

ESTIMATING COMPANY VALUE OF PT HOLCIM INDONESIA TBK

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Abstract- The author performed a valuation of PT Holcim Indonesia Tbk. PT Holcim Indonesia Tbk is a member of Holcim Group who holds majority and minority interests in more than 70 countries on all continents. Valuation of a company can help determine the worth of an asset by the process of linking risk and return, valuation can be applied to expect streams of benefits from bonds, stocks, income properties, and so on. Different methods were utilized in the research to estimate the value of the company. First is Discounted Cash Flow method, second is Asset Based Method, and the third is Market Approach. Three scenarios are used in the discounted cash flow method which was optimistic scenario, most likely scenario, and pessimistic scenario to generate a more actual result and more realistically illustrated the company's condition. Results of the company's valuation may differ for each method due to different focus and theory. Analysis of optimal capital structure of the Company is applied to find the optimal proportion of debt, equity, and the capital of the company, after finding the optimal proportion it is used by the author to know how the company could enhance its value. Theoretical stock price is also generated from the calculated company value. The theoretical stock price generated will be compared with the market value by the author to determine the status of the company's share price and determine whether it is undervalued or overvalued, by PT Holcim Indonesia Tbk share price, the author made a series of analysis on how PT Holcim Indonesia Tbk could enhance its value, how the company can use it as a strategy to get a higher valuation, funding options, and investment choice.

Keywords: Company Valuation, Discounted Cash Flow Method, Optimal Capital Structure

Introduction

Infrastructure served as a basic needs of a country's structural system which needed to be controlled, supervised, and fulfilled to ensure either public sector's or private sector's economic security and facilities necessary for an economy to function properly. The term of infrastructure usually refers to a physical or a technical infrastructure that supports network-like structures. Indonesia as a developing country has huge responsibilities to further improve their infrastructure so then it can support their economical growth and further help the country to reach its economical goals. Infrastructure development will open up a business opportunity to be utilized by building material company since massive amount of building material will be needed in the process of infrastructure development. Infrastructure development plays an important role in spurring the growth of the building material industry subsector cement in the country. Previously, the cement market grows at 5-6% per year range. However, after the infrastructure development, market growth is at 9% per year. Not to mention, the multiplier effect given by infrastructure development. Nowadays around 25%-30% sales of building material industry subsector cement is being used for infrastructure development, with its continuous growth of national consumption and production. Along these times of opportunity, no building material company will ever wanted to have a financial problem (such as short of capital) that may disrupt their production activity, to ensure these situation would not happen a company can go public or also known as Initial Public Offering (IPO) to attract new investors. IPO is the first sale of a company's common stock to public investors. By selling the company's stocks to public investors it can gather up a considerable amount of capital to be further utilized by the company. Investors will be appealed to invest their money only if they can

be convinced that their investment will not go to waste. Estimating the value of the company can be used to further convince investors to invest their money. "*Valuation is the process that links risks and return to determine the worth of an asset.*" (Gitman, 2009). For the process itself 3 valuation fundamentals or key process needed to be kept in mind, which was cash flows (returns), timing, and measure of risk (to determine the required return). Finding the fair market value or valuation of the company's value is important because it can assist investors to decide whether or not the company is being undervalued or overvalued from its own current share price in the stock market and also later on the value will be highly related to the investor's decision.

Due to this phenomenon, it entices the author to further value the value of building material subsector cement firm in Indonesia. PT Holcim Indonesia Tbk is chosen by the author to be valued. While in Indonesia PT Holcim Indonesia Tbk was first known as PT Semen Cibinong Tbk established in the 1971, later on Holcim then bought the shares of PT Semen Cibinong Tbk and change the name to PT Holcim Indonesia Tbk at 13th December 2001. PT Holcim Indonesia Tbk is listed on the Indonesia Stock Exchange (IDX) under the reference SMCB.

