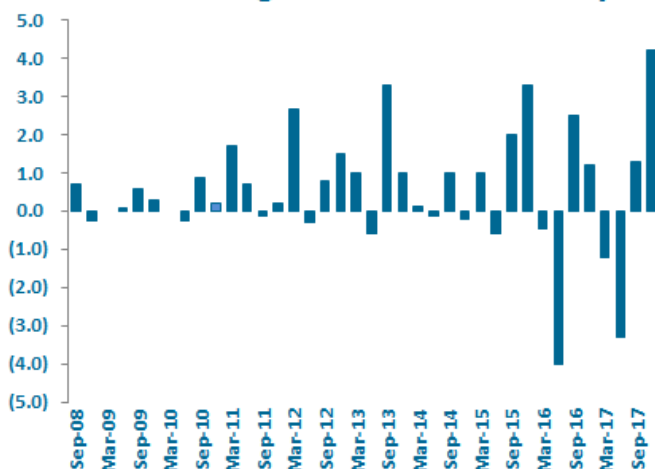
Source: Company reports; BTIG
Tags: iPhone model launched; iPhone model launch date



- Consensus numbers will be coming down for Apple, but as we suggested last week, Apple still generates impressive revenue growth. We estimate 15% in the March quarter and 10% for the Calendar year.
- Based on CFO Luca Maestri's comments, it appears that Apple added 4.2 million iPhones into the channel. Its highest quarterly inventory addition ever.

*"We exited the December quarter towards the lower end of our target range of 5 to 7 weeks of iPhone channel inventory, **with less than 1 million more iPhones in the channel compared to the December quarter a year ago**, in line with our growth in average weekly unit sales." -Luca Maestri, Apple CFO, 2/1/18, FQ1 2018 conference call*

iPhone Change in Channel Inventory



Source: Company reports; BTIG, Units in channel



- The \$796 iPhone ASP was higher than we expected in the quarter. Here is our best guess on unit mix.

Dec-2017			
Phone	Units	Mix	ASP
iPhone X	32.5	42%	\$1,052
iPhone 8+	17.5	23%	\$837
iPhone 8	17.5	23%	\$737
Legacy	9.8	13%	\$488
Total	77.3		\$859
Retail discount		8%	\$796

Source: BTIG

- Versus our estimate going into the quarter.

December Quarter	BTIG Unit Ests			BTIG Unit Mix			Wave7 Unit Mix	BTIG ASP Ests		
	Low	Midpoint	High	Low	Midpoint	High		Low	Midpoint	High
iPhone X	29.0	32.0	35.0	36%	40%	44%	25%	\$1,044	\$1,052	\$1,059
64GB	20.3	20.7	21.0	70%	65%	60%	62%	\$999	\$999	\$999
256GB	8.7	11.4	14.0	30%	35%	40%	38%	\$1,149	\$1,149	\$1,149
iPhone 8+	10.0	14.0	18.0	13%	18%	23%	26%	\$829	\$837	\$844
64GB	8.0	10.3	12.6	80%	75%	70%	75%	\$799	\$799	\$799
256GB	2.0	3.7	5.4	20%	25%	30%	25%	\$949	\$949	\$949
iPhone 8	10.0	11.0	12.0	13%	14%	15%	28%	\$729	\$737	\$744
64GB	8.0	8.2	8.4	80%	75%	70%	75%	\$699	\$699	\$699
256GB	2.0	2.8	3.6	20%	25%	30%	25%	\$849	\$849	\$849
Legacy	31.0	23.0	15.0	39%	29%	19%	21%	\$475	\$488	\$500
Total	80.0	80.0	80.0					\$757	\$808	\$859
Retail discount				10%	8%	5%		\$682	\$749	\$816

Source: BTIG estimates, Wave7. Data from Wave7 surveys: 12/16/17 and 10/15/17

- As a result, we are bumping up our FQ2 iPhone ASP by \$25 to \$745 and lowering our unit estimate by 1 million to 52 million, which lifts our FQ2 total revenue estimate by \$500 million to \$60.9 billion, the mid-point of the guidance range of \$60-\$62 billion.
- We increased our Calendar 2018 revenue estimate by \$700 million. A \$2.0 billion increase to iPhone revenue (on higher ASP assumptions) was partially offset by lower estimates for Mac unit sales and services revenue. It's notable that we are cutting Services revenue and that growth was under 20% despite the focus of this line item early in the call. We cut some unit growth from our iPhone expectations, but expect low single digit unit growth each quarter.
- The weak guidance for FQ2 gross margins caused us to cut our GM estimate for Calendar 2018 by 70 basis points to 38.3%, a 10 basis point contraction from 2017.
- We bumped up our R&D estimate by \$700 million for the year. It grew 19% this quarter and regularly outpaces our estimates. We expect R&D to represent 5.3% of revenue in Calendar 2018, up from 2.8% in Calendar 2013. No one on the call asked about what the R&D priorities are, but we did get a lengthy description of the HomePod, even though Other Products represented 6.0% of revenue in Calendar 2017.

