Apple Inc AAPL

Apple is driving software and services innovation to capture premium pricing on hardware.

by
Brian Colello, CPA

Sector Director

Authors can be reached at Analyst Feedback

Morningstar's Editorial Policies

Analyst Note 11/03/2017

Apple reported strong fiscal fourth-quarter results with impressive revenue growth in non-iPhone businesses, such as Mac, Services and Other Products (including Watch and Airpods). Meanwhile, the firm's first-quarter forecast implies healthy demand for both the iPhone X and iPhone 8 series. Despite a minority market share position in the smartphone industry versus Android, Apple continues to retain pricing power as early signs around the iPhone X indicate to us that the firm will successfully be able to raise the bar on pricing. We will raise our fair value estimate for narrow-moat Apple to $163 per share from $145, due to the time value of money and as we boost our long-term iPhone revenue and average selling price, or ASP, estimates, along with higher revenue from Services and Other Products. We reiterate our high uncertainty rating for Apple, in light of a lack of visibility regarding both iPhone X supply and a more complicated product mix this year with three premium devices (X, 8 Plus and 8) versus two iPhones in years past (such as the 7 and 7 Plus in late 2016).

Revenue in the September quarter was $52.6 billion, up 16% sequentially, 12% year over year and above the high-end of the firm's prior guidance of $49 billion-$52 billion. iPhone sales of 46.7 million units was roughly in line with our expectations, while the far more pleasant surprises came from other businesses. Mac revenue of $7.2 billion was up 25% year over year, thanks to healthy demand for the firm's new slate of MacBook Pros. Other Product revenue rose 36% year over year, driven by Watch sales (units up 50% year over year once again) and robust demand for AirPods. Services revenue was up 34% year over year as customer engagement with iOS devices is leading to healthy AppStore revenue.

For the December quarter, Apple expects revenue in the range of $84 billion-$87 billion, which was roughly in line with Street consensus and would represent 9% year-over-year growth.

Investment Thesis 08/02/2017

We believe Apple's strength lies in its experience and expertise in integrating hardware, software, services, and third-party applications into differentiated devices that allow Apple to capture a premium on hardware sales. Although Apple has a sterling brand, strong product pipeline, and ample opportunity to gain share in many end markets, short product life cycles and intense competition will prevent the firm from resting on its laurels or carving out a wide economic moat, in our opinion.

We believe Apple has developed a narrow economic moat, thanks to switching costs related to many attributes around the iOS platform that may make current iOS users more reluctant to stray outside the Apple ecosystem for future purchases. In our view, much of Apple's exponential growth in recent years has stemmed not from the firm's economic moat, but from the achievement of building the first truly revolutionary smartphone, the iPhone, that integrated hardware and software, as well

Morningstar's Take AAPL

Analyst

Price 11-03-2017	**Fair Value Estimate**	**Uncertainty**
172.5 USD	163 USD	High
Consider Buy	**Consider Sell**	**Economic Moat**
97.8 USD	252.65 USD	Narrow
Stewardship Rating		
Standard		

Bulls Say

- Between first-time smartphone buyers, users switching from Android, and repeat sales to current customers, Apple has plenty of opportunity to reap the rewards of its iPhone business.
- Apple's iPhone and iOS operating system have consistently been rated at the head of the pack in terms of customer loyalty, engagement and security, which bodes well for long-term customer retention.
- We think Apple is still innovating with introductions of Apple Pay, Apple Watch, Apple TV, and AirPods, each of which could drive incremental revenue but, more important, help to retain iPhone users over time.

Bears Say

- Apple's decisions to maintain a premium pricing strategy may help fend off gross margin compression but could limit unit sales growth as devices may be unaffordable for many emerging-market customers.
- If Apple were to ever launch a buggy software update or subpar services, it could diminish the firm's reputation for building products that "just work."
- Apple is believed to be behind firms like Google and Amazon in artificial intelligence, or AI, development, which could be problematic as tech firms look to integrate AI in order to deliver premium services to customers.

Competitors AAPL

More...

