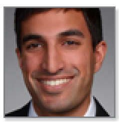
Apple Inc AAPL

Convoluted naming notwithstanding, Apple's latest iPhones underscore its premium pricing strategy.



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Analyst Note 01/29/2019

Apple reported fiscal first-quarter results in line with the firm’s revised guidance from Jan. 2. Positively, non-iPhone segments (services, Mac, iPad, and wearables/accessories) grew 19% year over year led by stellar services and wearables growth. After factoring in near-term iPhone headwinds in China and emerging markets, management’s outlook for the second quarter was relatively consistent with our expectations. Shares rose nearly 6% during after-hours trading, as we believe the market was expecting far worse. We are maintaining our $200 fair value estimate for narrow-moat Apple, as we anticipate the firm resumes mid-single-digit sales growth from fiscal 2020 onwards following a modestly lower fiscal 2019.

First-quarter revenue fell 4.5% year over year to $84.3 billion, as iPhone sales fell 15% and non-iPhone sales grew 19%. CEO Tim Cook attributed the iPhone challenges to negative foreign exchange fluctuations (as a stronger dollar made iPhones more expensive in many emerging regions), reduced carrier subsidies, Apple’s battery replacement program that prolonged upgrades, and the aforementioned weakness in China. While the first three factors appear more transitory in nature, we have significantly cut our iPhone unit forecasts for China going forward as we anticipate a more competitive environment despite the current tepid macroeconomic backdrop in the region and U.S.-China trade tensions.

We note the firm’s active installed base for iPhones surpassed 900 million devices (up nearly 75 million in the past 12 months) and supports our thesis of a rich and loyal customer base from which Apple can extract services and wearables revenue. Second-quarter sales are expected to be in the range of $55 billion and $59 billion, with the midpoint implying a 7% year-over-year decline. CFO Luca Maestri cited $1.3 billion in foreign exchange headwinds along with a weaker macroeconomic climate, particularly in emerging markets.

Business Strategy and Outlook 07/02/2018

Apple’s competitive advantage stems from its ability to package hardware, software, services, and third-party applications into sleek, intuitive, and appealing devices. This expertise enables the firm to capture a premium on its hardware, unlike most of its peers. Despite its admirable reputation, loyal customer base, and bevy of unique products, the consumer hardware space can be unforgiving to firms unable to consistently satiate the customer’s appetite for more features. Given the short product cycles of Apple’s products and army of firms targeting its dominance, we do not believe Apple has a wide economic moat.

Switching costs and intangible assets support Apple's narrow moat. The firm enjoys stellar returns on its devices by offering a unique user experience with its iOS ecosystem. Contrary to its peers in PCs and smartphones that rely on relatively open

Morningstar's Take AAPL

Analyst

Price 02-11-2019	**Fair Value Estimate**	**Uncertainty**
169.43 USD	200 USD	High
Consider Buy	**Consider Sell**	**Economic Moat**
120 USD	310 USD	Narrow

Stewardship Rating
Standard

Bulls Say

- Between greater smartphone penetration in emerging markets 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 these could drive incremental revenue, but more crucially 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 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 (notably Siri voice recognition), 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	**$169.43**	**-0.58**	**261,612**
Samsung Electronics Co Ltd	$2,210.00	4,900.00	222,891
Sony Corp ADR	$44.59	0.68	77,365
Sony Corp	$44.57	-0.45	77,365
Xiaomi Corp ADR	$6.76	4.08	22,099
Xiaomi Corp Ordinary Shares - Class B	$1.35	3.05	22,099

operating systems, Windows and Android, respectively, Apple's walled garden approach for its popular iOS allows it to charge a premium for relatively commoditized hardware not too different from that sold by Samsung, Dell, and others. Customer switching costs are elevated for Apple users as a non-Apple iOS experience does not exist, unlike computing platforms for the Windows or Android ecosystems that boast PCs and smartphones from many firms.

