

# Apple Inc AAPL [XNAS] | ★★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Stewardship	Morningstar Credit Rating	Industry
527.67 USD	770.00 USD	539.00 USD	1039.50 USD	Medium	Narrow	Standard		Computer Systems

## Report Says Apple May Move Away From Intel for Macs, but This Is Far From a Done Deal

by Brian Colello, CPA  
Senior Stock Analyst  
Analyst covering this company do not own its stock.

Pricing as of Nov 16, 2012.  
Rating as of Nov 16, 2012.

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted.



### Analyst Note Nov. 06, 2012

On Monday, a story from Bloomberg reported that Apple AAPL may be looking to switch from Intel INTC processors to its own in-house designed chips based on the ARM ARMH architecture to power its Mac line of computers. While such a move is possible, we believe it is hardly a done deal, though it's worth keeping an eye on in the next several years. Although Apple is a key customer, a switch would not be devastating to Intel, as we estimate Apple accounts for just 3% of total revenue.

Apple has been using Intel microprocessors for its Mac product line since 2005, after previously using PowerPC chips, which were backed by an alliance among IBM, Motorola, and Apple. The firm made the switch because PowerPC could no longer keep up with Intel's processors in terms of performance. However, Apple uses its own internally designed A-series processors, which are based on the ARM architecture, to power its iPhones and iPads. The Bloomberg story indicated that the firm may also look to design ARM-based processors to replace Intel in its Macs a few years from now. We believe it is likely that Apple is looking into alternatives, but such inquiries are common research and development practices at tech companies, as it is necessary for firms to investigate various options before choosing the best technology solution. For example, the firm was rumored to have considered using Advanced Micro Devices' AMD Fusion processors for its MacBook Air notebooks last year.

We think the biggest obstacle to a possible switch is that Apple will need to be convinced that it will be able to come up with a better processor technology road map than Intel for years to come, or it will face the risk of having Mac products that aren't as competitive with PCs that incorporate Intel chips. This is a tall task, given that Intel, as the world's largest chipmaker, has a large R&D budget and the most advanced semiconductor manufacturing technologies at its

disposal to focus on creating the most cutting-edge processors. The knock on Intel in recent years has been that its chips are too performance driven and lack the power efficiency that ARM-based chips can provide for mobile devices, such as smartphones and tablets. While this is given in the article as a reason behind a possible switch by Apple down the road, performance remains a paramount consideration in computers, which would play to Intel's strength. In addition, Intel has made significant strides in increasing the power efficiency of its chips in recent years, and we expect it to become more competitive with ARM's solutions on that front in the coming quarters. Even if Apple were to turn to internally developed processors in the years ahead, we suspect that it would do so in consumer-focused Macs, such as the MacBook Air, while continuing to rely on Intel's most advanced processors for Macs that require extensive computing power, such as MacBook Pro. Such a scenario would be similar to Microsoft's MSFT Windows 8 launch, where some less functional Windows RT devices are powered by ARM-based processors while Intel continues to be the processor of choice in more powerful Win8 products.

Bloomberg said Apple may eventually use its in-house A-series chips for Macs, in order to offer a unified user experience based on a single operating system among the Mac, iPhone, and iPad, which would be possible with a common processor architecture. While we recognize the value of a unified user experience, it probably wouldn't make much sense for Apple to entirely switch away from Intel if it would be a detriment to the performance of its Mac computers. While the Bloomberg article highlights a potential risk for Intel, we believe the issue is far from decided. Nonetheless, it is something that bears following over the next several years. We estimate that Apple currently accounts for roughly 3% of Intel's total revenue. Therefore, Intel wouldn't be significantly affected if Apple did make a switch, though it would certainly be egg on the face for the firm.

### Thesis Oct. 08, 2012

We believe Apple's strength lies in its experience and

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Close Competitors	Currency (Mil)	Market Cap	TTM Sales	Oper Income	Net Income
Microsoft Corporation	USD	223,212	72,359	19,868	15,706
Google, Inc.	USD	212,660	47,543	12,835	10,555
Hewlett-Packard Co	USD	25,265	122,520	-3,774	-5,557
Dell Inc	USD	15,367	60,301	3,798	3,024

expertise in integrating hardware, software, services, and third-party applications into differentiated, premium devices that provide superior functionality and ease of use for the end customer. Although Apple has a robust product pipeline and ample opportunity to gain share in its various 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.

Although Apple originated as an innovator in the PC market and rose from the ashes in the mid-2000s on the heels of its wildly popular iPods, its fortunes are likely to remain tied to the iPhone and, to a lesser extent, the iPad for quite some time. We believe the key to Apple's success has been the firm's ability to seamlessly integrate hardware and software into easy-to-use devices. Its multiyear head start in this integration gives the firm an advantage over software providers (like Google GOOG and Microsoft MSFT) and hardware providers (such as Samsung and Hewlett-Packard HPQ) alike. Although Apple didn't invent the handset, or even the smartphone, its elegant iPhone design revolutionized the industry. Handset makers caught up with their own touchscreen smartphones, and certain devices have at times outperformed Apple's hardware in terms of screen size and data speed, but we see Apple remaining at or ahead the rest of the pack on the hardware front as it continues to add innovative, differentiated features (like retina display and a devout focus on battery technology) into its devices.