Literature Review

Value

Value is one of the key factor determinants of a firm continuity. Based on the research by Fernandez, 2004 about Company Valuation Methods "The Most Common Errors In Valuations" the definition of value itself should not be confused with price which is the quantity agreed between the seller and the buyer in the sale of the company and it is also different for different buyer and seller. In finance term value is frequently used in portfolio management as a peripheral role for technical analysis of a firm and also a determinant for fundamental analysis, in corporate finance decision and plans towards project, investment, and dividend policy is related to value, in merger and acquisitions, value plays a central role in bidding a targeted firm value, it assists the bidder to bid on a fair value to further prevent misconception and deception.

Valuation

According to Gitman valuation is determining the worth of an asset by the process of linking risk and return, valuation can be applied to expected streams of benefits from bonds, stocks, income properties, oil wells, and so on. To measure a firm value, a financial statement of the firm will be required due to the process of the valuation (all financial aspect needed to be measured). Historical data of the company, the industry, and the country the firm operated in is also required to make assumption for the valuation process, as well the current condition and projection towards the future will also be required. Numerous approaches of value measurement for a firm differ relying on a certain aspect and condition (i.e. source of revenue, firms in distress, firms as acquisition target, etc.). The selected and utilized model of approach to measure the firm value in this research will be explained further in this chapter.

Discounted Cash Flow Method

Discounted cash flow approach will estimate the future cash flow and several others certain condition of the firm to be used as a consideration for the upcoming condition of the firm. The general formula for firm value in discounted cash flow method is

Formula 1 Discounted Cash Flow Method

$$Value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

Compound Annual Growth Rate

Compound annual growth rate (CAGR) is a geometrical approach of firm's valuation. The formula for CAGR is

Formula 2 Compound Annual Growth Rate

$$CAGR(t_0, t_n) = \left(\frac{V(t_n)}{V(t_0)} \right)^{\frac{1}{t_n - t_0}} - 1$$

Weighted Average Cost of Capital

Weighted average cost of capital (WACC) is the expected average future cost of funds over the long run, which can be generated by weighting the cost of each specific type of capital by its proportion in the firm's capital structure, the formula for WACC is

Formula 3 Weighted Average Cost of Capital

$$WACC = (W_d \times (r_d \times (1 - T))) + (W_e \times r_e)$$

Cost of Equity

Capital asset pricing model will be used in the research to calculate and measure the common share of equity due to its relation between required return, r_s , and the non-diversifiable risk of the firm as measured by the beta coefficient is being described with the model. The calculation formula will be illustrated as follows:

Formula 4 Cost of Equity

$$r_s = R_f + (\beta \times (r_m - r_f))$$

Cost of Debt

To calculate the cost of debt of a company, the first step would be to determine the loan interest rate, later on it will be multiplied with the determined effective tax rate, the formula being used to calculate cost of debt in this research will be illustrated as follows:

Formula 5 Cost of Debt

$$\text{Cost of Debt } (r_d) = \text{Loan Interest Rate} \times (1 - T)$$

Beta Coefficient

Beta Coefficient is often referred as financial elasticity or correlated relative volatility, and can be referred to as a measure of the sensitivity of the asset's returns to market returns, its non-diversifiable risk, its systematic risk, or market risk. The formula is

Formula 6 Beta Coefficient

$$\beta = \frac{COV(r_a, r_b)}{VAR(r_b)}$$

Free Cash Flow Valuation

Free cash flow valuation model serves as an alternative from the dividend model, projected free cash flows will be used to generate an estimation of a firm's value. The formula is

Formula 7 Free Cash Flow Valuation

$$\sum_{t=1}^n \frac{FCFF_t}{(1 + WACC_g)^t} + \frac{\frac{FCFF_n + 1}{WACC_{it} - g_n}}{(1 + WACC_g)^n}$$

Optimal Capital Structure

Optimal Capital Structure calculate the best proportion of cost of debt and cost of equity to achieve the best cost of capital. Optimal capital structure condition can be seen as illustrated in the following figures which were according to Ross (2008)