We view the iPhone as a revolutionary product that created the smartphone ecosystem and transitioned computing habits away from the PC. The robust app store helped foster iPhone adoption and grow Apple's user base, with applications ranging from productivity, social media, gaming, music, etc. We foresee Apple's ongoing business coming from existing customers versus new smartphone adopters. With hardware becoming increasingly commoditized and replacement cycles potentially elongating in the long term, we expect Apple to focus on newer software and services to augment the user experience and retain customers. The firm's additional products and services (Apple Watch, iCloud, HomePod, AirPods, Apple Pay) act as both supplemental revenue opportunities and, more importantly, critical enhancements to the iOS ecosystem that support Apple's crown jewel: the iPhone.

Economic Moat 07/02/2018

We assign a narrow economic moat rating for Apple that stems from the combination of switching costs and intangible assets. We think the firm's primary moat source is customer switching costs, as Apple bolsters the user experience with a cohort of auxiliary products such as iPad, Apple TV, Apple Watch, AirPods, etc., and services (iMessage, FaceTime) that augment Apple's sphere of influence on the consumer. As current iPhone users are familiar with the iOS environment (Apple-centric apps, services, etc.), it may take multiple subpar product releases to warrant an exodus to an Android OS, as these customers are likely loath to leave Apple's seemingly superior walled garden. Regarding intangible assets, Apple's differentiated user experience via iOS coupled with its expertise in both hardware and software design allows the firm to more seamlessly build integrated products. We see no other technology titan with comparable expertise in both hardware and software. In turn, we believe this integration allows Apple to build industry-leading devices that command industry-leading average selling prices, most notably the firm's crown jewel: the iPhone.

Recent survey data shows that iPhone customers are not even contemplating switching brands today. According to a U.S.-based survey by marketing platform Fluent in August 2017, 80% of iPhone owners planned to stay faithful to Apple, while 70% wouldn't even consider another brand. Forty-one percent of participants said it would be too painful to switch from the iOS ecosystem. Also, users of ancillary products (especially the Watch and AirPods) lose significant functionality when paired with a smartphone other than the iPhone. Ultimately, we believe that existing iPhone users are relatively locked in to the iOS ecosystem and interface.

While the Android cohort has attempted to replicate a similar feel of apps, app stores, and integrated experience, the fragmentation of its key players will likely prevent many loyal iOS users from switching, at least over a few product cycles. Competitors such as Samsung (Galaxy smartphone) and Google (Android OS) specialize in hardware and software, respectively, with Samsung boasting leadership in mobile device units and Google's Android OS serving as the pervasive smartphone OS. Although Apple's market share in the smartphone space doesn't seem excessive (11.7% in 2017, according to Gartner), the firm does enjoy the lion's share of industry profits. Neither Samsung nor Google has been able to offer a comprehensive and integrated product like the iPhone, though both have attempted to develop software/operating systems (Samsung's Tizen OS) and hardware (Google's Pixel smartphone), with mixed results. We believe Apple's expertise in both hardware and software represents an intangible asset that even the strongest of tech firms have struggled to replicate.

Although Apple's brand tends to be associated with premium technology gadgets, we don't think it can support an economic moat in isolation. Specifically, Apple's brand strength is a consequence of its differentiated hardware and software design, not the cause. We don't think Apple can charge twice the price of a similar set of hardware solely by sticking an Apple logo on it. Similarly, we suspect that Apple's brand equity will wane if the firm's products were technologically inferior to competitors over an extended period of time. As evidence, Nokia was the eighth-most-valuable brand in the world as recently as 2010, according to Interbrand, before succumbing to the rise of the smartphone.