We believe Apple's bigger battles are in software and services today. The early iPhone success was driven by easy portability of iTunes media (leveraged from its dominant position in iPod music players), as well as a first-mover advantage in the development of its iOS operating system

and third-party app store. Ongoing enhancements, such as FaceTime and iMessage, help to differentiate Apple from Google's Android and other operating systems even further. Apple's current goal is to heighten the switching costs of its products, and we see iCloud, which allows for online storage and synchronization across iOS devices, as a key facet of this plan. Customers who own an iPhone and other iOS products (perhaps an iPad, Mac, iPod, or current and future Apple TV products) may become more reluctant to buy a new device that doesn't sync with iCloud and the rest of the ecosystem. Although iCloud and iOS won't provide Apple users with insurmountable switching costs, the firm has done a much better job than predecessors (Motorola and Research in Motion RIMM come to mind) that failed to lock in customers when they were king of the hill. Finally, we view Apple's integration of third-party apps into iOS 6, including Siri, as an interesting, increasingly important part of its strategy. A Siri search that provides a restaurant review from Yelp YELP may enhance the iPhone's ease of use today and, given the complexity of voice recognition software, may emerge as a clear differentiator that other OS platforms may be unable to match for years to come.

Ultimately, Apple will have to continually develop superior products on all fronts (hardware, software, services and third-party apps) while fending off many strong rivals in end markets highlighted by short product life cycles and intense competition. We expect Apple to remain a premium supplier of devices, even though rivals will clearly compete on price; Amazon AMZN is essentially selling its hardware at cost in order to profit from higher online media sales, and Google gives the Android OS to handset makers for free in order to drive search traffic. Apple may do a better job than any other phone or tablet maker in raising the switching costs associated with its devices, but as rivals like Samsung develop products with similar functionality and others offer serviceable products at much lower prices, a few missteps from Apple could drive customers to leave iOS altogether, especially as consumers replace phones every couple of years. Apple's decision to part ways with Google Maps and offer an inferior in-house mapping solution might not be a fatal blow or even a long-term issue, as Apple Maps

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improves and Google may build an iOS mapping app, but similar blunders may cause iOS customers to take a second look at other smartphones. The maps issue highlights that, despite Apple's size and software expertise, the firm will still have to develop and maintain partnerships with third parties like Facebook FB and others in order to provide a favorable experience to end users.

## Valuation, Growth and Profitability

We are raising our fair value estimate to \$770 per share from \$670, based on improved long-term growth assumptions. This fair value estimate implies fiscal 2013 (ending September 2013) price/earnings of 15 times, enterprise value/EBITDA of 11 times, and a 6.5% free cash flow yield. Given the success of the iPhone 4S, iPad 2 and "new iPad" to date, we project 45% revenue growth in fiscal 2012. We expect Apple's momentum to continue in the near to intermediate term and project 21% sales growth in fiscal 2013 and 17% in 2014.

Despite the iPhone's huge success thus far, according to Gartner data, unit sales make up less than 25% of smartphone shipments and less than 10% of total handsets today, so Apple still has a mammoth opportunity to recognize strong iPhone growth. We expect the smartphone market to essentially double over the next five years, and we hold our forecast of the iPhone's share of the market relatively constant in the low to mid-20s, as Apple gains share on the high end, but a larger portion of smartphone growth will likely come from cheaper Android devices sold in emerging markets. We project 34% unit growth and 27% revenue growth for the iPhone in fiscal 2013.

We also anticipate robust long-term iPad revenue growth, as this device both displaces PCs and is purchased as a third device alongside of PCs and phones. We assume that Apple's

line of Mac PCs will see minimal revenue growth, as Macs gain share in the large but slow-growth (at best) PC market. iPods should also see lower revenue as Apple retains majority market share in portable music players but smartphones continue to cannibalize these products.

Longer term, we think a higher portion of iPhone sales will be in China and other emerging markets, which will probably cause a mix shift toward budget iPhones (likely older models) and average selling price declines on its latest phone models. In turn, Apple's iPhone gross margins may dip from around an estimated 50% today to the low 40s. Similarly, iPad gross margins may dip a few percentage points from current levels, especially if the firm launches an iPad Mini at lower price points. We project that Apple's total gross margins and operating margins will peak at 43% and 35% in fiscal 2012, respectively, and will dip to the high 30s and high 20s by 2016, respectively. Our fair value uncertainty rating is medium, given the company's size and scale in its various industries.

## Risk

We believe a large, well-diversified company like Apple faces several risks. Despite its intentions to control as much of the user experience as possible for its products, the firm still relies on a robust app developer base and strong partnerships with third parties. Its decision (and subsequent apology) to use an in-house mapping solution may have diminished Apple's reputation and its customers' user experience, at least in the near term, and switching costs around other iOS products might not be enough to retain unsatisfied customers. We think it is unlikely that a further split from Google involving search is next, as we believe Apple's and Google's map differences pertained to specific creative user interface differences around mapping features, whereas search has a much simpler user interface (i.e.,

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typing in the search bar). We also view Facebook as a key third-party apps provider. Although Apple is on the record as stating that Facebook is a friend and not a foe, a Facebook-centric phone could lure customers away from iOS in the unlikely event that the two firms were to end their relationship.

