APPLE FINANCIAL STATEMENT ANALYSIS

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2013

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A. Executive Summary

Apple Inc has been established since April 1, 1976. The headquarter is located in Cupertino, California. Apple achieved their enormous sales growth after Steve Jobs back. Previously, Jobs has been retired from Apple. Thereafter, he established Next, the electronic company which develop the software. After leaving, Apple almost suffered from huge loss. There was lack in innovation, human resource management, confidence and expertise in the interface design. In 1998, Jobs transform Apple from near bankruptcy to profitability. Since then, Apple begins to develop devices with beautiful interface. It sold package personal computers at the first place. In the old era, computers are sold separately with software. But, Apple has pioneered to sell software and hardware altogether. In the development, Apple introduces iPhone. This is driving majority apple sales. The interface was designed using skeuomorphism model that enable to imitate likely human action. All in all, Apple sells Macbook Pro, Macbook Air, Apple TV, Apple Remote, iPod, iPhone, iPod touch, iPad Mini, New iPad, Mac Dekstop, Apple Monitor, Software. Through more product differentiation, Apple achieved enormous. One of the sales driver is the introduction of the iPad in market. Apple has positive sales growth in the late 5 years. Apple has successfully maintained efficiency of assets and capital resources. As the result the profit margin is increasing steadily.

Furthermore, Apple is likely will have problem with liquidity ratios. However, company is able to pay obligation, the ratios below the other big industry. Furthermore, Apple holds much cash in their accounts. Otherwise, Apple has also allocates wide variance of write off to the credit sales. Thereafter, It has surprising financial structures. Surprisingly, Apple uses almost all equity financing. It corresponds to the much holding cash. They use cash to finance internally. The return on invested capital is bigger than industry average such as Microsoft and Google. Apple Return on Asset is the highest among all 7 big technology industries in US. Furthermore, profit margin is increasing in the late 5 years. This is good sign for apple. There is optimization of generating sales and cost of sales to generate income. The market measures reveals many investors trading Apple stocks. As the result, the market price is overvalued than actual earning per share. Earning per share is increasing over time. In contradiction, Apple did not pay cash dividend until 2011. Many investors expect the capital gains rather than the cash dividends distributions.

B. Analysis Overview

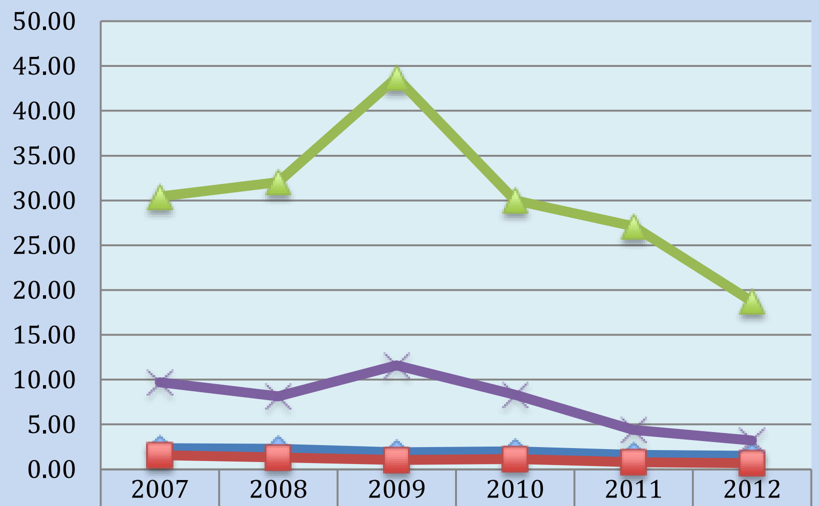
Apple financial statement indicates a healthy company. It is shown by some ratios that have been calculated in the following sub chapters. Account receivable collection period is shorter than competitors. Sales growth reached more than 30% per years. However, they hold much cash. This is normal if we see from other big companies such as Google and Oracle. Furthermore, Apple does not have long-term debt. They are free from risk of debt financing. Apple is able to finance the operations using the shares reinvested basis. The fast sales growth is stimulated by agreement to many carriers around the world, mostly in US such as AT&T. Other factor contributes to the fast sales growth is the ability to attract more customers through attractive advertisement and product features differentiation. In addition the analysis include recasting to perform true picture of the company. The increasing number of sales is bigger than the increasing number of sales. It makes the asset turnover is getting smaller from year to years. Profit margin is increasing through the years. This is the impact of reducing the cost of supply for materials. Altman Z Score can also reveal healthy financial condition. Apple Z Score analysis does not indicate any bankruptcy that would likely happen. The score is even higher than the minimum requirement. The company that likely to be bankrupt is under 2.9.

Financial measure is not enough to analyze the company performance. Therefore, we need to consider the crucial factors affecting to the financial performance. Crucial factor comprises all major events that influence apple performance, the economic condition and also the competition in the market. These things stimulate Apple to have stronger business strategy and competitive advantage. There are many brands attacking the market such as Samsung, LG, Panasonic, Sharp, Nokia, Oppo, Blackberry etc. They are coming with own strong features. Furthermore, Apple product is always dictating the market. Therefore economic conditions play important roles affecting the sales. Economics crisis somehow can reduce customer loyalty. It is not only influencing the customer purchasing power but it will also affect the increase supplier cost such as raw materials, transportation etc.

Altogether, the financial measures and other crucial factors are really important to forecast the company performance in the futures. Company valuation needs the information of sales growth, the cost of equity capital and also the inflation rate. In conclusion, many factors determining the future growth.

C. Evidential Matter

1. Short-term liquidity



	2007	2008	2009	2010	2011	2012
Current Ratio	2.37	2.29	1.88	2.01	1.61	1.50
Acid Test Ratio	1.57	1.32	1.03	1.14	0.79	0.69
Collection Period	30.43	32.05	43.70	30.02	27.10	18.75
Days to Sell Inventory	9.71	8.13	11.59	8.32	4.38	3.21

	2007	2008	2009	2010	2011	2012
Net Working Capital	$ 14,532	$ 21,030	$ 27,832	$ 47,791	$ 76,615	$ 118,210

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

1.1 Current Ratio

Current ratio measures the ability to pay obligations with company assets. It is calculated from current assets divided by the current liabilities. Furthermore, Apple current ratio is more stable compare to similar industry like Microsoft. The current ratio slightly decreases from 2007 to 2012. It means the speed of current asset growth is smaller than the current liability growth. Apple optimizes the use of internal financing to expand the business in Asia, Europe, and US. It reveals the positive sign for Apple. There is no liquidity problem in the company. Apple's ability to meet the short-term obligation is growing. A current ratio of one means that book value of current assets is exactly the same as book value of current liabilities. Apple current ratio with 1.5 is smaller than the current ratio of Google, Cisco and Oracle with 4.3, 3.2, and 2.5. This indicates apple's ability to pay short-term debts and other current liabilities (obligation to be paid during 1 year) lower than other 3 companies. The ratio reflects a company's ability to remain operates. This ratio is not exactly what investors look for. Investors look for a company with a current ratio of 2:1, current assets twice the current liabilities. Furthermore, it could be dangerous for Apple with only 1.5 current ratios. Moreover, the trend of Apple current ratio is decreasing in the late 5 years. Furthermore, a current ratio less than one indicate the company might have problems meeting short-term financial obligations. Otherwise, it would also not good to have high current ratio. The company may not be efficiently using its current assets or short term financing infusion.

1.2 Acid-Test Ratio

There are so many probability related to the ratios increase or decrease. And I analyze further into its components. First, we need to breakdown the formula to calculate acid test/quick ratios. Acid test ratio is the result of cash and cash equivalents plus marketable securities plus account receivables divided by the current liabilities. Therefore, it is clear that Acid test ratios will be solvency parameter to determine a firm's ability to pay down current liabilities with its cash, short term equivalents, and accounts receivables. This ratio was called quick to describe the quick assets needed to pay down any current liabilities. Firms with high quick ratios often indicate the firm ability pay current liabilities quickly. Otherwise, firms with low quick ratios may mean that the firm is potentially having solvency problem.

Based on calculation, Apple acid ratio is always lower than the current ratio. Moreover, it decreases from 1.57 in 2007 to 0.69 in 2012. Compare to technology industry average acid test ratio, apple had decreased slightly faster. This means that Apple can grow cash, cash equivalent, and account receivables smaller than the growth of their current liabilities. This probably reveals bad condition of the company. Apple might not efficiently allocate its current liabilities. With the existing current liabilities, they generate smaller cash and account receivables.

Furthermore, we cannot define those findings nakedly. Current Liabilities include account payable, accrued expense, deferred revenue. The ratio might be increase/decrease because of the account payable and accrued expense decrease/increase. In case the account payable is increasing, this might because Apple is required to pay more to the supplier of the IT part. As in the notes to financial statement stated that the cost of part from Supplier decrease in price. Furthermore, Apple has been acquired Silicon Valley. Thus, Apple should be able minimize the cost of produce part in the Silicon Valley. Another probability might because Apple cannot pay the supplier on time.

Compare to Microsoft and Google, Apple quick ratios is much smaller. Microsoft and Google quick ratios are more than 2 while Apple quick ratio is less than 1 in 2012. This is bad sign since it indicates that Apple pay the current liability slower rather than the other technology industry as the benchmark. It seems that the labor demonstration in china manufactures affecting this acid test ratio. The labor require more salaries, otherwise apple wants to keep low labor cost. As the result, it makes the company cannot pay quickly the current liability. Furthermore, Apple is in the difficulty to find the cheap supplier with the advance technology development.

1.3 Collection Period

An asset utilization ratio measures the duration a company takes, on average, to collect on its sales. This period is calculated dividing days in the year by the accounts receivable turnover (365/accounts receivable). Furthermore, it can measure the speed of converting the account receivables into cash. The smaller the collection period, the faster the company can hold more cash. Apple can use cash received from collection to finance the operation of the business or to reinvest. Apple's account receivable's collection period is not continuously decreasing from 2007 to 2012. The collection period increase from 30.43 in 2007 to 43.70 in 2009. This longer delay might because the crisis happened in USA in 2008. There was subprime mortgage Lehman Brothers bankruptcy in 2008. There were many people lost the job and salaries. After 2009, the condition is slightly better. The collection period is going to recover. It is decreasing from 43.70 in 2009 to 18.75 in 2012.

The collection delay might the result of Apple offers more credit sales with the carriers in some countries. It surprisingly fast recovery strategy. Apple is targeting more sales in Asian countries. Furthermore it makes sense that everybody uses iPhone in Japan and Singapore. To increase the collection period, Apple strengthens the locking code through the operating system that they develop.

1.4 Days to sell inventory

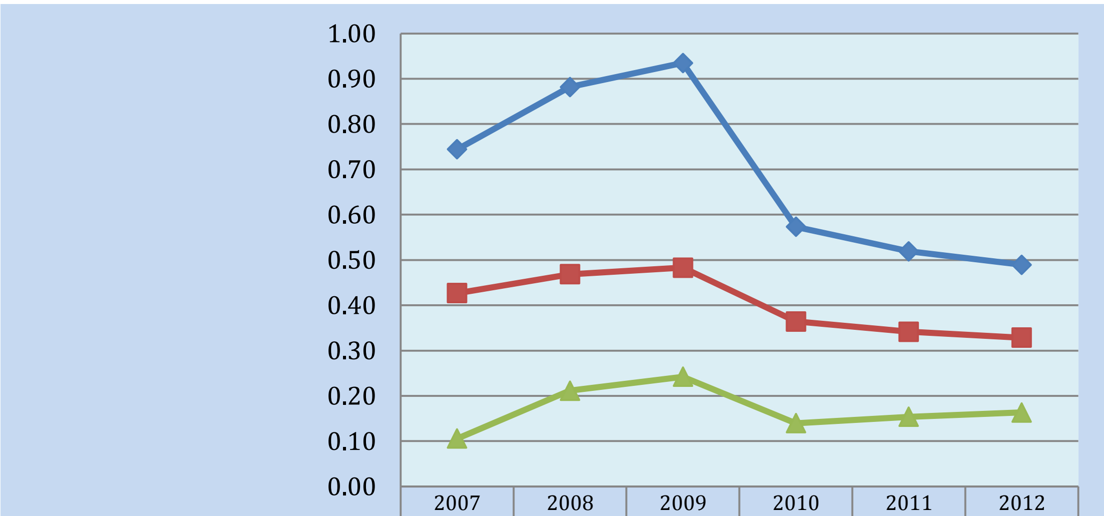
Days to sell inventory measure how long apple can sell the products. Thuis is calculated from average inventory divided by the cost of sales (divided by 360). Apple can successfully sell the product depends on many external and internal factors. The speed of selling products by Apple could be affected internally by big discount, agreement with many carriers, offer more credit sales, lowering the price, etc. Furthermore, many people buy more Apple products because of good economic condition, social affection, and also the easiness to get the product. Apple might not give the big discount to customers since they sell premium products, although Apple can differentiate the product into high or low cost product.