The current active installed base of Apple devices reached 1.3 billion in early 2018, showing the strong stickiness Apple has created. However, these switching costs are not insurmountable, illustrated by the rise and fall of former mobile device titans such as Nokia, Motorola, and BlackBerry, all of which failed to keep up with smartphone innovation. The short product cycles for phones and the inability of these firms to sufficiently innovate left each one struggling after the debut of Apple's iPhone and its subsequent proliferation. Apple is not immune to these pitfalls, as consumer sentiment for technology gadgets can be unforgiving, with one buggy or subpar product potentially driving customers to other companies' offerings, which have been increasingly competitive. We have often seen innovative features arise in the Android ecosystem before Apple, such as OLED screens and 3D sense. These industry dynamics prevent us from assigning a wide moat rating for Apple.

At this point, we do not consider network effects to be a key source of Apple's moat. We acknowledge that Apple's iOS users gravitate to the App Store to purchase new applications, and the size of Apple's installed base attracts developers to build new apps for iOS. Apple's integration of hardware and software also supports its developer networks, as Apple knows that iOS will be loaded on to only a handful of screen sizes or iPhone models, versus the hundreds of devices and manufacturers that support Android. This leads to a more fragmented Android ecosystem, which we believe is relatively harder for developers to support. Apple consistently touts when the majority of its user base is on the latest operating system, which in turn allows developers to build for the latest version of iOS and know that their apps are optimized for most of Apple's user base. Nonetheless, the Google Play store that supports the Android user base also achieves a similar network effect. Ultimately, we view the hardware and software (device and iOS) as the key differentiators for Apple's moat sources (switching costs and intangible assets), since the lion's share of applications used by smartphone users are platform-agnostic, in our view. Even for apps built for iOS first before Android (with the popular video game Fortnite being one recent example), mobile apps are ultimately built for both platforms in short order.

Finally, Apple may boast some cost advantages associated with its supply chain, such as pressuring suppliers or making massive purchases of memory, flash storage, and other key components. However, these advantages are predicated on the immense forecast volume of Apple's products, and we surmise these advantages would evaporate if Apple's device production were to diminish. Apple likely could not build the lowest cost phone in the industry as it has to build iOS, rather than use Android for free. More important, this is likely a moot point as we think Apple will play at the high end of the market with best-of-breed components for the foreseeable future—it's been doing so with the Mac for 40 years and counting.

Fair Value and Profit Drivers 09/12/2018

We are raising our fair value estimate for Apple to $200 per share from $175 per share thanks to stronger pricing assumptions for Apple's iPhone, given customer willingness to pay a premium for Apple's flagship devices despite intense competition across the smartphone market. Our fair value estimate implies a forward GAAP P/E ratio of 16.5 times. Following a solid rebound in fiscal 2017 where Apple enjoyed healthy sales of iPhones, Macs, services, and other products, we think the firm is poised for stellar revenue growth of 16% in fiscal 2018 thanks to the iPhone X and iPhone 8 launches at higher average selling prices than previous iPhones. Meanwhile, we expect both services and other products, including AirPods and Apple Watch, will grow 25% and 32% during the year, respectively. While we foresee solid iPhone spending in fiscal 2019 and beyond, and we think the smartphone titan will generate midcycle revenue growth in the midsingle digits. We expect gross margins to remain in the high 30s, thanks to Apple's exceptional premium pricing strategy and stable iPhone margins. Although we think higher-margin services segment will grow nicely, we foresee lower-margin other products, such as the Apple Watch, serving as an offset. However, these other products remain vital to Apple being able to lock in iPhone customers with the likes of AirPods, Watches, and other accessories that sell at a notable premium to non-Apple counterparts. To remain king of the hill in the premium smartphone market, we also model higher research and spending as Apple drives innovation and potentially ventures into new frontiers. Consequently, operating margins track from 26.8% in fiscal 2017 to 24.9% in fiscal 2022.

Risk and Uncertainty 07/02/2018

As the largest company in the world, Apple is susceptible to competitive threats from capable behemoths with significant resources. Over the course of its iPhone-fueled decade of dominance, Samsung, Microsoft, Google, and others have taken their best shots at Apple, with ephemeral success. Consumer hardware is inherently prone to cutthroat competition as short-product cycles and customers hungry for greater features make market leadership difficult to sustain. Although Apple has done well with its walled garden approach with iOS, the firm competes with Chinese OEMs at the low end and midtier as well as tech titans such as Samsung across the entire spectrum of smartphones.