Apple also faces several well-branded, well-capitalized rivals in software and hardware. It must continually deliver premium products in order to stave off these hungry competitors. If Apple were to falter and its exceptional brand be diminished as customers departed iOS in droves, we don't think its cash cushion could help the firm buy its way out of any problem. As a premium phone supplier, Apple also runs the risk that wireless carriers could reduce or eliminate the subsidies that they provide their customers on the iPhone, in turn raising customers' up-front costs and perhaps making other smartphones appear to be better alternatives. Finally, Apple lost cofounder and visionary Steve Jobs in October 2011, and while we believe that CEO Tim Cook is a more-than-capable leader, Apple runs the risk that its unique culture and sense of innovation may diminish over time.

## Bulls Say

- ▶ Gartner expects the smartphone market to essentially double from 2011 to 2014, so Apple could see tremendous revenue growth even if it only grew at the market rate.
- ▶ The iPad has been Apple's fastest-growing product line ever, which is a tremendous achievement given previous hits like the iPod and iPhone.
- ▶ For each iOS device purchased, customers may be less likely to switch to another provider and more likely to buy another Apple product, which could be a good sign for Mac sales, even in a soft PC environment.
- ▶ Apple's retail stores provide a platform for exposing new consumers to the breadth of the company's expanding

product lines.

## Bears Say

- ▶ Few firms have been able to maintain Apple's strong position in the handset market, as short product cycles and intense competition typically lead to new, innovative products that have historically prevented any single firm from dominating the marketplace.
- ▶ Apple will probably need to cut iPhone prices in order to grow in emerging markets, which in turn will weigh on gross margins.
- ▶ Apple may have lost much of its vision and creativity with the passing of cofounder Steve Jobs in October 2011.
- ▶ Apple is reliant on partnerships with third-party software providers like Google and Facebook, and it may struggle to sell premium products if it were to sever ties with these partners or offer inferior substitutes to these apps.

## Financial Overview

**Financial Health:** As of June, Apple held \$36 billion in cash and investments in the United States that can be used for dividend payments, stock repurchases, and domestic acquisitions. Apple held another \$81 billion in overseas cash and investments that it cannot repatriate to the U.S. without paying additional taxes. The company has no debt. We are not concerned about Apple's financial health.

## Company Overview

**Profile:** Apple designs consumer electronic devices, including PCs (Mac), tablets (iPad), phones (iPhone), and portable music players (iPod). Its iTunes online store is the largest music distributor in the world; it sells and rents TV shows and movies and sells applications for the iPhone and iPad. In early 2011, Apple launched the Mac App Store, an online store that sells first- and third-party applications for Mac desktop and notebook computers. Apple's products are

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distributed online as well as through company-owned stores and third-party retailers.

**Management:** 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' passing was a blow to the firm, as he was a one-of-a-kind leader and creative mind. However, we believe Apple is in good hands with Cook. Apple's formal apology after parting ways with Google Maps in iOS 6 and launching Apple Maps with a variety of bugs and errors may have put management in the spotlight. However, we understand the rationale for such a switch, and we're willing to give the management team the benefit of the doubt and tend to view the mishap as a one-time misstep. Arthur Levinson, former chairman and CEO of Genentech, is chairman of Apple's board of directors.

Apple continues to generate operating margins and cash flow well above its peers in various hardware industries. Although Apple may have frustrated investors under Jobs by holding a titanic cash cushion (\$117 billion as of June), we applaud the company's recent dividend initiation and buyback plan under Cook. We also appreciate Apple's frugality by making smaller strategic acquisitions 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.

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chips. This is a tall task, given that Intel, as the world's largest chipmaker, has a large R&D budget and the most advanced semiconductor manufacturing technologies at its disposal to focus on creating the most cutting-edge processors. The knock on Intel in recent years has been that its chips are too performance driven and lack the power efficiency that ARM-based chips can provide for mobile devices, such as smartphones and tablets. While this is given in the article as a reason behind a possible switch by Apple down the road, performance remains a paramount consideration in computers, which would play to Intel's strength. In addition, Intel has made significant strides in increasing the power efficiency of its chips in recent years, and we expect it to become more competitive with ARM's solutions on that front in the coming quarters. Even if Apple were to turn to internally developed processors in the years ahead, we suspect that it would do so in consumer-focused Macs, such as the MacBook Air, while continuing to rely on Intel's most advanced processors for Macs that require extensive computing power, such as MacBook Pro. Such a scenario would be similar to Microsoft's MSFT Windows 8 launch, where some less functional Windows RT devices are powered by ARM-based processors while Intel continues to be the processor of choice in more powerful Win8 products.

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### Apple's New Products Should Drive Strong Near-Term Revenue Growth, but at Lower Margins

Oct. 25, 2012  
Apple AAPL reported solid fiscal fourth-quarter earnings that were within the range of our expectations. After considering the company's usual conservatism with its forward-looking forecasts, its revenue outlook is a bit better than our prior estimates, although its earnings per share forecast was disappointing, as gross margins associated with new products will be lower than historical levels. We plan to maintain our fair value estimate.

