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APPLE INC. (AAPL)

THE QUENTISSENTIAL GRAHAM/BUFFET VALUE PLAY

Apple is the second largest company in the world. The company's stock pays a dividend (2.5% yield) and is currently selling at an astonishingly cheap multiple (7.8X one year forward P/E). Wall Street's overreaction to two quarters of weaker than expected earnings is the catalyst behind the recent decline in the price of Apple shares. Apple's brand, product pipeline, market position and "closed ecosystem" equate to a wide moat. The firm's balance sheet is exceptionally strong, which will give management an enormous amount of flexibility as they define ways to enhance shareholder value.

Compelling Valuation – Apple is cheaper than it has ever been on a Forward P/E basis (7.8X VS 10YR Average of 61X). It is cheaper than all of its major rivals (Google, Microsoft, and Samsung included). The stock's forward P/E is also well below the industry average (31x for Computers and Peripherals). Apple stock now implies a growth rate of -4%, which is in stark contrast to the firm's historical average of +7%. It is not possible to find a value like this in the technology sector that will also afford investors this much growth potential and security.

Competitive Advantage – Apple's brand, innovative design, and penchant for disruptive innovation (iPhone and iPad) are some of the most important components of their competitive advantage. Additionally, their complimentary approach to product design, and their "closed ecosystem" protect their competitive position and foster growth. Apple's product line has much better penetration among women and children than its competitors, which is a another major advantage. Lastly, Apple is one of the two largest producers of smartphones and tablets in the world which affords the firm an enormous amount of power in their industry.

Margin of Safety – Apple is a behemoth ($400B+ market cap). It pays a dividend and also has an enormous amount of cash ($130B) on its balance sheet. The company's fundamentals are superb (excellent track record, competent management, and the firm is debt free). These attributes provide investors with plenty of safety, while also affording management the latitude necessary to maximize shareholder value.

Recommendation & Price Target – Apple is rated a strong buy. Though the firm's growth rate will temper and management expects margins to decline, investors who buy the stock now are being awarded an "option on innovation" for free. **A fair multiple on the stock based on a blended relative value, comparative value, PEG and DCF valuation is 12.2x one year forward earnings, which equates to a dollar price of $535.77. Expected return on Apple based on this forecast is 37%.**

RECOMMENDATION	BUY
Stock Price	$392.05
52 Week Range	$385.10-$705.07
1 Year Target Price	**$535.77**
Expected Return	+37%

Sector	Technology
Sub Sector	Computers

Market Profile	(04/18/13)
Market Cap	$371.63B
Enterprise Value	$363.79B
Shares Outstanding	939.06M
Avg Volume (3Mo)	17,807,500
Dividend Yield	2.50%
Trailing P/E	8.97
Forward P/E	7.80
Return on Equity	38.41%
Short % of Float	2.10%

Basic EPS Record	
2012	44.64
2011	28.05
2010	15.41
2009	9.22

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Share Price Performance (1 YR)

Company Overview

History

Apple Inc. was founded by Steve Jobs and Steve Wozniak on April 1, 1976 (incorporated in Cupertino, California in 1977). Their first product was the Apple I personal computer. Apple went public on December 12, 1980. It was the biggest IPO (on a capital basis) since Ford in 1956. Apple manufactured personal computers almost exclusively until the 1990s. Jobs left Apple in 1985 but returned in 1996 after his company (NeXT) was acquired. Job's return, and subsequent ascent to CEO, marked a change in the product development and marketing strategies of Apple Inc. Simplified design and an integrated media ecosystem became the company's main philosophies. The introduction of the iPod (2001) and iTunes (2003) were major milestones for the company and allowed Apple to establish itself as a global leader in consumer electronics and media. It was the introduction of the iPhone though that became a watershed moment for Apple, disrupting most mobile technologies and paving the way for explosive growth. Further product diversification continued with the introduction of the iPad and improved iOS platforms. Apple sells to consumers, small/mid-sized businesses, government agencies and educational institutions.

Business Segments

Apple is organized by geographic region. Results are segregated by Americas, Europe, Japan, Asia-Pacific and Retail. The Americas consists of both North and South America. Europe includes the Middle East and Africa. Asia-Pacific covers all Asian countries (except Japan) as well as Australia. The retail segment operates Apple stores in 13 different countries.

Products

Apple sells an array of consumer electronics, services and software. Its product offering includes personal computers, digital media devices, digital media, software and peripherals.

iPhone

iPhone is a line of mobile smartphones that operates using Apple's iOS system. There have been six generations of the iPhone, which was first introduced by Steve Jobs on January 9, 2007. The iPhone has Wi-Fi connectivity as well as cellular (2G, 3G, 4G and LTE). The product is compatible with Windows and Mac computers. 250 million iPhones have been sold by Apple since its introduction. The product accounted for 51% of Apple's net sales in 2012.

iPad

Billed as "A magical window where nothing comes between you and what you love", the iPad is a tablet computer and was introduced by Apple on April 3, 2010. There have been five generations of the device since its inception. iPads can be used to send/receive email, browse the web, take photos and video, and play games. The product is GPS and Wi-Fi enabled and cellular capable (3G, 4G & LTE). The current generation of iPad comes in standard (with Retina Display technology) and Mini forms. In 2012, the iPad accounted for 21% of Apple's net sales.

Mac

Mac is Apple's range of personal computer products, which includes desktop/home computers and laptops. Macs are equipped with Intel processers and the Apple iOS system. The computers are bundled with iLife software and other software that allows users to browse the web, edit photos and videos, interact with various forms of media or play games.

Brands associated with Mac include iMac, Mac Pro, Mac Mini, MacBook Pro, and MacBook Air. Mac products accounted for 15% of Apple's net sales in 2012.

iPod

The iPod line consists of a suite of portable digital music players. The product was first introduced in 2001, and served to redefine the digital music landscape. iPods are small portable electronic devices that use flash media and internal hard drives to store data. The line currently consists of the iPod Nano, iPod Shuffle, iPod Touch and iPod Classic. The players work seamlessly with the iTunes platform to allow users easy access to all kinds of digital media (music, movies, TV shows, and games). The iPod line accounted for 4% of Apple's net sales in 2012.

iTunes

iTunes is a media and content delivery platform. iTunes is bundled with all Apple products and is available via internet download. Officially launched by Apple in 2000, iTunes is responsible for completely reshaping the streaming /content delivery industry (as well as the music industry in general). Users can download music, movies, games and other digital media from iTunes. iTunes is the number one music retailer in the world, with more than 25 billion tracks having been downloaded from the platform. The iTunes store accounted for 5% of Apple's net sales in 2012.

Mac App Store

The Mac App Store is a content & software delivery platform that allows users to download any approved Mac OS application (for use on most Apple products). The store was launched in 2011 and contains Apple, 3rd party, and user developed apps that conform to the Apple platform and policies. More than 10,000 apps are now available through the Mac App Store. The platform accounted for 2% of Apple's net sales in 2012.

iCloud

iCloud is a cloud computing service offered by Apple. Cloud computing allows users to store data (media, contacts, personal information, etc.) on remote computer servers. Apple's iCloud service is free for Apple users (up to 5GB). Additional storage (up to 50GB) is available at an additional cost. iCloud was introduced in 2011 and now boasts more than 250 million users. iCloud accounted for less than 2% of Apple's net sales in 2012.

Software/Operating Systems

Apple sells operating systems (iOS) and other software products. Products are sold for personal, professional and educational use. Software accounted for less than 2% of Apple's net sales in 2012.

Apple Product Mix Summary 2012 (in millions)

	Net Sales	% of Net Sales	Growth YoY
Mac	$ 23,221	15%	+7%
iPod	$ 5,615	4%	-25%
Music & Related Products	$ 8,534	5%	+35%
iPhone	$ 80,477	51%	+71%
iPad	$ 32,424	21%	+59%
Peripherals and Other Hardware	$ 2,778	2%	+19%
Software	$ 3,459	2%	+17%
	$ 156,508		+45%

Macro Environment

Industry Overview

Apple Inc. is part of the technology sector and personal computer industry. The industry grew from a hobbyist craft to one in which the number of active PCs in the world is greater than 1 billion. The industry offers a wide range of products including servers, personal computers, tablets, and storage devices. It is highly competitive and usually lags business cycles. Margins are generally high while debt is generally moderate.

The global PC industry is dominated by the US and Asia. Asia makes up more than 34% of the global market. Growth in the industry has been largely positive since 2006 as consumers have had the benefit of better technology, more product differentiation (Ultra-thin laptops and tablets) and more variety. Industry growth was negative in 2009 (as a result of deteriorating macro fundamentals and the global credit crisis) but returned to normal in 2010. Growth in the industry has also been driven by more widespread use and availability of the internet across the globe.

Average Industry Statistics (*Source: Yahoo Finance*)

Market Capitalization:	134,000.7B
Price / Earnings:	34.51
Price / Book:	5.3
Net Profit Margin (mrq):	5.05%
Price To Free Cash Flow (mrq):	34.69
Return on Equity:	6.18%
Total Debt / Equity:	81.45
Dividend Yield:	3.22%

Competition

Apple Inc. competes globally with manufacturers of personal computer systems, computer hardware, peripherals, and consumer electronics. Apple's main competitors are large cap global firms (some US based and some Asia-based), who generally have been in business for more than a decade. The sector is highly competitive and highly adaptive. Industry concentration is another dynamic of the competitive environment. The following firms are Apple's closest competitors:

HEWLETT® PACKARD

Ticker	HPQ
Price	22.32
P/E	N/A
EPS	-6.55
Market Cap	44.25B
Revenue	118.68B
Dividend	2.30%
PEG (5YR Est)	25.44

data as of 03/2212

Hewlett Packard is a US computer hardware manufacturer headquartered Palo Alto, California. The company was founded in 1939 and provides computers, hardware, printing and other technology solutions for personal, business and agency use. HPQ also provides business intelligence solutions at the enterprise level to help improve and standardize client data. HPQ's product line includes laptops, PCs, printers, monitors, software, and servers. The company recently boosted its dividend and is trading at 6.3x forward earnings. HPQ is a member of the Dow Jones Industrials.

Ticker	DELL
Price	14.18
P/E	10.44
EPS	1.35
Market Cap	24.61B
Revenue	56.94B
Dividend Yield	2.20%
PEG (5YR Est)	0.93

data as of 03/2212

Dell is a global computer hardware manufacturing company based in the United States. The company was founded by Michael Dell in 1984 (began as PCs Limited). Dell employs more than 100,000 people. Product lines include laptops, PCs, servers, HDTVs, MP3 players, cameras and printers. Dell is a member of the NASDAQ 100. The firm recently announced Michael Dell's plans to execute a $24B leveraged buyout of the company with the assistance of Silver Lake Partners and Microsoft (under shareholder review). The deal may garner competition as rumors are swirling that Blackstone group may enter the bidding.

Ticker	005930.KS
Price (KRW)	1,495,000
P/E	9.45
EPS	1.50
Market Cap	191.63B
Revenue	220.2B
Dividend	0.07%
PEG (5YR Est)	0.67

data as of 03/2212

Samsung is a global electronics manufacturer based in Korea that sells products in more than 61 countries. The company was founded in 1969 and now employs more than 220,000 people. It is the second largest semiconductor chip manufacturer in the world and the largest mobile phone maker by unit sales. Samsung is also the largest smartphone manufacturer in the world. The company is organized into four areas; digital media, semiconductors, telecommunications, and LCD appliances. Samsung and Apple have positioned themselves with a virtually duopoly in global smartphones. Samsung is currently the biggest threat to Apple's growth and future prospects.

Ticker	IBM
Price	212.49
P/E	14.78
EPS	14.37
Market Cap	236.65B
Revenue	104.51B
Dividend	1.60%
PEG (5YR Est)	1.31

data as of 03/2212

IBM was founded in 1911 as the Computer Tabulating Recording Company. It took the name IBM in 1924. The company has more than 400,000 employees worldwide. IBM has been a major innovator of technologies over the last several decades (ATM machines, floppy disks, magnetic stripe cards to name a few). It is organized into five operating segments; Global Technology Services, Software, Systems and Technology, and Global Financing. The company sells hardware, software and IT consulting services internationally. IBM sells its products to individuals, corporations, and agencies.

