August 6, 2015

Apple, Inc.

Addressing Investor Debates

Industry View	Stock Rating	Price Target
Cautious	**Overweight**	**$155.00**

AAPL shares are down 12% since earnings mainly on the back of fears that iPhone units will decline in FY16. We are buyers on weakness ahead of iPhone unit and gross margin expansion in FY16.

Key Debate 1: Can iPhone units grow in FY16? We believe iPhone units will grow next year, supported by continued upgrades of the installed base and the compelling value proposition of a discounted iPhone 6/+. Our 3% FY16 iPhone unit growth is predicated on continued upgrades with slowing new user additions (**Exhibit 2**and **Exhibit 3**). More specifically, only 27% of the 82% of US consumers who planned to upgrade to the larger screen iPhone have done so to-date (**Exhibit 1**) suggesting Apple is less than 1/3 through the upgrade cycle. We'd also note that iPhone 6/+ growth remained strong in the June quarter (units +35% Y/Y) despite approaching a refresh and macro pressures in international markets. This supports the view of strong continued 6/+ demand post an expected $100 price cut in September. We don't expect Apple to be fully immune to weak China but we'd highlight smartphones over $300 taking share as a sign Apple is converting previously mid-market smartphone purchasers to their platform (**Exhibit 4** and **Exhibit 5**). Lastly, our AlphaWise Smartphone Tracker, which compiles sell-through data using web search analysis, indicates 53.5M end demand for the September quarter based on data through the month of July compared to our forecast of 49M (**Exhibit 6**), with no noticeable slowdown in China relative to other regions.

Key Debate 2: Can Apple grow EPS in FY16 with slower iPhone growth? A combination of services/Watch growth, expanding iPhone margins, and share repurchases deliver 13% base case EPS growth in FY16. Importantly, gross margin will likely rise in FY16, potentially more than implied in our base case. In the June quarter, core margins increased 250bps after adjusting for currency, warranty accruals, mix, and scale – most of which will normalize in coming quarters (**Exhibit 9**). We believe margin expansion is a function of lower component costs given weak demand outside of iPhone as well as currency benefits that are passed back to Apple from international suppliers. Historically, Apple gross margin tends to improve when component costs, and particularly NAND pricing falls (**Exhibit 7**). Our base case model assumes 60bps gross margin expansion in FY16 compared to 340bps during the iPhone 4S cycle (**Exhibit 8**) and the 250bps (all else equal) implied by June results. Every 100bps incremental gross margin expansion contributes $0.34 to EPS, or nearly 4 points of growth.

Key Debate 3: Does iPhone dependency limit valuation? We believe it does. While iPhone loyalty is higher than peers, creating more of a recurring-like revenue base, investors are likely to pay a higher multiple in a scenario of

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Apple, Inc. (AAPL.O, AAPL US)

IT Hardware / United States of America

Stock Rating	**Overweight**
Industry View	**Cautious**
Price target	**$155.00**
Shr price, close (Aug 5, 2015)	$115.40
Mkt cap, curr (mm)	$661,025
52-Week Range	$134.54-93.28

Fiscal Year Ending	09/14	09/15e	09/16e	09/17e
ModelWare EPS ($)	**6.45**	**9.14**	**10.29**	**11.14**
Prior ModelWare EPS ($)	-	-	-	-
P/E	**15.6**	**12.6**	**11.2**	**10.4**
Consensus EPS ($)§	**6.33**	**9.12**	**9.78**	**10.91**
Div yld (%)	1.8	1.7	1.9	2.1

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework
§ = Consensus data is provided by Thomson Reuters Estimates
e = Morgan Stanley Research estimates

QUARTERLY MODELWARE EPS ($)

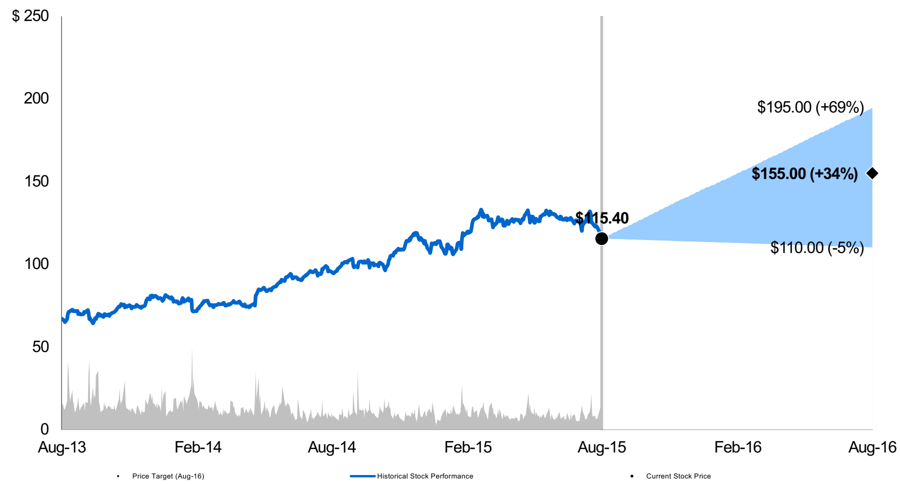
Quarter	2014	2015e Prior	2015e Current	2016e Prior	2016e Current
Q1	2.07	-	3.06a	-	3.26
Q2	1.66	-	2.33a	-	2.59
Q3	1.28	-	1.85a	-	2.19
Q4	1.42	-	1.88	-	2.24