The speed to sell the inventory is gorgeously decreasing from 9.71 in 2007 to only 3.21 in 2012. It is event only 1/3 of the speed to sell in 2007. The growth of apple retailer, build apple store, beautiful advertising strategy, and agreement with carriers makes Apple faster to sell the inventory. The product will be directly sell to the retailer around the world.

This sale is even faster because of the product differentiation as well. Apple introduces more and more product over the years with slightly different function, features and customers. Moreover, Apple introduces Apple iPad in 2008. It is dramatically huge sales ever for Apple. However, the number of inventory might be increase, but sales as denominator is also increase because people are not boring with only one product. The result is the speed to sell inventory keep increasing. Company like Apple depends heavily on the technology upgrade and innovation. Without having that, it might loose competition in the market.

2. Capital structure and solvency

It assesses the ability of Apple Inc to meet long-term obligations.



	2007	2008	2009	2010	2011	2012
Debt Equity Ratio	0.74	0.88	0.93	0.57	0.52	0.49
Debt to Total Assets Ratio	0.43	0.47	0.48	0.36	0.34	0.33
Long term Debt to Equity Ratio	0.11	0.21	0.24	0.14	0.15	0.16

	2007	2008	2009	2010	2011	2012
Total Asset	$25,347	$39,572	$53,851	$75,183	$116,371	$176,064
EBITDA	$ 5,008	$ 6,895	$ 7,984	$ 18,540	$ 34,205	$ 55,763

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

2.1 Total Debt to Equity

Total liabilities divided by shareholder's equity. This ratio shows the capital structure of Apple related to the risk. Previous research found that Apple has been paid all long-term debt in 2004. As the result the debt to equity ratio is quite small since the debt as nominator decrease its total amount and the equity is stable. We can see that Debt to equity ratio is increasing from 2007 to 2009. This might related to the speed of selling inventory and speed of payment to suppliers, and employees. Apple might defer the payment to suppliers due to the limited operating cash flow that they have. Starting from 2010, Apple's conditions are slightly smaller with the debt to equity ratio only 0.57%. There are two possibilities, whether the liabilities amount is decreasing, or the equity is increasing. Apple might pay much amount of tax for dividend. But, the management is also clever since Apple did not distribute the dividend to owners. The investors just receive the capital gain. Moreover, there is stock repurchase program in Apple Inc. Apple has smaller risk to finance the operation using all equity financing. Although, Apple intent to issue debt in 2016 due to the expensive charge of tax that should be paid. The second probability is the investor welfare is recovered in 2010. As a result, the investing in Apple's stock is growing bigger.

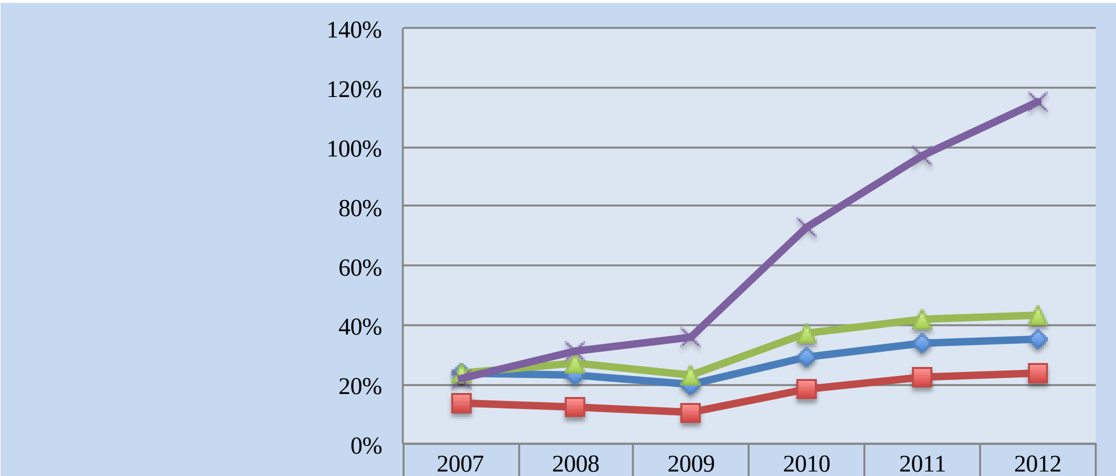
2.2 Long Term Debt to Equity

Long term liabilities divided by the shareholder's equity. In the notes to financial statement, it has been clearly stated that Apple does not have long-term liability. They have been paid all the long-term debt in 2004. Apple **does not have long term debt** might because to avoid the exposures. It might also to optimize the leverage ratio in Apple Inc. Furthermore; it insulated them from credit markets. Moreover, its cash has been too enough to finance internally the company operations. Not only Apple is free from debt, but also Google and Oracle.

2.3 Time Interest Earned

Income before income taxes and interest expense divided by the interest expense. It ensures the payment of the company to the debt holders. There is no specific explanation in terms of interest in the notes to financial statement since apple does not issue long-term debt. Since, Apple does not finance the operations from the loan, it make sense that Apple does not have interest, however, some interest is persist in the off balance sheet account. In case, Apple maintain long term debt, the lower time interest the better since it shows the credibility of the company pays its obligation on timely manner.

3 Return On Invested Capital

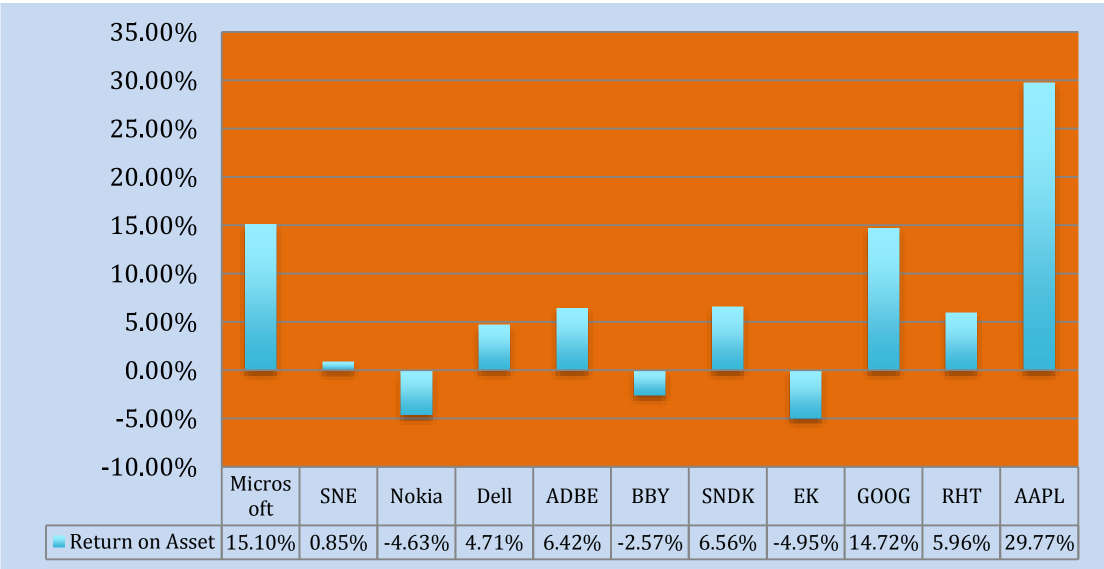


	2007	2008	2009	2010	2011	2012
Return on Equity	24%	23%	20%	29%	34%	35%
Return on Asset	13.79%	12.22%	10.59%	18.64%	22.28%	23.70%
Return on Common Equity	24%	27%	23%	37%	42%	43%
Return on Net Operating Assets	22%	31%	36%	73%	97%	115%

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

3.1 Return on Asset

Return on Assets indicates how much return receives by companies from the additional assets they have. In simple words, ROA tells the earnings were generated from invested capital on assets. Apple ROA is slightly increases from 2010 to 2012. It indicates better return received from invested capital through the years. ROA in the public companies can be different materially. Therefore, it will be highly dependent on the industry. If ROA used as comparative measure, it is best to compare it against a company's previous ROA numbers. In addition return on assets used to measure how efficient the company can get the returns by utilizing stockholders assets. It is calculated from net income plus interest expense multiply by 1 minus tax rate divided by average total assets. This is primarily examines the efficiency of debt or equity financing utilized by the company. Therefore, it is useful to compare the between company that has similar financing structures. Apple return on assets is increasing over time in the late 5 years except in 2009 when there was financial crisis in US. Apple ROA was 13.79% in 2007. It is almost doubled in 2012. The ROA recovery in 2010 had also significant. It was from 10.59% in 2009 increased to 18.64% in 2010. In 2013, Apple got the highest return on assets among it's competitors. In the 2nd quarter of 2013, Apple can reach the ROA 29.77%. The second highest ROA in the same industry is Microsoft 15.10 % ROA. It is make sense that Microsoft has the lower ROA rather than Apple because Microsoft is always trying to make price as cheap as possible for the customers. Then, it is followed by Google with 14.72 % ROA. Furthermore, Dell is far below those 2 companies. Dell ROA is only 4.71%.



Source: Wikinfest (2013) reprocessed in excel by Muhammad Irka

3.2 Return on Common Equity

Net income divided by average shareholder's equity. By having equity financing $14,532, Apple can generate net income around $3,496 in 2007. Then, It has increasing trend from 2007 to 2012. It seems that Apple Inc. is prospective investment in 2007. Many investors are attracted to invest their money. In 2012, the total shareholders equity has achieved $118,210. The net income in 2012 is $41,733. It is almost 12 times bigger than the net income in 2007. ROCE shows the ratio of net income divided by the average shareholders equity plus preferred dividend. Since the ratio is increasing from 24% to 43%, it means that with less equity financing, Apple Inc. still can generate income even more than the previous year. The increasing number is quite high from 2007 to 2012. It is doubled.

If we assume that the inflation rate is around 6% per years, the progress on ratio from 2007 to 2012 is not somewhat related to the net income and equity. Or, any general trends by investors. Looking up to the fact that the inflation rate is always exist, I believe that Apple Inc. improvement in Net Income and shareholders equity is not the effect of inflation. However, it because the prospect of the company itself. This condition is represented by the aggregate ROCE [1] from 2007-2012. The proportion shows that Apple Inc. is going to be better.

3.3 Return on Net Operating Asset

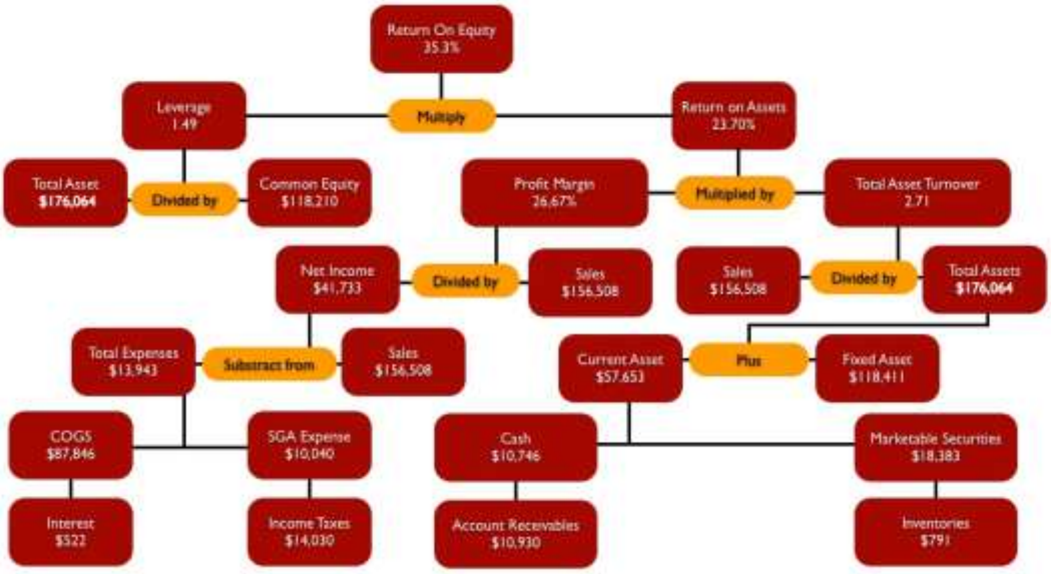
RNOA[2] have significant increasing numbers after 2009. Since if we see from 2007 to 2008, there was narrow slope. 2009 is the years for APPLE. Believe that the RNOA is doubled from 2009 to 2010. It is quite high comparing to the fact that before 2009, which always have RNOA lower than 40%. After 2009, it experience steady growth more than 70%.