Apple VS Samsung – The Virtual Duopoly

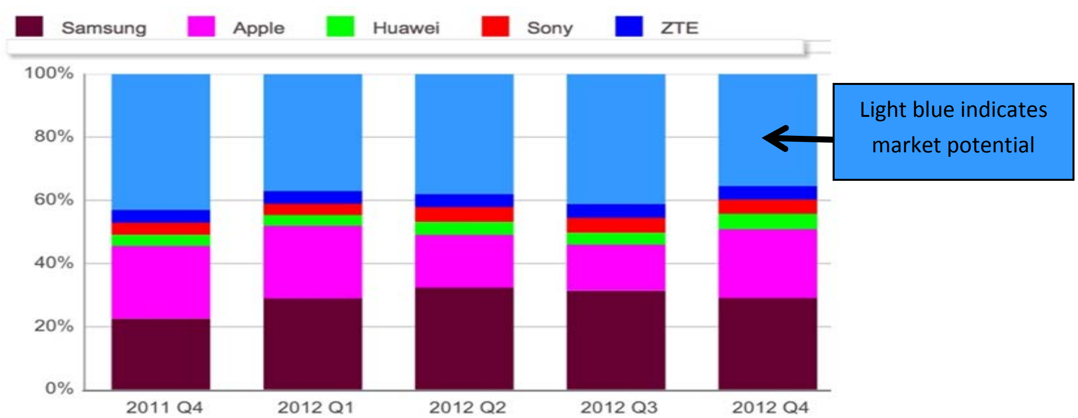
IDC's Top 5 Smartphone Vendors, Shipments and Market Share — Calendar Year 2012 (Units in Millions)					
Vendor	2012 Unit Shipments	2012 Market Share	2011 Unit Shipments	2011 Market Share	Year Over Year Change
Samsung	215.8	39.6%	94.2	19.0%	129.1%
Apple	136.8	25.1%	93.1	18.8%	46.9%
Nokia	35.1	6.4%	77.3	15.6%	-54.6%
HTC	32.6	6.0%	43.6	8.8%	-25.2%
RIM	32.5	6.0%	51.1	10.3%	-36.4%
Total (inc. others)	545.2	100.0%	495.3	100.0%	10.1%

Source: Apple Insider & IDC

Apple and Samsung are now locked into a fierce battle in the global smartphone market. Growth has been explosive for both firms over the last two years, with Samsung leading the way (+129%). The two firms have decimated the other competition in the process, creating a virtual duopoly in the space. Apple products and Samsung products use different operating systems and as a result, switching costs (and consumer commitment/loyalty) are very high. Further growth is anticipated as the market for smartphones globally is not yet saturated (see Figure 1).

Samsung's gains can be partly attributed to better penetration in the lower price points of the smartphone market. Analysts are anticipating a response from Apple (a bare bones iPhone with plastic casing and simpler display technology) that will allow it to better compete with Samsung's offerings.

Figure 1: Global Smartphone Market Share, Opportunities Abound (2012/Q4)



Source: Apple Insider

Industry Trends

General uncertainty abounds in the technology sector (as it does with all equity sectors). Loose monetary policy across the globe has fostered concerns of sovereign debt default risk. In addition, the consumer recovery from the Great Recession has been slow. Macro indicators are generally improving but global employment rates have lagged expectations. Firms in the technology sector have responded by hoarding more cash than they would in normal business conditions. Apple is especially guilty of this action and has more than $130B in cash across domestic and offshore operations. Another major macro concern in the industry is the specter of increased inflation. These factors have been especially impactful in the Euro zone. Demand is down as consumers there contend with austerity measures and other headwinds. Market uncertainty and waning demand have forced tech companies to shorten development cycles and push the envelope on innovation. Apple is not immune to the trend, and analysts are now expecting a much broader suite of product launches in 2013 than has been characteristic for the firm in the past.

Lifestyle Integration and Sociological Impacts

Smartphones have had an enormous impact on the world and are now firmly entrenched in our everyday lives. Products are lifestyle integrated and compliment other technologies. For instance, if you own an iPod it is very likely that it will be compatible with the audio systems of your automobile. If you own an iPhone, you can use its GPS functionality with many cars, trucks and boats. The App store provides specialty apps for Apple users that allow them to connect with third party websites (Facebook, Twitter, Yelp, etc.). These mobile technologies are now embedded in the human experience and have altered the sociological landscape (see Figure 2). This is another example of the long term growth potential and stability of this industry. Growth will temper, but these devices (and Apple by association) are now woven into the fabric of our culture and will remain so for the foreseeable future.

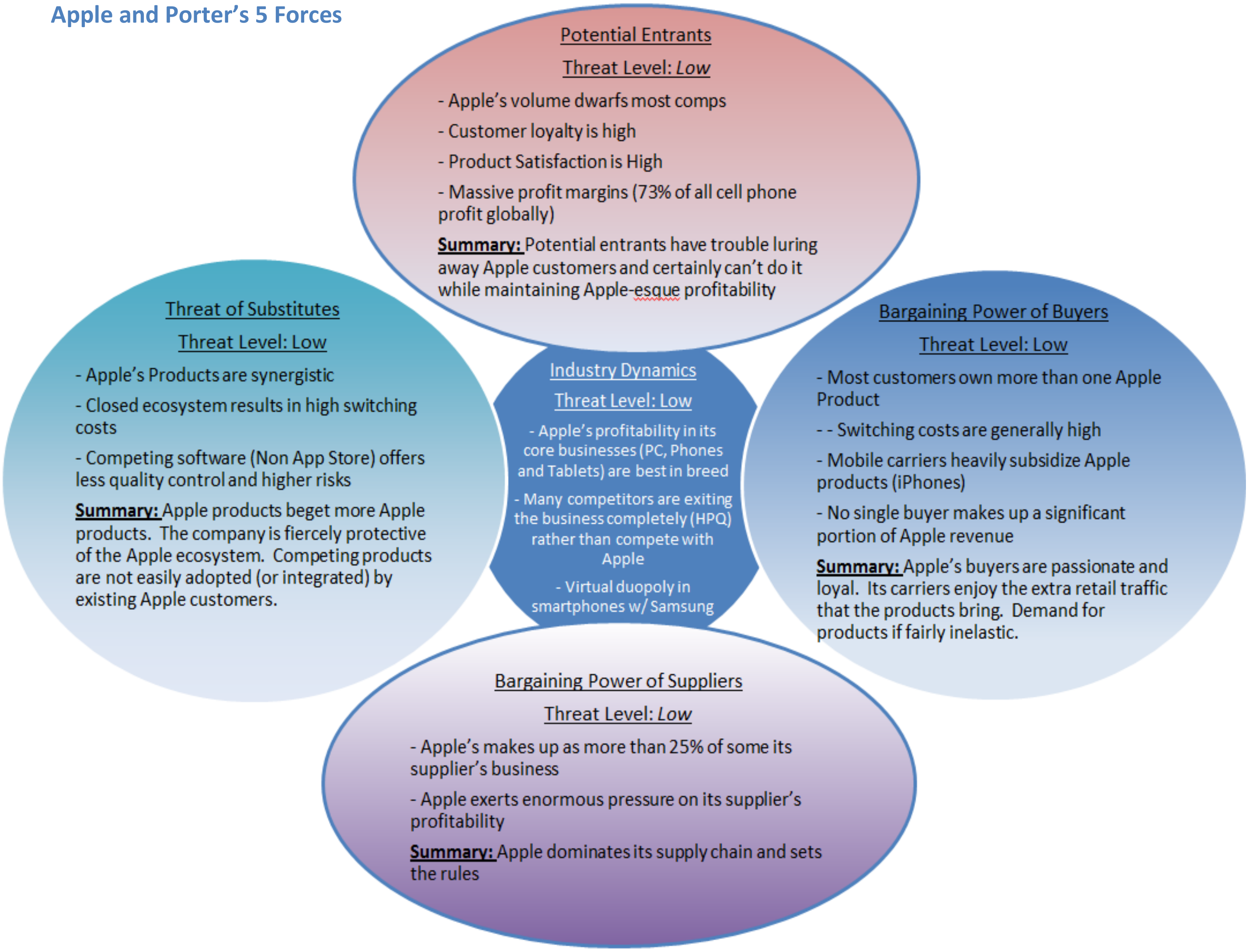
*Figure 2: St Peter's Square – What a Difference 8 Years Makes**

2005 – John Paul II Interment/2013 Pending Francis Announcement

SWOT Analysis

Strengths	Weaknesses
Strong Financials (Cash, Size & Yield) Strong R&D Record History of (Disruptive) Innovation Closed Product Ecosystem	Loss of Creative Vision? (Steve Jobs) Lack of Lower-End Product Offering Legal Battles (Patent Wars)
Opportunities	**Threats**
China Differentiated Product Pipeline Untapped Smartphone Markets (LatAm, S Asia) Unexplored Carrier Agreements	Fierce Competition (Samsung) Declining Share in Smartphones Compressing Margins Raw Material Pricing (Inflation)

Apple and Porter's 5 Forces



Compelling Valuation

Catalyst

Apple's earnings for the fourth quarter of 2012 and first quarter of 2013 were a disappointment for investors. Apple is no longer the darling it once was on Wall Street and its unpopularity must be noted. The Street has almost universally turned on the stock. In just the last 3 months, 14 different brokerages have cut their price targets or downgraded the stock. Institutional investors have systematically sold off their positions and locked in profits. Apple has lost its position as the number one hedge fund pick, falling to number three behind Google and AIG. The reaction to Apple's marginal misses has been so severe that the stock is now trading at a 34% discount from its 52 week high (as of 04/18/13). This decrease is unwarranted when viewed in the context of Apple's financial health, competitive position, and prospects for growth.

4Q12 – Earnings Miss in Review

In October of 2012, Apple reported quarterly EPS of $8.67 ($8.2B) VS expectations of $8.75. The results far exceeded Apple's own estimate ($7.65 per share). Investors were especially concerned about Apple's miss on gross margins. The 4th quarter (40.0%) was slightly below the consensus (40.8%). The stock price movement following this news was anything but proportionate. By year end, Apple has lost almost 14% of its value (see Figure 3). It's interesting to note, that these minor misses took the spotlight ahead of major product news and continued innovation by Apple. The iPhone 5 was a smashing success (selling more than 5 million units in just the first week). The introduction of the iPad mini was also viewed positively.

Figure 3: Apple Stock Performance – October 24 – December 31

1Q13 – Earnings Miss in Review

For the first quarter of 2013, Apple reported Revenue of $54.5B was slightly below consensus of $54.7B. Revenue was 5% above guidance but even this was viewed as a disappointment since Apple routinely beats their guidance by double digits (though they had not done so in the prior two quarters). Investors were left wondering if the juggernaut was beginning to stumble. Most problematic was news of weaker than expected holiday iPhone sales. Sell-out units (ex-inventory build) came in at 46.3M, lower than the many of the forecasts on the Street. Though it should be noted that even this "weak" number still represents a 33% increase year-over-year (on a run rate basis) unit sales. Analysts believe the weaker number may be attributable to slower growth at the higher end of the market place. There is speculation that Apple will respond by offering a lower priced/scaled down version of the iPhone. The stock continued to fall after first quarter results were announced, losing another 10% of its value (see Figure 4).

Figure 4: Apple Stock Performance – January 23 – March 22

Apple is CHEAP

These events have turned the second largest company in the world into an incredible bargain. A firm that is expected to have double digit growth over the next 5 years (better than industry and sector averages) can now be had at an amazing price. Forward P/E, based on most recent earnings report, has fallen to 9.3x (7.8X based 04/19/13 market price).

Relative Value - Competitors, Industry & Sector

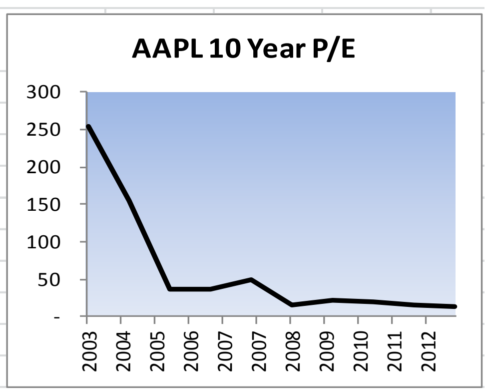
	Company	Price	Market Cap	Cash Balance	Forward P/E	PEG (5 Year)	FCF Yield	EV/FCF
Computer Hardware	**Apple**	**$ 463.70**	**$ 425,975**	**$ 121,251**	**9.3**	**0.55**	**10.3%**	**6.9x**
	Dell	$ 13.63	$ 23,679	$ 17,216	8.5	0.93	9.5%	9.2x
	NetApp	$ 36.25	$ 12,988	$ 5,399	13.1	1.26	7.6%	8.1x
	EMC Corporation	$ 24.85	$ 52,358	$ 10,580	11.5	0.98	9.1%	9.9x
Services	IBM	$ 205.18	$ 231,839	$ 12,254	11.4	1.30	6.1%	N/A
	Computer Sciences Corp	$ 42.70	$ 6,633	$ 1,850	13.9	2.54	1.2%	5.8x
Storage	SanDisk Corp	$ 50.25	$ 12,150	$ 2,876	12.9	0.48	0.3%	266.5x
	TeraData Corp	$ 66.43	$ 11,233	$ 909	16.1	1.32	3.5%	20.6x
Software	VMware Inc.	$ 78.79	$ 10,139	$ 4,631	20.5	1.18	4.9%	17.3x
	Adobe Systems	$ 38.34	$ 19,124	$ 3,538	23.5	2.78	6.4%	13.7x
	Microsoft	$ 27.93	$ 233,949	$ 68,312	9.0	1.10	9.7%	6.4x
	Google	$ 775.60	$ 207,473	$ 48,088	15.1	1.26	5.2%	15.5x
	Samsung	$ 652.50	$ 196,644	$ 22,315	9.5	0.67		
	S&P 500	$ 1,513.13			14.7			
	S&P 500: IT Hardware	$ 475.41			13.6			
	Yahoo: Computers & Peripherals	$ 475.41			31.5			

Values as of 03/25/13

Apple is a rare opportunity in the technology sector. Even the most bearish analysts are expecting double digit growth (low teens) over the next 5 years. It is cheaper on a forward P/E basis than the likes of Google, Microsoft and Samsung. It has a more attractive PEG ratio than all three of those tech titans as well. In fact, it's cheaper than it has ever been and well below its 10 year average forward P/E rate of 61x. The market is no longer assigning a fair value to Apple's growth potential, competitive position or financial health.