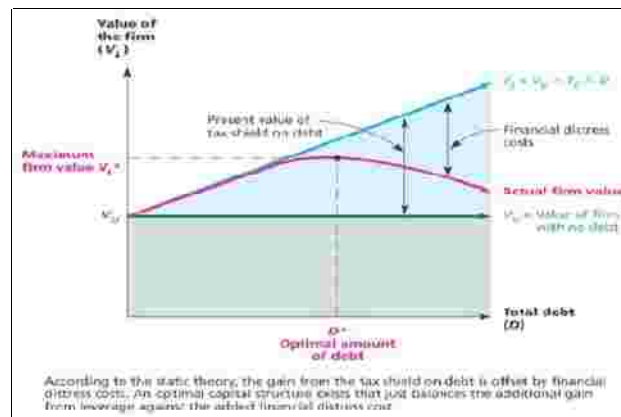


Figure 1 Optimal Capital Structure Figure

Asset Based Method

Asset based method calculate the fair market value of firm's fair market value of its total asset minus by its total liabilities, these circumstances happened because asset based method focuses on firm's net asset value for its valuation process.

Market Approach

Basic concept of this approach is to use the price per earnings (P/E) ratios of similar business that listed on share exchange to generate the value of a firm. The formula is

Formula 8 Market Approach

$$\text{Value} = \text{P/E Ratio of The Firm} \times \text{Earnings of The Company}$$

P/E Ratio

P/E ratio measuring the amount that investors are willing to pay for each dollar of a firm's earnings which means the higher the P/E ratio, the greater the investor confidence.

Methodology

To complete the research, these following steps will be practiced by the author, first is to determine the problem for the research, collect literature review and determine the methodology to be utilized to support the completion of the research, collect the data required and analyze it, and the last would be to conclude the findings from the research.

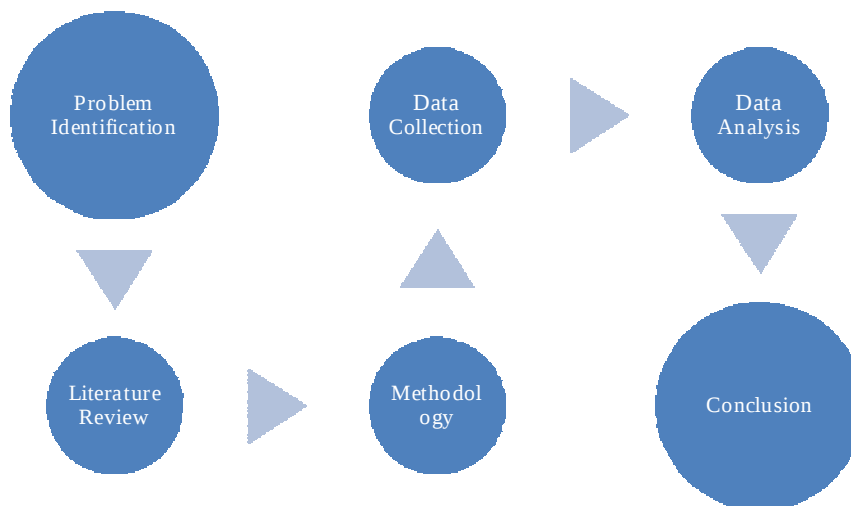


Figure 2 Research Method

Data Collection

The author will collect and analyzed the data of PT Holcim Indonesia Tbk annual reports from the year of 2008 to 2012, PT Holcim Indonesia Tbk quarterly results from the year of 2008 to 2012, PT Holcim Indonesia Tbk share price and return for the completion of the research.

Data Analysis

Weighted Average Cost of Capital

The formula for calculating the weighted average cost of capital (WACC) will be illustrated as follows:

$$\begin{aligned} \text{WACC} &= W_d \times R_d (1 - T) + W_e \times R_e \\ &= 20.67\% \times 6.34\% (1 - 27.87\%) + 79.33\% \times 18.49\% \\ &= 15.61\% \end{aligned}$$

Where the calculated debt proportion (W_d) is 20.67%, cost of debt (R_d) is 6.34%, equity proportion is 79.33%, and cost of equity is 18.49% also with the use of tax rate in the assumption of 27.87%, the calculation result of WACC is 15.61%.

Compound Annual Growth Rate

the net sales from the finish value (2012) has to be divided by the starting value (2008), PT Holcim Indonesia Tbk's net sales from 2008 is Rp. 5,341,054,000,000 while it is Rp. 9,011,076,000,000 from 2012, by utilizing the formula it will generate the result of CAGR of 13.969%, so it will be assumed that in the most likely scenario the sales projection growth for PT Holcim Indonesia Tbk will be 13.969% more compared to the previous year performance.