RNOA shows how big operating assets can effect to the Net Operating Profit After Tax. It is amazing that APPLE Inc. can have RNOA more than 100% in 2012. It shows that the manufacturing can improve rapidly their productivity and the efficiency. All the current assets has been utilized as minimum as possible and generate profit much more than that. By having NOPAT $84,985, we can generate NOA $83,075. Net Operating assets include current assets that consist of account receivable, inventory, and accounts payable. The higher the RNOA means that the higher profit can be generated from those several sub items. In summary, the RNOA increase from 22% in 2002 to 115% in 2012. RNOA in 2012 is around 5 times of RNOA in 2007.

The rest after deducting from the net operating assets and liabilities, we can get the net financial obligation which shows the financing amount of the company. However company do not regard as a profit if they can make yield from the financing and reinvestment. They regard profit from the real operating activities. How is technically the company can generates income.

[1] Return on Common Equity
[2] Return on Net Operating Assets

4. Dupont Analysis



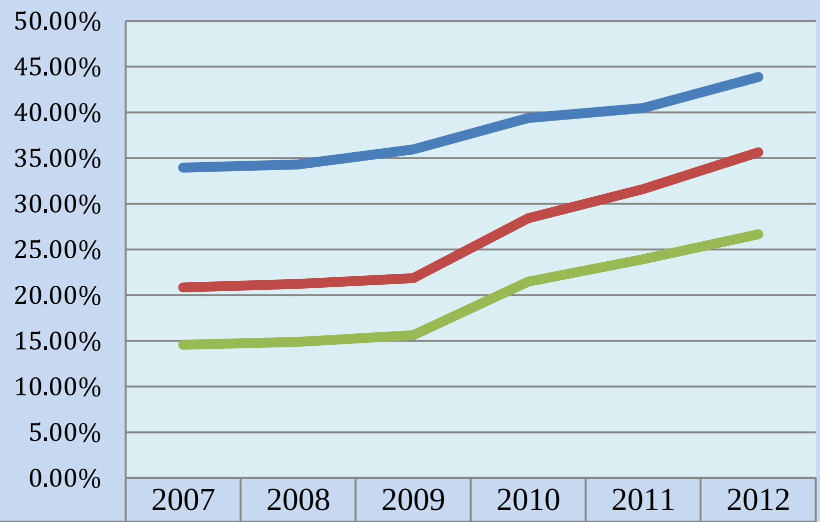
Sources: Apple annual report calculated by Muhammad Irka - see Appendix

Dupont model explain Return on Equity that are affected by 3 things: operating efficiency, asset use of efficiency and financial leverage. Based on the formula, ROE connecting the correlation between leverage and return on asset. Leverage ratio and return on assets determine the number of ROE whether it is high or low. Dupont model give the bright picture of the company performance. Some ratios are correlated and confirm reciprocally. The accuracy and validity of ratio measurement are tested using Dupont model diagram. In Apple, the leverage ratio is 1.49 and return on asset is 23.7%. Those numbers are multiplied and give the result of ROE 35.3%. Since the number is coming from many ratios below ROE, this 35.3% is representing big picture of the company performance.

In the Dupont model, return on asset is the result of profit margin 26.67% multiplied by total asset turnover 2.71. It means that the higher the profit margin and total asset turnover, the higher the return on assets. Higher profit margin means that higher sales and low cost of good sold. The higher asset turnover, the higher sales over the average total assets. Those numbers above indicates how good and efficient the company can generate sales using the existing assets. It measures how company can reduce amount of cost of good sold that will give higher profit margin.

If the total assets increase its value, the leverage will increase its value as well. In the opposite direction, if the common equity is increasing, the amount of leverage will decrease. In order to increase the ROA, company must increase the leverage by increase the total assets and decrease the common equity. Literally, Apple is excellent since they are good in the internal financing. No much external financing. All the things below the calculation involve sales. Whether the sales is becoming the nominators or denominators. It is nakedly said that the major driver of ROA is the amount of sales but again we need to elaborate more on this analysis.

5. Operating performance and profitability



	2007	2008	2009	2010	2011	2012
Gross Profit Margin	33.97%	34.31%	35.96%	39.38%	40.48%	43.87%
Operat Profit Margin	21%	21%	22%	28%	32%	36%
Net Profit Margin	14.56%	14.88%	15.61%	21.48%	23.95%	26.67%

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

5.1 Gross profit margin

The gross margin is not only estimate of the company's pricing strategy but it gives good measures of financial health. Without an adequate gross margin, a company will unable to pay its operating and other expenses. Furthermore they are unable to build for the future. Generally, a company's gross profit margin should be stable. The gross profit margin will increase if the company able to increase sales reduces cost of goods sold, increase price etc. Apple increase gross profit margin from 33.97% in 2007 to 43.87% in 2012 by reducing cost of supplier. Apple has bought Silicon Valley to reduce cost of supply cost. Therefore, Apple is able to increase sales and price acceptance by introducing more product differentiation in each year. If we take notes, Apple always upgrade the product semiannually. They also introduce completely new devices and software once in 2 years

Gross profit margin derived from Sales minus Cost of Sales then divided by Sales. It compares how company can generate sales from the cost that have already paid for preparing the product that will be sold. To measure how efficient the production is. Gross profit margin is increasing steadily from 2007 to 2012. It is quite good signal for Apple Inc. However, we have to analyze other ratios to determine the confirmatory of a ratio.

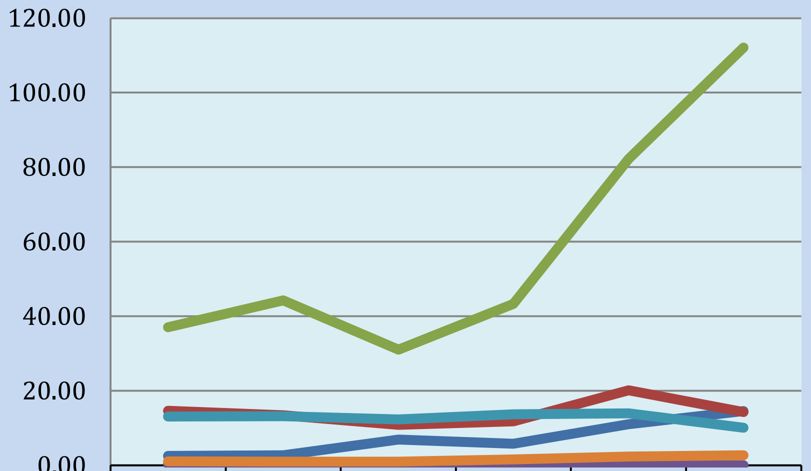
5.2 Operating profit margin - Pretax

Operating margin measures the proportion of a company's revenue is left over after paying for variable costs of production such as wages, raw materials, etc. A healthy operating margin is required for Apple to be able to pay for its fixed costs, such as interest on debt. Operating profit margin derived from Income from operations divided by Sales. It shows how much income that can we received from the operational activity from sales. Based on the chart above, Apple increases the operating profit margin. There was 21% in 2007 increase to 36% in 2012. This is good sign for Apple. Furthermore, it is possible that companies will have enormous sales but low income.

5.3 Net profit margin

Net profit margin equals to Net Income divided by Sales. The higher the ratio shows the higher net income that can be generated from the Sales. The analysis shows that there is increasing trend from 2007-2012. It is quite good for Apple Inc. Net Profit margin shows the percentage of revenue that a company keeps as profit after accounting for fixed and variable costs. It is calculated by dividing net income by Apple sales. The profit margin is primary used for internal comparisons. The acceptable profit margins will vary between industries. In general, narrow profit margins reveals increased volatile earnings. For companies with significant fixed costs, wide profit margins reduce the risk that a decline in sales will cause a net profit loss. By percentage, profit margin can be said amount of profit that a company keeps per dollar of revenue. Since Apple has net profit margin of 26.67%, the company keeps $.26 of each dollar of revenue. Apple net profit margin has increased steadily. It means that it reduces the risk of volatile earnings. Apple is also save from the risk of decline in sales that cause a net profit loss because 26.67% net profit margin is quite big variance.

6. Asset turnover



	2007	2008	2009	2010	2011	2012
Cash turnover	2.57	2.74	6.94	5.79	11.03	14.56
Acc Receivable turnover	14.66	13.41	10.87	11.84	20.16	14.32
Inventory turnover	37.08	44.26	31.07	43.29	82.23	112.12
Working capital turnover	0.28	0.27	0.19	0.16	0.08	0.09
PPE turnover	13.10	13.23	12.37	13.68	13.92	10.13
Total Asset turnover	1.09	1.01	1.01	1.56	2.41	2.71

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

6.1 Cash turnover

Cash turnover measures the relation between sales divided by average cash and cash Equivalent. It explains how big the sales generated from the cash. How much cash we can received from certain amount of sales. The cash turnover ratios is accounted for only 2,57 in 2007, but it has already reach 14,56 in 2012. These number shows quite significant improvement. It is good, since Apple can generate more cash from sales. In the some news, many analysts said that apple holds much cash in the accounts. Moreover, Apple did not distribute the cash dividends in 2007-2011. This cash is intended to finance internally the operation. This big amount of cash comes mainly from the sales. Apple is still profit generating machine. Some of the cash are used to finance the research and development and also pay dividends. As the result, Apple distribute cash dividend per share $2.65 to the owners in order to increase the commitments. Somehow, it is better to increase the cash turnover. The smaller the cash on hand, the more productive those cash is utilize in somewhere else (more profitable investment). The number of sales increase, the number of cash is also increase but better to invest soon. Somehow, the operations need cash. Those cash is really useful to pay short-term obligation such as pay salaries and suppliers in the year operations. Not to small and not to much holding cash is more expected. Based on my calculations, it is shown that the cash turnover is increasing. This is good sign since, the cash are optimized to generate more sales or invest in more profitable place.

6.2 Accounts receivable turnover

Account receivable turnover equals to sales divided by account receivable. It shows the ability of company convert account receivable into cash. It can shows where the sales is coming from. It might be big sales. But, it is hard for company to convert it into cash. Apple is quite good since the ratio is quite stable. It is accounted for 14.32. It means that Apple Inc. can convert account receivable into cash. Many of customers not pay in long-term credit. Apple maintains its account receivable to boost the sales. Company offers more credit sales to the customers through the network carriers. Increase the number of account receivable is really expected since it measures the ability of company to collect receivables from credit sales. The ironic factor is that if the customers leave the contract before the contract term is ended. They will just pay some of the credit. It is hard to collect the payment. As the result, Apple might get loss from bad debt expense. Account receivable is the measures if the company credit sales are still in track. Apple account receivable turnover 14.32 means every 14 sales that apple made, 1 of them is sold using credit sales. The more the number, it means the more the company have the credit sales. In fact, this number is still normal compare to Samsung. The risk they are facing is similar. However, Samsung might be easier to collect account receivables since they offer cheaper price.

6.3 Inventory turnover

Inventory turnover is calculated from cost of sales divided by average inventory. It shows how much cost of sales we get from the single inventory we produce. Apple Inc. has fluctuates trends in the inventory turnover. It decline from 2007 to 2009. But then it backed to increase from 2010. The higher the ratios mean the worst the company is. The Apple Inc. inventory turnover is accounted for 112 in 2012. There is improvement from 2007 to 2012. It is good, since they can generate more sales from inventory they produce. The inventory turnover 112 means in 112 sales that company make, there is 1 inventory left in the factory. This make sense that inventory number is efficiently sold. Apple has more credit sales. As the result, the transfer of product sold to customers is faster, however the ownership status of customers is still in the credit term. Since the inventory turnover is sharply increasing compare to account receivable. It means that company truly to be more profitable and not suffering the lost.

