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Quick Thoughts: Apple's growth is all about the iPhone

- The iPhone 6 and 6 Plus are Apple's most important products since the iPad and will drive a significant upgrade cycle in its largest and most profitable product area.
- Screen size parity will pull upgrade demand forward and take incremental share, with a similar geographic roll out as the 5S, suggesting significant upside for 2-3 quarters
- Apple Pay and Apple Watch have grabbed the headlines, but neither will have more than a small fraction of the impact of the new iPhones on Apple sales and earnings
- Larger screens were low hanging fruit. It is not clear that there is any further move with close to the same revenue impact available to Apple for 2015's update.

After years of asserting that the original iPhone's 3.5 inch display was "perfect for the human hand" and mocking the expansive screen real estate available on the leading Android models as unwieldy, Apple has now fully capitulated. The baby step forward two years ago with the iPhone 5's 4 inch screen has precipitated a full on leap to the phablet with the iPhone 6 and 6 Plus. The September 9 unveiling was the hottest ticket since Steve Jobs last took the stage in 2011, and brought blissful relief from the unwelcome attention of the iCloud celebrity photo hacking scandal.

The new iPhones shared the stage with the Apple Pay payments solution and with the long anticipated Apple Watch, products that many of the journalists and bloggers in the audience found sexier and more worthy of column inches. However, for investors, the stars of the "Special Event" were the phones. Apple's track record with iPhone model introductions is extraordinary, delivering robust unit sales and revenue growth year over year since launching the first version in 2007. While recent years have brought fairly incremental improvements to the iPhone experience – such as Siri, better cameras, a flatter OS and TouchID – this year gives patient Apple devotees the number one item on their wish lists. I expect a lot of early upgrades.

The latest iPhones feature 4.7-inch and 5.5-inch displays with ion-strengthened Gorilla Glass. Apple, which brought "retina display" into the vernacular with the iPhone 4, is keeping the fidelity of the retina display at 326ppi for the iPhone 6 and taking it a step further to 401 ppi pixel density for the larger iPhone 6 plus phablet. While competitors have ventured into the 500ppi+ range with Samsung's new Galaxy Note 4 and Note Edge boasting 515 ppi and 525 ppi respectively, ultra-high PPIs are almost indistinguishable from "retina" displays and no longer a significant point of differentiation to drive sales. For the most part, Apple's new iPhones are not built to impress on the spec sheet. Samsung's latest ad campaign drives this point home as it compares Galaxy Note 4 specs and positions the iPhone 6 Plus as a 2012 throwback with PPIs and MPs harking back to the days of old. This, of course, misses the fundamental appeal of the iPhone's well integrated functionality.

Last week's launch largely avoided gimmicky feature bling like Samsung's bump to share, facial tracking or even Apple's own Siri. Sure the iPhone 6 added a barometer to let Apple Fit measure altitude when climbing stairs, and it has an NFC chip to enable Apple Pay to communicate with POS terminals, but these are not the main selling points meant to differentiate the products. Well, Apple Pay could be a key point of differentiation in the future, but probably not now and maybe not longer term either. See (<http://www.sector-sovereign.com/2014/09/september-15-2014-apple-pay-friend-and-potential-foe-to-the-payments-industry-status-quo/>) for a deep dive on the new mobile payments initiative.

Much of Apple's innovation is in the guts of the iPhone and seems incremental. The phones feature faster processors and an architecture with a co-processor supports faster applications appealing to gamers. In terms of communications, the baseband chips are compatible with more frequencies including LTE FDD bands requiring fewer SKUs of iPhone for specific carriers and regions. While the new camera sensor still lingers on the 2011 8MP standard, it features a higher quality technologies borrowing from expensive DSLR cameras such as "focus pixels" and "phase detection" to enable faster autofocus and better image processing. The result is better quality photos and the ability to record HD quality videos at a higher rate of frames per second. In recent years, photography experts have consistently rated Apple's cameras near best in class despite the seeming deficit in pixel specs.

It's hard to imagine the bill of materials is substantially greater for these phones than the previous generation – rumors of sapphire displays proved to be false. We expect Apple will still manage to keep its tidy margins on the phones despite upgrading memory sizes across its tiered offering. Initial user surveys point very to a strong upgrade cycle. ComScore predicts over 36% of US iPhone 5 users will upgrade within 6 months after release, and that figure only climbs for previous generations like the iPhone 4S, which is still being sold by Apple as the entry level iPhone in various markets until they launch the iPhone 6.

With Apple learning from the lessons of the 5C, there is no all new entry-level iPhone this year, rather last year's 5S/5C models have been relegated to lower price points to appeal to emerging market consumers. For Apple, this strategy allows it to keep its rich margins as the bill of materials of a device decreases over time and the lifecycle of a device. The last two quarters saw lower priced iPhones driving sales – blended iPhone ASPs were \$596 in March and \$561 in June versus a flagship model starting ASP of \$650. Emerging market demand will continue to drive market growth, but that strong upgrade cycle could reverse the ASP slide for a quarter or three.

For now, Apple is sticking to its tried and true approach of a staggered iPhone launch with developed countries like the US, Canada, Australia, France, Germany, UK, Hong Kong, and Singapore. Last year it also included China in the initial batch, but that was before behemoth China Mobile began to offer the iPhone. Launching in China as soon as this end of this year may be problematic given tight supply constraints. With Apple's own orders for the devices from contract manufacturing partners said to be up well over 20% from last year, it's not clear if that will be enough to satiate demand. 22 more countries are set to follow a week later including almost the rest of Europe, Middle East economies including Saudi Arabia and the UAE, as well as Russia. The iPhone could be in almost 100 countries by the end of the year. The staggered approach gives a consistent comparison with last year and smoothes the growth spurt over a 2-3 quarter stretch.



Despite this, there are some concerns the iPhone 6 Plus, clocking in at 5.5-inches, may be an iPad killer. The Mini likely makes up a significant portion of iPad sales, as ASPs are now hovering in the \$450 range and well below the \$500+ levels seen before the smaller unit's introduction. Overall iPad sales have been disappointing, declining over the past few quarters as Android alternatives have opened a serious price gap vs. the stubbornly expensive iPad line. While the iPhone 6 Plus will almost certainly accelerate this trend by siphoning off possible iPad Mini buyers, it's a great trade-off for Apple, as its carrier subsidized iPhones boast much higher margins than its iPads. However, the deterioration of the once powerful iPad franchise is clearly a weak point in the Apple story. Rumor has it that an upcoming refresh of iPads will take the platform bigger with a 12 inch "iPad Pro". Time will tell us whether this rumor is true and if so, if it can be successful in changing the trajectory of the segment for Apple.

Meanwhile, iPhones, which are 60% of Apple sales and likely 80% of its profits, are on a roll. I'm pretty confident that Apple will post some eye-popping sales on the back of the iPhone 6 and 6 Plus over the course of the next few quarters. Still, accelerated upgrade demand won't last forever, competitors will deliver their own innovations to the market, and the universe of consumers able to afford a high end smartphone is saturating. After what Senior Vice President Eddie Cue pronounced as "the most significant line up of product launches in his Apple career", it is not clear that the company can reasonably be expected to follow with more of the same next year. By then, Apple's annual revenues will likely be over \$200B. Moving that needle will be very hard indeed.