- Our Calendar 2018 EPS estimate would have been cut to \$11.44 from \$12.00 if the company had not guided to the 15% tax rate versus our 19% estimate.
- Share repurchase finally rose to \$10 billion and we expect it to stay at those levels in future quarters in order to hit our target.

"Tax reform will allow us to pursue a more optimal capital structure for our company. Our current net cash position is \$163 billion, and given the increased financial and operational flexibility from the access to our foreign cash, we are targeting to become approximately net cash neutral over time. We will provide an update to our specific capital allocation plans when we report results for our second fiscal quarter, consistent with the timing of updates that we had provided in the past." -Luca Maestri, Apple CFO, 2/1/18, FQ1 2018 conference call

- Our \$10 billion estimate of quarterly share repurchase might be prove to be too low based on CFO Luca Maestri's comments above. If Apple bought \$15 billion of stock back each quarter it would lift our \$12.00 EPS estimate up to \$12.19.
- Tables that compare our estimate revisions are below.

Income Statement

Apple Income Statement											Est	Est	Est	Est	Est		
\$ millions	2015	Dec	Mar	Jun	Sep	2016	Dec	Mar	Jun	Sep	2017	Dec	Mar	Jun	Sep	2018	Dec
Revenues	233,715	75,872	50,557	42,358	46,852	215,639	78,351	52,896	45,408	52,579	229,234	88,293	60,875	51,069	57,180	257,417	93,467
Cost of goods sold	140,089	45,449	30,636	26,252	29,039	131,376	48,175	32,305	27,920	32,648	141,048	54,381	37,438	31,663	35,452	158,934	57,482
Gross profit	93,626	30,423	19,921	16,106	17,813	84,263	30,176	20,591	17,488	19,931	88,186	33,912	23,437	19,406	21,729	98,484	35,985
R&D	8,067	2,404	2,511	2,560	2,570	10,045	2,871	2,776	2,937	2,997	11,581	3,407	3,348	3,371	3,431	13,556	3,739
SG&A	14,329	3,848	3,423	3,441	3,482	14,194	3,946	3,718	3,783	3,814	15,261	4,231	4,322	4,204	4,148	16,904	4,432
Operating Income	71,230	24,171	13,987	10,105	11,761	60,024	23,359	14,097	10,768	13,120	61,344	26,274	15,767	11,832	14,150	68,023	27,814
Other inc and exp	1,285	402	155	364	427	1,348	821	587	540	797	2,745	756	300	300	300	1,656	300
NIBT	72,515	24,573	14,142	10,469	12,188	61,372	24,180	14,684	11,308	13,917	64,089	27,030	16,067	12,132	14,450	69,679	28,114
Taxes	19,121	6,212	3,626	2,673	3,174	15,685	6,289	3,655	2,591	3,203	15,738	6,965	2,410	1,820	2,167	13,362	4,217
Net Income	53,394	18,361	10,516	7,796	9,014	45,687	17,891	11,029	8,717	10,714	48,351	20,065	13,657	10,312	12,282	56,316	23,897
EPS	\$9.20	\$3.28	\$1.90	\$1.42	\$1.67	\$8.28	\$3.36	\$2.10	\$1.67	\$2.07	\$9.19	\$3.89	\$2.68	\$2.04	\$2.46	\$11.07	\$4.83
Shares out	5,793	5,594	5,541	5,473	5,393	5,500	5,328	5,262	5,233	5,184	5,252	5,158	5,103	5,050	4,999	5,077	4,950
Dividends per share	\$1.98	\$0.52	\$0.52	\$0.57	\$0.57	\$2.18	\$0.57	\$0.57	\$0.63	\$0.63	\$2.40	\$0.63	\$0.63	\$0.69	\$0.69	\$2.64	\$0.69
Dividends	11,464	2,909	2,881	3,119	3,074	11,984	3,037	2,999	3,297	3,266	12,599	3,249	3,215	3,484	3,449	13,398	3,416
Margins																	
GPM	40.1%	40.1%	39.4%	38.0%	38.0%	39.1%	38.5%	38.9%	38.5%	37.9%	38.5%	38.4%	38.5%	38.0%	38.0%	38.3%	38.5%
R&D/Revenue	3.5%	3.2%	5.0%	6.0%	5.5%	4.7%	3.7%	5.2%	6.5%	5.7%	5.1%	3.9%	5.5%	6.6%	6.0%	5.3%	4.0%
SG&A/Revenue	6.1%	5.1%	6.8%	8.1%	7.4%	6.6%	5.0%	7.0%	8.3%	7.3%	6.7%	4.8%	7.1%	8.2%	7.3%	6.6%	4.7%
Operating Inc	30.5%	31.9%	27.7%	23.9%	25.1%	27.8%	29.8%	26.7%	23.7%	25.0%	26.8%	29.8%	25.9%	23.2%	24.7%	26.4%	29.8%
NIBT	31.0%	32.4%	28.0%	24.7%	26.0%	28.5%	30.9%	27.8%	24.9%	26.5%	28.0%	30.6%	26.4%	23.8%	25.3%	27.1%	30.1%
Tax rate	26.4%	25.3%	25.6%	25.5%	26.0%	25.6%	26.0%	24.9%	22.9%	23.0%	24.6%	25.8%	15.0%	15.0%	15.0%	19.2%	15.0%
Net Income	22.8%	24.2%	20.8%	18.4%	19.2%	21.2%	22.8%	20.9%	19.2%	20.4%	21.1%	22.7%	22.4%	20.2%	21.5%	21.9%	25.6%
Annual growth																	
Revenues	27.9%	1.7%	-12.8%	-14.6%	-9.0%	-7.7%	3.3%	4.6%	7.2%	12.2%	6.3%	12.7%	15.1%	12.5%	8.8%	12.3%	5.9%
Operating Income	35.7%	-0.3%	-23.5%	-28.2%	-19.6%	-15.7%	-3.4%	0.8%	6.6%	11.6%	2.2%	12.5%	11.8%	9.9%	7.8%	10.9%	5.9%
NIBT	35.6%	0.6%	-23.8%	-27.7%	-19.1%	-15.4%	-1.6%	3.8%	8.0%	14.2%	4.4%	11.8%	9.4%	7.3%	3.8%	8.7%	4.0%
Net Income	35.1%	1.9%	-22.5%	-27.0%	-19.0%	-14.4%	-2.6%	4.9%	11.8%	18.9%	5.8%	12.2%	23.8%	18.3%	14.6%	16.5%	19.1%
EPS	43.0%	7.1%	-18.4%	-23.0%	-14.6%	-10.0%	2.3%	10.4%	16.9%	23.7%	11.0%	15.9%	27.7%	22.6%	18.9%	20.5%	24.1%
Dividends	9.3%	10.6%	10.6%	9.6%	9.6%	10.1%	9.6%	9.6%	10.5%	10.5%	10.1%	10.5%	10.5%	9.5%	9.5%	10.0%	9.5%