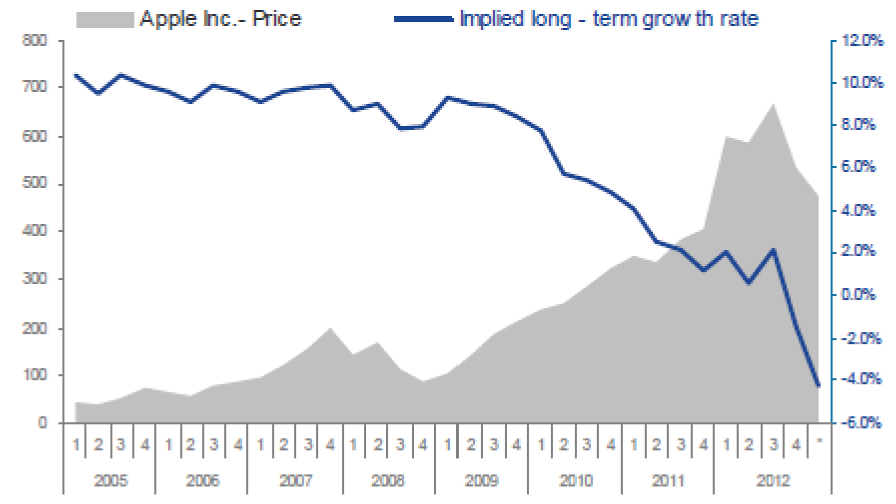
Apple P/E – 10 Year Trend

Date	Sales	Net Income	EPS	PX	P/E
2003	6.21 Bil	68.00 Mil	0.09	$ 22.89	**254.33**
2004	8.28 Bil	266.00 Mil	0.34	$ 52.40	**154.12**
2005	13.93 Bil	1.33 Bil	1.55	$ 57.59	**37.15**
2006	19.32 Bil	1.99 Bil	2.27	$ 81.08	**35.72**
2007	24.58 Bil	3.50 Bil	3.93	$ 189.95	**48.33**
2008	37.49 Bil	6.12 Bil	6.78	$ 107.76	**15.89**
2009	42.91 Bil	8.24 Bil	9.08	$ 188.50	**20.76**
2010	65.23 Bil	14.01 Bil	15.15	$ 300.98	**19.87**
2011	108.25 Bil	25.92 Bil	27.68	$ 404.78	**14.62**
2012	156.51 Bil	41.73 Bil	44.15	$ 595.32	**13.48**



Apple's 10 year P/E trend looks like that of many technology companies. Investors tend to pay huge multiples for potential future growth. However, as a company becomes larger and its growth rate declines, the multiple tends to moderate. The major difference here is that Apple's multiple has fallen well below the market (S&P500: 14.7x) and the sector (13.6x) and it happened in a single quarter. Morgan Stanley has noted that Apple's current share price implies a long term growth rate of -4% VS the 7% the firm has achieved in its history (see Figure 5). They've deemed this a "free option on innovation". The stock appears to be completely oversold.

Figure 5: Implied Growth Rate VS Share Price



Source: Thomson Reuters, Morgan Stanley Research

Competitive Advantage

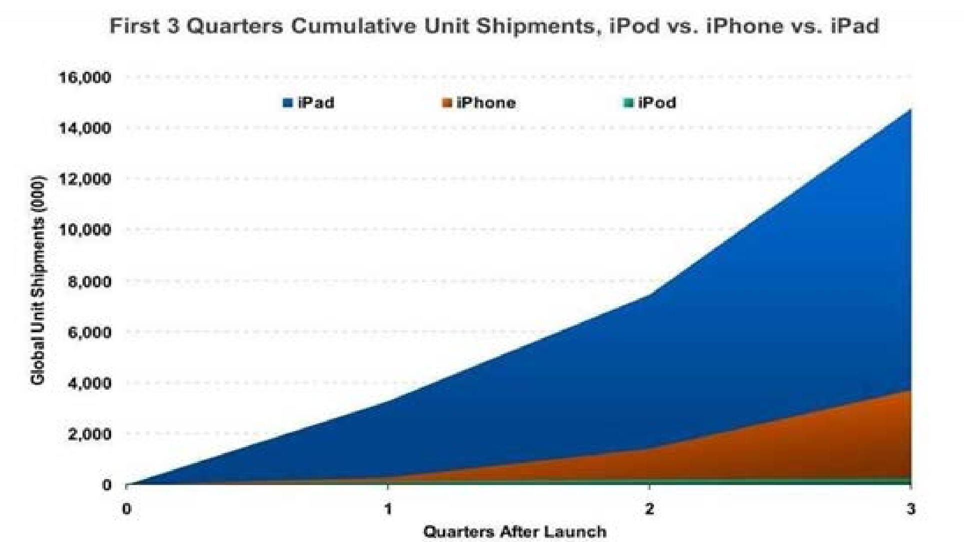
The iPad Changed Everything (too)…

The iPhone was Apple's first massively successful and highly innovative product. It changed everything for the company and for the world. However, it is impossible to deny that the smartphone market has matured, and the growth rates from here will be less substantial. This isn't the case with the iPad. When introduced, some analysts believed the iPad was "underwhelming". They expected just a few million units in sales but nothing on the level of the iPhone. Well, three years later, the iPad has changed the world too. iPads are now being used for all sorts of daily activities. They're employed as cash registers and POS devices. They're found in airport terminals and on flight decks. Police use them as their mobile information platforms. They're making pads and pencils in restaurants obsolete. The growth of tablet use in so many places and for so many different activities has forced competitors to take notice. Everyone is making tablets now. Amazon created the Kindle. Google has a platform of tablets. So does Microsoft. Tablets have made the netbook obsolete and are now taking aim at laptops too. Apple stands to benefit enormously. They are the global leader in tablet sales. In unit terms, they sold three times as many tablets as the next closest competitor (Samsung). Figure 6 shows the dramatic lead Apple has in the tablet market. iPads outsell the Kindle and Nook by more than 10 to 1. Tablet sales surged 78.4% in 2012 and Apple was awarded the lion share of the revenue from these sales. Sales of tablets are expected to pass desktop PC sales this year and portables by 2014. The iPad is now what the iPhone was 3 years ago. The growth in unit sales after launch is actually more dramatic for the iPad than it was for the iPhone (see Figure 7).

Figure 6: Top Vendors; Worldwide Tablet Shipments (Source: IDC)

Vendor	4Q12 Shipments	4Q12 Market Share	4Q11 Shipments	4Q11 Market Share	4Q12/4Q11 Growth
1. Apple	22.9	43.6%	15.5	51.7%	48.1%
2. Samsung	7.9	15.1%	2.2	7.3%	263.0%
3. Amazon.com Inc.	6.0	11.5%	4.7	15.9%	26.8%
4. ASUS	3.1	5.8%	0.6	2.0%	402.3%
5. Barnes & Noble	1.0	1.9%	1.4	4.6%	-27.7%
Others	11.6	22.1%	5.5	18.5%	108.9%
All Vendors	52.5	100%	29.9	100%	75.3%

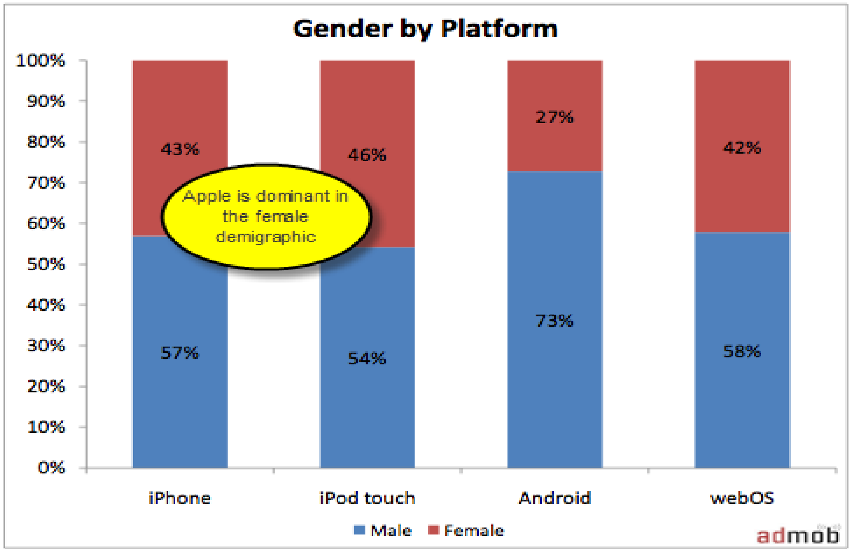
Figure 7: Growth in Unit Shipments after Launch – By Quarter (Source: Apple)



The Digital Pacifier

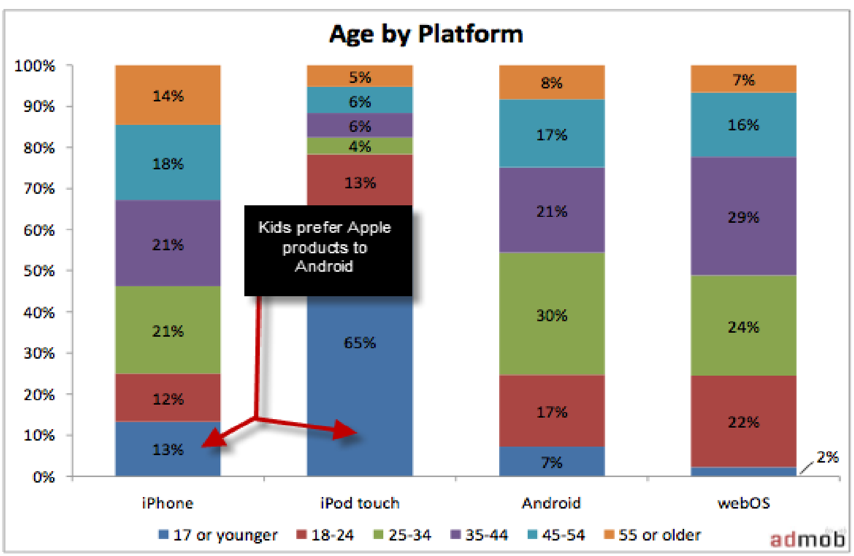
An entire generation of kids is growing up regularly using a different OS than Windows or Android. This is largely because the intuitive user-interface of iPhones and iPads and its interactivity are compelling to kids. One year old children are learning to unlock, swipe, and otherwise navigate the Apple mobile OS. Bloomberg was one of the first to document the impact Apple products were having on kids back in 2011. They chronicled the experiences of Patrick Smith, a web designer from Germany. He was contemplating buying a second iPad just so that he could put an end to his kid's arguments over the single model he owned. BlueKai Inc., a consumer data research firm, has estimated that most iPad buyers have children. As of 2011, the most-wanted Holiday gift in the US among kids 6-12 was the iPad (according to Neilson Co.). Jamie Pearson, founder of BestKidsApps.com, was quoted as saying, "Kids just get it…It's like any other natural language at that age, they just pick it up". The data is startling. More than 29% of parents with iPads share the devices with their kids. That number shoots up to 65% when narrowed down to just mothers. Considering Apple has far better market penetration than the Android OS among females, that statistic if very important (see Figure 8). The term "Digital Pacifier" was coined by Victoria Nash of Oxford Internet Institute to describe this phenomenon. Apple's competitive advantage is even more apparent when you dissect product ownership by age categories (see Figure 9). Apple iPhone users under the age of 17 are almost double that of Android products like those produced by Samsung.