e = Morgan Stanley Research estimates, a = Actual Company reported data multiple products doing well and contributing to top and bottom-line growth. To the extent new categories – Watch, TV, Autos (longer-term), Services (Music, Pay, Video, Apps) – help smooth results and drive more recurring revenue, we believe Apple will garner a platform multiple of 18x, reflected in our bull case. For now, we see shares moving to the upper-end of its recent range, or 15x (12x ex-cash) as iPhone fears prove overblown in C2H15. 15x our FY16 EPS of $10.29 drives our $155 PT.

This is not a repeat of 2012: We acknowledge that with Apple building iPhone component inventory, supply chain data points are likely to be volatile as builds and shipments converge over time. While these headlines may weigh on the stock near-term, we are buyers on any related weakness as we see an upward bias to our iPhone unit and gross margin assumptions for the reasons discussed above. We do not view the current set-up as similar to 2012 given 1) gross margins are improving (not deteriorating) as we head into the next iPhone cycle, 2) low institutional ownership, 3) competitive product line-up / stickier ecosystem against Android handsets, and 4) more robust product/services roadmap.

Risk Reward

World's Most Valuable Technology Platform Enhanced by New Devices and Services



Source: Thomson Reuters, Morgan Stanley Research

Price Target $155	Derived from base-case scenario.
Bull $195 18x Bull Case FY16e EPS of $11.00	**Apple valuation in-line with large-cap platform companies across industries.** Investors believe Apple's platform can extend into new products and industries over time. Revenue grows 13% in FY16 driven by 5% growth in iPhone revenue, 10% upside in Watch shipments, and slight acceleration in Services revenue growth. Gross margin of 41% mainly reflects Watch margin improvements and increasing mix of higher-margin revenue. We assume an 18x P/E multiple, in-line with US, large-cap platform companies across industries, or 15x adjusting for Apple's net cash.
Base $155 15x Base Case FY16e EPS of $10.29 or 12x Ex-Cash	**Apple is valued as a product company.** Investors increasingly recognize the value and size of Apple's loyal users and expanding platform. Revenue grows 7% in FY16 driven by the Watch and secondarily new Services, while iPhone revenue remains flat on 3% unit growth. Gross margin expands 60 bps Y/Y due to improving Watch margins and lower mix of iPads. We assume a 15x P/E multiple, similar to where Apple traded in the last year, or 12x adjusting for Apple's $148B of net cash.
Bear $110 13x Bear Case FY16e EPS of $8.50	**Valuation in-line with large-cap IT Hardware peers on slower growth.** Revenue barely grows as iPhone revenue declines slightly, which is offset by growth in Watches and Services. Gross margin also declines slightly Y/Y due to lower iPhone mix and little improvement in Watch margins. P/E multiple falls to 13x or 10x after adjusting for Apple's net cash balance.

Investment Thesis

- Apple has the world's most valuable technology platform, and we believe is best positioned to capture more of their users' time in areas such as health, cars and home, as these platforms expand in the Internet of Things computing era. We believe the company deserves a platform multiple of high-teens, which drives our bull case.

Key Debates

- *Can Apple grow revenue and EPS?* Yes, at a low teens pace as it takes share in slower growth smartphone and tablet markets with larger screens and new services. However, new product categories (like Watch), services (Apple Music), and partnerships (HealthKit, HomeKit, CarPlay) could further boost growth with the addition of TV and Autos longer-term.
- *Can Apple accelerate innovation?* Yes, in light of a sixth year in a row of 30%+ growth in R&D spend. We see Watch as an important barometer of the company's innovation capabilities under the leadership of Tim Cook. We are also encouraged by recent additions to Apple's management team, which expand leadership in key areas like retail, design, health, digital content, and recently autos.