Revenue in the September quarter was \$36 billion, ahead of the firm's forecast of \$34 billion discussed in July and modestly ahead of Wall Street consensus estimates of \$35.8 billion. By product line, iPhone sales of 26.9 million units were modestly below our expectations, but we believe sales at these levels still indicate a solid iPhone 5 launch at the tail end of the quarter. iPhone revenue of \$17.1 billion was in line with our forecast, thanks to a 2% average selling price increase to \$636. Mac sales were a surprising bright spot, as laptop PC unit sales and revenue were respectively up 31% and 47% sequentially and 9% and 17% on a year-over-year basis.

These results are miles ahead of the dismal results reported by many other firms in the PC supply chain. Even if the PC end market were healthy, these sequential improvements were also substantially above Apple's typical seasonal patterns. We view Mac strength as a positive sign for Apple's narrow economic moat, as iPhone and iPad users

may be trading up to Mac PCs, thereby incorporating more Apple products into the company's ecosystem.

The iPad was the big disappointment, as the firm only sold 14 million units in the quarter. We expected a weak iPad quarter, since CEO Tim Cook indicated that the firm sold its 100 millionth iPad a couple of weeks ago, which implied sales of no more than 16 million in the September quarter. Apple hinted that it will start to see a seasonal decline in iPad units in the September quarter, as educational sales spike in the June quarter before the back-to-school season, and we don't see lower iPad sales this quarter as a sign that iPad is losing its growth momentum.

Despite higher sales levels, gross margins deteriorated 280 basis points to 40%. We suspect that the decline was due to higher costs associated with the company's new products, such as the iPhone 5. Still, Apple earned a strong operating margin of 30% in the quarter, down from 33% in the June quarter. In turn, earnings per share were \$8.67, well ahead of the firm's forecast of \$7.65 but slightly under consensus estimates of \$8.75.

For the December quarter, Apple forecasts revenue of \$52 billion and EPS of \$11.75. The firm typically exceeds its financial forecasts, and we calculate that it only needs to beat its sales forecast by 6% to match consensus estimates of \$55 billion. We think there's a very good chance that the top line will meet or exceed these Street estimates. The company's EPS forecast of \$11.75 appears light to us and is well below consensus forecasts of \$15.41. The biggest concern, in our opinion, revolves around Apple's forecast gross margins of 36%, well below 40% earned in the September quarter. New products like the iPhone 5 and various new Macs are expected to carry higher component costs than prior models. The iPad Mini will also be well

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below Apple's corporate gross margin average, although at a \$329 price point and given the specifications of the product (like an older processor), we still think the Mini has similar gross margins to the larger iPad, which we estimate to be around 20%.

Despite the disappointing gross margin and EPS forecasts, we're still encouraged by Apple's expected top-line growth. We also anticipate that Apple will focus on cutting costs, especially as new products mature and certain supply constraints ease in the months ahead, in order to see modest gross margin improvement over the next few quarters.

**Apple's iPad Mini: Pricier Than Expected** Oct. 23, 2012  
Apple AAPL made several new product announcements today, the most important of which was the long-anticipated and widely rumored iPad Mini tablet. At first glance, the form factor and specifications, such as the use of an older A5 processor and a non-retina display, were consistent with our expectations. However, we're a bit disappointed at the starting price point of \$329, as we fear that price-sensitive consumers may continue to turn to alternative tablet solutions, such as Amazon's AMZN Kindle Fire and Google's GOOG Nexus tablet at \$200 price points. Since a \$329 iPad Mini likely carries similar gross margins to Apple's existing iPad portfolio, we don't expect to make a material change to our fair value estimate for Apple. However, we'll update our valuation assumptions for the firm once Apple reports fiscal fourth-quarter earnings on Thursday evening.

The iPad Mini includes a 7.9-inch display, as compared with the larger 9.7-inch displays in traditional iPads. It will come in its usual variety of versions (16/32/64 GB of memory, black or white bezel, Wi-Fi only versus 3G/4G cellular connectivity). We're not surprised that potential iPad Mini buyers will have to make some compromises, as the Mini won't have a retina

display and will rely on Apple's older A5 processor, but we also thought that Apple would make an 8 GB model in order to reach an even lower price point.

We previously anticipated that Apple would make a \$249 Mini that would carry mid- to high-teens gross margins, which would be a few percentage points below our estimates for Apple's larger iPad gross margins. We had some fears that Apple may have taken a hit on profitability with such a product, as these cheaper Minis may have significantly cannibalized larger iPad sales. However, Apple could have strengthened its narrow economic moat by bringing more customers onto the iOS platform, as we believe that iOS customers who own multiple Apple products face higher switching costs and are less likely to shift to alternative platforms. Instead, the opposite scenario may play out. We have little concern about larger iPad cannibalization or Apple's iPad gross margins going forward, as we roughly calculate that a \$329 Mini should carry gross margins equal to larger iPads. We also understand the rationale that it would be easier for Apple to cut prices on the Mini at a later date if it failed to gain adoption, rather than price it aggressively right off the bat and try to raise prices later on. However, the risk around the Mini, in our view, is that Apple's Mini pricing may concede more of the low-end tablet market to Amazon and Google, running the risk that these Android tablet users may buy compatible Android phones and/or shy away from Apple iPhones in the future. Apple may be able to target these buyers a year from now by selling older iPad Mini models at \$249 or \$269, but Amazon and Google may respond with similar price cuts as well. That said, if consumers buy the Mini in spite of Apple's relatively higher price point and drive up significant iPad unit volumes, the Mini launch could be a net positive for Apple.