Figure 8: Apple VS Android by Gender



Source: AdMob

Figure 9: Apple VS Android by Age



Source: AdMob

This has spurred growth for Apple products as well as kid-friendly Apple apps. The company hasn't turned a blind eye to the hidden market potential. Steve Jobs was known to be a proponent of developing applications specifically for children. He was instrumental to the formation of Callaway Digital Arts, which produces "Sesame Street" and "Thomas the Train" apps for the Apple store. These efforts have given the firm a huge lead in the depth and breadth of apps available for kids when compared with the Android market. In gaming, Apple has a wide moat as many developers will only produce for the more strictly regimented (and better marketed) iOS platform. When comparing Apps designed specifically for young kids, Apple is ahead by a mile. Wilson Rothman, a writer for MSNBC tech, went as far as to say, "On the iPlatform, kids' apps are very high quality — and in the Android Market they're almost totally nonexistent. Seriously, I can't find any of my favorite kids' apps for Android." This is primarily due to the wide range of devices that developers would have to test their apps on when creating for the Android platform. It makes the process for developing apps costly and inefficient.

Apple gives out free iPods with Mac purchases as a part of their back-to-school promos, which has helped them to garner a huge teen following. In addition, Apple has developed apps to help its products become part of the classroom. Piper Jaffray's research indicates that "teens strongly prefer" iOS to Android (see figure 10). The company is actively marketing the iPad as a device that is "changing the classroom" (see Figure 11).

Figure 10: US Teens Want iPhone to Be Their Next Smartphone

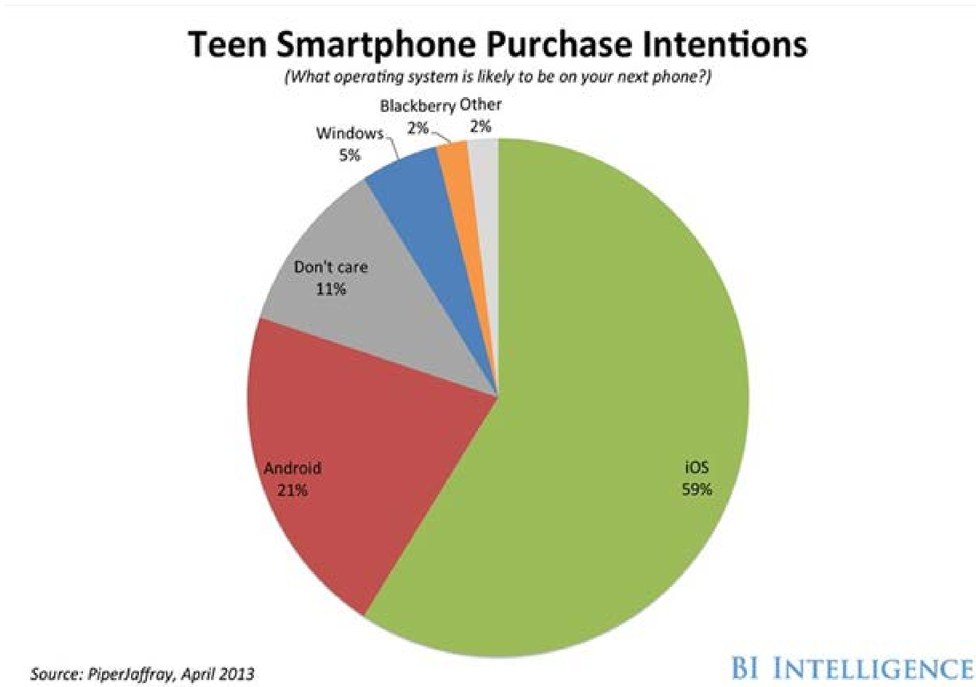
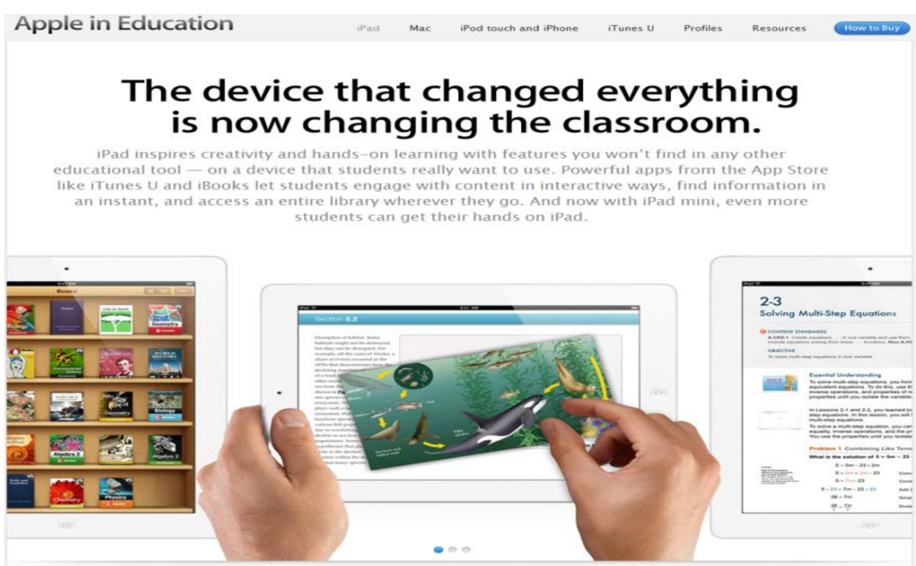


Figure 11: Apple & Education

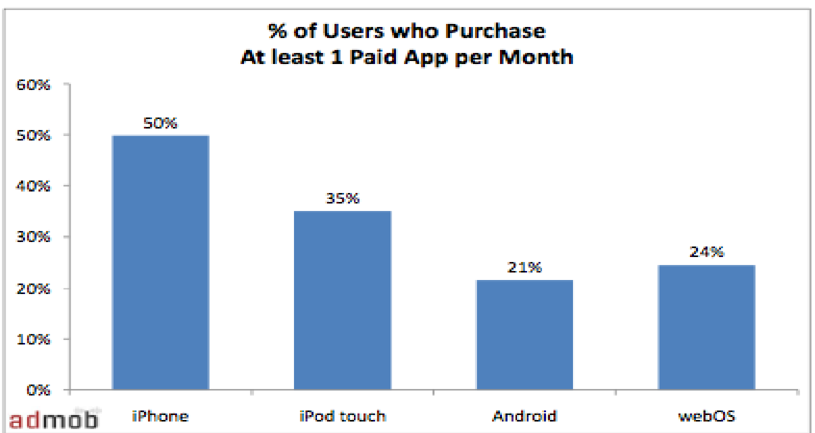


As a result of the way Apple has positioned its products with children it has significant long term growth potential. As these kids get older, they will be more likely to purchase Apple products due to their familiarity and comfort with the devices (not to mention the stickiness of the Apple ecosystem). Those purchases will go beyond just mobile and bolster the sales of home computing products as well.

The (Closed) Apple Ecosystem

The Apple ecosystem is an enormous competitive advantage for the firm. Apple products beget more Apple products. The iPlatform is intuitive and the product line is specifically designed for synchronicity. The company now allows users to share content between devices in the same household via iTunes ("home sharing"). These features make it more convenient for users to add more Apple products to their electronics stable (at the expense of Android or Windows products). They also make it more likely for Apple users to remain with the company as they retire older devices and buy new ones. Switching costs are generally high and make consumers sticky in their preference (Apple VS Non-Apple). The application ecosystem is also closed. This means Apple has control over all app store content and even receives a share of the proceeds of all of the apps sold there. The result is less versatility for developers and more quality control (and profit potential) for Apple. The high level of quality and control also lends itself to a better organized app distribution model and a much higher likelihood of app purchases by customers (see Figure 12). Apple is also in control of all app content as it approves or denies any request by developers for app store distribution. As a result, Apple has an enormous amount of leverage over its developers and a wide moat in application development arena.

Figure 12: App Purchases



Source: AdMob

Apple's software is designed to consume data from other operating systems but not to freely give it back (Apple Mail and Proprietary Media Formatting for example). Finally, Apple continues to build out its cloud-based computing services via iCloud. The iCloud users, who have essentially surrendered the physical maintenance of their own data to Apple, are very unlikely to endure the hassle of switching to an Android or Windows based architecture.

Android and Windows products are not nearly as restrictive in their data architecture. They do not control the content in their app store nor do they receive a share of developer's revenue. This also leaves them more vulnerable to badly written or malicious code. Though an open ecosystem has greater innovation potential the risks of degraded quality control are hard to ignore. Lastly, the Windows and Android data/product strategies make it far easier for users to switch to an Apple product than the other way around. Hence, new Apple offerings have more potential to lure away non-Apple customers providing Apple with a huge advantage in the market.

Apple's Product Pipeline

The Apple product and service pipeline is certainly a competitive advantage for the firm as it heads into the 2nd quarter of 2013. Rumored product launches for 2013 include a cheaper iPhone 5, an improved iPhone 5s and the iWatch. A single product launch would prove to be accretive for Apple based on its history. Analysts are expecting multiple launches. The question is no longer if Apple would introduce new products in 2013 but when. Further, its competitors (namely Samsung) are not currently offering products that would compete with Apple in some of these new areas.

iPhone 5 Lite ***Consensus ETA: 3Q13***

Apples most significant competitive disadvantage when compared with Samsung is the lack of a low-end smart phone offering. Samsung recently launched four additional low-end smartphones (REX brand) along with the higher-end Galaxy S4. All of these were priced at less than $100. This has allowed Samsung to capture market share in places like Indonesia and China, where consumers are much more price conscious. Analysts believe Apple will respond to the threat by offering an iPhone 5 'Lite'. The smartphone will be marketed to emerging markets where Apple has been losing share. Analysts believe plastic casing, a scaled-down camera, and less robust processor will allow Apple to price the new offering in the low-end range. This could provide the firm with a significant long term growth driver as it would allow better access to very large emerging markets like China.

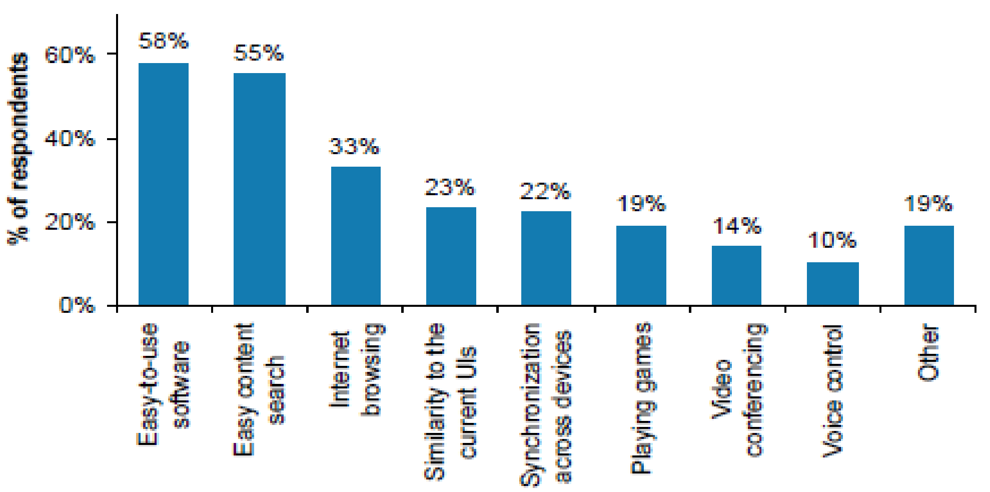
iPhone 5s or "iPhablet " ***Consensus ETA: 4Q13***

The introduction of the Samsung Galaxy S4 has resulted in more pressure for Apple to broaden its product line to include a 5+ inch smartphone. Dubbed an 'iPhapblet' by analysts, the device would be a direct foe to the S4 and a bridge product between the iPhone 5 and iPad Mini. This would allow Apple to capture the large-screen smartphone market, in which they do not offer a product. As an alternative to an the 'iPhapblet' (or potentially in addition to), Apple may release an iPhone 5s, which would contain a faster processor, better camera, fingerprint security, and be thinner/lighter.

Apple Smart TV (iTV) ***Consensus ETA: 4Q13/1Q14***

iTV is a completely untapped market for Apple. Expectations are for slim LED TVs with robust smart capabilities (WiFi, App Store Connectivity, and Synchronicity). Figure 13 illustrates the most important features expected in a "smart" TV and can be used as a basis for iTV speculation. Apple is rumored to be targeting the $1,400-2,000 price range, with screen sizes from 48-60 inches. Development has been slow because Apple is seeking to deploy 4k high definition technology into the iTV at a lower ASP. The market potential for this product is enormous. Morgan Stanley estimates iTV is a $17B or $4.50 on an EPS basis (assuming 10% penetration of iTunes accounts and an ASP of $1,300, which are conservative estimates).