Potential Catalysts

- Continued strength in iPhone 6s cycle, evidenced by unit growth compared to the 6 cycle
- New products (Watch and MacBook) and services (Music), and potential new iPad and TV services driving growth
- Expanding the platform to new industries, for example in healthcare, cars or homes, drives "halo effect" across Apple's businesses
- Expanding points-of-sale, especially in emerging markets like China, Brazil and India

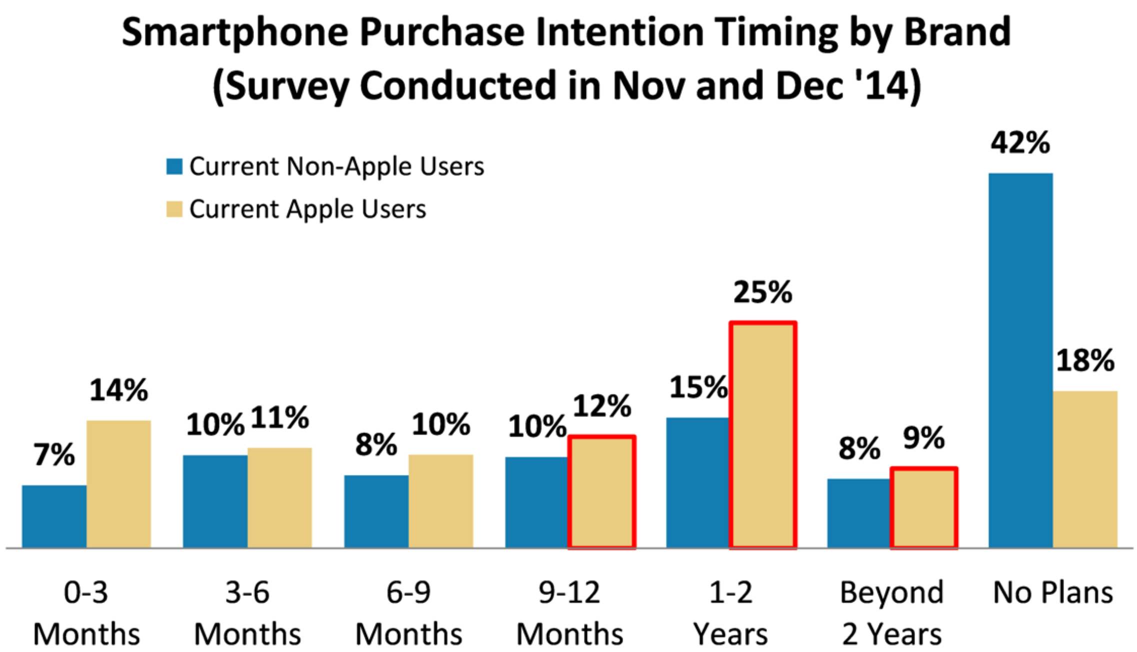
Risks to Achieving Price Target

- Maturing markets, and Android and Windows competition in smartphones and tablets
- Carriers lengthening replacement cycles and/or lower subsidies
- Regulatory and legal risk as Apple gains profit share in mobile devices
- Weak global consumer spending and strong US Dollar create headwinds
- Lack of traction with new product categories

and/or services limit multiple expansion

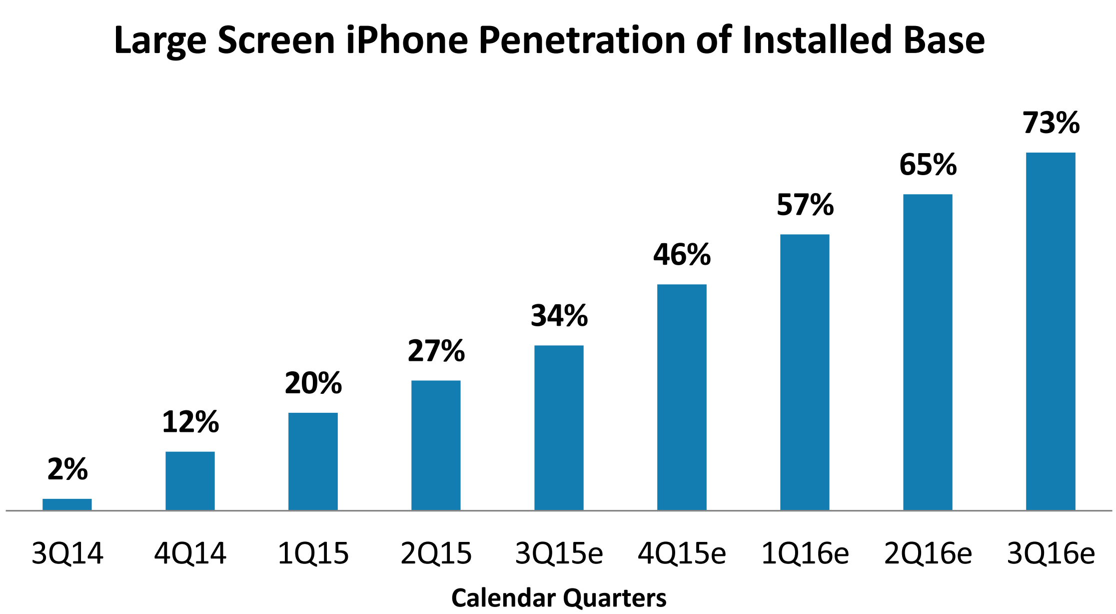
Exhibits

Exhibit 1: Only 27% upgraded, but over 80% plan to upgrade to larger iPhone screens