6.4 Working capital turnover

It is equals to sales divided by current assets deducted with current liabilities. How much sales can be generated from Working capital. It will indicates the efficiency of the working capital that will be returned from expenditure to produce sales. Apple Inc. Working capital turnover is decreasing. Apple has bigger working capital. Thus denominator make the ratios decrease. Sales growth is increasing, while working capital ratios continue to decrease. It might that apple save money much in current assets not to generate sales. It might also the current liabilities is decreasing. It can be good it can be bad.

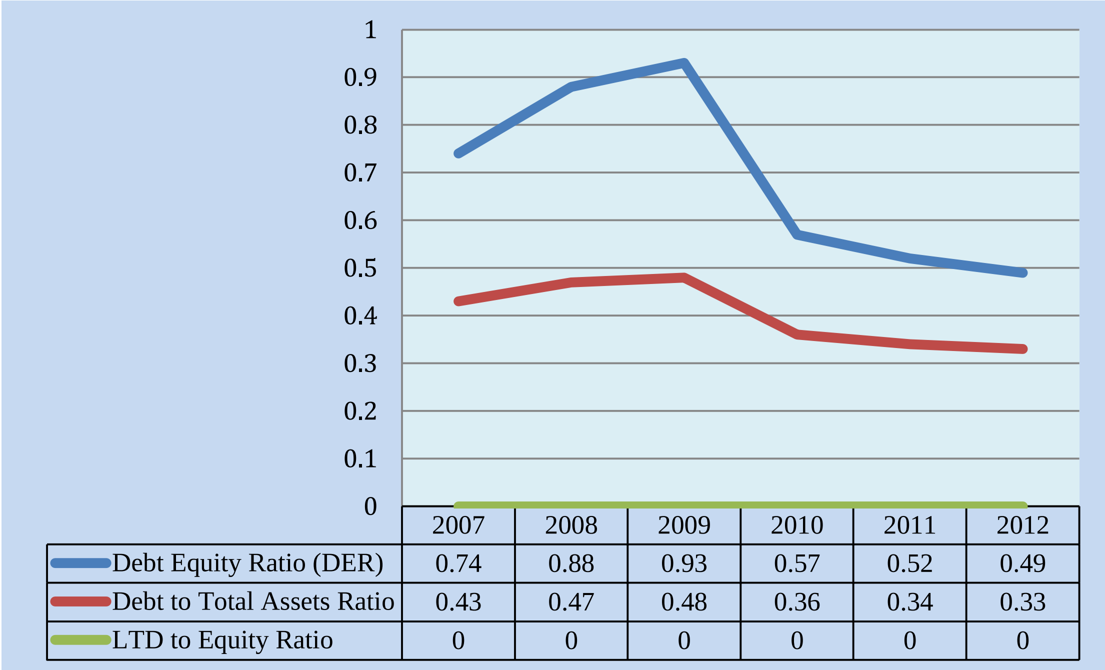
6.5 Property Plan and Equipment turnover

It measures how big the company will receive sales if they have the certain amount of Property, Plant and Equipment. The amount of Apple's PPE is decreasing from 2007 to 2012. Actually, it is better to have increasing PPE turnover. High PPE turnover indicates the productivity and the functionality of the property, plant and equipment for operational. Otherwise the value decrease might because Apple buys more property, plant equipment for operations. Low PPE indicates that property, plant and equipment are not productive. The decreasing number of Apple PPE rates indicates that apple waste money to buy more PPE. In fact this purchase is not supporting the sales growth. Apple might experience insufficiency for this. Since the ratios is around 13 in 2007, but it decline to 10 in 2012.

6.6 Total Asset turnover

Apple increase it total asset turnover. It is 1,09 in 2007. But then it doubled become 2.71 in 2012. Apple is quite good utilize the assets to produce the sales. It might improve the efficiency in the production process. This total asset ratio measures proportion of company's sales to company's total assets. Asset Turnover Ratio reflects how many dollar a company generate in sales for one dollar of total assets. High number reveals that company operates efficiently since company is able to generate sales with less capital injection. Lower number shows capital intensive Business, company needs more investment to generate sales.

7. Market measures



	2007	2008	2009	2010	2011	2012
Debt Equity Ratio (DER)	0.74	0.88	0.93	0.57	0.52	0.49
Debt to Total Assets Ratio	0.43	0.47	0.48	0.36	0.34	0.33
LTD to Equity Ratio	0	0	0	0	0	0

	2007	2008	2009	2010	2011	2012
Total Assets – T. Liab	$ 14,532	$ 21,030	$ 27,832	$ 47,791	$ 76,615	$ 118,210
Outstanding shares Basic	864.595	881.592	893.016	909.461	924.258	934.818
Dilutive	889.292	889.292	889.292	889.292	889.292	889.292

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

7.1 Price to earnings

Apple has price to earning ratio approximately 49.03. It is much lower compare to the market price per share. The higher number of market price per share shows that the stock market price is overvalued. Higher P/E ratio would reveals that investors are anticipating higher growth in the future. This happens because of the high level trust of investors. The average market of P/E ratio would be 20-25 earnings. Higher number of P/E, the better the performance in case all other things are equal.

The price to earnings ratio measures the share price relative to the annual net income netted by the firm value per share. PE ratio indicates current investor demand for a company share. A high PE ratio is normally sign of increased demand. Apple do not have increasing trend of PE ratio. Apple does not rely much on external financing. The existing trend is fluctuates. It reveals that the investor demand for company shares is not many. High PE ratio is because investors anticipate earnings growth in the future. The PE ratio has units of years, which can be inferred as the years of earnings to pay back purchase price.

7.2 Earnings yield

Earning yield is the reverse of price to earning ratio. This number will help the investors to determine the company's optimal asset allocation. Earning yield is calculated from earning per share divided by market price per share. There was a research said that the investment will be profitable if the price to earning ratio is higher than the earning yield plus the growth. Apple earning yield is 0.0839 in 2012. This number is far from the price to earning ratios. In fact, Apple is prospective company for investors. The earnings yield is quoted as %, which illustrates the % of each dollar invested that was earned by Apple during the past 12 months. The earnings yield can be used to compete the earnings of a stock, sector or the whole market challenge bond yields. Commonly, the earnings yields of equities are higher than the yield of risk-free treasury bonds. Some financial theorists argue that this variance exists because stock earnings are chancier than bond coupon costs. If Apple has an earnings yield of 8%, investors are purchasing $0.08 of earnings per dollar invested.

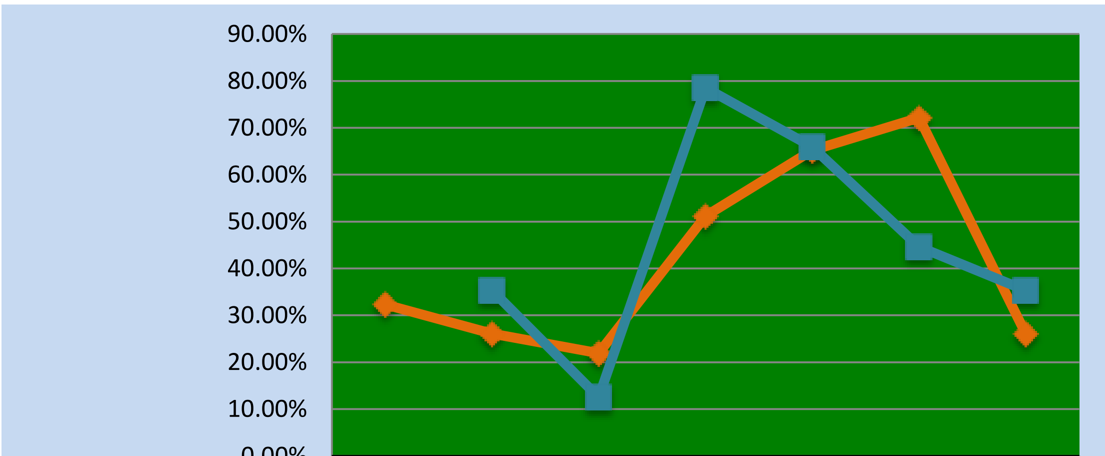
7.3 Dividend payout rate

Apple did not pay dividend in the late 5 years except in 2012. The investors are expecting more on the capital gain from Apple investment. As the result, the cash dividend distributed was only appear in 2012 annual report with the amount $2.65. This is contradictory with the Apple that holding much cash around $10 billion. This amount is questionable since apple did not paid as dividend. If not, then it will increase the liquidity of the company. It is better to reinvest that big amount of cash in some more profitable investment or paid as dividend. Comparing to other similar technology industry, this actually common for high growth companies. There are several reasons why they did not pay the dividends. Such as Apple need to finance their growth using internal sources of fund. In fact, internally generated earnings are cheaper. Consequently, all generated earnings are reinvested back. Moreover, this happens because apple shares held by investors who prefer capital gains rather than dividends. Furthermore, apple needs to spend their cash to forge a partnership with Microsoft (NASDAQ: MSFT) in order to continue their operations. However, Apple has started to distribute cash dividend $2.65 in 2012.

7.4 Price to book

Price to book value measures apple's book value to its current market price. Furthermore, book value is an accounting phrase indicates the portion of the company own by shareholders at accounting value. Similarly, book value is the company's total tangible assets less its total liabilities divided by the outstanding shares. The ratio has two methods to calculate the price to book. First, the company's market capitalization is divided by the company's total book value from balance sheet. Second, per-share values used to divide the company's current share price by the book value per share. Commonly, a low price to book value reveals that a stock is undervalued and thus are looked-for. Based on theory in the textbook, if we purchased stock with a price to book value less than 1, it indicates that the company immediately went bankrupt. In this matter, Apple is strongly safe since the price to book value is around 4.06 in 2012. Furthermore, it would gain money on investment. In fact, this may not be true because there are times for liquidation value. There are also probabilities that the price at which a company's assets can be sold if it is less than the book value of assets. Apple's market to book valuation yielded a value of $4.06 which is far to their actual share value of $532.

8. Sustainable Growth



	2007	2008	2009	2010	2011	2012	2013
Sustainable Growth	32.33%	26.07%	21.92%	51.16%	65.20%	72.14%	26.07%
Sales Growth		35.30%	12.49%	78.52%	65.96%	44.58%	35.30%

	2007	2008	2009	2010	2011	2012	2013
Profit Margin	14.56%	14.88%	15.61%	21.48%	23.95%	26.67%	14.88%
Retention Ratio	1.00	1.00	0.93	0.98	0.98	0.97	1.00

Asset Turn Over	94.71%	82.08%	67.85%	86.75%	93.02%	88.89%	82.08%
Financial Leverage	234.37%	213.42%	206.97%	274.47%	292.71%	304.32%	213.42%

Sources: Apple annual report calculated by Muhammad Irka - see Appendix

The sustainable growth rate measures ability to grow for a firm without borrowing more money and financial leverage. Subsequently, the firm has surpassed the rate, they must borrow funds from another source to finance the growth. It is perfect that we can compare the sales growth and the sustainable growth of the companies. Look at the 2012 sustainable growth, the sales growth is less than the sustainable growth. It is means that without using the additional borrowing, apple can generate more growth. This possibly happens that sales growth is lower than sustainable growth if the amount of income tax is high because of the dividend income tax, or because of the interest expense payment from loan. Intentionally, company wants to increase sales growth more than sustainable growth. Sales growth is the sustainable growth that has been stimulated by additional financing. As the result, the sales growth must be higher than the sustainable growth. The management expectation is like in 2010 and 2013 where the sales growth is more than the sustainable growth rate. It means that the additional financing is really utilized to generate the sales rather than used for any other expenditure.

When we see at a glance, the sustainable growth of Apple inc is increasing from 2007 to 2012. However, Apple also experience decrease in 2009. The improvement tell us that Apple has higher prospects. Sustainable growth derive from 3 ratios: profit margin, asset turnover and return on equity. We will see from the components, then we can make a conclusions. We can see that the financial leverage have decreasing patterns. It means that either the aseets is lower or the equity is higher. Equity higher means that the company increase financing from the equity. Lower assets might because company invest the assets in other place.

The book value of equity is increasing rapidly over time, it makes the return on equity is lower than in the previous year. This ROE can be compared to the assets turnover. When the ROE is high then it is good since the company ca utilize better in source of fund. However after we see from the sales sigificant increase, it can tell us somehow the oprational performance is good. Apple can generate more sales around 33% more than the previous year. The trend from 2011 to 2012 shows the decrease amount of assets turnover. However, the profit margin is increasing. It shows that apple can increase the efficient performance of operational in the company.