Figure 13: Most Important "Smart" TV Features



Source: AlphaWise, Morgan Stanley Research

iWatch ***Consensus ETA: 3Q13***

The iWatch represents another untapped market for Apple. Initial accounts believe it would be a complimentary product to iPhones and iPads. iWatch will be a stand-alone user interface that improves access and functionality for other Apple products. The iWatch may display push alerts, text messages and other data and do so in a more convenient way (allowing users to avoid fumbling with their phones or tablets). iWatch may also allow Apple to capitalize on a new service opportunity as the device would be very complimentary to any mobile payment technology (via iTunes). Even without additional service opportunities, the product is estimated to be worth billions to Apple (see Figure 14). If Apple were to achieve penetration of just 20% of existing iTunes accounts, the iWatch could add as much as $10B to Apple's revenue (based on a $200ASP).

Figure 14: iWatch Market Opportunity

			500		iTunes Accounts (Millions)
		20%	40%	60%	iTunes Account Penetration
		50	100	150	Annual Unit Opportunity (Millions)
	$100	$5.0	$10.0	$15.0	
ASP	$200	$10.0	$20.0	$30.0	
	$300	$15.0	$30.0	$45.0	

Assumes 2-year life.
Smart watch ASPs: Nike FuelBand $149. Jawbone Up $129.99
Source: Company data, Morgan Stanley Research

Developments in Enterprise Mobile

Blackberry's dominant position in enterprise mobile is declining precipitously. Enterprise mobile is shifting away from the dated technology that Blackberry offers and towards more intelligently designed smartphones and tablets. Apple is one of the beneficiaries of this trend and it has actively sought applications that would allow it further access to the market (the 'Good' Application being one of these). Apple's thorough and controlled approach to application development has given it a leg up on its competitors in the enterprise mobile space. This is another example of a growth opportunity for the firm. Recent news suggests even the Pentagon will be dumping its Blackberry devices and has placed an enormous order with Apple for iPhones and iPads to be deployed to agency personnel. According to a report from Electronista (who claims they have sources within the DoDs mobile device testing program), the Pentagon is about to order nearly 600,000 iOS devices.

Carrier Expansion/Untapped Market Potential

On January 23, Tim Cook announced the addition of 36 new 4G LTE carriers to its existing stable of 24. The iPhone 5 will be compatible with all of the new carriers. More importantly, all of the new carriers represent untapped markets. Apple's existing LTE carriers are in places like the US, Germany and the UK. The new ones are in places like Demark, Italy and across the Middle East. The total subscriber potential is 300 million and this has yet to make an impact on Apple's results. It's also important to note that the carrier expansion strategy would be nicely complimented by the addition of a cheaper iPhone to the stable of products (iPhone 5 Lite). The iPhone 5 is also capable of operating on "ultra-fast" networks like HSPA+, which will allow Apple to exploit additional market capacity as that technology is rolled out. These carrier expansions will give Apple the ability to generate further competitive advantage through increased market penetration.

The Apple Store Experience

Put simply, the Apple Store is an amazing experience for technology consumers. Every detail is planned out to maximize customer involvement and satisfaction. Small things, like angling the screens on products so customers will be more inclined to adjust them (and handle the products) are meticulously attended to. Apple loads all of the products in their stores with a variety of apps so that when you interact with them you receive a comprehensive view of their capabilities. The stores foster an ownership experience. Customers learn about the products and are only guided by staff with minimal physical intervention. They are left feeling as if they are part of the process and that spurs brand loyalty. This "experience" is completely unique to Apple and it is an enormous competitive advantage. No Samsung produced or an Android-based product can offer consumers a holistic approach to sales like this.

Field Research – How Does an Apple Store Manager See Things?

One of the best ways to understand a business is to speak to someone who's a part of it. For our field research, we reached out to an Apple Store manager. This manager runs a store in the Dallas area and has worked for Apple for more than one year. Some interesting things came out of the interview. Here are the highlights:

What Product Generates the Most Buzz in Your Store?	"iPhone 5"
Are Customers Benchmarking to Samsung Products?	"**Seems rare**, apple culture generally maintains their original customer basis that started off with Apple products."
Have You Converted Customers from Samsung to Apple?	"Yes, happens daily. Apple Care warranty products, newer technologies, ease of use and affordability with new phone plans drive customer sales and promotes the Apple culture…"
How Powerful is the Apple Brand in Your Experience?	"**Very- when you create a culture of users, more and more people are inclined to join in**"
When Was Your Store the Most Busy?	"**IPhone 5 was a huge success**…We had people lined up around the whole mall for days"

Margin of Safety

Strong Financials

Apple is a financial juggernaut. It was largest company in the world by market capitalization at the close of 2012 and is second to Exxon Mobil now (see Figure 15). Apple's rise has been meteoric and is largely due to the disruptive innovation (iPhone mobile technology) that the firm pioneered. Apple is so large, and so well capitalized, that it could technically purchase every cell phone vendor in the world (except Samsung) using just its current cash pile (see Figure 16). The size of the company alone makes a compelling argument for a large margin of safety.

Figure 15: Market Capitalization 2008-2012 (Source: Wikipedia)

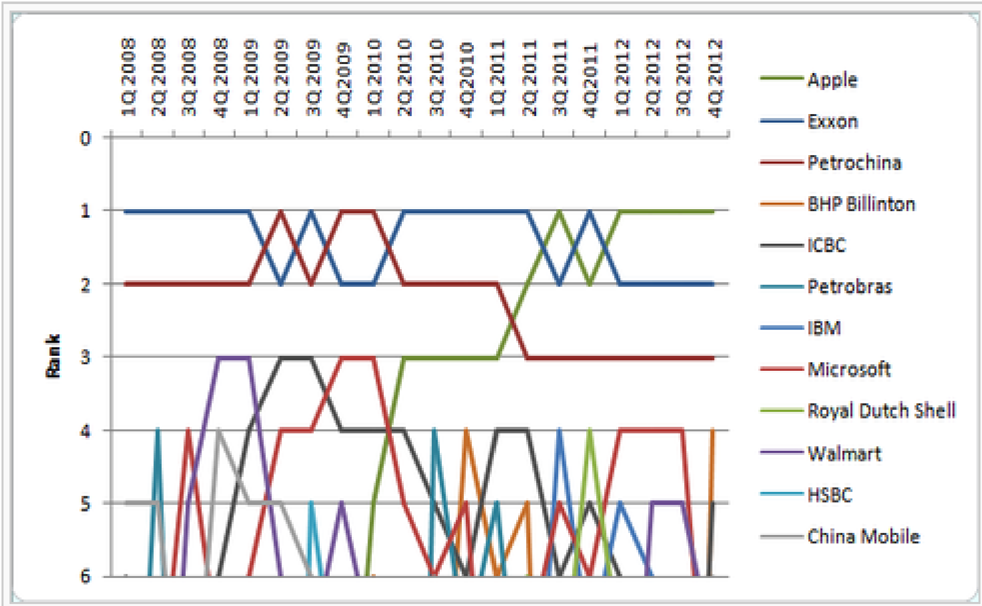
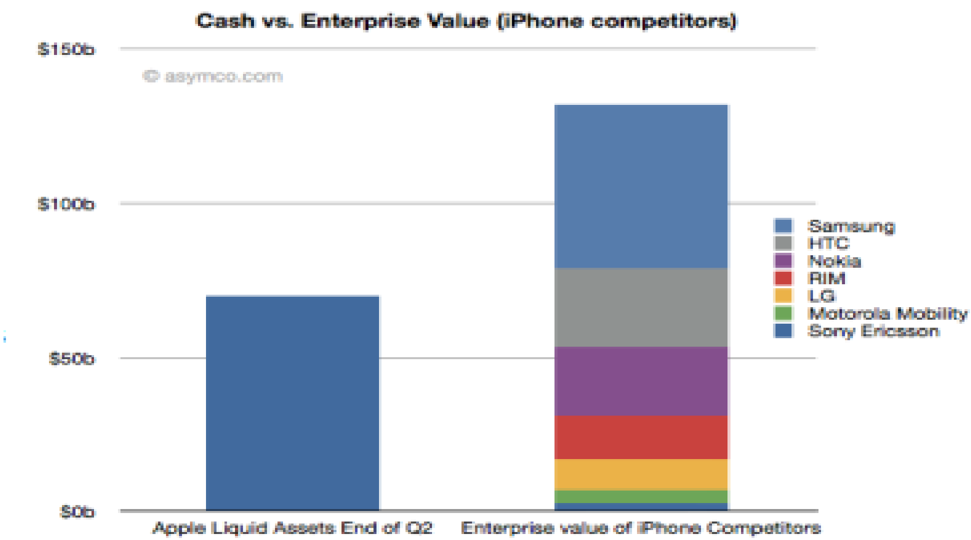


Figure 16: Market Capitalization 2008-2012 (Source: Asymco)



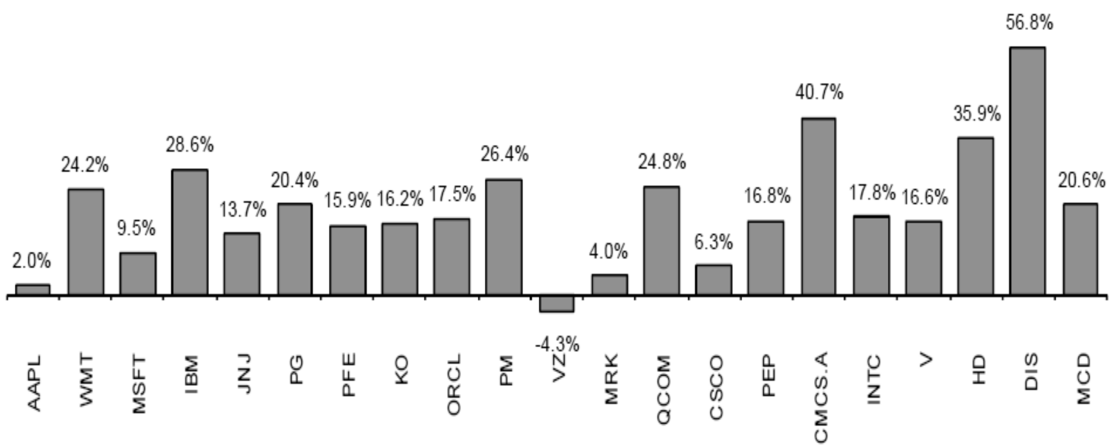
Apple's War Chest

One of the best arguments for a wide margin of safety with Apple is the tremendous amount of cash currently on the firm's balance sheet. The firm has more than $130B in "cash", which includes actual cash, short term and long term marketable securities. Tim Cook thought he had too much cash in March of 2012 and the stockpile has increased by 30% since then. The 30% increase occurred even after Apple declared its first quarterly dividend since 1995.

Composition, Versatility and Mobility

The composition of Apple's cash stockpile has made investors wary of just how much of it they could actually deploy for any particular shareholder value enrichment strategy. A large chunk of the cash (nearly 40%) has not been repatriated. Investors are concerned that this portion of the cash is less likely to be deployed for share repurchases or dividend payments since it would cause Apple to incur a large tax charge. Apple's implied offshore tax rate is extremely low (see Figure 17). Well below that of the average paid by other S&P 500 companies (13-25%). Hence, at first glance, repatriating any cash could prove very costly to the firm.

Figure 17: Implied Foreign Tax Rates, Past 3 Years, S&P500 Dividend Payers



Source: Corporate reports, Bernstein analysis

However, Bernstein Research has gone to great lengths to analyze Apple's cash balance, its location and its mobility and they have uncovered some very interesting facts. Apple is paying a much higher overall tax rate than the sum of the components (domestic and international) would suggest. This is because they have been accruing for taxes in preparation for moving some of the cash back onshore. The amount accrued would suggest a material amount of cash repatriation (perhaps up to 50% of the offshore balance). In fact, Apple's overall tax rate (26%) is considerably higher than that of its peers due to this strategy. Microsoft and Dell pay only 24% and 17% respectively. The higher tax rate reflects Apple's increased GAAP tax accrual (found in the income statement) than its peers. If Apple was not employing this strategy, EPS could be as much as 15% higher than reported. Bernstein asserts that the strategy will allow Apple to repatriate as much as half of offshore cash with only incremental changes to its income statement and a payable cash tax. A deferred liability of $14.7B on Apple's balance sheet accounts for these accruals (taxes accrued but not yet paid). Meaning there is more mobility and less risk to the offshore stock pile than one might perceive. Employing just $20B in cash for redistribution would allow Apple to materially increase its dividend. Clearly, Apple has enough flexibility between its onshore and offshore cash reserves that it could deploy at least that amount without hampering liquidity of R&D (see Figure 18).