Looking at the rest of Apple's product announcements today,

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we were also surprised that the company released a fourth-generation 9.7-inch iPad today. (It continues to be named simply "iPad" but we'll refer to it as the iPad 4). The main improvement in the iPad 4 is an advanced A6X processor, which Apple claims doubles the computing and graphics power of the device. The announcement takes Apple off of its traditional pattern of launching a new iPad in the March-April time frame, and we fear that Apple may face a bit of a backlash from its customers by supplanting its third-generation iPad in just six months, especially because there aren't many more product enhancements beyond the faster processor. It appears that the "iPad 3" will simply be pulled from Apple's product portfolio and replaced with the iPad 4, as Apple will still sell the iPad 2 at the same \$399 price first discussed in March. Apple also announced new versions of its Macbook Pro laptops and Mac Mini and iMac desktops, but we view these new models as regular product refreshes that do not change our long-term thesis on the company.

### Apple Under Review Oct. 01, 2012

We are placing Apple AAPL under review while we transfer coverage to another analyst.

### As the iPhone Goes, So Does Apple; 3Q Results Below Expectations Jul. 24, 2012

Apple AAPL delivered third-quarter results below our expectations because of an unexpectedly sharp drop in iPhone shipments. We believe the headwinds are primarily short-term in nature and product-cycle driven. Competition is increasing but there is no evidence to suggest that Apple's fundamental ability to attract new customers is fading or that the lock-in of existing customers is eroding. We are maintaining our \$670 fair value estimate.

Apple delivered revenue of \$35 billion during the quarter, up

23% over the prior year, but down 11% sequentially and 25% from the firm's blockbuster first quarter. The iPhone and iPad account for approximately 73% of Apple's total revenue and remain the key drivers of Apple's iOS platform and the firm's overall business model. Apple shipped 26 million iPhone units this quarter, a 28% year-over-year increase, but a 26% sequential decline. The sequential decline works out to approximately 9 million units, but falls to a 6-million-unit decline after adjusting for differences in channel inventory.

We were surprised by the magnitude of the drop in iPhone unit shipments, but directionally and fundamentally, this quarter played out exactly as we expected. There are two key drivers of the iPhone softness. First, consumers are more attuned to the product release cycle and would-be customers are delaying purchases until later this year. Second, there is greater competition from Google's Android phones--larger screens and faster data connections--that can make the iPhone look stale more quickly as it ages past 6 months old.

The iPad product line was the highlight of Apple's quarter, with unit shipments rising 84% year over year and 44% sequentially. This is in line with our expectations as the third quarter represents the first full quarter of availability for both the Next Generation iPad and the discounted iPad 2.

The importance of the iPhone to Apple's bottom line is clear with the strength of iPad unit shipments unable to offset the surprise miss in iPhone shipments. Apple's gross margin fell 460 basis points to 42.8% during the quarter, largely driven by the revenue mix-shift away from the iPhone. In the second quarter, the iPhone delivered 58% of Apple's revenue--in the third quarter the revenue contribution from iPhone fell to 46%. Also contributing to the decline in Apple's gross profitability is the growing proportion of older generation devices as a percentage of iPhones and iPads sold.

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## Analyst Notes (continued)

This quarter also delivered one of the first signs that our long-term thesis on product mix is beginning to play out, with the average sale price of both the iPhone and the iPad falling approximately 4% sequentially. We have long held that Apple will need to offer products at lower price points in order to drive unit growth during the next few years, especially as the center of the smartphone transition shifts from developed to emerging economies. Apple has a plan in place, offering older versions of its products, the iPad 2 and the iPhone 4 concurrently with the latest and greatest iterations of these devices. Until now, however, the insatiable demand for the very latest device has kept average selling prices from falling. The product mix-shift has become more pronounced this quarter because the iPhone 4S has been out for three quarters and Apple began offering the iPad2 at the lower \$399 price point. We expect prices to continue falling and will be watching the rate of decline closely during the next several years.

The true test for Apple was not this quarter, nor is it the fourth quarter. In fact, we expect to see greater volatility in Apple's quarterly results going forward due to the growing importance of the product cycle. It will not be until the next generation iPhone launches that investors will get a true reading of Apple's positioning in the market. We maintain that the next iPhone launch will demonstrate Apple's continued ability to assimilate new users and retain the existing user base by layering on additional sticky services. In the meantime, any pullback in the stock that would send this Apple's shares toward our 5-star price and below \$500 would provide investors with an excellent opportunity to own this high-quality name with an attractive margin of safety.