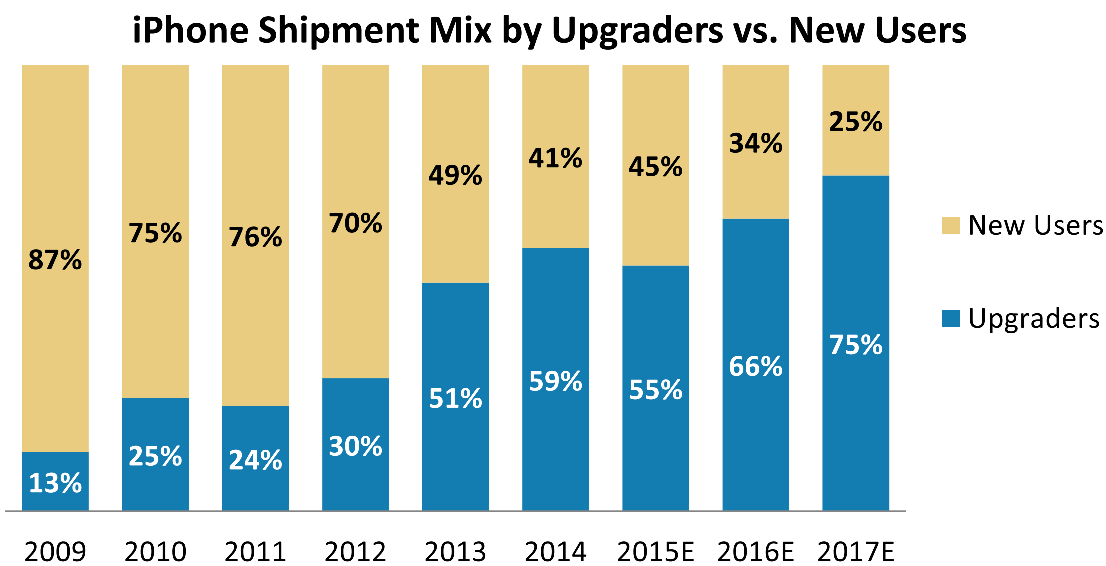
Source: AlphaWise, Company data, Morgan Stanley Research

Exhibit 2: We therefore expect upgrades to drive unit growth



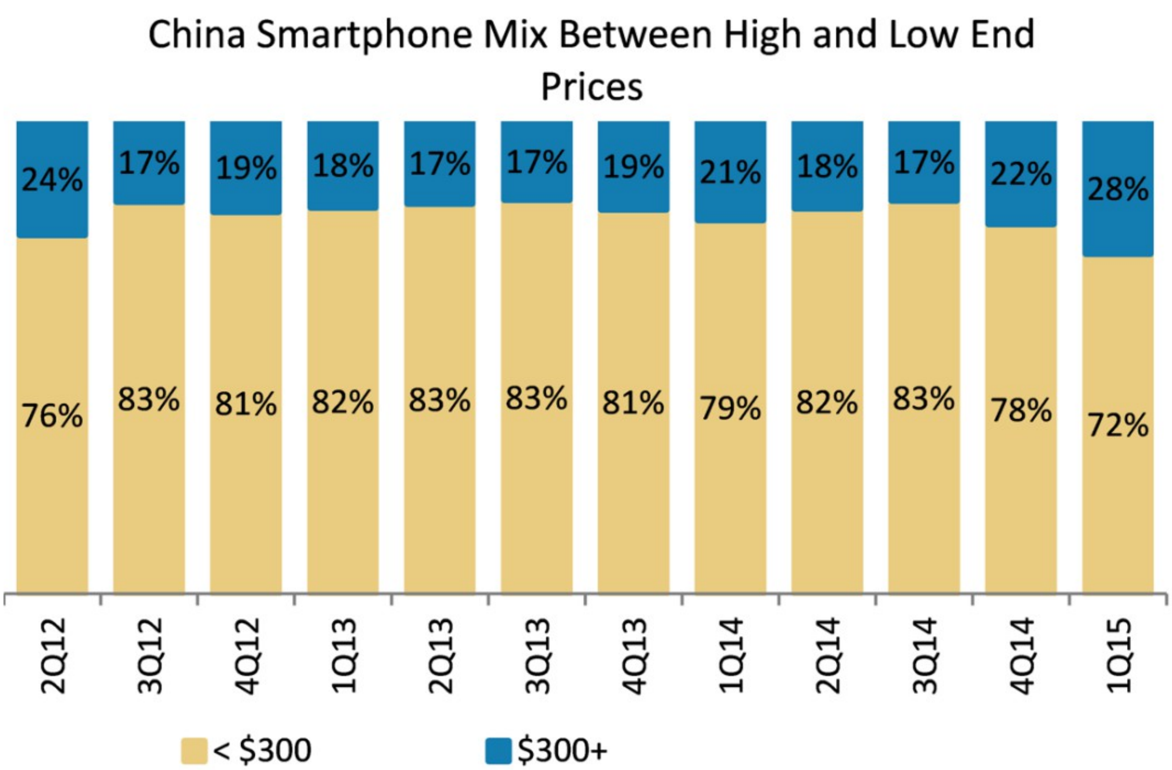
Note: This chart shows the penetration of iPhone 6/+ and the next-generation iPhone into the iPhone user base at the start of the 6/+ cycle. Source: Company data, Morgan Stanley Research