Source: Company reports; BTIG

Revenues

Apple Revenue Analysis																
\$ millions	2015	Dec-15	Mar-16	Jun-16	Sep-16	2016	Dec-16	Mar-17	Jun-17	Sep-17	2017	Dec-17	Est Mar-18	Est Jun-18	Est Sep-18	Est Dec-18
Revenue by Product	233,715	75,872	50,557	42,358	46,852	215,639	78,351	52,896	45,408	52,579	229,234	88,293	60,875	51,069	57,180	257,417
iPhone	155,041	51,635	32,857	24,048	28,160	136,700	54,378	33,249	24,846	28,846	141,319	61,576	38,740	28,560	32,290	161,166
iPad	23,227	7,084	4,413	4,876	4,255	20,628	5,533	3,889	4,969	4,831	19,222	5,862	4,446	4,815	4,681	19,804
Mac	25,471	6,746	5,107	5,239	5,739	22,831	7,244	5,844	5,592	7,170	25,850	6,895	5,990	5,674	7,276	25,835
Services	19,909	6,056	5,991	5,976	6,325	24,348	7,172	7,041	7,266	8,501	29,980	8,471	8,449	8,719	9,433	35,073
Other Products	10,067	4,351	2,189	2,219	2,373	11,132	4,024	2,873	2,735	3,231	12,863	5,489	3,250	3,300	3,500	15,539
Annual Revenue Growth	27.9%	1.7%	-12.8%	-14.6%	-9.0%	-7.7%	3.3%	4.6%	7.2%	12.2%	6.3%	12.7%	15.1%	12.5%	8.8%	12.3%
iPhone	52.0%	0.9%	-18.4%	-23.3%	-12.6%	-11.8%	5.3%	1.2%	3.3%	2.4%	3.4%	13.2%	16.5%	14.9%	11.9%	14.0%
iPad	-23.3%	-21.2%	-18.7%	7.4%	-0.5%	-11.2%	-21.9%	-11.9%	1.9%	13.5%	-6.8%	5.9%	14.3%	-3.1%	-3.1%	3.0%
Mac	5.8%	-2.9%	-9.0%	-13.1%	-16.6%	-10.4%	7.4%	14.4%	6.7%	24.9%	13.2%	-4.8%	2.5%	1.5%	1.5%	-0.1%
Services	10.2%	26.2%	19.9%	18.9%	24.4%	22.3%	18.4%	17.5%	21.6%	34.4%	23.1%	18.1%	20.0%	20.0%	11.0%	17.0%
Other Products	20.1%	61.8%	29.6%	-16.0%	-22.1%	10.6%	-7.5%	31.2%	23.3%	36.2%	15.5%	36.4%	13.1%	20.7%	8.3%	20.8%
Revenue Mix																
iPhone	66.3%	68.1%	65.0%	56.8%	60.1%	63.4%	69.4%	62.9%	54.7%	54.9%	61.6%	69.7%	63.6%	55.9%	56.5%	62.6%
iPad	9.9%	9.3%	8.7%	11.5%	9.1%	9.6%	7.1%	7.4%	10.9%	9.2%	8.4%	6.6%	7.3%	9.4%	8.2%	7.7%
Mac	10.9%	8.9%	10.1%	12.4%	12.2%	10.6%	9.2%	11.0%	12.3%	13.6%	11.3%	7.8%	9.8%	11.1%	12.7%	10.0%
Services	8.5%	8.0%	11.8%	14.1%	13.5%	11.3%	9.2%	13.3%	16.0%	16.2%	13.1%	9.6%	13.9%	17.1%	16.5%	13.6%