Figure 18: Dividend Scenarios – Repatriation of Cash and use of US Balances

Current Dividend ($)	$10.60		
Shares Outstanding (mil.)	947		
Annual Dividend Cost ($M)	$10,041		
Stock Price ($)	430.47		
Current Yield	**2.5%**		
Use Ongoing Offshore Cash Generation			
FY13E Offshore Cash with Taxes Accrued ($M)	$14,716		
Estimated Repatriation Cash Tax Rate	33%		
International Cash Available ($M)	$9,859		
Increase in Dividend Per Share ($)	$10.41		
Combined Dividend ($)	$21.01		
Combined Yield	**4.9%**		
Repatriate Cash with Taxes Already Accrued			
Offshore Cash with Income Taxes Accrued but Not Paid ($M)	$48,126		
Estimated Repatriation Tax	33%		
International Cash Available ($M)	$32,245		
Boost to Dividend if Spent Over:	**3 Years**	**5 Years**	**10 Years**
Cash Available Per Year ($M)	$10,748	$6,449	$3,224
Increase in Dividend Per Share ($)	$11.35	$6.81	$3.40
Further Boost to Dividend Yield	**2.6%**	**1.6%**	**0.8%**
Drawdown US Cash Balance			
Current US Cash Balance ($M)	42,912		
Cash Availabile if Drawdown US Cash Balance to $20B ($M)	22,912		
Boost to Dividend if Spent Over:	**3 Years**	**5 Years**	**10 Years**
Cash Available Per Year ($M)	$7,637	$4,582	$2,291
Increase in Dividend Per Share ($)	$8.06	$4.84	$2.42
Further Boost to Dividend Yield	**1.9%**	**1.1%**	**0.6%**
	Low	**High**	
Total Potential Dividend Yield	**6.2%**	**9.4%**	

Source: Corporate reports, Bernstein estimates and analysis

The yield could be nearly doubled if offshore cash is repatriated w/ minimal cash tax implications

AAPL's enormous cash pile equates to an enormous amount of upside to future yield

Deploy the Cash & Add Value

Investors are in constant debate over what Apple should do with the cash. It's interesting to note, that Apple shares may be under pressure simply because investor sentiment has soured over Apple's slow deployment of the cash. At some point, Apple will define a strategy, and no matter which strategy it chooses, the results will be positive for shareholders. This huge cash buffer and the flexibility it provides are a major component of the margin of safety for Apple investors.

✓ ***Option 1: "If you don't know what to do with your cash, give it back to your investors"***

Apple has already established a quarterly dividend but the redistribution of cash has barely made a dent in their reserves. The firm could simply increase the dividend and return even more of the cash back to investors. Apple seemed to have underestimated their investor's appetite for yield with the initial declaration to begin with as the stock actually dipped after the announcement. Does Apple have the capacity to increase the dividend without materially affecting their liquidity? The answer is yes.

✓ ***Option 2: "Is Your Stock Cheap? Then Why Don't You Buy It?"***

The cheapness of Apple stock and its growing pile of cash have gotten the attention of the most successful value investor of all time, Warren Buffet. In early March, Buffet spoke about Tim Cook and what he thought Cook's strategy should be for Apple going forward. First, Buffet reiterated that Cook should start with making sure Apple remains profitable. He stated, "The best thing you can do with a business is run it well". Buffet also mentioned that at one point he advised Steve Jobs to buy back Apple stock. Buffet recalled saying, "Is your stock cheap? He (Steve Jobs) responded, 'yes'. I said, 'Do you have more cash than you need?' He said, 'A little' and laughed and I said 'Then buy back your stock'". Jobs never actually did buy back any stock but with Apple's growing pile of cash it appears Cook may want to do just that. Buffet's advice to Cook: "If you could buy dollar bills for 80 cents, it's a very good thing to do."

Capital Structure Flexibility

Apple has grown to become the second largest firm in the world and has not incurred any debt along the way. Their lack of debt is another characteristic that affords investors a margin of safety. Apple is generating revenue and profit and has left the debt markets completely untapped. As a result, Apple has an enormous amount of flexibility as they plan for future growth. First, their current financial health would undoubtedly place them in very select company when it comes to creditworthiness. They would immediately become a top tier credit. Their cost of capital would be exceptionally low. It is clear that Apple would demand a AAA rating, much like Microsoft.

Microsoft is a very good example of how management can use a high quality balance sheet as a resource when designing a new capital structure and maximizing growth. In 2009, MSFT was in a very similar position to where Apple finds itself now. The stock was performing poorly (partly effected by the debt crisis and weak equity markets). Microsoft was looking for new and creative ways to grow shareholder value. They decided to access the debt markets, knowing that their financial health would afford them top tier interest rates. Management understood that the excess capital could allow them more flexibility. Specifically, they could grow organically through R&D spend and inorganically through acquisitions (Yahoo). Borrowing also improves a firm's tax position (when compared to paying/increasing dividends) since the interest on debt is tax-deductible. MSFT went to capital markets with a debt free balance sheet and $20B in cash. When the dust settled, the firm had sold 5, 10 and 30 year bonds netting proceeds of nearly $4B. The act of borrowing and shoring up their capital position had an immediate effect on the stock (See Figure 19).

In Apple's case, they could tap the debt markets and borrow against their massive offshore cash reserves. This would allow the firm more flexibility to grow (inorganically being the most likely). It would also allow them to shelter their offshore cash from any cash tax associated with repatriation. This all speaks to the margin of safety investors in Apple can rely on. The firm can use the strength of their balance sheet to grow, or even just to weather hard times or down cycles. Apple epitomizes Graham's concept of "Large, Prominent and Conservatively Financed".

Figure 19: MSFT's first debt offering in May of 2009. Stock gained almost 35% in less than a year.

Recommendation & Price Target

Financial Statement Analysis & DCF

Our model was built using a blend of management guidance and Wall Street consensus information. In our view, revenue will be in line with consensus estimates in 2013 and 2014. We believe the introduction of new products (at varying ASPs) as well as Apple's growing cash reserves, will allow the firm to moderate declines in growth in 2015, 2016, and 2017. Specifically, we believe Apple will introduce at least one materially accretive product creating a new market opportunity (iWatch & iPhone 5 Lite are most likely) in the next 12 months. Though we expect growth to moderate, we believe the firm is well positioned with consumers and competitors and should be able to produce double digit revenue and EBITA growth rates over the next 5 years. Our model is conservative with regard to SG&A and margins, forecasting both to be worse than management expectations. We also assume more significant R&D spend (as a percent of net sales) as Apple ramps up the product refresh cycles and enters into new markets.

Executive Summary – 5 Year Projections

	Historical			Projected				
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Revenue	$65,225	$108,249	$156,508	$181,283	$204,596	$233,189	$264,646	$298,520
Growth		*66.0%*	*44.6%*	*15.8%*	*12.9%*	*14.0%*	*13.5%*	*12.8%*
EBITDA	21,263	38,225	62,504	69,975	78,770	89,544	98,977	111,348
Margin	*32.6%*	*35.3%*	*39.9%*	*38.6%*	*38.5%*	*38.4%*	*37.4%*	*37.3%*
Growth		*79.8%*	*63.5%*	*12.0%*	*12.6%*	*13.7%*	*10.5%*	*12.5%*
Capex			3,381	4,197	4,760	5,449	6,122	6,878
Interest Expense			0	0	0	0	0	0
EPS				$55.02	$63.30	$73.35	$82.56	$94.43
Net Debt			($100,303)	($150,920)	($208,739)	($274,942)	($349,233)	($433,352)
Total Debt			$0	$0	$0	$0	$0	$0

Our DCF analysis, utilizes a terminal growth rate of 3%. Additionally, we have calculated a WACC for Apple of 10.1 (see Figure 18). In Apple's case, the WACC consists solely of the CAPM component (Apple is debt free). For Apple's CAPM, our calculation assumes that the risk free rate is equal to the yield on a 10 year US treasury bond (at 3/31). It also assumes the market rate is equal to the one year historical S&P500 return (17.12%). Please see Figure 19 details on Apple's CAPM calculation.

*Figure 18: WACC Calculation**

$$WACC = \boxed{\frac{E}{V} * Re} + \frac{D}{V} * Rd * (1 - Tc)$$

**100% of Apple cap structure is in equity*

Figure 19: CAPM Calculation Details

CAPM

Formula

$$R(a) = R(f) + \beta\,[R(m) - R(f)]$$

Risk Free Rate /10 Year Treasury	1.84
Beta	0.66
Expected Market Return	17.12

APPLE CAPM =0.0184 + 0.66(17.12-1.84)	
= 10.10	

Our DCF analysis, utilizing our model's growth profile and cash valuation, indicates a fair multiple for Apple stock is 19.3X one year forward earnings. Our analysis also indicates an EV multiple of 14.4X.

PEG Valuation

Our evaluation of Apple on a PEG basis reveals an implied discount of 43.4%. This equates to a potential share price of $562.35 and a multiple of 12.8X one year forward earnings (consensus 2013 EPS).

Apple PEG Ratio	0.5
Full Value	1.0
5 Year Average Growth Rate (Model)	13.79%
1 Year Forward P/E (04/16/13)	7.80
PEG Calculation:	= 7.80/13.79 = 0.5656
Implied Discount =	**= 43.4%**
Current Share Price (04/18/13)	$ 392.05
PEG Implied Price	$ 562.35

P/E Relative Value Based on Sector and Comps

Apple is undervalued on a P/E basis VS its sector and comps. We believe a fair multiple for the stock on a relative value basis could be calculated for Apple by taking the simple unweighted average P/E for the market, sector, and 3 of Apple's major competitors.

P/E Relative Value Estimate	
S&P500	14.7
S&P500 IT Hardware	13.6
Samsung	9.5
IBM	11.4
Dell	10.4
Average P/E	**11.9**

P/E Comparative Value:

Apple is locked into a virtual duopoly with Samsung, and both companies produce similar products for similar markets. The firm's financial profiles and strategies are similar as well. It was our opinion that multiples on the firms should also be comparable. Samsung currently trades at 9.5x one year forward earnings. For the comparative piece of our valuation we decided to blend Samsung's current multiple into the analysis.

Blended Valuation

Apple's growth profile is unique and warranted a blended approach to implied P/E and forecasted price. Weightings were assigned to each valuation methodology in order to temper the result. Equal weights were assigned to PEG, Relative P/E, and Comparative P/E approaches. A lesser weight was assigned to the DCF valuation as the model tends to overestimate companies with significant prior growth. Based on this analysis, we believe a fair multiple for Apple is 12.2x one year forward earnings. This multiple would result in a market price of $535.77, which is a 37% increase from the current share price. At current levels, the stock is so attractive; Buffet himself may break from form and delve into the technology sector for this incredible buying opportunity.

Valuation Approach	Implied Multiple	Price Forecast	Weighting	Component
DCF	19.3x	$ 847.44	0.10	84.7
PEG	12.8x	$ 562.35	0.30	168.7
P/E Relative Value	11.9x	$ 522.85	0.30	156.9
P/E Relative Value (Samsung)	9.5x	$ 418.22	0.30	125.5

Total	**12.2x**	**$ 535.77**

Consensus EPS ($43.90) utilized in Relative P/E valuation and price target

Conclusion

Apple's current level can no longer be ignored by the Street. At some point capital flows will be directed back toward the stock. The bad news has been priced in and then some. Apple is on the eve of its next quarterly report (April 23). Sentiment has soured so badly over the last three months that it will take just one minor surprise in next week's report for the stock to gain upward momentum. Apple is among a handful of safe haven large caps stocks (Coca Cola, McDonalds, IBM, etc.). The spread between Apple's P/E and that of some of the other brand name large caps is now truly astounding. The value can no longer be ignored. In many ways, Apple is a lot like Graham's A&P example. The price on the stock is now "extraordinary". Just like A&P, Apple is "one of the largest enterprises in the world, with a continuous and impressive record of earnings over many years". Apple shares are also suffering from "exaggerated" and <somewhat> "groundless" fear. Apple is unpopular, but the thesis for investment remains sound. Graham or Buffet would be recommending a buy on this stock as it is meets or exceeds all of the most important value criteria.

Potential Risks

Risks to the “Buy” recommendation and price targets include:

- Slower than expected release of products in pipeline
- Unintended cannibalization of sales of existing products due to newer (cheaper) product offerings
- Poorly conceived product design and lack of market penetration
- Regulatory and sovereign risks associated with new carrier agreements
- Unanticipated economic headwinds (inflation/raw material pricing impact, sovereign debt issues, black swan economic events, global conflicts, etc)
- Intense competition with Samsung resulting in price wars and ASPs become unstable.
- IP conflicts and litigation
- Declines in carrier subsidies

4/23/13 UPDATE - Apple Reports Earnings and Mobilizes Excess Capital

After the bell on April 23, Apple reported second quarter earnings. Apple's revenue of $43.6B beat analyst expectations (Consensus estimate of $42.3B). This compares with $39.2 B for the same period one year ago. Gross margins continue to face pressure (as was predicted by the Street and Apple), coming in at 37.5% VS 47.4% for the same period last year. Apple attributed their second quarter revenue beat to strong iPhone and iPad sales. The company continued to be a cash machine, with cash reserves and equivalents growing to $145B. Apple guided down for the third quarter. Revenue and margins are expected to decrease as demand for older products stabilizes and Apple ramps up for the next product release cycle. Investor's reaction to the report was mixed. The stock traded up more than 5% in premarket and then opened flat on April 24th. Since the news, Apple stock has begun to build some upward momentum (see Figure 20).