Exhibit 3: Our iPhone estimates are less reliant on new user growth



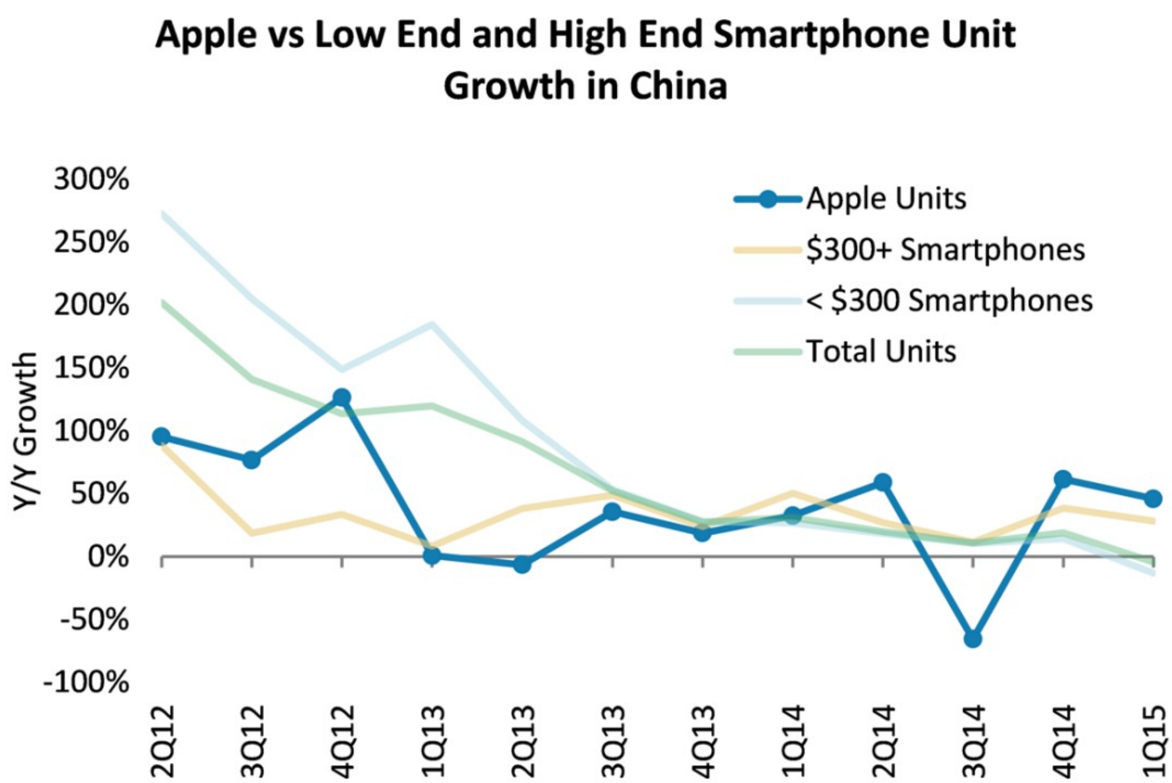
Source: IDC, AlphaWise, Morgan Stanley Research

Exhibit 4: Increasing high-end mix in China suggests Apple converting mid-market users to iOS



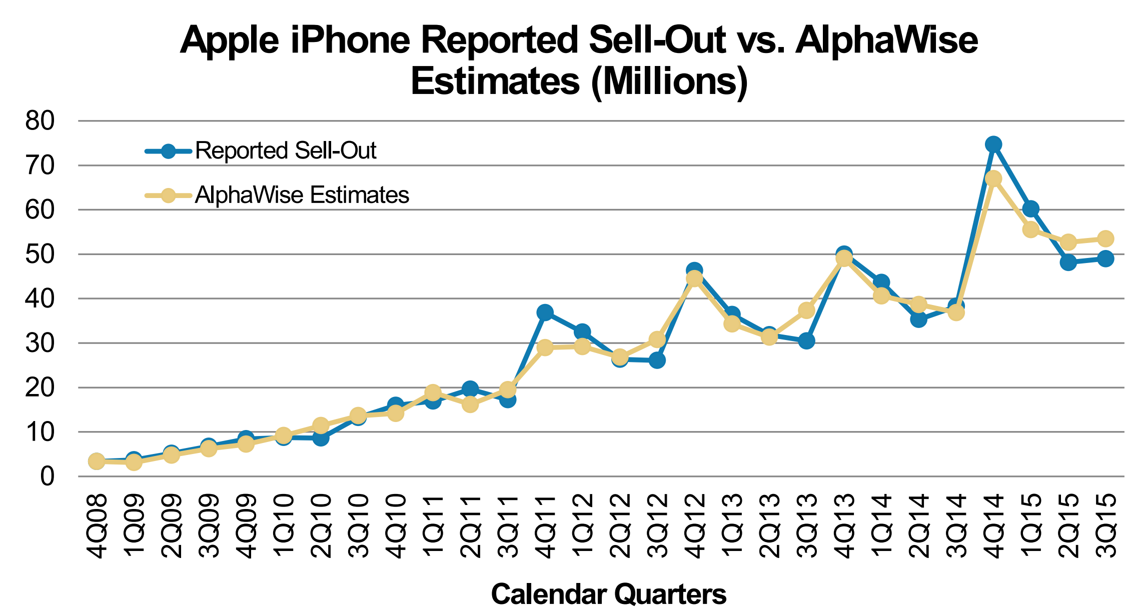
Source: Company data, Morgan Stanley Research