The assets turnover experiences fluctuates trend. However, it fluctuates, Apple inc can still have the increasing trend in the profit margin. We can conclude that Applke can generate more profit while lowering the financial leverage. That's way, Apple inc can have sustainable growth. However, the SG from 2011 to 2012 not really have significant difference. It might because Steve Job have passed away.I think Apple is quite good company since the can manage the source of fund balance. They do not also keep high cash. Apple make the faster cashflow. So, they can generate more and more over the year. When the company keep many cash, it means that they cannot manage the cash put into the prospective place.

9. Z-Score

Ratios	2007	2008	2009	2010	2011	2012
Net Working Cap	$ 14,532	$ 21,030	$ 27,832	$ 47,791	$ 76,615	$ 118,210
Total Assets	$ 25,347	$ 39,572	$ 53,851	$ 75,183	$ 116,371	$ 176,064
Retained Earning	$ 9,101	$ 13,845	$ 19,538	$ 37,169	$ 62,841	$ 101,289
EBIT	$ 5,008	$ 6,895	$ 7,984	$ 18,540	$ 34,205	$ 55,763
Net worth	$ 14,595	$ 21,038	$ 27,916	$ 47,745	$ 77,058	$ 118,709
Total Debt	$ 10,815	$ 18,542	$ 26,019	$ 27,392	$ 39,756	$ 57,854
Net Sales	$ 24,006	$ 32,479	$ 36,537	$ 65,225	$ 108,249	$ 156,508
Z - Score	**6.088**	**5.202**	**4.839**	**7.381**	**8.116**	**8.465**

Bankruptcy Unlikely	2.90 / more	2.60 / more	3.00 / more
Monitoring And Corrective Action Required	1.24 - 2.89	1.11 - 2.59	1.80 - 2.99
Bankruptcy Likely	1.23 or less	1.10 or less	1.79 or less

Sources: Apple annual report calculated by Muhammad Irka

Altman Z Score classifies the companies into 3 categories based on the Z – Score. Company is likely to go bankrupt if the Z Score is below 1.23. Then, companies need monitoring and corrective action if the Z Score is ranging between 1.23 - 2.89. Furthermore, it is likely not going to bankrupt if the Z Score is above 2.9. Based on Z – Score number above, we can conclude that Apple is likely not going to bankrupt in the nearly 3 years. The Z – Score in 2012 is 8.465. That number is far above 2.9. Moreover, it shows that Apple is in really good financial health. Compare to other similar industry competitors, Apple is in the normal state. The Z Score is not to high but also not to small. The probability of bankruptcy is only 1%. The highest Z

Score in Apple competitors is the Universal electronics. Sony Z Score is below one. The probability of bankrupt is high. The good thing is that the Z Score is increasing overtime. In 2009, the Z Score decrease dramatically to 4.83. This might because the effect of previous American crisis in 2008. Z Score is representative for to measures the company since it is formed by some ratios inside. Z Score is sum of working capital/ total assets, retained earnings/total assets, earnings before interest and taxes/total assets, shareholders equity/total liabilities, and sales divided by total assets.

10. Recasting

In order to get the true picture of the Apple financial condition, I recast some account in the statement of income and the statement of financial position. For some companies, the financial statements do not reflect the true profitability and assets values in the business. This is because the accrual accounting can distort the reported profit and the account in the balance sheet. There is also tax reduction strategy to reduce the reported profit. Furthermore the value of assets and liabilities on the balance sheet can change over time and may not be reflected on the balance sheet.

In the financial statements, it includes the non-recurring accounts like non-operating expense such as discontinued operations, extraordinary items, and unrealized gains and losses. This non-recurring item can be excluded from the recast financial statements. It is because it will not recur in the following years, the impact is not significant. Moreover, it can distort the trend in the financial statement information. Therefore, I made some adjustment in some accounts in the balance sheet and income statement.

10.1 Recast Income Statement

(in million)	2007	2008	2009	2010	2011	2012
Net sales	$ 24,006	$ 32,479	$ 36,537	$ 65,225	$ 108,249	$ 156,508
Cost of sales	$ 15,852	$ 21,334	$ 23,397	$ 39,541	$ 64,431	$ 87,846
Gross margin	$ 8,154	$ 11,145	$ 13,140	$ 25,684	$ 43,818	$ 68,662
Operating expenses:						
Research and development	$ 782	$ 1,109	$ 1,333	$ 1,782	$ 2,429	$ 3,381
Selling, general and administrative	$ 2,963	$ 3,761	$ 4,149	$ 5,517	$ 7,599	$ 10,040
Total operating expenses	$ 3,745	$ 4,870	$ 5,482	$ 7,299	$ 10,028	$ 13,421
Operating income	$ 4,409	$ 6,275	$ 7,658	$ 18,385	$ 33,790	$ 55,241
Other income and expense	$ 599	$ 620	$ 326	$ 155	$ 415	$ 522
Income before provision for income taxes	$ 5,008	$ 6,895	$ 7,984	$ 18,540	$ 34,205	$ 55,763
Provision for income taxes	$ 1,512	$ 2,061	$ 2,280	$ 4,527	$ 8,283	$ 14,030
Net income	$ 3,496	$ 4,834	$ 5,704	$ 14,013	$ 25,922	$ 41,733
Add: Depreciation & Amortization Expense	$ 1,009	$ 1,292	$ 2,954	$ 2,466	$ 3,991	$ 6,435
Excess Compensation	$ 254	$ 320	$ 357	$ 363	$ 590	$ 735
Added back Provision for Income Taxes	$ 1,512	$ 2,061	$ 2,280	$ 4,527	$ 8,283	$ 14,030
Recast Pretax Net Income	$ 6,271	$ 8,507	$ 11,295	$ 21,369	$ 38,786	$ 62,933

I recast apple net income by adding depreciation and amortization expense to net income. This is because it is non-cash expense. Furthermore, I add back the amount of taxes that is paid by Apple. There is also compensation that deviates from what it would cost to hire someone to perform the duties of the owners. In consequences, I add excess compensation to the net income. As the result, the recast pretax net income is higher than the net income reported in the balance sheet.

This is good example how management why apple report lower net income. If they reported using the recast pretax net income, Apple will be required to pay more tax. In fact, paying more tax is the something that management will expect.

10.2 Recast Balance Sheet

Assets	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Current assets:	Recast	Recast	Recast	Recast	Recast	Recast
Cash and cash equivalents	8,417	10,688	5,000	10,135	8,834	9,671
Short-term marketable securities	5,431	9,212	17,291	12,923	14,523	16,545
Accounts receivable, less allowances of $98 and $53, respectively	1,473	2,180	3,193	4,959	4,832	9,837
Inventories	311	458	432	946	698	712
Deferred tax assets	704	1,302	1,996	1,472	1,813	2,325
Other current assets	3,425	5,240	6,540	3,102	4,076	5,812
Total current assets	19,760	29,080	34,452	37,510	40,489	51,888
Long-term marketable securities	0	2,141	10,002	22,852	50,056	82,910
Property, plant and equipment, net	1,649	2,210	2,806	4,291	6,999	13,907
Goodwill	34	186	196	667	806	1,022
Acquired intangible assets, net	269	257	235	308	3,182	3,802
Other assets	1,043	1,734	3,389	2,078	2,801	4,431
Total assets	22,756	35,608	51,079	63,733	98,622	151,023
Liabilities And Shareholders' Equity						
Current liabilities:						
Accounts payable	4,473	4,968	5,321	10,814	13,169	19,058
Accrued expenses	3,879	3,347	3,207	5,151	8,322	10,273
Deferred revenue	0	4,368	9,790	2,686	3,682	5,358
Total current liabilities	8,352	12,683	18,318	18,650	25,173	34,688

Deferred revenue - non-current	0	2,726	4,261	1,025	1,517	2,383
Other non-current liabilities	1,382	1,279	2,139	1,005	3,377	8,012
Total liabilities	9,734	16,688	24,718	20,680	30,067	45,083
Shareholders' equity: Common stock, no par value	4,831	6,459	7,800	9,601	11,998	14,780
Retained earnings	8,191	12,461	18,561	33,452	56,557	91,160
Total shareholders' equity	13,079	18,927	26,440	43,012	68,954	106,389
Total liabilities and shareholders' equity	22,756	35,608	51,079	63,733	98,622	151,023

There are some accounts that have been adjusted to make a recast balance sheet. First, the account receivable reported in the annual report does not indicate the true value of account receivable. This is because some of the account receivable will be uncollectible. Therefore, Apple might write offs some bad debts expense. This thing happens usually at the network carriers. Network carriers offer the customers to pay the iPhone in credit. The payment basis is monthly. Sometimes, foreigner bought the apple product in the country. They might leave country without paying the monthly contract fees to network carriers. Those foreigners will be able unlock the product in their home countries using illegal trick. That is the reason why apple tightening the software development in order to lock the apple product when it is used illegally. Apple write-off bad allowance for doubtful accounts for 5% of total sales. Actually, the bad debt expense ratio is only 0.7 of the total write off. I used that percentage and ratios to deduct the amount of account receivable in the balance sheet. This deduction is intended to reveals the real value of account receivables.

Furthermore, the inventory recast is needed to reflect the true value of inventories. Inventory recast should only include the inventory that is actually sellable and at cost that will allows it to be sold, over a reasonable amount of time at the normal profit margin. Here, I exclude the work in process inventories. Furthermore, I exclude the total inventories that unsold for some years. This number is explained in the cash flow statement and the notes to financial statements. Cash recast exclude the cash that will not be sold with the business. Furthermore, the depreciation has been also eliminated from the accounts in the balance sheet. This is reflected by the property plant and equipment since in non recast financial statement, depreciation expense reduces the PPE.

D. Assumption

Apple use U.S. GAAP[3] as the guidance to prepare financial statement and disclosures, however, they have adjust some items using fair value measurement. Furthermore, the Company will involve discussion and analysis of its financial condition and operating results in order to fulfill the requirement of Company's management. It will be useful to make judgments, assumptions and estimates. As the result, it affects the amounts reported in its consolidated financial statements and accompanying notes. Apple uses the fair value measurements for assets and liabilities. Based on that, Apple considers the most advantageous market in for transaction and assumptions that market participants will use in pricing the balance sheets. The BSM[4] option-pricing model contains various assumptions including expected volatility, estimated expected life and interest rates. The preparation of these financial statement based on US GAAP requires management to make estimates and assumptions. It consequently affects the amounts reported in these consolidated financial statements and accompanying notes.

1. Market Share Growth

According to my research in some websites including Forbes, global tech market grows by 5.4% in 2013 and will grow by 6.7% in 2014. This growth is bigger than the previous year. This indicates that the technology is moving very fast. There are many budget allocated for research and development in some companies and universities. As the result, this technology change is really fast. Note that the global tech market comprises business and government purchases of computer package, communications equipment, software, IT consulting services, and IT outsourcing and hardware maintenance services, but does not embrace payment of telecommunications services. There is several forecast concern on the global tech market. It is said that US will only grow by 3.3%, while asia pacific will slow due to Japan after suffering from tsunami. Furthermore, the software development will be great in the following years. It is accompanied by the growth of analytics and cloud computing.

[3] Generally Accepted Accounting Principles
[4] Black Scholes Model

2. Cost of Capital

The calculation of cost of capital here is using Capital Pricing Accepted Model. This model has been very popular in finance. Since, CAPM formula is practicable for investment project decision. The risk free is taken from the bond interest rate in US. While the risk market is taken from the NYSE by calculating the variance and covariance of the stock price in traded in NYSE, Nasdaq and S&P 500. As the result the amount of risk free rate used in calculating cost of capital is 4.5%. The risk market is 5%. Furthermore, beta is found from the variance of the stock returns different of apple itself with the amount of beta 1. Capital asset pricing model is calculated by adding risk free market with beta times expected risk market that have been deducted with risk free market. As the result, we got the result of cost of equity capital 9.9% shown in the valuation performance section.

E. Crucial Factors

There must be crucial factors other than the financial aspects influencing the company performances. Such as economics conditions, leader character, competition, old versus new market mix. The world economic crisis might influence the overall apple sales around the worlds. This was proofed by the past event in 2008. US was hit by the big economics crisis caused by some company bankruptcy. One of the biggest is the Lehman Brothers subprime mortgage crisis. Other thing that would be crucial factors is the death of former Apple CEO Steve Job. It is followed by the stronger competition with Samsung smartphone and Android OS based tablet. Special IOS designer of Apple, Scott Forstall has been also retired from Apple due to the management consideration. His personal character might bring the internal conflict. These crucial factors are also affecting the product character such as IOS user interface. Previous iPhone design, IOS design, Price will be different with the new product that will be launched in the next couple of times. And some news has make rumors that Apple lost their brand character with simple and premium product. Since, Apple introduce cheaper product with more product differentiation and colors. It seems that Apple wants to win the competition with the Samsung products. Previously, Apple is the one first dictate and trend set the market.