As for the optimistic scenario, the most likely scenario's sales projection growth will be multiplied by $(1+7.87\%)$, 7.87% which is as stated by Indonesia's Ministry of Industry, Mohammad S. Hidayat, to be the target of cement industry growth. The growth in optimistic scenario will be 15.013%. While for the pessimistic scenario, the most likely scenario's sales projection growth will be multiplied by $(1-7.87\%)$ because this scenario will likely be happened in the condition that there are a lot of competitors that may have affect the business, but due to the unlikely possibility of market downturn (people don't stop using cement since it is the very basic material for construction work) since cement industry is a defensive sector, the decreased amount is not significant from the most likely scenario. The sales projection growth being used in the pessimistic scenario is 11.592%.

Pro Forma Income Statement

By utilizing the CAGR the pro forma income statement is possible to be generated, later on the pro forma income statement will projected each account using the growth calculated from CAGR. The tax rate being used in the pro forma income statement is based on PT Holcim Indonesia Tbk effective tax rate which is 27.87% of the profit before tax account.

Pro Forma Balance Sheet

The table provided below is PT Holcim Indonesia Tbk's balance sheet projection for the year 2013 until 2017. Similar to the pro forma income statement, each account of the pro forma balance sheet were projected using the growth calculated from CAGR.

Free Cash Flow Valuation

Free cash flow can be defined as the amount of cash flow available to investors (creditors and owners) after the firms has met all operating needs and paid for investments in net fixed assets and net current assets.

After the value of free cash flow from 2013 to 2017 has been obtained, the next step is for the author to calculate the free cash flow of growth perpetuity, it is assumed that PT Holcim Indonesia Tbk grow 5.23% per year.

For the optimistic scenario the company value is Rp 59,890,070,785,991, most likely scenario is Rp. 50,748,737,636,064, and pessimistic scenario Rp. 40,513,274,414,858. The stock value of each scenario will be illustrated as follows:

	Company Value	Long Term Liabilities	No of Share Outstanding Common Stock	Share Price
Optimistic	Rp 59,890,070,785,991	Rp 2,193,586,000,000	7,662,900,000	Rp 7,529
Most Likely	Rp 50,748,737,636,064	Rp 2,193,586,000,000	7,662,900,000	Rp 6,336
Pessimistic	Rp 40,513,274,414,858	Rp 2,193,586,000,000	7,662,900,000	Rp 5,001

It is shown from the table above that the calculated share price of PT Holcim Indonesia Tbk has a range from Rp 5,001 – Rp 7,529 in the projected 3 scenarios of pessimistic, most likely, and optimistic. From the result generated compared to the market value of PT Holcim Indonesia Tbk which is Rp. 2,725 at 26th of July 2013, PT Holcim Indonesia Tbk's stocks is lower than the book value, this situation shows that PT Holcim Indonesia Tbk's stocks are undervalued and low on demand.

Optimal Capital Structure

By utilizing formula mentioned above it is procured that the optimal proportion of debt is at 30% and equity at 70%. PT Holcim Indonesia Tbk will have the value of Rp. 63,481,546,538,180 and by subtracting it with the company's long term liabilities which totaled at Rp. 2,193,586,000,000 and dividing it by its number of outstanding common stock which is at 7.662.900.000, the Company's share price with the optimal capital structure will be at Rp. 7,998.01.

Asset Based Method

In the process of asset based method completion to estimate the value of PT Holcim Indonesia Tbk, the total assets of the Company in the year of 2012 has to be summed, some adjustment of recent condition is also needed to be made to several accounts in the balance sheet.

The generated share price calculation from the asset based method is Rp. 1,302 while the market value of the price at 26th of July 2013 is Rp. 2,725, if compared these two price difference is too far, these situation may happened due to the low estimation value of PT Holcim Indonesia Tbk.