# Apple Inc AAPL

**Sales USD Mil** 156,508 **Mkt Cap USD Mil** 494,447 **Industry** Computer Systems **Sector** Technology

Apple designs consumer electronic devices, including PCs (Mac), tablets (iPad), phones (iPhone), and portable music players (iPod). Its iTunes online store is the largest music distributor in the world; it sells and rents TV shows and movies and sells applications for the iPhone and iPad. In early 2011, Apple launched the Mac App Store, an online store that sells first- and third-party applications for Mac desktop and notebook computers. Apple's products are distributed online as well as through company-owned stores and third-party retailers.

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**Morningstar Rating** — **Last Price** 525.62 **Fair Value** — **Uncertainty** — **Economic Moat™** — **Stewardship** —  
per share prices in USD



Growth Rates		Compound Annual			
Grade: A		1 Yr	3 Yr	5 Yr	10 Yr
Revenue %	44.6	53.9	45.5	39.2	
Operating Income %	63.5	67.6	65.8	124.5	
Earnings/Share %	59.5	69.4	62.2	85.8	
Dividends %	—	—	—	—	
Book Value/Share %	52.7	53.0	49.8	36.3	
Stock Total Return %	36.5	37.5	26.4	53.9	
+/- Industry	23.7	20.5	14.3	38.8	
+/- Market	18.0	28.2	27.3	49.7	

Profitability Analysis				
Grade: A	Current	5 Yr Avg	Ind	Mkt
Return on Equity %	42.8	35.6	32.7	22.8
Return on Assets %	28.5	22.4	12.7	9.3
Fixed Asset Turns	13.5	15.7	11.7	7.7
Inventory Turns	112.1	67.7	20.7	17.0
Revenue/Employee USD K	2149.8	1726.8*	—	1055.7
Gross Margin %	43.9	39.6	35.8	39.7
Operating Margin %	35.3	28.3	7.4	16.6
Net Margin %	26.7	21.2	12.0	11.1
Free Cash Flow/Rev %	26.5	25.3	14.5	0.1
R&D/Rev %	2.2	0.0	—	9.5

Financial Position		
Grade: A	09-11 USD Mil	09-12 USD Mil
Cash	9815	10746
Inventories	776	791
Receivables	11717	18692
Current Assets	44988	57653
Fixed Assets	7777	15452
Intangibles	4432	5359
Total Assets	116371	176064
Payables	15772	22710
Short-Term Debt	—	—
Current Liabilities	27970	38542
Long-Term Debt	—	—
Total Liabilities	39756	57854
Total Equity	76615	118210

Valuation Analysis				
	Current	5 Yr Avg	Ind	Mkt
Price/Earnings	11.9	21.9	13.6	—
Forward P/E	8.5	—	—	13.2
Price/Cash Flow	9.8	14.4	9.0	—
Price/Free Cash Flow	12.0	16.7	11.6	—
Dividend Yield %	1.0	—	1.3	2.0
Price/Book	4.2	5.7	4.0	—
Price/Sales	3.2	4.0	1.7	—
PEG Ratio	0.5	—	—	0.3

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	YTD	Stock Performance
Total Return %	-34.6	49.1	201.4	123.3	18.0	133.5	-56.9	146.9	53.1	25.6	31.1	Total Return %
+/- Market	-11.2	22.7	192.4	120.3	4.4	130.0	-18.4	123.5	40.3	25.6	17.1	+/- Market
+/- Industry	-9.5	22.2	188.1	124.0	0.0	99.0	-17.7	72.8	32.3	10.8	18.5	+/- Industry
Dividend Yield %	—	—	—	—	—	—	—	—	—	—	—	1.0
Market Cap USD Mil	5146	7859	25893	60587	72901	173427	75997	190983	297089	377519	494447	Market Cap USD Mil

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	TTM	Financials
Revenue USD Mil	6207	8279	13931	19315	24006	32479	42905	65225	108249	156508	156508	Revenue USD Mil
Gross Margin %	27.5	27.3	29.0	29.0	34.0	34.3	40.1	39.4	40.5	43.9	43.9	Gross Margin %
Oper Income USD Mil	-1	326	1650	2453	4409	6275	11740	18385	33790	55241	55241	Oper Income USD Mil
Operating Margin %	0	3.9	11.8	12.7	18.4	19.3	27.4	28.2	31.2	35.3	35.3	Operating Margin %
Net Income USD Mil	69	276	1335	1989	3496	4834	8235	14013	25922	41733	41733	Net Income USD Mil

Earnings Per Share USD	0.10	0.36	1.56	2.27	3.93	5.36	9.08	15.15	27.68	44.15	44.15	Earnings Per Share USD
Dividends USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.65	2.65	Dividends USD
Shares Mil	727	775	857	878	889	902	907	925	937	945	945	Shares Mil
Book Value Per Share USD	5.82	6.54	9.00	11.74	16.71	25.17	35.16	52.18	82.45	126.10	125.66	Book Value Per Share USD
Oper Cash Flow USD Mil	289	934	2535	2220	5470	9596	10159	18595	37529	50856	50856	Oper Cash Flow USD Mil
Cap Spending USD Mil	-164	-176	-260	-657	-986	-1199	-1213	-2121	-7452	-9402	-9402	Cap Spending USD Mil
Free Cash Flow USD Mil	125	758	2275	1563	4484	8397	8946	16474	30077	41454	41454	Free Cash Flow USD Mil