1. Current Market Situation and Competitive Analysis

Apple faces more competitors from android phone and Microsoft operating systems. Both operating system devices are the major challenge for Apple. Android phone like Samsung has been continuously attacking the market with more product differentiation with more reasonable price. Samsung has been introducing Samsung Galaxy X4 to be strongly competes with iPhone 5. Samsung galaxy X4 has wider screen rather than iPhone 5 with cheaper price.

The other competitors are coming from the old competitors Microsoft. Microsoft upgraded their product more recent and offers at more expensive price for 1 single Windows. Apple offers cheaper price in this part. Buyer can buy Mountain Lion operating system for around $300. This purchase can be used to license 5 apple devices that compactible with OS Mountain Lion.

2. Major Recent Event of the Company

First, one of the big major events is the time of CEO unveil new product in the market. In June 2013, Tim Cook unveil the iOS 7, the new Mac Pro, OS X Mavericks, the new MacBook Air, iTunes Radio, iWork for cloud beta and Airport time capsule. This event is called Apple WWDC 2013 Keynote Address. Second, there was Apple special event held in October 2012. Apple CEO Tim Cook unveil the new iPad mini, the new iPad with Retina display, the new iMac, the new 13” Mac book Pro with retina display and more. Third, the annual report announcement and the dividend distribution date in December 31 every year. Fourth, the major events that might be included is the funeral day of Steve Job. Those replacement of CEO might effect the customers believe to the Apple products. Since, some Apple addict might love more to Steve Job rather than the innovative design of the product.

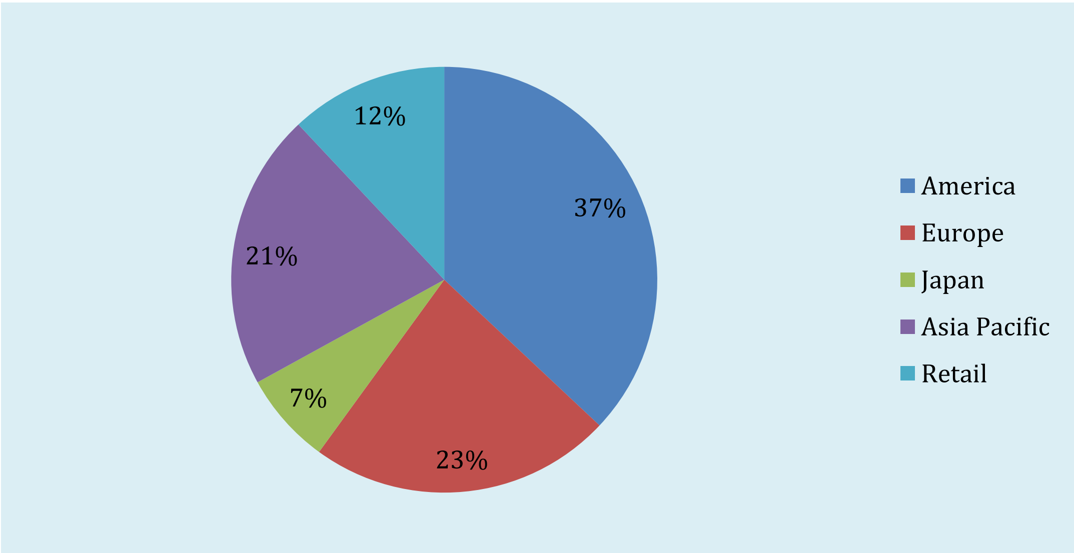
3. Corporate Strategy

Apple offers high technology device with the beautiful design. They offer all premium part inside the products. They do not dictated by the market price, but they prioritize the buyer needs. This brings apple product introduced in more expensive price compare to other competitors. Although the features are similar, Apple is confidence with their pricing range because they sell the quality. The post sales service is also really easy to claim. The excellent thing is that Apple sells their product and service separately. They sell apple care for its product. It enables customers to extend the warranty period. Actually, the technology that they offer is not something new. But they combine all the things. Because they believe that invention is all about integration between the hardware and software. Apple is always creating needs for the customers. Customers might not imagine that the features are needed. Apple has been successfully educates the market. Apple has excellent strategy to optimize the expense for research and development. They maintain the similar design for several periods although there is an upgrade in design and technology. This was proofed by numbers that apple optimize the asset allocation.

4. Current Year Analysis

Based on the historical trends that I calculated and some news in the websites. It seems that Apple will outperform the market in 2013. In Junes, Apple will launch their OS Mavericks, IOS 7, and new Mac book air with longer battery life. This is believed that Apple stores in June will be crowded with costumers. It is the right time together with the fall. Apple posts $9.5 billion net profit in the second quarter in 2013. They successfully sold 19.5 million iPads, 37.4 million iPhones. This shows big market in tablet and smartphone in the high mobilization era. Apple remains generates the strong cash with $12.5 billion in cash floe from operations during the quarter with the ending balance $145 billion. The net profit is around $9.5 billion,

In 2012, sales were dominated by American market 37% total net sales in 2012. Then followed by Asian market including Japan 28%. Europe is only around 23% of total net sales. The rest were sold through the retail market.



Sources: Apple annual report calculated by Muhammad Irka

In second quarter report, it is said that the strong competitors for apple is Samsung smartphone and tablet. This competition is pressing Cook to lead Apple in more innovative way. Since, Apple did not introduce something really new until October 2012. Lately, Apple would have plan to issue bond in 2016 since it is useful for Apple to reduce the amount of tax should be paid.

Recently Apple invites may software developers to join Apple Event-WWDC[5] in Cupertino. Gorgeously, participants from around the world attend this event. This event expects the more involvement of the software developers to fill the apple store. It is believed that this event is some part of advertising strategy for Apple. The customers are starting to crazy again with apple product after that special event. There will dramatic increase in sales in 2013 and the following years.

[5] Worldwide Development Center

F. Inferences

1. Forecast the Coming Year

Firstly, it needs to determine the sales growth rate in 2012 to calculate growth rate in 2013 since it is more representative and closers compare to other previous years (2007-2011). There was no Steve Job existence as well in 2012. We project that Apple sales growth will sustain up to the next 5 years until 2018 based on the calculation using 2012 sales growth rate. The amount might be increasing, but it is no guarantee that the company will still get more real profit. Since, there is inflation effect. The amount of money might increase just because the inflation, so the numbers is getting higher but actually not. The second probability is that Apple might increase the sales growth but the unit sale is decrease because Apple offers more discount and cheaper product. There are many possible reasons behind the increasing number of sales growth. Then, we need another ratio to confirm the more accurate projection for the company.

Apple has big higher sales growth 44.6% comparing to other company such as Dell with only 0.94% revenue growth in 2012. Based on my calculation, Apple never decrease its sales number in dollar in the late 5 years, however, Dell decreased its sales dollar in 2010.

Based on the historical trends of sales growth, we assume that Apple will still maintain its sales growth sustainability in 2013 and the following year. The stability of the environment is the key factor. Macroeconomics conditions, market competition, new versus old store mix will certainly affect Apple sales growth. We use historical data from 2011 to 2013. We select 2012 historical data that give closer picture to the sales growth in 2013, 2014, 2015, 2016, 2017 and 2018. The sales growth is fluctuate from 2007 to 2012. In 2007, the sales growth was only 24.3 %. It increased to 35.3% in 2008 then decreased to 12.5% in 2009 since there was bad economic conditions in that year after Lehman Brother's declared its bankruptcy in 2008. Then in 2010, sales growth increased significantly to 78.5%. It was because Apple introduced more product upgrade and product differentiation in 2010. In 2011, the sales growth decreased. There was 2 probability of this number decreased. It might because the Apple offer more discount that cause unit sales are increase but the the total sales decrease, or because of the died of Steve Job that caused customers leave.

We calculate the balance sheet projection from 2013 to 2018 using the historical data in 2013. The trends show that the amount o total assets and total liabilities and equities increase over time. We assume that the sales are increasing over time. This affects the number of inventories and account receivable in the current assets. As the sales projection increase, the number of inventories and account receivables is also increasing.

Balance Sheet

	2013
Assets	
Current assets	
Cash and cash equivalents	$ 10,746
Short-term marketable securities	$ 20,629
Accounts receivable	$ 15,803
Inventories	$ 1,144
Deferred tax assets	$ 2,583
Vendor non-trade receivables	$ 9,491
Other current assets	$ 6,458
Total current assets	$ 66,853
Long-term marketable securities	$ 152,585
Property, plant and equipment, net	$ 27,445
Goodwill	$ 1,438
Acquired intangible assets, net	$ 4,224
Other assets	$ 8,439
Total assets	$ 260,984
Liabilities And Shareholders' Equity	
Current liabilities	
Accounts payable	$ 30,615
Accrued expenses	$ 16,503
Deferred revenue	$ 5,953
Total current liabilities	$ 53,071
Deferred revenue - non-current	$ 2,597
Other non-current liabilities	$ 10,765
Total liabilities	$ 66,433

To forecast the sales in 2013, it uses the sales growth from 2011 to 2012. I assume that the market condition in 2013 is closer to 2012. Therefore, the 2013 net sales is result of 2012 net sales multiply by the sales growth rate. Then, determine the gross profit margin to calculate the amount of gross profit. Based on my calculation the 2013 net sales is $226,282. This is coming from net sales in 2012 multiplied with 46% sales growth rate plus one. After we got the amount of gross margin, we can determine the cost of sales. The subsequent step is determining the selling general and administrative expense divided by sales.

This 1 year forecast did not consider the inflation effect and the present value. All of the numbers comes from the rate and ratio inside the income statement and the balance sheet. Assuming that the growth will be the same all other external and internal factor are equals. Although the sales number is seems growth in the big numbers, but in fact the gross margin is in more closer to the 2012 gross margin.

Statement of Income

	2013
Net sales	$ 226,282
Cost of sales	$ 127,009
Gross margin	$ 99,273
Operating expenses:	
Research and development	$ 4,888
Selling, general and administrative	$ 10,684
Total operating expenses	$ 15,572
Operating income	$ 83,700
Other income and expense	$ 755
Income before provision for income taxes	$ 84,455
Provision for income taxes	$ 21,249
Net income	$ 63,206

* Calculated by Muhammad Irka

2. Performance Forecast & Valuation

APPLE INC	HISTORICAL FIGURES		FORECAST HORIZON					TERMINAL YEAR
	2011	2012	2013	2014	2015	2016	2017	2018
Sales growth	66%	45%	45%	45%	45%	45%	45%	45%
Net profit margin (Net Income/Sales)	24%	27%	27%	27%	27%	27%	27%	27%
Net working caP turnover (Sales/Av Net Work Cap	5.99	8.66	12.53	18.11	26.18	37.86	54.74	79.14
Fixed Asset turnover (Sales/Average Fixed assets)	5.15	7.23	5.65	5.62	5.65	5.79	5.85	5.97
Total Operating Assets/Total Equity	0.43	0.38	0.34	0.30	0.25	0.21	0.16	0.12
Cost of Equity			9.90%					
($ million)								
Sales	$ 108,249	$ 156,508	$ 226,282	$ 327,161	$ 473,015	$ 683,891	$ 988,780	$ 1,429,593
Net Income	$ 25,922	$ 41,733	$ 63,206	$ 94,436	$ 139,784	$ 205,558	$ 300,877	$ 438,925
Net Working Capital	$ 17,018	$ 19,111	$ 17,494	$ 18,297	$ 18,310	$ 18,531	$ 18,127	$ 18,312
Fixed Assets	$ 15,765	$ 26,289	$ 43,838	$ 73,103	$ 121,903	$ 203,280	$ 338,980	$ 565,268
Total Operating Assets	$ 32,783	$ 45,400	$ 61,332	$ 91,400	$ 140,213	$ 221,811	$ 357,107	$ 583,580
Long term liabilities	$ 11,786	$ 19,312	$ 12,589	$ 14,562	$ 15,488	$ 14,213	$ 14,755	$ 14,819
Total Stockholder's Equity	$ 76,615	$ 118,210	$ 182,387	$ 281,407	$ 434,186	$ 669,909	$ 1,033,609	$ 1,594,765
Residual Income Computation								
Net Income			$ 63,206	$ 94,436	$ 139,784	$ 205,558	$ 300,877	$ 438,925
Beginning equity			$ 118,210	$ 182,387	$ 281,407	$ 434,186	$ 669,909	$ 1,033,609
Required rate of return			9.90%	9.90%	9.90%	9.90%	9.90%	9.90%
Expected Income			$ 11,703	$ 18,056	$ 27,859	$ 42,984	$ 66,321	$ 102,327
Residual Income			$ 51,503	$ 76,380	$ 111,925	$ 162,574	$ 234,556	$ 336,598
Discount Factor			91%	83%	75%	69%	62%	57%
Present value of residual income			$ 46,864	$ 42,642	$ 38,801	$ 35,306	$ 32,125	
Cumulative present value of resdual income			$ 46,864	$ 89,506	$ 128,307	$ 163,612	$ 195,737	
Terminal value of residual income							$ 2,385,836	
Beginning book value of equity							$ 118,210	
Value of equity							$ 2,699,783	
Common shares outstanding (thousands)							9,393	
Value of equity per share							$ 287	

The financial forecast horizon refers the historical trend. In the late 5 years, Apple experience positive and big sales growth. We can assume that nearly in the following 5 years, the condition is still stay steady. The estimation primarily uses the sales growth as the major driver to forecast. After determining the sales growth, net profit margin calculation is executed to determine gross profit. Then, we can find the cost of good sold by deducting the sales from the gross profit. We then also calculate the fixed asset turnover to forecast the fix asset in 2013. The other years behind 2013 will follow. Furthermore, forecasting the total operating assets uses the rate calculated from total operating assets divided by total equity.