Market Approach

In market approach the P/E ratio will be multiplied to PT Holcim Indonesia Tbk's net income. The formula is

$$\text{Stock Value} = \text{P/E Ratio} * \text{Net Income}$$

Table 1 Market Approach Current Condition

	P/E Ratio TTM
Sector	16.96
Net Income	Rp 1,350,791,000,000
Value	Rp 22,909,415,360,000

From the table above, it is shown that the Company's P/E ratio of the sector in July 2012 is 16,96% and the net income is Rp 1.350.791.000.000. The calculation will be further illustrated as follows:

$$\begin{aligned} \text{Value} &= \text{P/E Ratio} \times \text{Net Income} \\ &= 16.96 \times \text{Rp } 1,350,791,000,000 = \text{Rp } 22,909,415,360,000 \end{aligned}$$

Therefore, the value of the company based on the P/E ratio is Rp 22,909,415,360,000. The share price result generated from the market approach is Rp. 2,989.65 with the market value of PT Holcim Indonesia Tbk is Rp. 2,725, both share price shows a difference and it explains that the market value is higher and therefore it indicates that PT Holcim Indonesia is one of the good shares in the market.

Conclusions

The author have estimated the company value using three methods in the research that has been conducted, the methods being used were as follows, discounted cash flow method, asset based method, and market approach. Optimal capital structure for finding the optimal proportion of capital, equity, and debt has also been procured in the research.

The first one is the discounted cash flow method, in which there are three scenarios being implemented which are optimistic, most likely, and pessimistic scenario, to further utilize the discounted cash flow method, first the discount rate for the Company must be procured by the author, and from the calculation from cost of equity it is shown that 18.49% is the discount rate. For the 3 scenarios being implemented the author will assigned a specific compound annual growth rate (CAGR) for each of the account that will affect the calculation of the free cash flow, this is done so later the result will be more reliable, the calculation of the CAGR for each of the account is based on the company's historical financial performance. However for the projection of pro forma balance sheet and income statement the CAGR is 13.969% for the most likely scenario and it will be multiplied by (1+7.87%) for the optimistic scenario, 7.87% which is as stated by Indonesia's Ministry of Industry, Mohammad S. Hidayat, to be the target of cement industry growth, the growth in optimistic scenario will be 15.013%. While for the pessimistic scenario, the most likely scenario's sales projection growth will be multiplied by (1-7.87%) resulting in 11.592% being used for the pessimistic scenario.

The estimated company value of PT Holcim Indonesia Tbk using the discounted cash flow method is Rp 59,890,070,785,991 for the optimistic scenario, Rp 50,748,737,636,064 for the most likely scenario, and Rp 40,513,274,414,858 for the pessimistic scenario. The asset based method and market approach are the second and third method being used to estimate PT Holcim Indonesia Tbk's value at January 2013, from the asset based method it is calculated that the Company's value would be at Rp 11,842,736,000,000 and Rp 22,909,415,360,000 from the market approach.

In addition, from each of the method being used to estimate the Company's value, the author will also calculate their fair value of the share price. This calculation can act as a helpful guide to assist on making the decision of whether to buy or hold the shares. For the discounted cash flow method the share price of the 3 scenarios being implemented are Rp 7,529 for the optimistic scenario, Rp 6,336 for the most likely scenario, and Rp 5,001 for the optimistic scenario, different method will differ in the result generated of their fair value of the share price, from the asset based method the fair value of the share price is at Rp 1,302 and Rp 2,703 for the market approach.

Based on the presented result above PT Holcim Indonesia Tbk's ranged from Rp 11,842,736,000,000 - Rp 59,890,070,785,991 while their share price is ranged from Rp 1,302 - 7,529, from these result the author can make a conclusion on which is the method that has the closest approach to find the estimated corporate value of PT Holcim Indonesia Tbk and the author feels that it is the market approach method that delivers the closest estimation, arguably it is most common for the discounted cash flow method to delivers the closest estimation of company's value but due to the phenomenon of PT Holcim Indonesia having a trend of low growth of current liabilities which would later affect the growth of their working capital, as it can be seen in the previous chapter the working capital of the Company's is negative, which would mean that the Company's is generating cash so fast and not investing in excess assets, working capital can also shows us to figure the Company's underlying operational efficiency. Their negative working capital will also take affect later in their

free cash flow, while a positive working capital will decrease the free cash flow and will make a lower company value and resulting in a closer estimation of the fair value of the share price, in the case of PT Holcim Indonesia Tbk's, it will increase the free cash flow and also its company value, making the final calculation of their share price seems irregularly higher compared to its market value, however if the factors supporting those results is analyzed thoroughly as it is in this research it will all comes to a resolution of why is it irregular.