Other Products	4.3%	5.7%	4.3%	5.2%	5.1%	5.2%	5.1%	5.4%	6.0%	6.1%	5.6%	6.2%	5.3%	6.5%	6.1%	6.0%
Units																
iPhone	231,218	74,779	51,193	40,399	45,513	211,884	78,290	50,763	41,026	46,677	216,756	77,316	52,000	42,000	47,500	218,816
iPad	54,856	16,122	10,251	9,950	9,267	45,590	13,081	8,922	11,424	10,326	43,753	13,170	10,000	10,853	9,810	43,833
Mac	20,587	5,312	4,034	4,252	4,886	18,484	5,374	4,199	4,292	5,386	19,251	5,112	4,304	4,399	5,521	19,336
Annual Unit Growth																
iPhone	36.6%	0.4%	-16.3%	-15.0%	-5.3%	-8.4%	4.7%	-0.8%	1.6%	2.6%	2.3%	-1.2%	2.4%	2.4%	1.8%	1.0%
iPad	-19.3%	-24.7%	-18.8%	-9.0%	-6.2%	-16.9%	-18.9%	-13.0%	14.8%	11.4%	-4.0%	0.7%	12.1%	-5.0%	-5.0%	0.2%
Mac	8.9%	-3.8%	-11.6%	-11.3%	-14.4%	-10.2%	1.2%	4.1%	0.9%	10.2%	4.1%	-4.9%	2.5%	2.5%	2.5%	0.4%
Sequential Unit Growth																
iPhone		55.6%	-31.5%	-21.1%	12.7%		72.0%	-35.2%	-19.2%	13.8%		65.6%	-32.7%	-19.2%	13.1%	
iPad		63.1%	-36.4%	-2.9%	-6.9%		41.2%	-31.8%	28.0%	-9.6%		27.5%	-24.1%	8.5%	-9.6%	
Mac		-7.0%	-24.1%	5.4%	14.9%		10.0%	-21.9%	2.2%	25.5%		-5.1%	-15.8%	2.2%	25.5%	
Average Sales Prices																
iPhone	671	691	642	595	619	645	695	655	606	618	652	796	745	680	680	737
iPad	423	439	430	490	459	452	423	436	435	468	439	445	445	444	477	452
Mac	1,237	1,270	1,266	1,232	1,175	1,235	1,348	1,392	1,303	1,331	1,343	1,349	1,392	1,290	1,318	1,336
Annual ASP Growth																
iPhone	11.3%	0.5%	-2.5%	-9.8%	-7.7%	-3.8%	0.6%	2.1%	1.7%	-0.1%	1.1%	14.7%	13.7%	12.3%	10.0%	13.0%
iPad	-5.0%	4.7%	0.1%	18.0%	6.1%	6.9%	-3.7%	1.3%	-11.2%	1.9%	-2.9%	5.2%	2.0%	2.0%	2.0%	2.8%
Mac	-2.9%	0.9%	2.9%	-2.0%	-2.6%	-0.2%	6.1%	9.9%	5.7%	13.3%	8.7%	0.1%	0.0%	-1.0%	-1.0%	-0.5%
Sequential ASP Growth																
iPhone		3.0%	-7.0%	-7.3%	3.9%		12.3%	-5.7%	-7.5%	2.0%		28.9%	-6.5%	-8.7%	0.0%	
iPad		1.6%	-2.0%	13.8%	-6.3%		-7.9%	3.1%	-0.2%	7.6%		-4.9%	-0.1%	-0.2%	7.6%	
Mac		5.3%	-0.3%	-2.7%	-4.7%		14.8%	3.2%	-6.4%	2.2%		1.3%	3.2%	-7.3%	2.2%	