Name	Price	% Chg	TTM Sales $ mil
Apple Inc	**$172.50**	**2.61**	**229,234**
Samsung Electronics Co Ltd	$2,450.00	13.95	190,972
Sony Corp ADR	$44.81	-0.18	71,960
Sony Corp	$44.61	-1.22	71,960
Panasonic Corp	$15.22	-2.28	65,066
Panasonic Corp ADR	$15.16	0.07	65,066

as a robust app store and ecosystem that attracted new users to platform. Apple's first-mover advantage and "easy growth" from new smartphone adopters is over, but the company appears likely to retain its existing premium customer base and could still attract some switchers from Android over time.

Ultimately, we think future smartphone competition will stem from software and services, as we're seeing less and less meaningful hardware differentiation. We view Apple as well positioned to develop and expand enough services to enhance the user experience, in order to build switching costs that will help the firm retain customers and generate significant repeat purchases will be critical for future iPhone growth in the years ahead. We consider almost all other products and services that Apple offers (Apple Watch, iCloud, HomePod, AirPods, Apple Pay) as not only incremental revenue and earnings drivers for the firm, but more important, improving the iOS ecosystem that will enable Apple to sell future iPhones at premium prices to a loyal customer base.

Economic Moat 08/02/2017

We believe Apple has a narrow economic moat based on modest, but not insurmountable, customer switching costs. We don't believe these switching costs are critical factors in attracting new iOS customers, especially in emerging markets, but that such switching costs will allow Apple to build a loyal iOS user base that may be less likely to flee to other operating systems for future device purchases in the long term. As the smartphone market matures and a greater proportion of purchases come from previous smartphone owners, we foresee these switching costs as extremely important differentiators in favor of Apple. That said, given the short product life cycles of two to four years for most of its devices, we still think competing products will have plenty of chances to lure iOS customers away from Apple's platform and overcome these switching costs, especially if Apple were to stumble in any given product refresh cycle. This prevents us from assigning the company a wide economic moat.

Inherently, we believe there are minimal switching costs associated with smartphones, as all of these devices can perform most necessary functions--place calls, send texts, browse the web, run apps, and so on. However, we believe Apple has done a much better job at trying to develop switching costs than its handset predecessors (such as Motorola and BlackBerry) that failed to lock in customers when they were on top. In our opinion, Apple's switching costs stem from its iOS operating system and appear to be increasing, thanks to iCloud and other native services. Apple iOS users who purchase movies, TV shows, and applications from the iTunes store are unable to port these items to Android or other portable devices (music is transferrable). ICloud adds another layer of switching costs by synchronizing media, photos, notes, and other items across all Apple devices. New services like Apple CarPlay and Apple Pay should also aid the firm’s efforts not only to improve the entire iOS ecosystem and the overall user experience, but also to build switching costs that give users more and more reasons not to depart the platform. Furthermore, in hardware, we believe an owner of multiple Apple devices (say, an iPhone and iPad) is less likely to switch from an iPhone to an Android phone if it means that he or she will be unable to sync or access a portion of their content. Additional Apple devices, such as the Mac, Apple Watch and Apple TV, as well as other gadgets to potentially tie to iOS via HomeKit, could raise these switching costs even further. By comparison, no other former handset leader (Nokia, Motorola, BlackBerry) offered secondary devices that partnered with their phones, giving Apple a unique edge. Other hardware vendors, such as Samsung, are still trying to emulate this business model by bundling devices together. However, Samsung doesn’t control the operating system (Android) used to run these products, and the company has had several false starts in trying to build its own operating system, Tizen.

Looking at other sources of economic moat, Apple holds intangible assets associated with patents for its hardware and software designs. However, both the value of such assets and the sustainable competitive advantage stemming from these assets remain cloudy. Regarding Apple’s sterling brand equity, we view brands within technology differently than, say, consumer luxury goods. We doubt that Apple can charge double the price for a product that has the exact same hardware and software specifications as an unbranded product. However, we think that Apple benefits from intangible assets, or a brand, in terms of the (mostly) positive user experiences that customers capture from the firm’s integrated hardware, software and services. This brand equity may encourage customers to go with Apple for their first wearable device, instead of similar offerings from a host of other competitors. Similarly, Apple might be the world's most trusted consumer technology firm in terms of delivering flawlessly working products in existing, and even new, product categories. However, we still think tech brands are relatively fleeting, as technological inferiority can supersede years of brand equity at any given time. As an example, Nokia was long considered a top-10 brand, but brand recognition failed to make up for its lack of technological innovation in the smartphone space. In other words, new customers might give Apple’s products the benefit of the doubt and trialability based on brand, but such an advantage might not be sustainable forever.