These results basically shows the value of PT Holcim Indonesia Tbk and it reflects good results, it reflects that the company value of PT Holcim Indonesia Tbk is good and worth high based on the results of the estimated value, if their satisfactory performance can be maintained through the upcoming future, there is a high possibility that their value can increase overtime.

The current condition of PT Holcim Indonesia Tbk cost of capital, equity, and debt proportion itself have not meet the best proportion procured by the author from the optimal capital structure measurement. The author procured that the best proportion for the company would be at 52% debt and 48% equity while the current condition is at 20.67% debt and 79.33% equity, from these comparison it can be seen that there's still room for improvement for PT Holcim Indonesia Tbk to further enhance its value, making it possible for their value to increase overtime. It have been proved from the calculation of PT Holcim Indonesia Tbk share value price if they achieves its optimal capital structure, the result generated a nominal of Rp 6,076.37 which is higher from its market price of Rp 2,725.

Recommendations

The long-term plan which would be suitable for PT Holcim Indonesia Tbk is for them to expand their business globally and become a sustainable company by maximizing all of the opportunities as well by achieving high growth of their business. It would be wise for the management to believe that their growth should generate lasting benefits for the national and local economy. The fact that the author finds significant difference in the fair value of their share price with the market price from the discounted cash flow method and the fact that best capital structure for the company have not been met should also be seen as a promising potential for the company to further grow in the upcoming future, to achieve the best capital structure, the company could enhance its debt proportion, but further consideration such as the company's current condition itself should be taken to be wise and ensuring in implementing new business strategy, such aspects like the investment's behaviour and liquidity rate should be determined and taken into further consideration. PT Holcim Indonesia Tbk nowadays is also publicly acclaimed as one of the biggest cement company in Indonesia, this position will come with a certain consequences, likely the threat of the other existing competitors whether it comes from local company or international company. To make sure that this barrier would not come as an obstacle it would be recommended for PT Holcim Indonesia Tbk to increase awareness of the company to maintain as the market leader in cement industry in Indonesia.

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Appendix

Beta Calculation

	SMCB.JK	^JKSE		SMCB.JK	^JKSE		
Date	Adj Close	Adj Close		Return	Return		Beta
12/31/2012	2867.13	4316.69		0.859258	1.015642		1.220456
12/17/2012	3336.75	4250.21		0.957447	0.986389		
12/10/2012	3485.05	4308.86		1	1.004209		
12/3/2012	3485.05	4290.8		0.986015	1.003428		
11/26/2012	3534.48	4276.14		1.021429	0.98329		
11/19/2012	3460.33	4348.81		0.915032	0.999432		
11/12/2012	3781.65	4351.28		1.055171	1.00407		
11/5/2012	3583.92	4333.64		1.098486	0.99879		
10/29/2012	3262.6	4338.89		1.023256	0.99994		
10/22/2012	3188.45	4339.15		1	1.001824		
10/15/2012	3188.45	4331.25		1.057378	1.004606		
10/8/2012	3015.43	4311.39		1	1.000019		
10/1/2012	3015.43	4311.31		1.070174	1.011437		
9/24/2012	2817.7	4262.56		1.017856	1.004227		
9/17/2012	2768.27	4244.62		1.046732	0.997092		
9/10/2012	2644.68	4257		0.981649	1.027348		
9/3/2012	2694.12	4143.68		1.048561	1.020528		
8/27/2012	2569.35	4060.33		0.929207	0.979478		
8/13/2012	2765.1	4145.4		1.027273	1.000927		
8/6/2012	2691.69	4141.56		1.089105	1.010183		
7/30/2012	2471.47	4099.81		1.01	1.00382		
7/23/2012	2447	4084.21		1.010101	1.000738		
7/16/2012	2422.53	4081.2		1.010204	1.015307		
7/9/2012	2398.06	4019.67		0.951456	0.991238		
7/2/2012	2520.41	4055.2		1.061856	1.025185		
6/25/2012	2373.59	3955.58		0.989796	1.016984		
6/18/2012	2398.06	3889.52		0.960784	1.018703		
6/11/2012	2495.94	3818.11		1.0625	0.998113		
6/4/2012	2349.12	3825.33		1.054945	1.006727		
5/28/2012	2226.77	3799.77		0.90099	0.973673		
5/21/2012	2471.47	3902.51		1	0.980407		
5/14/2012	2471.47	3980.5		0.935185	0.967517		
5/7/2012	2642.76	4114.14		1.02002	0.975682		
4/30/2012	2590.89	4216.68		1.019044	1.012656		
4/23/2012	2542.47	4163.98		1	0.995841		
4/16/2012	2542.47	4181.37		1.05	1.005311		
4/9/2012	2421.4	4159.28		1.030931	0.998298		
4/2/2012	2348.75	4166.37		0.941745	1.010875		
3/26/2012	2494.04	4121.55		1.029999	1.019792		
3/19/2012	2421.4	4041.56		1	1.003232		