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	TTM	Profitability
Return on Assets %	1.1	3.7	13.6	13.8	16.4	14.9	18.9	22.8	27.1	28.5	28.5	Return on Assets %
Return on Equity %	1.7	5.9	21.3	22.8	28.5	27.2	31.3	35.3	41.7	42.8	42.8	Return on Equity %
Net Margin %	1.1	3.3	9.6	10.3	14.6	14.9	19.2	21.5	23.9	26.7	26.7	Net Margin %
Asset Turnover	0.95	1.11	1.42	1.34	1.13	1.00	0.99	1.06	1.13	1.07	1.07	Asset Turnover
Financial Leverage	1.6	1.6	1.6	1.7	1.7	1.9	1.5	1.6	1.5	1.5	1.5	Financial Leverage

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	09-12	Financial Health
Working Capital USD Mil	3530	4375	6816	8038	12657	20598	20049	20956	17018	19111	19111	Working Capital USD Mil
Long-Term Debt USD Mil	—	—	—	—	—	—	—	—	—	—	—	Long-Term Debt USD Mil
Total Equity USD Mil	4223	5076	7466	9984	14532	21030	31640	47791	76615	118210	118210	Total Equity USD Mil
Debt/Equity	—	—	—	—	—	—	—	—	—	—	—	Debt/Equity

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM	Valuation
Price/Earnings	—	57.5	50.5	38.8	30.8	43.5	15.9	20.5	18.0	11.5	11.9	Price/Earnings
P/E vs. Market	—	—	—	—	—	—	—	—	—	0.6	—	P/E vs. Market
Price/Sales	0.9	1.2	2.6	3.8	3.6	6.7	2.3	4.1	3.9	3.0	3.2	Price/Sales
Price/Book	1.3	1.8	4.5	7.2	6.5	10.3	3.3	5.3	5.4	4.2	4.2	Price/Book
Price/Cash Flow	33.0	19.7	17.2	30.1	19.8	27.5	7.2	16.0	13.3	8.4	9.8	Price/Cash Flow

Quarterly Results						
Revenue USD Mil	Dec 11	Mar 12	Jun 12	Sep 12		
Most Recent Period	46333.0	39186.0	35023.0	35966.0		
Prior Year Period	26741.0	24667.0	28571.0	28270.0		
Rev Growth %	Dec 11	Mar 12	Jun 12	Sep 12		
Most Recent Period	73.3	58.9	22.6	27.2		
Prior Year Period	70.5	82.7	82.0	39.0		
Earnings Per Share USD	Dec 11	Mar 12	Jun 12	Sep 12		
Most Recent Period	13.87	12.30	9.32	8.67		
Prior Year Period	6.43	6.40	7.79	7.05		

Industry Peers by Market Cap				
	Mkt Cap USD Mil	Rev USD Mil	P/E	ROE%
Apple Inc	494447	156508	11.9	42.8
Microsoft Corporatio	224389	72359	14.4	24.5
Google, Inc.	212686	47543	20.1	17.2

Major Fund Holders		% of shares
		—
		—
		—

\*3Yr Avg data is displayed in place of 5Yr Avg

TTM data based on rolling quarterly data if available; otherwise most recent annual data shown.

## Morningstar's Approach to Rating Stocks

### Our Key Investing Concepts

- ▶ Economic Moat™ Rating
- ▶ Discounted Cash Flow
- ▶ Discount Rate
- ▶ Fair Value
- ▶ Uncertainty
- ▶ Margin of Safety
- ▶ Consider Buying/Consider Selling
- ▶ Stewardship Grades

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic value and allowing them to compound their value over long periods of time is the surest way to create wealth in the stock market.

We rate stocks 1 through 5 stars, with 5 the best and 1 the worst. Our star rating is based on our analyst's estimate of how much a company's business is worth per share. Our analysts arrive at this "fair value estimate" by forecasting how much excess cash--or "free cash flow"--the firm will generate in the future, and then adjusting the total for timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable and consistently profitable business is worth more than cash from a cyclical or unsteady business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than for mediocre ones, for a simple reason: We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a bad deal if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based