Source: Company reports; BTIG

Estimate Revisions - Income Statement

Apple Income Statement	OLD	NEW	Diff	OLD	NEW	Diff	OLD	NEW	Diff
\$ millions	Mar-18	Mar-18		FY2018	FY2018		CY2018	CY2018	
Revenues	60,379	60,875	496	255,187	257,417	2,230	261,889	262,591	703
Cost of goods sold	36,650	37,438	788	156,304	158,934	2,629	159,870	162,035	2,165
Gross profit	23,729	23,437	(292)	98,883	98,484	(399)	102,019	100,556	(1,463)
R&D	3,229	3,348	119	13,041	13,556	515	13,197	13,888	691
SG&A	4,244	4,322	78	17,106	16,904	(201)	17,408	17,106	(302)
Operating Income	16,256	15,767	(489)	68,735	68,023	(713)	71,414	69,563	(1,852)
Other inc and exp	600	300	(300)	2,400	1,656	(744)	2,425	1,200	(1,225)
NIBT	16,856	16,067	(789)	71,135	69,679	(1,457)	73,839	70,763	(3,077)
Taxes	3,203	2,410	(793)	15,209	13,362	(1,847)	14,029	10,614	(3,415)
Net Income	13,653	13,657	3	55,926	56,316	390	59,810	60,148	338
EPS	\$2.69	\$2.68	(\$0.02)	\$11.06	\$11.07	\$0.01	\$12.00	\$12.00	(\$0.00)
Shares out	5,072	5,103	30	5,047	5,077	30	4,982	5,011	29
Dividends per share	\$0.63	\$0.63	\$0.00	\$2.64	\$2.64	\$0.00	\$2.70	\$2.70	\$0.00
Dividends	3,195	3,215	19	13,318	13,398	80	13,484	13,564	80
Margins									
GPM	39.3%	38.5%	-0.8%	38.7%	38.3%	-0.5%	39.0%	38.3%	-0.7%
R&D/Revenue	5.3%	5.5%	0.2%	5.1%	5.3%	0.2%	5.0%	5.3%	0.2%
SG&A/Revenue	7.0%	7.1%	0.1%	6.7%	6.6%	-0.1%	6.6%	6.5%	-0.1%
Operating Inc	26.9%	25.9%	-1.0%	26.9%	26.4%	-0.5%	27.3%	26.5%	-0.8%
NIBT	27.9%	26.4%	-1.5%	27.9%	27.1%	-0.8%	28.2%	26.9%	-1.2%
Tax rate	19.0%	15.0%	-4.0%	21.4%	19.2%	-2.2%	19.0%	15.0%	-4.0%
Net Income	22.6%	22.4%	-0.2%	21.9%	21.9%	0.0%	22.8%	22.9%	0.1%
Annual growth									
Revenues	14.1%	15.1%	0.9%	11.3%	12.3%	1.0%	10.6%	9.8%	-0.8%
Operating Income	15.3%	11.8%	-3.5%	12.0%	10.9%	-1.2%	12.6%	8.3%	-4.3%
NIBT	14.8%	9.4%	-5.4%	11.0%	8.7%	-2.3%	11.9%	5.7%	-6.2%
Net Income	23.8%	23.8%	0.0%	15.7%	16.5%	0.8%	19.9%	19.0%	-0.9%
EPS	28.4%	27.7%	-0.7%	20.4%	20.5%	0.1%	24.9%	23.5%	-1.3%
Dividends	10.5%	10.5%	0.0%	10.0%	10.0%	0.0%	9.8%	9.8%	0.0%