3/12/2012	2421.4	4028.54		1	1.00927		
3/5/2012	2421.4	3991.54		1.020409	0.996672		
2/27/2012	2372.97	4004.87		1.076924	1.028324		
2/20/2012	2203.47	3894.56		0.989132	0.979384		
2/13/2012	2227.68	3976.54		1	1.016397		
2/6/2012	2227.68	3912.39		1	0.974213		
1/30/2012	2227.68	4015.95		1	1.00741		
1/23/2012	2227.68	3986.41		1	0.999975		
1/16/2012	2227.68	3986.51		1.022219	1.013005		
1/9/2012	2179.26	3935.33		1.034487	1.017034		
1/2/2012	2106.61	3869.42		1	1.01241		
12/26/2011	2106.61	3821.99		1.011626	1.006542		
12/19/2011	2082.4	3797.15		0.966293	1.007643		
12/12/2011	2155.04	3768.35		1.034883	1.002325		
12/5/2011	2082.4	3759.61		1.113988	0.994648		
11/28/2011	1869.32	3779.84		1.054647	1.03922		
11/21/2011	1772.46	3637.19		0.973403	0.968755		
11/14/2011	1820.89	3754.5		0.994707	0.993546		
11/7/2011	1830.58	3778.89		0.984379	0.998747		
10/31/2011	1859.63	3783.63		0.984614	0.987903		
10/24/2011	1888.69	3829.96		1.054056	1.057807		
10/17/2011	1791.83	3620.66		0.973683	0.987988		
10/10/2011	1840.26	3664.68		1.124262	1.069767		
10/3/2011	1636.86	3425.68		0.949438	0.965244		
9/26/2011	1724.03	3549.03		1.017139	1.035805		
9/19/2011	1694.98	3426.35		0.879399	0.8934		
9/12/2011	1927.43	3835.18		0.980312	0.959155		
9/5/2011	1966.14	3998.5		1.056701	1.040807		
8/22/2011	1860.64	3841.73		1.005181	0.999735		
8/15/2011	1851.05	3842.75		0.97475	0.987719		
8/8/2011	1899	3890.53		1.010203	0.992067		
8/1/2011	1879.82	3921.64		0.944581	0.949366		
7/25/2011	1990.11	4130.8		0.965112	1.005839		
7/18/2011	2062.05	4106.82		1.011766	1.020784		
7/11/2011	2038.07	4023.2		0.977014	1.004873		
7/5/2011	2086.02	4003.69		0.977526	1.019503		
6/27/2011	2133.98	3927.1		1.022991	1.020408		
6/20/2011	2086.02	3848.56		0.966667	1.034175		
6/13/2011	2157.95	3721.38		1.05882	0.982504		
6/6/2011	2038.07	3787.65		0.944447	0.985336		
5/30/2011	2157.95	3844.02		1.034482	1.003037		
5/23/2011	2086.02	3832.38		1	0.989525		
5/16/2011	2086.02	3872.95		1.035713	1.010681		
5/9/2011	2014.09	3832.02		0.974275	1.008811		
5/2/2011	2067.27	3798.55		0.966664	0.994484		