Then, we calculate the cost of equity using CAPM to be the multiplier for net income. From this calculation, we will get the expected income. The deduction from net income with the expected income will yield a residual income. Residual income has also called economic value added to measure the company performance. Historically, EVA has become excellent performance valuator. Since the cost of capital is calculated to be 9.9%. The expected income in 2013 would be $ 11,703. Consequently, the residual income would be $51.103. Residual income is suitable to compare the company performance however it has the different financial structure. We can use ROA to value the company as well. But the ROA is only suitable to compare the company that has similar financing structure.

The discounted factor cost of equity capital is calculated by dividing 1 with the 1 plus the cost of equity capital raised to the year the cost of equity are discounted. In 2013, the discount factor is 0.911. It will be used to calculate the residual income.

To calculate the present value of residual income simply put the net present value formula in the Microsoft excel. Based on my calculation, it is shown that the residual income in 2013 is $46,864. It is means that the $51,103 residual income in 2013 is similar to $46,864 in 2012.

After we get the present value of residual income, we can find the cumulative residual income by adding the current residual income with the previous residual income. Based on my calculation, the cumulative residual income is $1,033,609 in 2010. Since, the terminal value of residual income is calculated for the future years, we need to calculate the present value of money to get real value. This calculation needs the discount factor and inflation rate as the denominator. So, it is clearly shown that cost of equity capital influence the amount of the terminal value of residual income.

Therefore, we got the amount of the terminal residual income by dividing terminal residual income $336,598 with the ((cost of equity 0.099 minus US current inflation rate 0.011) multiplied by (1 plus 0.099). As the result, the value of terminal residual income is $2,385,836. To calculate the value of equity, we need to sum up the terminal value of residual income, beginning equity, and cumulative present value of residual income. As the result, the value of equity is $2,699,783. Therefore, the value of equity per share is $287. It is calculated from value of equity divided by current shares outstanding in case Apple did not add the shares outstanding. This makes sense compares to the earning per share in 2012 which only $48,7. In 2017, assuming the number of shares outstanding, the inflation rate and the cost of equity are the same, earning per share would be almost 6 times higher than the existing one. This number will be undervalued or over valued compare to market price per share is still questionable since we haven't yet project the market price per share. In case market price is still higher than the Apple stock price is overvalued which can be possibly good or bad thing.

3. Conclusions

Lets conclude the financial statements analysis that has been done above. There are major findings that can be inferred here.

Apple has no problem in the liquidity ratios. Company able to meet all their obligations in the required time period. Although, Apple hold much cash in their accounts and some write off bad debt expense of the credit sales conducted by the network carriers. Apple has surprising solvency ratios. Apple finance use majority equity to finance operations. Since, Apple holds much cash, they can use the cash to finance internally and reinvest. The return on invested capital is bigger than industry average such as Microsoft and Google. Apple Return on Asset is the highest among all 7 big technology industry in US (Wikinfest, 2008). Profit margin is increasing in the late 5 years. This is good sign since apple can optimize the their sales and cost of sales to generate income. The market measures indicate that many investors trade Apple stocks. As the result the market price is much overvalued than actual earnings per share. Earning per share is increasing over time. This is because the net income increases over time. The thing that most interesting is that apple did not pay dividend in the late 5 years except in 2012 they start to distribute. Many investors surprisingly expect the Apple capital gains rather than the cash dividends distributions.

Financial measure is not enough to analyze the company performance. Therefore, we need to consider the crucial factors affecting to the financial performance of apple. Crucial factor comprises all major events that influence the company performance, the economic condition and also the competition in the market. All of these things require company to have strong business strategy and competitive advantage. There are many brands attacking the market such as Samsung, LG, Panasonic, Sharp, Nokia, Blackberry etc. They are coming with their own strong features. Apple business strategy is always dictating the market. There was no friendly user interface device like apple made in iPhone and Mac book track pad. But now, every business wants to imitate. This is the challenge for Apple to always inventing new ideas, design and combine the technologies. Apple is always coming with smart ideas inside the devices. It is because their intention of understanding the customer needs. Economic conditions play important roles affecting the sales. Economics crisis somehow move the customers to the cheaper product. Sadly, Samsung is more adaptive to the friendly pricing method. Government affects the majority of economic conditions. It is not only affect the customer purchasing power but it will affect the supplier cost such as raw materials, transportation etc.

Altogether, the financial measures and other crucial factors are really important to forecast the company performance in the futures. Company valuation needs the information of sales growth, the cost of equity capital and also the inflation rate. These all comprised to determine the value of equity in the future. As the result apple value of equity per share in 2017 will be six times bigger than in 2012.

Appendix

Apple Statement of Financial Position

	2007	2008	2009	2010	2011	2012
ASSETS:						
Current assets:						
Cash and cash equivalents	$9,352	$11,875	$5,263	$11,261	$9,815	$10,746
Short-term marketable securities	6,034	10,236	18,201	14,359	16,137	18,383
Accounts receivable, less allowances of						
$98 and $53, respectively	1,637	2,422	3,361	5,510	5,369	10,930
Inventories	346	509	455	1,051	776	791
Deferred tax assets	782	1,447	2,101	1,636	2,014	2,583
Vendor non-trade receivables				4,414	6,348	7,762
Other current assets	3,805	5,822	6,884	3,447	4,529	6,458
Total current assets	21,956	32,311	36,265	41,678	44,988	57,653
Long-term marketable securities		2,379	10,528	25,391	55,618	92,122
Property, plant and equipment, net	1,832	2,455	2,954	4,768	7,777	15,452
Goodwill	38	207	206	741	896	1,135
Acquired intangible assets, net	299	285	247	342	3,536	4,224
Other assets	1,222	1,935	3,651	2,263	3,556	5,478
Total assets	$25,347	$39,572	$53,851	$75,183	$116,371	$176,064

LIABILITIES AND SHAREHOLDERS' EQUITY:						
Current liabilities:						
Accounts payable	$4,970	$5,520	$5,601	$12,015	$14,632	$21,175
Accrued expenses	4,310	3,719	3,376	5,723	9,247	11,414
Deferred revenue		4,853	10,305	2,984	4,091	5,953
Total current liabilities	9,280	14,092	19,282	20,722	27,970	38,542
Deferred revenue - non-current		3,029	4,485	1,139	1,686	2,648
Other non-current liabilities	1,535	1,421	2,252	5,531	10,100	16,664
	1,535	4,450	6,737	6,670	11,786	19,312
Total liabilities	10,815	18,542	26,019	27,392	39,756	57,854
Shareholders' equity:	5,368	7,177	8,210	10,668	13,331	16,422
Retained earnings	9,101	13,845	19,538	37,169	62,841	101,289
Accumulated other comprehensive income	63	8	84	(46)	443	499
Total shareholders' equity	$14,532	$21,030	$27,832	$47,791	$76,615	$118,210
Total liabilities and shareholders'						
equity	$25,347	$39,572	$53,851	$75,183	$116,371	$176,064
	2007	2008	2009	2010	2011	2012
Interest and dividend income			$ 407	$ 311	$ 519	$ 1,088

Apple Statement of Income

	2007	2008	2009	2010	2011	2012
Net sales	$24,006	$32,479	$36,537	$65,225	$108,249	$156,508
Cost of sales	15,852	21,334	23,397	39,541	64,431	87,846
Gross margin	8,154	11,145	13,140	25,684	43,818	68,662
Operating expenses:						
Research and development	782	1,109	1,333	1,782	2,429	3,381
Selling, general and administrative	2,963	3,761	4,149	5,517	7,599	10,040
Total operating expenses	3,745	4,870	5,482	7,299	10,028	13,421
Operating income	4,409	6,275	7,658	18,385	33,790	55,241
Other income and expense	599	620	326	155	415	522
	2.50%	1.91%	0.89%	0.24%	0.38%	0.33%
Income before provision for income taxes	5,008	6,895	7,984	18,540	34,205	55,763
Provision for income taxes	1,512	2,061	2,280	4,527	8,283	14,030
	30%	30%	29%	24%	24%	25%
Net income	$3,496	$4,834	$5,704	$14,013	$25,922	$41,733
Earnings per common share:						
Basic	$4.04	$5.48	$6.39	$15.41	$28.05	$44.64
Diluted	$3.93	$5.36	$6.29	$15.15	$27.68	$44.15
Shares used in computing earnings per share:						
Basic	864,595	881,592	893,016	909,461	924,258	934,818
Diluted	889,292	902,139	907,005	924,712	936,645	945,355

Apple Statement of Cash Flow

	2007	2008	2009	2010	2011	2012
Cash and cash equivalents, beginning of the year	$6,392	$9,352	$11,875	$5,263	$11,261	$9,815
Operating activities:						
Net income	3,496	4,834	5,704	14,013	25,922	41,733
Adjustments to reconcile net income to cash generated By operating activities						
Depreciation and amortization	317	473	703	1,027	1,814	3,277
Share-based compensation expense	242	516	710	879	1,168	1,740
Deferred income tax expense	78	(368)	(519)	1,440	2,868	4,405
Loss on disposition of property, plant and	12	22	26	-	-	-
Changes in operating assets and equipment Liabilities:						
Accounts receivable, net	(385)	(785)	(939)	(2,142)	143	(5,551)
Inventories	(76)	(163)	54	(596)	275	(15)
Vendor non-trade receivables	(1,540)	(1,958)	(1,050)	(2,718)	(1,934)	(1,414)
Other current and non-current assets	81	(492)	(1,346)	(1,610)	(1,391)	(3,162)
Accounts payable	1,494	596	92	6,307	2,515	4,467
Deferred revenue	1,139	5,642	6,908	1,217	1,654	2,824
Other current and non-current liabilities	612	1,279	(184)	778	4,495	2,552
Cash generated by operating activities	5,470	9,596	10,159	18,595	37,529	50,856
Investing activities:						
Purchases of marketable securities	(11,71)	(22,965)	(46,72)	(57,793)	(102,31)	(151,23)
Proceeds from maturities of marketable securities	6,483	11,804	19,790	24,930	20,437	13,035

Proceeds from sales of marketable securities	2,941	4,439	10,888	21,788	49,416	99,770
Purchases of other long-term investments	(17)	(38)	(101)	(638)	(244)	(350)
Payments made in connection with						
business acquisitions, net of cash acquired	-	(220)	-	-	-	-
Payments for acquisition of property,						
plant and equipment	(735)	(1,091)	(1,144)	(2,005)	(4,260)	(8,295)
Payments for acquisition of intangible assets	(251)	(108)	(69)	(116)	(3,192)	(1,107)
Other	49	(10)	(74)	(20)	(259)	(48)
Cash used in investing activities	(3,249)	(8,189)	(17,43)	(13,854)	(40,419)	(48,227)
Financing activities:						
Proceeds from issuance of common stock	365	483	475	912	831	665
Excess tax benefits from equity						
awards	377	757	270	751	1,133	1,351
Cash used to net share settle equity awards	(3)	(124)	(82)	-	-	-
Dividends and dividend equivalent						
rights paid	-	-	-	0	0	(2,488)
Taxes paid related to net share						
settlement of equity awards	-	-	-	(406)	(520)	(1,226)
Cash (used in)/generated by financing						
activities	739	1,116	663	1,257	1,444	(1,698)
Increase/(decrease) in cash and cash equivalents	2,960	2,523	(6,612)	5,998	(1,446)	931
Cash and cash equivalents, end of the						
year	$9,352	$11,875	$5,263	$11,261	$9,815	$10,746
Supplemental cash flow disclosure:						
Cash paid for income taxes, net	$863	$1,267	$2,997	$2,697	$3,338	$7,682