Exhibit 5: Apple is driving most of the overall market growth in China



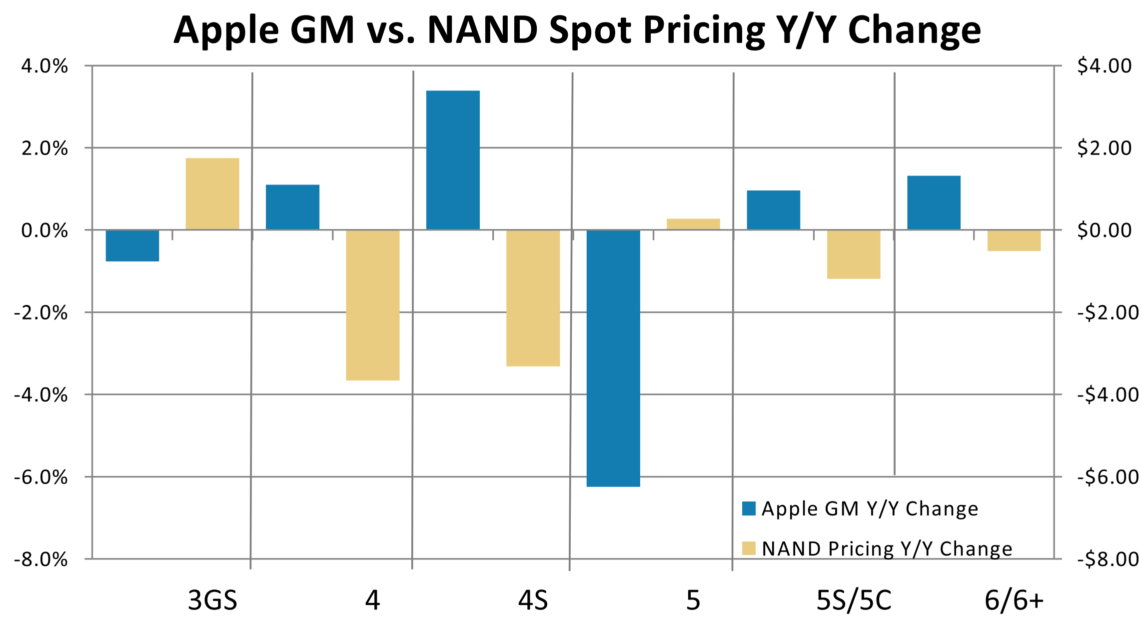
Source: Company data, Morgan Stanley Research

Exhibit 6: Our AlphaWise Smartphone Tracker indicates 53.5M of end demand in the September quarter based on data through July