The management team also announced plans to return more than $100B in cash reserves to investors by 2015. Their new capital plan included an increased dividend (+15% to $3.05 per share), an increase to the share repurchase program of $50B (the largest buyback ever announced), and plans to tap the debt markets for additional liquidity. Their initial rating (AA) will allow the firm to borrow very cheaply, keeping their cost of capital down. Management has essentially put all of the value creation strategies discussed earlier in this report into action. This further supports our initial "buy" recommendation. The stock is still extremely cheap after the news (8.5x forward P/E as of 04/26/13). In fact, it is cheaper than 94% of companies in the S&P500. Investors are now able to buy a blue chip firm, receive a "free option on innovation", *and* enjoy a higher yield. Management has the flexibility to enhance shareholder value and shore up capital through borrowing for enhanced R&D. Though the next two quarters will be more challenging, we still see an enormous amount of value in this stock and prospects for revenue growth past 2013 (as new products leave the pipeline) are quite good.

Figure 20: Apple Stock Performance – April 22 – April 26

APPENDIX

Financial Statement Analysis – Detailed Model

Summary Financial Results

	Historical			Projected				
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Revenue	$65,225	$108,249	$156,508	$181,283	$204,596	$233,189	$264,646	$298,520
Growth		*66.0%*	*44.6%*	*15.8%*	*12.9%*	*14.0%*	*13.5%*	*12.8%*
EBITDA	21,263	38,225	62,504	69,975	78,770	89,544	98,977	111,348
Margin	*32.6%*	*35.3%*	*39.9%*	*38.6%*	*38.5%*	*38.4%*	*37.4%*	*37.3%*
Growth		*79.8%*	*63.5%*	*12.0%*	*12.6%*	*13.7%*	*10.5%*	*12.5%*
Capex			3,381	4,197	4,760	5,449	6,122	6,878
Interest Expense			0	0	0	0	0	0
EPS				$55.02	$63.30	$73.35	$82.56	$94.43
Net Debt			($100,303)	($150,920)	($208,739)	($274,942)	($349,233)	($433,352)
Total Debt			$0	$0	$0	$0	$0	$0

Credit Statistics

LEVERAGE RATIOS							
Total Debt / EBITDA		**0.0x**	**0.0x**	**0.0x**	**0.0x**	**0.0x**	**0.0x**
Total Debt/Total Capital		**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Debt/Total Assets		**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Debt/ Equity		**0.0x**	**0.0x**	**0.0x**	**0.0x**	**0.0x**	**0.0x**
Short term Debt/Total Debt	**NA**		**NA**	**NA**	**NA**	**NA**	**NA**
COVERAGE RATIOS							
EBIT/Interest		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
EBITDA / Interest		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
EBITDA less Capex/ Interest		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
LIQUIDITY RATIOS							
Current Ratio		**3.9x**	**4.6x**	**5.4x**	**6.0x**	**6.5**	**7.1x**
Quick Ratio		**3.9x**	**4.6x**	**5.4x**	**6.0x**	**6.5x**	**7.0x**

Summary DCF Valuation

DCF Enterprise Value	$897,389	*14.4x*	
Less: Net Debt	$100,303		
Equity Value	$997,692		
Shares	939		
DCF Value per Share	$1,062.50	*19.3x*	Forward

DCF Equity Sensitivity Analysis

	WACC		
Growth	8.1%	10.1%	12.1%
2.0%	$ 1,264.90	$ 967.96	$ 789.23
3.0%	$ 1,452.98	$ 1,062.50	$ 844.28
4.0%	$ 1,732.80	$ 1,188.05	$ 912.92

OPERATING ASSUMPTIONS

	Historical			Projected				
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Revenue	$65,225	$108,249	$156,508	$181,283	$204,596	$233,189	$264,646	$298,520
Growth		*66.0%*	*44.6%*	*15.8%*	*12.9%*	*14.0%*	*13.5%*	*12.8%*
Cost of Goods Sold:								
COGS (Excl. Depn.)	38,514	62,617	84,569	99,706	112,528	128,254	148,202	167,171
% Sales	*59.0%*	*57.8%*	*54.0%*	*55.0%*	*55.0%*	*55.0%*	*56.0%*	*56.0%*
Depreciation	1,027	1,814	3,277	3,277	3,277	3,277	3,277	3,277
% Sales	*1.6%*	*1.7%*	*2.1%*	*1.8%*	*1.6%*	*1.4%*	*1.2%*	*1.1%*
Total COGS	39,541	64,431	87,846	102,983	115,805	131,531	151,479	170,448
% Sales	*60.6%*	*59.5%*	*56.1%*	*56.8%*	*56.6%*	*56.4%*	*57.2%*	*57.1%*
SG&A Expense:								
SG&A Expense (Excl. Amt.)	5,448	7,407	9,435	11,602	13,299	15,390	17,467	20,001
% Sales	*8.4%*	*6.8%*	*6.0%*	6.4%	6.5%	6.6%	6.6%	6.7%
Amortization	69	192	605	673	743	753	758	635
% Sales	*0.1%*	*0.2%*	*0.4%*	*0.4%*	*0.4%*	*0.3%*	*0.3%*	*0.2%*
Total SG&A Expense	5,517	7,599	10,040	12,275	14,042	16,143	18,225	20,636
% Sales	*8.5%*	*7.0%*	*6.4%*	*6.8%*	*6.9%*	*6.9%*	*6.9%*	*6.9%*
EBITDA	21,263	38,225	62,504	69,975	78,770	89,544	98,977	111,348
Margin	*32.6%*	*35.3%*	*39.9%*	*38.6%*	*38.5%*	*38.4%*	*37.4%*	*37.3%*
Growth		*79.8%*	*63.5%*	*12.0%*	*12.6%*	*13.7%*	*10.5%*	*12.5%*
Operating Profit (EBIT)	20,167	36,219	58,622	66,025	74,750	85,514	94,942	107,436
Margin	*30.9%*	*33.5%*	*37.5%*	*36.4%*	*36.5%*	*36.7%*	*35.9%*	*36.0%*
Total Capital Expenditures	1,782	2,429	3,381	4,197	4,760	5,449	6,122	6,878
% of Sales	*2.7%*	*2.2%*	*2.2%*	*2.3%*	*2.3%*	*2.3%*	*2.3%*	*2.3%*

WORKING CAPITAL ASSUMPTIONS

	Historical	Projected				
	2012	**2013**	**2014**	**2015**	**2016**	**2017**
Sales	$156,508	$181,283	$204,596	$233,189	$264,646	$298,520
Total COGS	87,846	102,983	115,805	131,531	151,479	170,448
Current Assets						
Required Cash	27,406	32,128	36,129	41,035	47,258	53,176
Accounts Receivable	21,275	24,643	27,812	31,699	35,975	40,580
Inventory	791	927	1,043	1,184	1,364	1,535
Prepaid Expenses	0	0	0	0	0	0
Current Assets	49,472	57,698	64,983	73,918	84,597	95,290
Current Liabilities						
Accounts Payable	38,542	45,183	50,809	57,708	66,460	74,783
Accrued Expenses	0	0	0	0	0	0
Current Liabilities	38,542	45,183	50,809	57,708	66,460	74,783
Net Cash Impact						
Net Working Capital	*10930*	*12515*	*14174*	*16209*	*18136*	*20507*
Cash (Used by) / Generated from Work. Cap.		*-1585*	*-1659*	*-2035*	*-1927*	*-2371*
Ratios						
Required Cash % of COGS	*31.2%*	*31.2%*	*31.2%*	*31.2%*	*31.2%*	*31.2%*
A/R % of Sales	*13.6%*	*13.6%*	*13.6%*	*13.6%*	*13.6%*	*13.6%*
Days Receivable	*49.6 d*	*49.6 d*	*49.6 d*	*49.6 d*	*49.6 d*	*49.6 d*
Inventory % of COGS	*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*	*0.9%*
Inventory Turns	*111.1x*	*111.1x*	*111.1x*	*111.1x*	*111.1x*	*111.1x*
Prepaid % of COGS	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Accts Payable % of COGS	*43.9%*	*43.9%*	*43.9%*	*43.9%*	*43.9%*	*43.9%*
Accrued % of COGS	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

INCOME STATEMENTS

		Historical	Projected				
		2012	**2013**	**2014**	**2015**	**2016**	**2017**
Revenue		156,508	181,283	204,596	233,189	264,646	298,520
Less: Total COGS		(87,846)	(102,983)	(115,805)	(131,531)	(151,479)	(170,448)
Gross Profit		68,662	78,300	88,791	101,658	113,167	128,072
Less: Total SG&A		(10,040)	(12,275)	(14,042)	(16,143)	(18,225)	(20,636)
EBIT		58,622	66,025	74,750	85,514	94,942	107,436
Interest & Other Expense / (Income):	*Rate*						
Revolver	*6.00%*		0	0	0	0	0
Term Loan	*7.00%*		0	0	0	0	0
Sr. Sub. Notes	*10.00%*		0	0	0	0	0
Total Interest Expense			0	0	0	0	0
Less: Interest Income	**3.0%**		(3,831)	(5,491)	(7,346)	(9,479)	(11,895)
Financing Costs Amortization	**7.0 y**		783	783	783	783	783
Pretax Income			69,074	79,458	92,078	103,639	118,548
Less: Income Taxes	*25.20%*		(17,407)	(20,024)	(23,204)	(26,117)	(29,874)
Net Income			51,667	59,435	68,874	77,522	88,674
Shares Outstanding			939	939	939	939	939
Earnings per Share (EPS)			$55.02	$63.30	$73.35	$82.56	$94.43
EBITDA Reconciliation:							
EBIT			66,025	74,750	85,514	94,942	107,436
Plus: Depreciation			3,277	3,277	3,277	3,277	3,277
Plus: Amortization			673	743	753	758	635
EBITDA			69,975	78,770	89,544	98,977	111,348

BALANCE SHEETS

	Historical	Projected				
	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
ASSETS:						
Required Cash	$27,406	32,128	36,129	41,035	47,258	53,176
Excess Cash	$100,303	150,920	208,739	274,942	349,233	433,352
Total Cash	$127,709	183,049	244,868	315,977	396,491	486,528
Accounts Receivable	$ 21,275	24,643	27,812	31,699	35,975	40,580
Inventory	$ 791	927	1,043	1,184	1,364	1,535
Prepaid Expenses	$ -	0	0	0	0	0
Current Assets	$ 149,775	208,619	273,722	348,860	433,829	528,642
PP&E - Gross	$ 15,452	19,649	24,409	29,858	35,980	42,859
Less: Accum. Depn.	$ -	(3,277)	(6,554)	(9,831)	(13,108)	(16,385)
Net PP&E	$ 15,452	16,372	17,855	20,027	22,872	26,474
Intangibles & Goodwill	$ 5,359	4,686	3,943	3,190	2,432	1,797
Cap. Financing Costs	$ 5,478	4,695	3,913	3,130	2,348	1,565
Total Assets	$176,064	$234,373	$299,433	$375,207	$461,481	$558,478
LIABILITIES & EQUITY:						
Accounts Payable	$ 38,542	45,183	50,809	57,708	66,460	74,783
Accrued Expenses	$ -	0	0	0	0	0
Current Liabilities	$ 38,542	45,183	50,809	57,708	66,460	74,783
Revolver	$ -	0	0	0	0	0
Term Loan	$ -	0	0	0	0	0
Sr. Sub. Notes	$ -	0	0	0	0	0
Total Debt	$ -	0	0	0	0	0
Other Liabilities	$ 19,312	19,312	19,312	19,312	19,312	19,312
Total Liabilities	$ 57,854	64,495	70,121	77,020	85,772	94,095
Common Equity & Retained Earnings	$ 118,210	169,877	229,312	298,187	375,709	464,383
Liabilities & Equity	$176,064	$234,373	$299,433	$375,207	$461,481	$558,478
Check	0	0	0	0	0	0