Apple is trying to improve the network effects of its devices with functions like iMessage and FaceTime. However, BlackBerry's demise proves that even highly popular smartphone-centric networks like BlackBerry Messenger can be broken if other smartphone features (or lack thereof) drive customers to flee. Network effects may be forming around Apple’s apps developers, as a more robust apps store is likely helping Apple attract new customers. However, these same developers likely build for Android as well, so we think that developers will flock to the ecosystem that offers the most attractive return on investment. Along these lines, Apple Pay may ultimately develop a network effect between merchants, credit card networks, and users, but we would also anticipate that some other service (PayPal, Google) could come close to replicating this service and provide customers with a non-iOS alternative. In short, the network effects created by these services (with perhaps the largest and most important being the iOS apps community) might not be strong enough to ensure excess ROICs for Apple if other aspects of the phone (hardware, operating system, services, for example) become inferior to other offerings.

Finally, Apple may have some cost advantages associated with its supply chain, such as squeezing suppliers or making massive purchases of flash memory and other key components. However, we believe these advantages are predicated on the enormous forecast volume of Apple's products, and we suspect these advantages would evaporate if Apple's device production were to shrink.

Valuation 11/03/2017

We are raising our fair value estimate for Apple to $163 per share from $145, due to the time value of money but also to more optimistic revenue assumptions for the iPhone, Other Products and Services. This new fair value estimate implies fiscal 2018 (ending September 2018) price/earnings of 14 times (and only 11 times after excluding Apple's net cash balance on hand). Apple earned 6% revenue growth in fiscal 2017, thanks to a nice bounce back in iPhone 7 revenue plus solid growth in Mac, Services and Other Products revenue. We foresee a big year for Apple in fiscal 2018 with 22% revenue growth, driven by healthy sales of the iPhone X at substantially higher average selling prices (ASPs) than prior generation iPhones. We also foresee strong revenue growth from Other Products, including the Apple Watch and AirPods, while we anticipate that Services revenue will grow at a low teens pace. We're forecasting a dip in revenue in fiscal 2019 as customers pause their spending (similar to the iPhone 6s in fiscal 2016 after a monster iPhone 6 launch in fiscal 2015) but model mid-cycle, mid-single digit revenue growth for Apple thereafter. Based on Apple's premium pricing strategy and services becoming a slightly bigger part of Apple's revenue mix, we model gross margins remaining roughly flattish in the 38% range over the next five years. We expect Apple to aggressively spend on research and development in order to fund new product categories (perhaps an Apple car), so that operating margins deteriorate slightly from 27% in fiscal 2016 to 25% in the long run.

Risk 08/02/2017

Apple faces several key risks as competitors attack the firm from all angles. Smartphone and tablet competition is rising, both from upstart Chinese OEMs on the low and mid-range, and tech titans like Samsung and Huawei, which all have the size and scale to build large smartphone portfolios to suit customers at every price point. As a premium phone supplier, Apple runs the risk that, as wireless carriers in the U.S. strive to reduce phone subsidies and two-year contracts, customers may hold on to their phones longer, in turn weighing on future sales. Finally, some competitors like Xiaomi and Amazon are more than willing to sell hardware at close to cost in order to drive other revenue streams. If any of these devices offer a similar user experience to iOS products, Apple may be unable to capture an adequate premium on future hardware sales. All the while, the low end of the smartphone market (where Apple does not participate) will probably be the faster-growing portion of the smartphone market for years to come.

In addition to continual innovation on the hardware front, Apple must also deliver immaculate software and services in order to generate premiums on hardware sales. Recent mistakes like the early launch of Apple Maps and a buggy iOS 8.0.1 release show the difficulty in flawlessly staying on the cutting edge. Any severe slip-up could be damaging to Apple’s brand and customer loyalty. Further, Apple still relies on a robust app developer base and strong partnerships with third parties, yet these companies are likely to focus on the operating system that provides the best return on investment and could turn their attention to Android if Apple’s iOS user base were to slip. If Apple were to falter and its exceptional brand be diminished as customers departed iOS in droves, we’re not sure that Apple’s mighty cash cushion could help the firm buy its way out of any problem.