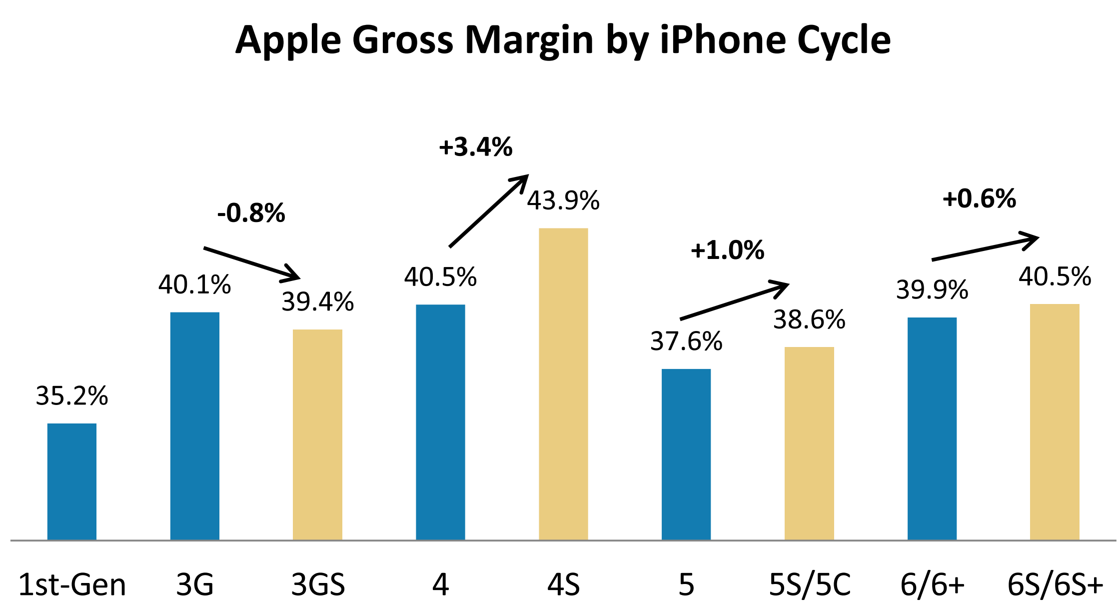
Source: AlphaWise, Google Trends, Morgan Stanley Research

Exhibit 7: Apple gross margin tends to improve Y/Y during iPhone cycles where NAND spot pricing (as a proxy for contract) declines Y/Y



Source: DRAMeXchange, Company Data, Morgan Stanley Research

Exhibit 8: Apple Gross Margins expanded in the 4S and 5S/5C iPhone cycles, and we conservatively model 0.6% expansion in the 6S/6S+ Cycle

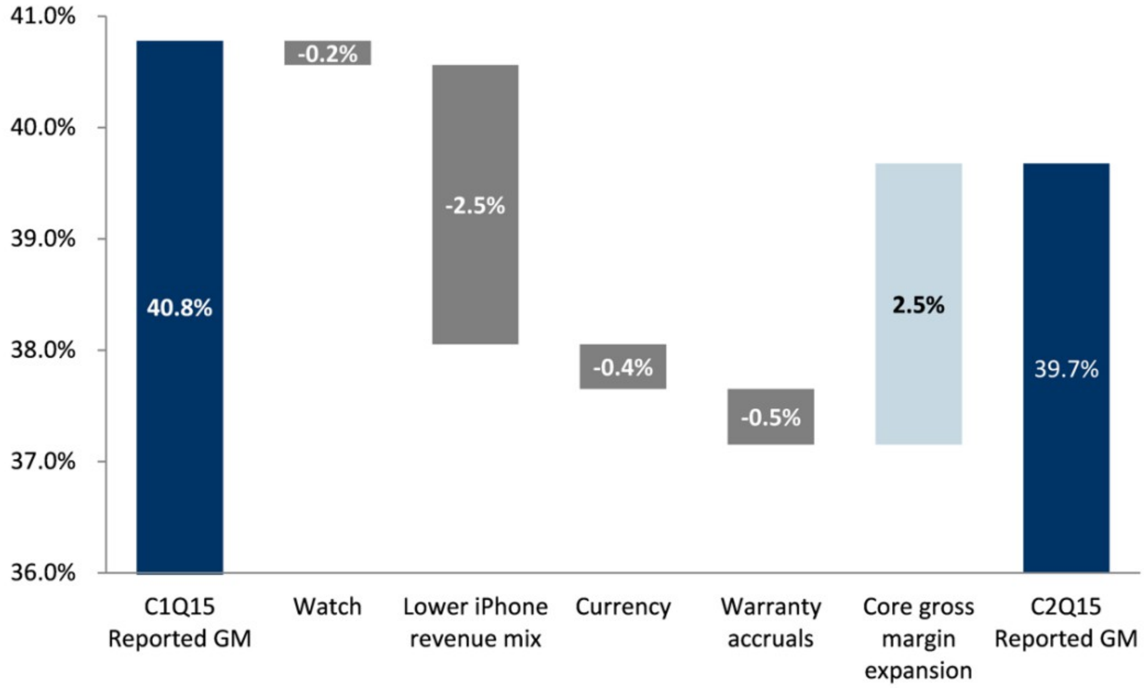


Source: Company Data, Morgan Stanley Research

Unpacking Apple's Gross Margin Trends

After backing out major headwinds, we think core gross margin actually expanded by 250bps in the June quarter. We believe lower component costs was a main driver, especially in light of the weak overall IT spending environment driving down memory pricing. We also believe Apple negotiated with some international suppliers who benefit from the US Dollar strength in recent quarters as most components are priced in Dollars.