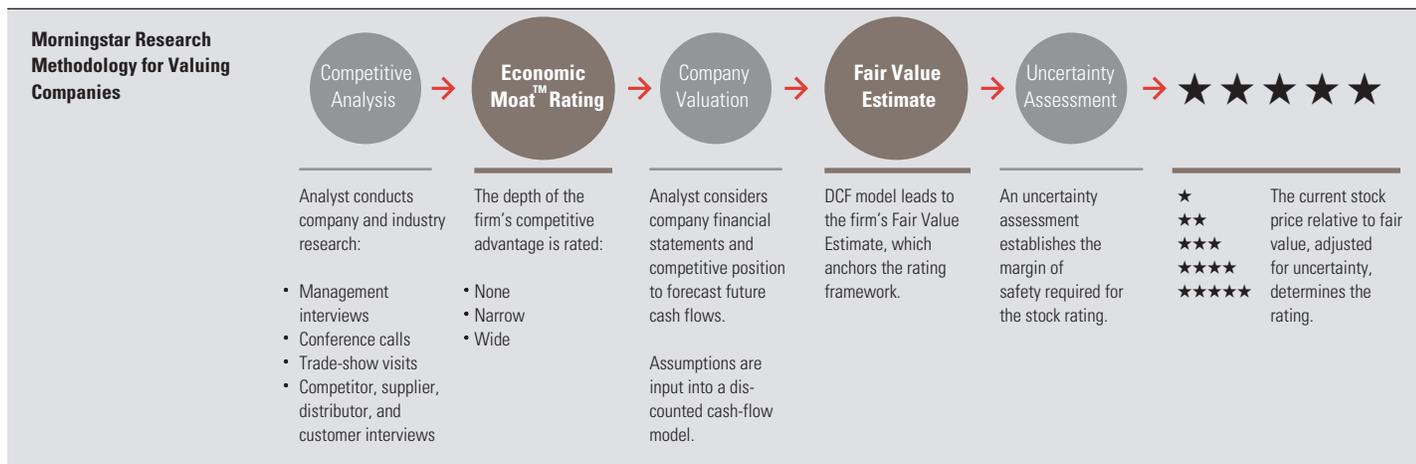
just on movement in the share price. If we think a stock's fair value is \$50, and the shares decline to \$40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at \$40 than they were at \$50.

Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, at times we may appear out of step with the overall stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. But when the market tumbles, many more will likely garner 5 stars. Although you might expect to see more 5-star stocks as the market rises, we find assets more attractive when they're cheap.

We calculate our star ratings nightly after the markets close, and issue them the following business day, which is why the rating date on our reports will always be the previous business day. We update the text of our reports as new information becomes available, usually about once or twice per quarter. That is why you'll see two dates on every Morningstar stock report. Of course, we monitor market events and all of our stocks every business day, so our ratings always reflect our analyst's current opinion.

### Economic Moat™ Rating

The Economic Moat™ Rating is our assessment of a firm's ability to earn returns consistently above its cost of capital in the future, usually by virtue of some competitive advantage. Competition tends to drive down such



## Morningstar's Approach to Rating Stocks (continued)

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economic profits, but companies that can earn them for an extended time by creating a competitive advantage possess an Economic Moat. We see these companies as superior investments.

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### Discounted Cash Flow

This is a method for valuing companies that involves projecting the amount of cash a business will generate in the future, subtracting the amount of cash that the company will need to reinvest in its business, and using the result to calculate the worth of the firm. We use this technique to value nearly all of the companies we cover.

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### Discount Rate

We use this number to adjust the value of our forecasted cash flows for the risk that they may not materialize. For a profitable company in a steady line of business, we'll use a lower discount rate, also known as "cost of capital," than for a firm in a cyclical business with fierce competition, since there's less risk clouding the firm's future.

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### Fair Value

This is the output of our discounted cash-flow valuation models, and is our per-share estimate of a company's intrinsic worth. We adjust our fair values for off-balance sheet liabilities or assets that a firm might have--for example, we deduct from a company's fair value if it has issued a lot of stock options or has an under-funded pension plan. Our fair value estimate differs from a "target price" in two ways. First, it's an estimate of what the business is worth, whereas a price target typically reflects what other investors may pay for the stock. Second, it's a long-term estimate, whereas price targets generally focus on the next two to 12 months.

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### Uncertainty

To generate the Morningstar Uncertainty Rating, analysts consider factors such as sales predictability, operating leverage, and financial leverage. Analysts then classify their ability to bound the fair value estimate for the stock into one of several uncertainty levels: Low, Medium, High,

Very High, or Extreme. The greater the level of uncertainty, the greater the discount to fair value required before a stock can earn 5 stars, and the greater the premium to fair value before a stock earns a 1-star rating.

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### Margin of Safety

This is the discount to fair value we would require before recommending a stock. We think it's always prudent to buy stocks for less than they're worth. The margin of safety is like an insurance policy that protects investors from bad news or overly optimistic fair value estimates. We require larger margins of safety for less predictable stocks, and smaller margins of safety for more predictable stocks.

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### Consider Buying/Consider Selling

The consider buying price is the price at which a stock would be rated 5 stars, and thus the point at which we would consider the stock an extremely attractive purchase. Conversely, consider selling is the price at which a stock would have a 1 star rating, at which point we'd consider the stock overvalued, with low expected returns relative to its risk.

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### Stewardship Grades

Our corporate Stewardship Rating represents our assessment of management's stewardship of shareholder capital, with particular emphasis on capital allocation decisions. Analysts consider companies' investment strategy and valuation, financial leverage, dividend and share buyback policies, execution, compensation, related party transactions, and accounting practices. Corporate governance practices are only considered if they've had a demonstrated impact on shareholder value. Analysts assign one of three ratings: "Exemplary," "Standard," and "Poor." Analysts judge stewardship from an equity holder's perspective. Ratings are determined on an absolute basis. Most companies will receive a Standard rating, and this is the default rating in the absence of evidence that managers have made exceptionally strong or poor capital allocation decisions.