Management 08/02/2017

We view Apple as a good steward of shareholder capital. Tim Cook became CEO in August 2011 after cofounder, longtime CEO, and visionary Steve Jobs stepped down from the CEO role before passing away in October 2011. Cook was considered to be Jobs' right-hand man and served in various operations roles with Apple before becoming COO in 2005. We believe Jobs' death was a blow to the firm, as he was a one-of-a-kind leader and creative mind. Arthur Levinson, former chairman and CEO of Genentech, is chairman of Apple's board of directors. Jeff Williams serves as COO of Apple and would be our best bet to replace Cook as CEO.

We’re comfortable with Apple’s level of technological innovation over the past couple of years. Much of this innovation has come from new software and services within iOS like Apple Pay, as well as under-the-hood improvements in semiconductors, rather than brand-new life-altering devices. That said, we still have high hopes that products like the Apple Watch, AppleTV, AirPods and HomePod will deliver incremental earnings growth to Apple, and the firm’s ability to execute and deliver additional premium products will likely be viewed by many as a sign that Cook’s Apple can, or cannot, deliver successful new products over time. We are not concerned about the relatively slow start for the Apple Watch, as both the iPod and iPhone had similarly tepid launches, at least in terms of unit sales. We think the firm still has room to go in areas like voice recognition and artificial intelligence to stay ahead of other tech titans like Google, Facebook, Amazon and Microsoft, but we would not declare Apple as dead in these areas just yet.

Although Apple maintains sterling brand recognition and has hundreds of millions of loyal followers, it has made a couple of missteps under Cook that, some skeptics would argue, would have never happened under Jobs. Apple executed poorly when it decided to part ways with Google Maps in iOS 6 and launch Apple Maps with a variety of bugs and errors, leading to a formal apology. Also, Apple launched an iOS 8.0.1 update that was quickly recalled after it rendered some users' phones useless. These types of missteps could leave the door open for any frustrated customers to try another platform like Android. At the very least, Apple may find it more difficult to quickly push its iOS user base onto the latest version of its operating system in future releases, which we see as a key positive differentiator for Apple over Android as apps developers don’t need to build and test their apps for a wide variety of operating system versions.

In terms of capital allocation, we applaud Cook's decision to initiate dividend and stock buyback programs, as well as take on debt in order to fund such programs. We recognize that many high-profile investors have called for larger buyback programs, but we think Apple's current plan of $300 billion is more than satisfactory as long as dividends and buybacks (and the debt issuances needed to fund these buybacks) are made in a prudent manner.

Perhaps more important, we think Apple's frugality in terms of acquisitions is quite admirable. Apple's strategy of focusing on smaller, tuck-in deals and developing products in house, rather than splashy but questionable deals like Microsoft's purchase of Skype or Google's foray into hardware by acquiring Motorola Mobility and Nest, appears to have served investors quite well in recent years. Even Apple's $3.0 billion acquisition of Beats Music and Beats Electronics represented only a tiny portion of the firm's total cash balance.

Apple has also done a good job of attracting topnotch talent to the company, such as former Burberry CEO Angela Ahrendts to run Apple’s retail and online stores. We are comfortable that these hires have strengthened Apple’s bench in the unlikely event of Cook departing the company, and each hire likely has aided in Apple’s efforts to build and deliver the Apple Watch and perhaps future products as well. All the while, Apple’s ongoing operations continue to generate operating margins and cash flow well above its peers in various hardware industries, which bodes well for future free cash flow for investors.

Overview

Profile:

Apple designs consumer electronic devices, including smartphones (iPhone), tablets (iPad), PCs (Mac), smartwatches (Watch) and TV boxes (Apple TV), as well as a variety of services like Apple Music, iCloud, and Apple Pay. Apple's products run internally developed software, and we believe this integration of hardware, software, and services often allows the firm to maintain premium pricing for its devices. Apple's products are distributed online as well as through company-owned stores and third-party retailers.