Source: Company reports; BTIG

Estimate Revisions – Revenues

Apple Revenue Analysis	OLD	NEW	Diff	OLD	NEW	Diff	OLD	NEW	Diff
\$ millions	Mar-18	Mar-18		FY2018	FY2018		CY2018	CY2018	
Revenue by Product	60,379	60,875	496	255,187	257,417	2,230	261,889	262,591	703
iPhone	38,186	38,740	554	158,718	161,166	2,448	163,199	165,215	2,016
iPad	4,446	4,446	0	19,767	19,804	38	19,586	19,623	36
Mac	6,049	5,990	(58)	26,801	25,835	(965)	26,952	25,937	(1,015)
Services	8,449	8,449	0	35,351	35,073	(279)	37,101	36,767	(335)
Other Products	3,250	3,250	0	14,550	15,539	989	15,050	15,050	0
Annual Revenue Growth	14.1%	15.1%	0.9%	11.3%	12.3%	1.0%	10.6%	9.8%	-0.8%
iPhone	14.8%	16.5%	1.7%	12.3%	14.0%	1.7%	11.6%	11.2%	-0.4%
iPad	14.3%	14.3%	0.0%	2.8%	3.0%	0.2%	0.4%	0.4%	0.0%
Mac	3.5%	2.5%	-1.0%	3.7%	-0.1%	-3.7%	2.6%	1.7%	-0.8%
Services	20.0%	20.0%	0.0%	17.9%	17.0%	-0.9%	17.6%	17.5%	0.0%
Other Products	13.1%	13.1%	0.0%	13.1%	20.8%	7.7%	12.8%	5.0%	-7.8%
Revenue Mix									
iPhone	63.2%	63.6%	0.4%	62.2%	62.6%	0.4%	62.3%	62.9%	0.6%
iPad	7.4%	7.3%	-0.1%	7.7%	7.7%	-0.1%	7.5%	7.5%	0.0%
Mac	10.0%	9.8%	-0.2%	10.5%	10.0%	-0.5%	10.3%	9.9%	-0.4%
Services	14.0%	13.9%	-0.1%	13.9%	13.6%	-0.2%	14.2%	14.0%	-0.2%
Other Products	5.4%	5.3%	0.0%	5.7%	6.0%	0.3%	5.7%	5.7%	0.0%
Units									
iPhone	53,000	52,000	(1,000)	223,000	218,816	(4,184)	226,500	221,500	(5,000)
iPad	10,000	10,000	0	44,163	43,833	(330)	43,488	43,174	(314)
Mac	4,346	4,304	(42)	19,925	19,336	(589)	20,092	19,464	(628)
Annual Unit Growth									
iPhone	4.4%	2.4%	-2.0%	2.9%	1.0%	-1.9%	4.2%	2.6%	-1.5%
iPad	12.1%	12.1%	0.0%	0.9%	0.2%	-0.8%	-1.5%	-1.5%	0.0%
Mac	3.5%	2.5%	-1.0%	3.5%	0.4%	-3.1%	3.4%	2.5%	-0.9%
Sequential Unit Growth									
iPhone	-32.9%	-32.7%	0.2%						
iPad	-25.9%	-24.1%	1.9%						
Mac	-21.9%	-15.8%	6.1%						
Average Sales Prices									
iPhone	720	745	25	712	737	25	721	746	25
iPad	445	445	0	448	452	4	450	454	4
Mac	1,392	1,392	0	1,345	1,336	(9)	1,341	1,333	(9)
Annual ASP Growth									
iPhone	10.0%	13.7%	3.7%	9.2%	13.0%	3.8%	7.2%	8.4%	1.2%
iPad	2.0%	2.0%	0.0%	1.9%	2.8%	1.0%	2.0%	1.9%	0.0%
Mac	0.0%	0.0%	0.0%	0.2%	-0.5%	-0.7%	-0.8%	-0.8%	0.0%
Sequential ASP Growth									
iPhone	-3.9%	-6.5%	-2.5%						
iPad	3.1%	-0.1%	-3.2%						
Mac	0.9%	3.2%	2.3%						

Source: Company reports; BTIG

BTIG Covered Companies Mentioned in this Report

APPLE, INC. (AAPL, Buy, \$198.00 PT; Current Price: \$167.78; Analyst: Walter.Pieczyk)

Appendix: Analyst Certification and Other Important Disclosures

Analyst Certification

I, Walter Piecyk, hereby certify that the views about the companies and securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

I, Joseph Galone, hereby certify that the views about the companies and securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

Regulatory Disclosures

Ratings Definitions

BTIG LLC's ("BTIG") ratings, effective June 12, 2017, are defined as follows:

BUY – A security which is expected to produce a positive total return of 15% or greater over the 12 months following the recommendation. The BUY rating may be maintained as long as it is deemed appropriate, notwithstanding price fluctuations that would cause the target to fall outside of the 15% return.

SELL – A security which is expected to produce a negative total return of 15% or greater over the next 12 months following the recommendation. The SELL rating may be maintained as long as it is deemed appropriate, notwithstanding price fluctuations that would cause the target to fall outside of the 15% return.

NEUTRAL – A security which is not expected to appreciate or depreciate meaningfully over the next 12 months.

NOT RATED – A security which is not rated or covered by BTIG.

UNDER REVIEW – Effective immediately, coverage of the following securities is Under Review. Ratings, price targets, disclosures, and estimates for the companies listed below are suspended and should no longer be relied upon.