Exhibit 9: We believe excluding transitory headwinds, core gross margins expanded 250bps in the June quarter



Source: Company data, Morgan Stanley Research

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STOCK RATING CATEGORY	COVERAGE UNIVERSE COUNT	COVERAGE UNIVERSE % OF TOTAL	INVESTMENT BANKING CLIENTS (IBC) COUNT	INVESTMENT BANKING CLIENTS (IBC) % OF TOTAL IBC	INVESTMENT BANKING CLIENTS (IBC) % OF RATING CATEGORY
Overweight/Buy	**1198**	**36%**	**321**	**44%**	**27%**
Equal-weight/Hold	**1449**	**43%**	**325**	**44%**	**22%**
Not-Rated/Hold	**93**	**3%**	**10**	**1%**	**11%**
Underweight/Sell	**623**	**19%**	**78**	**11%**	**13%**
TOTAL	**3,363**		**734**		

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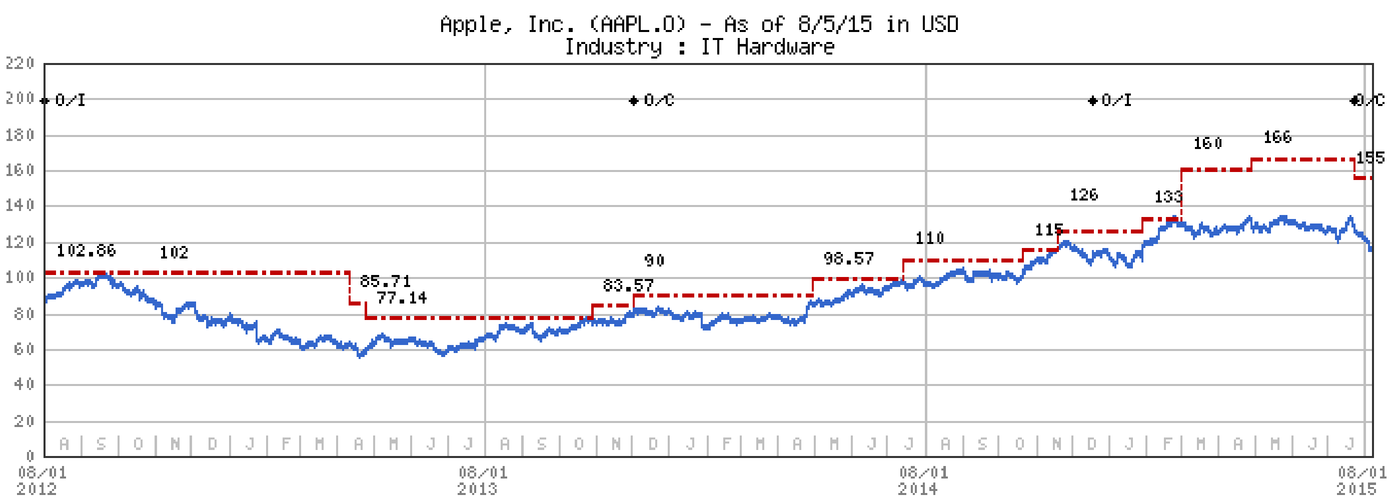
Stock Price, Price Target and Rating History (See Rating Definitions)



Stock Rating History: 8/1/12 : O/I; 12/3/13 : O/C; 12/17/14 : O/I; 7/22/15 : O/C

Price Target History: 7/24/12 : 102.86; 10/26/12 : 102; 4/11/13 : 85.71; 4/24/13 : 77.14; 10/29/13 : 83.57; 12/3/13 : 90; 4/30/14 : 98.57; 7/14/14 : 110; 10/21/14 : 115; 11/19/14 : 126; 1/28/15 : 133; 3/2/15 : 160; 4/28/15 : 166; 7/22/15 : 155

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
Stock Price (Not Covered by Current Analyst) Stock Price (Covered by Current Analyst)
Stock and Industry Ratings (abbreviations below) appear as ◆ Stock Rating/Industry View
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Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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INDUSTRY COVERAGE: IT Hardware

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/05/2015)
Huberty CFA, Katy L.		
Apple, Inc. (AAPL.O)	O (05/26/2009)	$115.40
CDW Corporation (CDW.O)	E (08/06/2013)	$39.72
Electronics for Imaging Inc (EFII.O)	E (07/21/2015)	$45.63
EMC Corp. (EMC.N)	E (01/10/2013)	$26.85
Fitbit Inc (FIT.N)	E (07/13/2015)	$51.64
Hewlett-Packard (HPQ.N)	O (03/18/2013)	$30.30
IBM (IBM.N)	E (09/08/2009)	$157.90
Lexmark International (LXK.N)	U (07/14/2010)	$33.37
NCR Corp. (NCR.N)	E (09/25/2011)	$27.11
NetApp Inc (NTAP.O)	U (03/24/2014)	$30.87
Nimble Storage (NMBL.N)	O (06/18/2014)	$27.15
QLogic Corporation (QLGC.O)	E (07/22/2015)	$9.21
Seagate Technology (STX.O)	U (07/22/2015)	$51.86
Teradata (TDC.N)	U (12/03/2013)	$36.27
Western Digital (WDC.O)	E (07/22/2015)	$84.69

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.