CASH FLOW STATEMENTS

	Projected				
	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17
Operating Activities:					
Net Income	$51,667	$59,435	$68,874	$77,522	$88,674
Depreciation	$3,277	$3,277	$3,277	$3,277	$3,277
Amortization	$673	$743	$753	$758	$635
Financing Costs Amortization	$783	$783	$783	$783	$783
Subtotal	56,400	64,237	73,687	82,340	93,369
Changes in Working Capital	(1,585)	(1,659)	(2,035)	(1,927)	(2,371)
Cash Flow from Operations	54,815	62,578	71,652	80,413	90,998
Investing Activities:					
Less: Capital Expenditures	(4,197)	(4,760)	(5,449)	(6,122)	(6,878)
Plus: Investment Gains/(Losses)	0	0	0	0	0
Cash Flow from / (Used by) Investing	(4,197)	(4,760)	(5,449)	(6,122)	(6,878)
Cash Available for Debt Repayment	50,617	57,819	66,203	74,290	84,119
Financing Actitivies Capital Inflow / (Outflow):					
Revolver	0	0	0	0	0
Term Loan	0	0	0	0	0
Sr. Sub. Notes	0	0	0	0	0
Cash Flow from / (Used by) Financing	0	0	0	0	0
Net Increase / (Decrease) in Cash	50,617	57,819	66,203	74,290	84,119

VALUATION ANALYSIS

			Projected				
		2012	2013	2014	2015	2016	2017
		0	*1*	*2*	*3*	*4*	*5*
Free Cash Flow Calculation							
EBIT			$66,025	$74,750	$85,514	$94,942	$107,436
Plus: Depreciation			$3,277	$3,277	$3,277	$3,277	$3,277
Plus: Amortization			$673	$743	$753	$758	$635
EBITDA			**69,975**	**78,770**	**89,544**	**98,977**	**111,348**
Less: Capex			(4,197)	(4,760)	(5,449)	(6,122)	(6,878)
EBITDA Less Capex			**65,778**	**74,010**	**84,096**	**92,855**	**104,470**
Less: Taxes on EBIT	25.2%		(16,638)	(18,837)	(21,550)	(23,926)	(27,074)
Less: Changes in Working Capital			(1,585)	(1,659)	(2,035)	(1,927)	(2,371)
Unlevered Free Cash Flow			**47,554**	**53,514**	**60,511**	**67,003**	**75,025**
DCF Enterprise Value Calculation							
Terminal Value Calculation							
Terminal Value Growth Rate							3.0%
Projected Free Cash Flow							77,276
Discount Rate (WACC)							10.1%
Terminal Enterprise Value							1,088,390
Implied Term. Value EBITDA Multiple							9.8x
Discounted Cash Flows at WACC							
Unlevered Free Cash Flow			43,192	44,146	45,339	45,598	46,373
Terminal Value							672,741
Total Discounted Cash Flows		**897,389**	43,192	44,146	45,339	45,598	719,114

REVENUE BUILD UP

Volume Growth		2013	2014	2015	2016	2017
	1 Management Case	18.0%	16.0%	18.0%	16.0%	14.0%
	2 Base Case	17.0%	14.0%	17.5%	17.0%	17.5%
	3 Downside Case	12.0%	11.0%	13.0%	12.0%	12.0%
Active Case	**Base Case**	**17.0%**	**14.0%**	**17.5%**	**17.0%**	**17.5%**

Price Growth		2013	2014	2015	2016	2017
	1 Management Case	(1.0%)	(2.0%)	(3.0%)	(3.0%)	(3.0%)
	2 Base Case	(1.0%)	(1.0%)	(3.0%)	(3.0%)	(4.0%)
	3 Downside Case	(2.0%)	(2.0%)	(3.0%)	(4.0%)	(5.0%)
Active Case	**Base Case**	**(1.0%)**	**(1.0%)**	**(3.0%)**	**(3.0%)**	**(4.0%)**

Revenue Growth		2013	2014	2015	2016	2017
Active Case	**Base Case**	**15.8%**	**12.9%**	**14.0%**	**13.5%**	**12.8%**

COGS %		2013	2014	2015	2016	2017
	1 Management Case	56.0%	56.0%	56.0%	57.0%	58.0%
	2 Base Case	55.0%	55.0%	55.0%	56.0%	56.0%
	3 Downside Case	57.0%	58.0%	59.0%	60.0%	61.0%
Active Case	**Base Case**	**55.0%**	**55.0%**	**55.0%**	**56.0%**	**56.0%**

SG&A %		2013	2014	2015	2016	2017
	1 Management Case	6.4%	6.4%	6.4%	6.4%	6.4%
	2 Base Case	6.4%	6.5%	6.6%	6.6%	6.7%
	3 Downside Case	6.5%	6.6%	6.6%	6.7%	6.7%
Active Case	**Base Case**	**6.4%**	**6.5%**	**6.6%**	**6.6%**	**6.7%**

Capex		2013	2014	2015	2016	2017
	1 Management Case	4,015	4,553	5,212	5,856	6,579
	2 Base Case	4,197	4,760	5,449	6,122	6,878
	3 Downside Case	4,745	5,380	6,160	6,921	7,776
Active Case	**Base Case**	**4,197**	**4,760**	**5,449**	**6,122**	**6,878**

Financial Statements (2012)

CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except number of shares which are reflected in thousands and per share amounts)

	September 29, 2012	September 24, 2011	September 25, 2010
Net sales	$ 156,508	$ 108,249	$ 65,225
Cost of sales	87,846	64,431	39,541
Gross margin	68,662	43,818	25,684
Operating expenses:			
Research and development	3,381	2,429	1,782
Selling, general and administrative	10,040	7,599	5,517
Total operating expenses	13,421	10,028	7,299
Operating income	55,241	33,790	18,385
Other income/(expense), net	522	415	155
Income before provision for income taxes	55,763	34,205	18,540
Provision for income taxes	14,030	8,283	4,527
Net income	$ 41,733	$ 25,922	$ 14,013
Earnings per share:			
Basic	$ 44.64	$ 28.05	$ 15.41
Diluted	$ 44.15	$ 27.68	$ 15.15
Shares used in computing earnings per share:			
Basic	934,818	924,258	909,461
Diluted	945,355	936,645	924,712
Cash dividends declared per common share	$ 2.65	$ 0.00	$ 0.00

	September 29, 2012	September 24, 2011
ASSETS:		
Current assets:		
Cash and cash equivalents	$ 10,746	$ 9,815
Short-term marketable securities	18,383	16,137
Accounts receivable, less allowances of $98 and $53, respectively	10,930	5,369
Inventories	791	776
Deferred tax assets	2,583	2,014
Vendor non-trade receivables	7,762	6,348
Other current assets	6,458	4,529
Total current assets	57,653	44,988
Long-term marketable securities	92,122	55,618
Property, plant and equipment, net	15,452	7,777
Goodwill	1,135	896
Acquired intangible assets, net	4,224	3,536
Other assets	5,478	3,556
Total assets	$ 176,064	$ 116,371
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Current liabilities:		
Accounts payable	$ 21,175	$ 14,632
Accrued expenses	11,414	9,247
Deferred revenue	5,953	4,091
Total current liabilities	38,542	27,970
Deferred revenue - non-current	2,648	1,686
Other non-current liabilities	16,664	10,100

Total liabilities	57,854	39,756
Commitments and contingencies		
Shareholders' equity:		
Common stock, no par value; 1,800,000 shares authorized; 939,208 and 929,277 shares issued and outstanding, respectively	16,422	13,331
Retained earnings	101,289	62,841
Accumulated other comprehensive income	499	443
Total shareholders' equity	118,210	76,615
Total liabilities and shareholders' equity	$ 176,064	$ 116,371

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In millions, except number of shares which are reflected in thousands)

	Common Stock				
	Shares	Amount	Retained Earnings	Accumulated Other Comprehensive Income/ (Loss)	Total Shareholders' Equity
Balances as of September 26, 2009	899,806	$ 8,210	$ 23,353	$ 77	$ 31,640
Components of comprehensive income:					
Net income	0	0	14,013	0	14,013
Change in foreign currency translation	0	0	0	7	7
Change in unrealized gains/losses on marketable securities, net of tax	0	0	0	123	123
Change in unrecognized gains/losses on derivative instruments, net of tax	0	0	0	(253)	(253)
Total comprehensive income					13,890
Share-based compensation	0	876	0	0	876
Common stock issued under stock plans, net of shares withheld for employee taxes	16,164	703	(197)	0	506
Tax benefit from equity awards, including transfer pricing adjustments	0	879	0	0	879
Balances as of September 25, 2010	915,970	10,668	37,169	(46)	47,791
Components of comprehensive income:					
Net income	0	0	25,922	0	25,922
Change in foreign currency translation	0	0	0	(12)	(12)
Change in unrealized gains/losses on marketable securities, net of tax	0	0	0	(41)	(41)
Change in unrecognized gains/losses on derivative instruments, net of tax	0	0	0	542	542
Total comprehensive income					26,411
Share-based compensation	0	1,168	0	0	1,168
Common stock issued under stock plans, net of shares withheld for employee taxes	13,307	561	(250)	0	311
Tax benefit from equity awards, including transfer pricing adjustments	0	934	0	0	934
Balances as of September 24, 2011	929,277	13,331	62,841	443	76,615
Components of comprehensive income:					
Net income	0	0	41,733	0	41,733
Change in foreign currency translation	0	0	0	(15)	(15)
Change in unrealized gains/losses on marketable securities, net of tax	0	0	0	601	601
Change in unrecognized gains/losses on derivative instruments, net of tax	0	0	0	(530)	(530)
Total comprehensive income					41,789
Dividends and dividend equivalent rights declared	0	0	(2,523)	0	(2,523)
Share-based compensation	0	1,740	0	0	1,740
Common stock issued under stock plans, net of shares withheld for employee taxes	9,931	200	(762)	0	(562)
Tax benefit from equity awards, including transfer pricing adjustments	0	1,151	0	0	1,151
Balances as of September 29, 2012	939,208	$ 16,422	$101,289	$ 499	$118,210

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Years ended September 29, 2012	September 24, 2011	September 25, 2010
Cash and cash equivalents, beginning of the year	$ 9,815	$ 11,261	$ 5,263
Operating activities:			
Net income	41,733	25,922	14,013
Adjustments to reconcile net income to cash generated by operating activities:			
Depreciation and amortization	3,277	1,814	1,027
Share-based compensation expense	1,740	1,168	879
Deferred income tax expense	4,405	2,868	1,440
Changes in operating assets and liabilities:			
Accounts receivable, net	(5,551)	143	(2,142)
Inventories	(15)	275	(596)
Vendor non-trade receivables	(1,414)	(1,934)	(2,718)
Other current and non-current assets	(3,162)	(1,391)	(1,610)
Accounts payable	4,467	2,515	6,307
Deferred revenue	2,824	1,654	1,217
Other current and non-current liabilities	2,552	4,495	778
Cash generated by operating activities	50,856	37,529	18,595
Investing activities:			
Purchases of marketable securities	(151,232)	(102,317)	(57,793)
Proceeds from maturities of marketable securities	13,035	20,437	24,930
Proceeds from sales of marketable securities	99,770	49,416	21,788
Payments made in connection with business acquisitions, net of cash acquired	(350)	(244)	(638)
Payments for acquisition of property, plant and equipment	(8,295)	(4,260)	(2,005)
Payments for acquisition of intangible assets	(1,107)	(3,192)	(116)
Other	(48)	(259)	(20)
Cash used in investing activities	(48,227)	(40,419)	(13,854)
Financing activities:			
Proceeds from issuance of common stock	665	831	912
Excess tax benefits from equity awards	1,351	1,133	751
Dividends and dividend equivalent rights paid	(2,488)	0	0
Taxes paid related to net share settlement of equity awards	(1,226)	(520)	(406)
Cash (used in)/generated by financing activities	(1,698)	1,444	1,257
Increase/(decrease) in cash and cash equivalents	931	(1,446)	5,998
Cash and cash equivalents, end of the year	$ 10,746	$ 9,815	$ 11,261
Supplemental cash flow disclosure:			
Cash paid for income taxes, net	$ 7,682	$ 3,338	$ 2,697

Field Research Questionnaire

Responses are anonymous. Your name will not be included in research unless requested by Professor John Longo. Data from this questionnaire will be used as a part of a student report on Apple Inc.

Apple Inc. Field Research Questionnaire:

1.) What is the "hottest" or most in demand Apple Product in your store?

2.) How often do you deal with customer questions/comparisons between your product line and Samsung?

3.) Have you ever converted a Samsung smartphone owner to Apple? What motivated that customer to switch?

4.) Can you describe what makes the Apple store experience "special" for customers?

5.) How powerful is the Apple brand based on your experience

6.) Can you describe a time when your store was most busy because of a new product release?

7.) Can you rank the following Apple products by the amount of "buzz" in your store?

Rank 1-5 (1 being the most talked about item)

- ✓ **iPhone**
- ✓ **iPad**
- ✓ **Mac**
- ✓ **iPod**
- ✓ **iMac**
- ✓ **MacBook**

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