Distribution of Ratings and Investment Banking Clients

BTIG must disclose in each research report the percentage of all securities rated by the member to which the member would assign a "buy", "neutral" or "sell" rating. The said ratings are updated on a quarterly basis. BTIG must also disclose the percentage of subject companies within each of these three categories for whom the member has provided investment banking services within the previous twelve months. **Stocks under coverage as of the end of the most recent calendar quarter (December 31, 2017): 278**

Distribution of BTIG's Research Recommendations (as of December 31, 2017):

BUY: 59.0%; NEUTRAL: 37.0%; SELL: 4.0%

Distribution of BTIG's Investment Banking Services (as of December 31, 2017):

BUY: 20.1%; NEUTRAL: 6.8%; SELL: 0.0%

For purposes of FINRA ratings distribution rules, BTIG's stock ratings of Buy, Neutral and Sell fall into Buy, Hold and Sell categories, respectively.

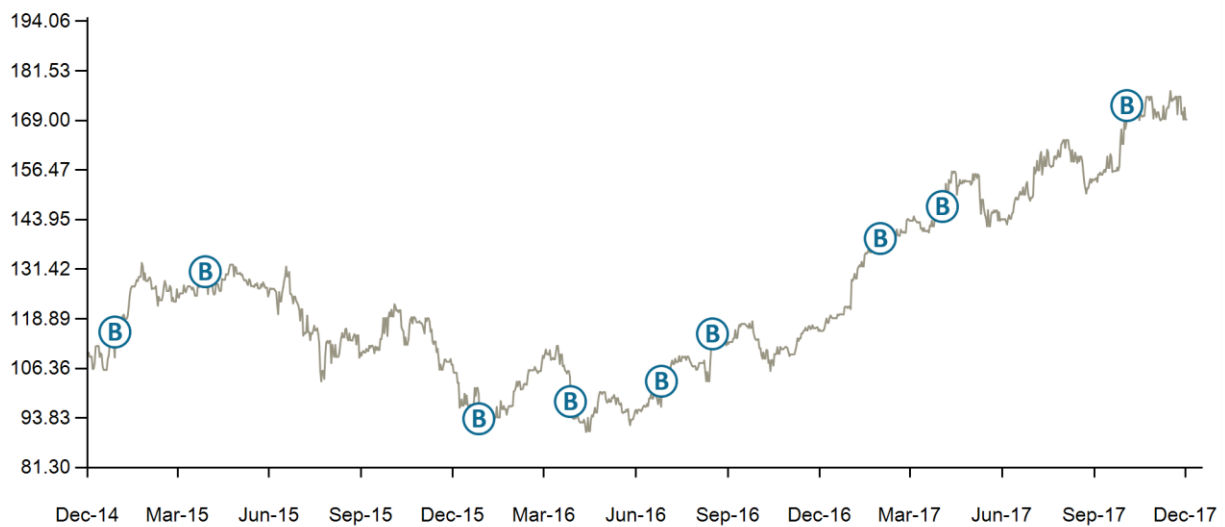
Company Valuation and Risk Disclosures

Apple, Inc. (AAPL, Buy, \$198.00 PT)

Valuation: Our \$198 price target is based on 16.5x our CY 2018 EPS estimate of \$12.00, which reflects 23.5% growth in that year. Our price target implies a free cash flow yield of 6.5% and 7.6% if you reduced the market cap by the more than \$150 billion of net cash.

Risks: Apple competes against a number of traditional and start-up wireless device manufacturers who are constantly bringing new products to market that could potentially take share from the company. These competitors could also be more willing to cut prices and have promotional offers in the market.

Apple, Inc. (AAPL)



Note: Closing Price and Target Price have been adjusted for corporate actions.

Date	Closing Price (\$)	Target Price (\$)	Analyst	Rating
20-May-10	33.97	47.14	Walter Piecyk	Buy
21-Jul-10	36.32	50	Walter Piecyk	Buy
12-Oct-10	42.65	53.57	Walter Piecyk	Buy
16-Mar-11	47.14	64.29	Walter Piecyk	Buy
19-Jul-11	53.84	71.43	Walter Piecyk	Buy
18-Oct-11	60.32	78.57	Walter Piecyk	Buy
05-Jan-12	59.72	82.86	Walter Piecyk	Buy
24-Jan-12	60.06	85.71	Walter Piecyk	Buy
09-Apr-12	90.89	NA	Walter Piecyk	Neutral
14-Mar-13	61.79	77.14	Walter Piecyk	Buy
06-Feb-14	73.22	78.86	Walter Piecyk	Buy
24-Apr-14	81.11	85.71	Walter Piecyk	Buy
01-Jul-14	93.52	112	Walter Piecyk	Buy
21-Oct-14	102.47	128	Walter Piecyk	Buy
18-Nov-14	115.47	135	Walter Piecyk	Buy
28-Jan-15	115.31	150	Walter Piecyk	Buy
28-Apr-15	130.56	160	Walter Piecyk	Buy
26-Jan-16	93.42	141	Walter Piecyk	Buy
26-Apr-16	97.82	115	Walter Piecyk	Buy
26-Jul-16	102.95	124	Walter Piecyk	Buy
15-Sep-16	114.92	133	Walter Piecyk	Buy
01-Mar-17	138.96	165	Walter Piecyk	Buy
02-May-17	147.06	184	Walter Piecyk	Buy
02-Nov-17	172.50	198	Walter Piecyk	Buy

Note: Apple completed a 7-for-1 stock split after the close on June 6, 2014.