All Ratios

	2007	2008	2009	2010	2011	2012
Liquidity Ratios						
Net Working Capital	$ 14,532	$ 21,030	$ 27,832	$ 47,791	$ 76,615	$ 118,210
Current Ratio	2.03	1.74	1.39	1.52	1.13	1.00
Acid Test Ratio	1.57	1.32	1.03	1.14	0.79	0.69
Collection Period	30.43	32.05	43.70	30.02	27.10	18.75
Days to Sell Inventory	9.71	8.13	11.59	8.32	4.38	3.21
Profitability Ratios						
Gross Profit Margin	33.97%	34.31%	35.96%	39.38%	40.48%	43.87%
Operating Profit Margin	21%	21%	22%	28%	32%	36%
Net Profit Margin	14.56%	14.88%	15.61%	21.48%	23.95%	26.67%
Return on Equity	24%	23%	20%	29%	34%	35%
Return on Asset	13.79%	12.22%	10.59%	18.64%	22.28%	23.70%
(Cost of Good Sold + SGA)/Sales	78%	77%	75%	69%	67%	63%
Solvency Ratios						
Debt Equity Ratio	0.74	0.88	0.93	0.57	0.52	0.49
Debt to Total Assets Ratio	0.43	0.47	0.48	0.36	0.34	0.33
Long term Debt to Equity Ratio	0.11	0.21	0.24	0.14	0.15	0.16
Earning Before Income Income Tax	$ 5,008	$ 6,895	$ 7,984	$ 18,540	$ 34,205	$ 55,763
Activity Ratios						
Net sales / Month	$ 2,000.50	$ 2,706.58	$ 3,044.75	$ 5,435.42	$ 9,020.75	$ 13,042.33
Inventory turnover (days)	7.86	8.59	7.00	9.57	4.34	3.24
Account receivable turnover (days)	24.55	26.85	33.12	30.41	17.86	25.14
Account Payable turnover (days)	112.87	93.15	86.18	109.39	81.75	86.78

Net TC (days)	-80.46	-57.71	-46.06	-69.41	-59.56	-58.39
Asset Utilization	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Cash turnover	2.57	2.74	6.94	5.79	11.03	14.56
Account Receivable turnover	14.66	13.41	10.87	11.84	20.16	14.32
Inventory turnover	37.08	44.26	31.07	43.29	82.23	112.12
Working capital turnover	0.28	0.27	0.19	0.16	0.08	0.09
PPE turnover	13.10	13.23	12.37	13.68	13.92	10.13
Total Asset turnover	1.09	1.01	1.01	1.56	2.41	2.71

Percentages	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Sales Growth Rate	24.3%	35.3%	12.5%	78.5%	66.0%	44.6%
Cost of Good Sold / Sales	66.0%	65.7%	64.0%	60.6%	59.5%	56.1%
Selling GA / Sales	12.3%	11.6%	11.4%	8.5%	7.0%	6.4%
R&D / Sales %	3.3%	3.4%	3.6%	2.7%	2.2%	2.2%
Others - Net / Sales %	2.5%	1.9%	0.9%	0.2%	0.4%	0.3%
Taxes / EBT %	30.2%	29.9%	28.6%	24.4%	24.2%	25.2%

Account in Days	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Days Cash & Bank	212.4	200.4	81.0	102.5	54.8	44.0
Days Accts Receivable	24.5	26.8	33.1	30.4	17.9	25.1
Days Inventory	7.9	8.6	7.0	9.6	4.3	3.2
Days Other Curr Assets	57.1	64.5	67.8	19.0	15.1	14.9
Days Accts Payables	112.9	93.1	86.2	109.4	81.8	86.8
Days Accruals	64.6	41.2	33.3	31.6	30.8	26.3
Days Other Curr. Liab.	23.0	15.8	22.2	30.5	33.6	38.3

Ratio Used to Forecast

	2007	2008	2009	2010	2011	2012
Account Receivable Turnover Rate	14.66	13.41	10.87	11.84	20.16	14.32
Inventory Turnover Rate	45.82	41.91	51.42	37.62	83.03	111.06
Accounts Payable turnover rate	3.19	3.86	4.18	3.29	4.40	4.15
Accrued Expense turnover rate	5.57	8.73	10.82	11.40	11.71	13.71
Dividends Per Share						2.56
CAPEX/Sales	3%	3%	3%	3%	4%	5%
Goodwill Growth		4.45	0.00	2.60	0.21	0.27
Intangible Assets Growth		-0.05	-0.13	0.38	9.34	0.19
Other Assets Growth		0.58	0.89	-0.38	0.57	0.54
Long term marketable securities growth			3.43	1.41	1.19	0.66
Vendor non trade receivables Growth					0.44	0.22
Deferred Revenue Growth			1.12	-0.71	0.37	0.46
Other Non-Current Liabilities		-0.07	0.58	1.46	0.83	0.65
Common Stock		0.34	0.14	0.30	0.25	0.23
Shareholder's Equity Growth		0.45	0.32	0.72	0.60	0.54

Projected Net Income

	2011	2012	2013	2014	2015	2016	2017	2018
Net sales	$ 108,249	$ 156,508	$ 226,282	$ 327,161	$ 473,015	$ 683,891	$ 988,780	$ 1,429,593
Cost of sales	64,431	87,846	$ 127,009	$ 183,632	$ 265,497	$ 383,860	$ 554,990	$ 802,413
%	60%	56%	56%					
Gross margin	43,818	68,662	$ 99,273	$ 143,530	$ 207,517	$ 300,032	$ 433,790	$ 627,180
	0.40	0.44	0.44					
Operating expenses:								
Research and development	2,429	3,381	$ 4,888	$ 7,068	$ 10,218	$ 14,774	$ 21,360	$ 30,883
Selling, general and administrative	7,599	10,040	$ 10,684	$ 11,369	$ 12,099	$ 12,875	$ 13,701	$ 14,580
	7%	6%						
Total operating expenses	10,028	13,421	$ 15,572	$ 18,437	$ 22,317	$ 27,649	$ 35,061	$ 45,463
Operating income	33,790	55,241	$ 83,700	$ 125,093	$ 185,200	$ 272,383	$ 398,729	$ 581,717
Other income and expense	415	522	$ 755	$ 1,091	$ 1,578	$ 2,281	$ 3,298	$ 4,768
	0.38%	0.33%	0.33%					
Income before provision for income taxes	34,205	55,763	$ 84,455	$ 126,184	$ 186,778	$ 274,664	$ 402,027	$ 586,485
Provision for income taxes	8,283	14,030	$ 21,249	$ 31,748	$ 46,993	$ 69,106	$ 101,150	$ 147,560
	24%	25%	25%					
Net income	$25,922	$41,733	$ 63,206	$ 94,436	$ 139,784	$ 205,558	$ 300,877	$ 438,925

Projected Balance Sheet

	2012	2013	2014	2015	2016	2017	2018
ASSETS:							
Current assets:							
Cash and cash equivalents	10,746	10,746	10,746	10,746	10,746	10,746	10,746
Short-term marketable securities	18,383	20,629	22,875	25,121	27,367	29,613	31,859
Accounts receivable	10,930	15,803	22,848	33,034	47,761	69,053	99,838
Inventories	791	1,144	1,653	2,391	3,456	4,997	7,225
Deferred tax assets	2,583	2,583	2,583	2,583	2,583	2,583	2,583
Vendor non-trade receivables	7,762	9,491	11,605	14,190	17,351	21,216	25,941
Other current assets	6,458	6,458	6,458	6,458	6,458	6,458	6,458
Total current assets	57,653	66,853	78,768	94,522	115,722	144,666	184,651
Long-term marketable securities	92,122	152,585	252,731	418,608	693,354	1,148,427	1,902,179
Property, plant and equipment, net	15,452	27,445	44,785	69,855	106,101	158,507	234,276
Goodwill	1,135	1,438	1,821	2,307	2,922	3,702	4,689
Acquired intangible assets, net	4,224	4,224	4,224	4,224	4,224	4,224	4,224
Other assets	5,478	8,439	13,000	20,026	30,851	47,525	73,212
Total assets	176,064	260,984	395,330	609,542	953,175	1,507,051	2,403,231
LIABILITIES AND SHAREHOLDERS' EQUITY:							
Current liabilities:							
Accounts payable	21,175	30,615	44,264	63,997	92,528	133,779	193,419
Accrued expenses	11,414	16,503	23,860	34,497	49,876	72,111	104,259
Deferred revenue	5,953	5,953	5,953	5,953	5,953	5,953	5,953
Total current liabilities	38,542	53,071	74,076	104,447	148,357	211,843	303,631
Deferred revenue - non-current	2,648	2,597	2,511	2,116	2,312	2,437	2,395
Other non-current liabilities	16,664	10,765	12,510	13,313	12,196	12,673	12,727
Total liabilities	57,854	66,433	89,097	119,876	162,864	226,952	318,753
Shareholders' equity	16,422	20,230	24,920	30,698	37,816	46,585	57,386
Retained earnings	101,289	143,022	206,228	300,664	440,448	646,007	946,883
Accumulated other comprehensive income	499	175	194	225	248	297	273
Total shareholders' equity	118,210	163,427	231,342	331,587	478,513	692,888	1,004,542
Total liabilities and shareholders' equity	176,064	229,860	320,439	451,463	641,377	919,841	1,323,295

Dupont Ratio

	2012	2011	2010	2009	2008	2007
Net sales revenue	$ 156,508	$ 108,249	$ 65,225	$ 36,537	$ 32,479	$ 24,006
Divided by: total assets	$ 176,064	$ 116,371	$ 75,183	$ 53,851	$ 39,572	$ 25,347
Asset turnover ratio a	0.89	0.93	0.87	0.68	0.82	0.95
Net income	41733	25922	14013	5704	4834	3496
Divided by: net sales	$ 156,508	$ 108,249	$ 65,225	$ 36,537	$ 32,479	$ 24,006
Return on sales ratio b	0.27	0.24	0.21	0.16	0.15	0.15
Dupont return on assets (a x b)	0.24	0.22	0.19	0.11	0.12	0.14
Total assets	$ 176,064	$ 116,371	$ 75,183	$ 53,851	$ 39,572	$ 25,347
Divided by: total equity	$ 118,210	$ 76,615	$ 47,791	$ 27,832	$ 21,030	$ 14,532
Asset leverage ratio c	1.49	1.52	1.57	1.93	1.88	1.74
Dupont return on equity (a x b x c)	**0.35**	**0.34**	**0.29**	**0.20**	**0.23**	**0.24**

RNOA and ROCE

	2007	2008	2009	2010	2011	2012
NOPAT (Net Operating Profit After Tax)						
Operating Profit	9,417	13,170	15,642	36,925	67,995	111,004
(1-Tax)	70%	70%	71%	76%	76%	75%
NOPAT	**6,574**	**9,233**	**11,175**	**27,909**	**51,529**	**83,075**
NOA (Net Operating Assets)	$ 27,036	$ 33,020	$ 29,540	$ 46,516	$ 60,018	$ 84,985
RNOA = NOPAT /Average NOA	**22%**	**31%**	**36%**	**73%**	**97%**	**115%**
ROCE (Return On Common Equity):						
Net Income	3,496	4,834	5,704	14,013	25,922	41,733
Preferred Dividend	0	0	0	0	0	0
A=Net Income + Preferred Dividend	3,496	4,834	5,704	14,013	25,922	41,733
Equity	14,532	21,030	27,832	47,791	76,615	118,210
Preferred Dividend	0	0	0	0	0	0
B=(Equity + Preferred Dividend)	14,532	21,030	27,832	47,791	76,615	118,210
ROCE = A / Average B	**24%**	**27%**	**23%**	**37%**	**42%**	**43%**

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