Furthermore, we suspect that many customers are holding on to their phones longer as premium devices are more than good enough for today’s needs (web browsing, media streaming, social media) and potentially tomorrow’s (virtual/augmented reality). Analogous to the decline of PCs (with current PCs more than adequate for most applications), Apple faces the possibility of smartphone unit stagnation or even declines once emerging markets saturate or consumers gravitate to mid-tier devices. Should it be unable to innovate, the firm may lose its ability to charge premium prices for hardware that is no longer indistinguishable from many comparable devices.

Some competitors are willing to sell hardware at essentially cost to drive revenue or stickiness in other business segments. A notable example is Amazon with its multitude of products including its Echo smart speaker, Fire TV, Prime Music, Kindle Fire, and Prime Video to attract and retain Prime customers. Should these devices supersede their iOS counterparts, Apple's devices may be at risk. A recent focus on AI assistants such as Google Now and Amazon Alexa has also put pressure on Apple’s Siri that has fallen behind its peers in efficacy. Herein lies another area Apple may face headwinds if consumers further prioritize voice-recognition capabilities.

Stewardship 07/02/2018

We view Apple’s stewardship rating as Standard. 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 Jobs' right-hand man and served in various operations roles with Apple before becoming COO in 2005. Although Jobs' death was a blow to the firm, as he was a one-of-a-kind leader and creative mind, Apple is not lacking in capable leaders. 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 think Apple’s recent level of technological innovation has been adequate, though it has likely faced an unreasonably high bar for expectations after the debut of the iPhone. Many of the firm’s recent innovations have been in software and services within iOS such as Apple Pay, as well as under-the-hood improvements in semiconductors, rather than revolutionary, ubiquitous devices like the iPod or iPhone. We like how the firm designs its own chips for the CPU and artificial intelligence (neural engine), as this can create a better user experience since Apple also designs the operating system and can appropriately tailor the CPU or neural engine to its needs. Going forward, we expect the firm to also design its own GPU, which should enable performance differentiation.

Products like the Apple Watch, AppleTV, AirPods and HomePod don’t move the needle in isolation, but should drive incremental earnings growth to Apple. More importantly, these products will make it more challenging for iPhone users to leave the iOS ecosystem, in our view. Although the Apple Watch has had mixed results at the outset, we don’t view it as a miss just yet, given similar slow starts for the iPad and iPhone.

Although Apple maintains sterling brand recognition and has 1.3 billion active devices (as of December 2017), it has made a few missteps under Cook that skeptics would argue wouldn’t have happened under Jobs. Apple made a poor decision to part ways with Google Maps in iOS 6 and launch Apple Maps with a bevy of bugs and errors, leading to a formal apology. More recently, Apple is being investigated by the U.S. government as the firm purposefully slowed down iOS on older devices. While the firm claims that it was to protect the user from sudden phone shutdowns, many fear that Apple was implementing planned obsolescence of their devices, in order to get customers to upgrade.

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 when most of its cash was trapped overseas. We think Apple’s recent plan of $300 billion in capital distributions (to be completed in the June 2018 quarter) was more than sufficient to appease investors. We like the firm’s expansion of this program by another $100 billion in buybacks, along with the company’s healthy dividend raises in recent years.

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 a wide variety of consumer electronic devices, including smartphones (iPhone), tablets (iPad), PCs (Mac), smartwatches (Watch), and TV boxes (Apple TV), among others. The iPhone makes up the majority of Apple’s total revenue. In addition, Apple offers its customers a variety of services such as Apple Music, iCloud, AppleCare and Apple Pay, among others. Apple's products run internally developed software and semiconductors, and the firm is well known for its integration of hardware, software and services. Apple's products are distributed online as well as through company-owned stores and third-party retailers. The company generates about 40% of its revenue from the Americas, with the remainder earned internationally.