Other Disclosures

Additional Information Available Upon Request

General Disclosures

Research reports produced by BTIG LLC ("BTIG") are published for and intended to be distributed solely to BTIG institutional and corporate clients. Recipients of BTIG reports will not be considered clients of BTIG solely because they may have received such BTIG report.

The research analyst(s) responsible for the preparation of this report receives compensation based upon a variety of factors, including the quality and accuracy of research, internal/client feedback, and overall Firm revenues.

BTIG reports are based on public information and BTIG considers the same to be reliable, comprehensive information, but makes no representation or warranty that the reports are accurate or complete. BTIG opinions and information provided in this report are as of the date of the report and may change without notice. An issuer may be classified as "Under Review" or "Research Restricted". In these cases, investors should consider any previous investment recommendation and/or rating to a subject company/issuer to no longer be current and should not be relied upon nor considered a solicitation.

This research report is not an offer to buy or sell or solicitation of an offer to buy or sell any security in any jurisdiction where such an offer or solicitation would be illegal. This research report was not drafted specifically for any particular individual or entity and is not a personal recommendation to participate in any particular trading strategy or transaction. Any recipient of this research report should obtain independent advice specific to their personal circumstances before undertaking any investment activity and must make their own independent evaluation of any securities or financial instruments.

Facts, views or opinions presented in this report have not been reviewed by, and may not reflect information known to, employees or other professionals in the "BTIG Group" (BTIG Group includes, but is not limited to, BTIG and its parents, subsidiaries and/or affiliates). BTIG Group employees, including Sales Representatives and Traders, may provide oral or written commentary or advice that may be inconsistent with the opinions and/or views expressed in this research report. BTIG Group employees and/or its affiliates not involved in the preparation of this research report may have investments in securities or derivatives of securities of companies mentioned in this report that are inconsistent with the views discussed in this report.

Investors in securities products bear certain risks in conjunction with those investments. The value of, and income from, any investments may vary because of changes in interest rates or foreign exchange rates, securities prices or market indexes, operational or financial conditions of companies or other factors within or beyond the companies control. Recipient of the research reports should be aware that investments in securities may pose significant risks due to the inherent uncertainty associated with relying on forecasts of various factors that can affect the earnings, cash flow and overall valuation of a company. Any investment in securities should be undertaken only upon consideration of issues relating to the recipient's overall investment portfolio and objectives (such as diversification by asset class, industry or company) as well as time horizon and liquidity needs. Further, past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. There may be time limitations on the exercise of options or other rights in any securities transactions.

Investing in foreign markets and securities, including ADRs, is subject to additional risks such as currency fluctuation, limited information, political instability, economic risk, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks. Non-U.S. reporting issuers of foreign securities, however, may not make regular or complete public disclosure relating to their financial condition or the securities that they issue.

The trademarks and service marks contained herein are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability of any damages of any kind relating to such data. The report or any portion hereof may not be reprinted, sold or redistributed without the written consent of BTIG. This report is intended only for use by the recipient. The recipient acknowledges that all research and analysis in this report are the property of BTIG and agrees to limit the use of all publications received from BTIG within his, or her or its, own

company or organization. No rights are given for passing on, transmitting, re transmitting or reselling the information provided.

Jurisdiction and Dissemination

BTIG is a U.S. broker-dealer and member of FINRA and SIPC.

BTIG Australia Limited ACN 128 554 601, member of ASIC and ASX; BTIG Hong Kong Limited, an Exchange Participant of SEHK and licensed and regulated by the SFC; BTIG Ltd, member of the LSE, authorized and regulated by the FSA; and BTIG Singapore Pte Ltd, registered and licensed with MAS; are all separate but affiliated entities of BTIG. Unless governing law permits otherwise, you must contact a BTIG entity in your home jurisdiction for further information, or if you want to use our services in effecting a transaction.

Issues and approved for distribution in the UK and EEA by BTIG Ltd. to eligible counterparties and professional clients only. Issued and distributed in Australia to “wholesale clients” only by BTIG Australia Limited. In Singapore and Hong Kong, further information may be obtained from BTIG Singapore Pte Ltd and BTIG Hong Kong Limited, respectively.