4/25/2011	2138.56	3819.62		1.02273	1.004878		
4/18/2011	2091.03	3801.08		1.011493	1.018917		
4/11/2011	2067.27	3730.51		1.060976	0.99698		
4/4/2011	1948.46	3741.81		1.035352	1.009257		
3/28/2011	1881.93	3707.49		0.977778	1.027828		
3/21/2011	1924.7	3607.11		1.088711	1.032352		
3/14/2011	1767.87	3494.07		0.984124	0.986404		
3/7/2011	1796.39	3542.23		0.989528	0.999811		
2/28/2011	1815.4	3542.9		1.026885	1.028857		
2/21/2011	1767.87	3443.53		0.958762	0.983444		
2/14/2011	1843.91	3501.5		1.037432	1.032352		
2/7/2011	1777.38	3391.77		0.958973	0.970139		
1/31/2011	1853.42	3496.17		0.951223	1.002454		
1/24/2011	1948.46	3487.61		1.045917	1.031978		
1/17/2011	1862.92	3379.54		0.944575	0.946878		
1/10/2011	1972.23	3569.14		0.932585	0.982842		
1/3/2011	2114.8	3631.45		0.98889	0.980543		
12/27/2010	2138.56	3703.51		0.978262	1.025468		
12/20/2010	2186.08	3611.53		1.010988	1.008368		
12/13/2010	2162.32	3581.56		0.947916	0.955666		
12/6/2010	2281.13	3747.71		1.03226	1.013919		
11/29/2010	2209.84	3696.26		0.968748	1.014759		
11/22/2010	2281.13	3642.5		0.979593	0.977839		
11/15/2010	2328.65	3725.05		1.065217	1.016149		
11/8/2010	2186.08	3665.85		1	1.002886		
11/1/2010	2186.08	3655.3		0.989248	1.005496		
10/25/2010	2209.84	3635.32		0.968748	1.010443		
10/18/2010	2281.13	3597.75		0.979593	1.0002		
10/11/2010	2328.65	3597.03		1.031577	1.014119		
10/4/2010	2257.37	3546.95		0.950004	0.999955		
9/27/2010	2376.17	3547.11		1.06383	1.043995		
9/20/2010	2233.6	3397.63		1.021738	1.003835		
9/6/2010	2186.08	3384.65		1.022221	1.069643		
8/30/2010	2138.56	3164.28		1	1.01918		
8/23/2010	2138.56	3104.73		0.927836	0.995833		
8/16/2010	2304.89	3117.72		1.065934	1.021195		
8/9/2010	2162.32	3053.01		1.01111	0.997523		
8/2/2010	2138.56	3060.59		0.947368	0.997169		
7/26/2010	2257.37	3069.28		1.021508	1.008961		
7/19/2010	2209.84	3042.02		0.978945	1.016565		
7/12/2010	2257.37	2992.45		1.055556	1.016492		
7/5/2010	2138.56	2943.9		1.046513	1.025195		
6/28/2010	2043.51	2871.55		0.955554	0.974391		
6/21/2010	2138.56	2947.02		1.034485	1.00595		
6/14/2010	2067.27	2929.59		1.023528	1.045573		

6/7/2010	2019.75	2801.9		0.965912	0.992438		
5/31/2010	2091.03	2823.25		1.086419	1.040285		
5/24/2010	1924.7	2713.92		1.033163	1.034576		
5/17/2010	1862.92	2623.22		0.90115	0.917726		
5/10/2010	2067.27	2858.39		1.023528	1.043463		
5/3/2010	2019.75	2739.33		0.904258	0.921945		
4/26/2010	2233.6	2971.25		0.96907	1.015906		
4/19/2010	2304.89	2924.73		1.043012	1.016		
4/12/2010	2209.84	2878.67		1.04494	1.011831		
4/5/2010	2114.8	2845.01		1.04706	1.005304		
3/29/2010	2019.75	2830		1	1.006015		
3/22/2010	2019.75	2813.08		1	1.02556		
3/15/2010	2019.75	2742.97		1.078679	1.028674		
3/8/2010	1872.43	2666.51		1.076505	1.034024		
3/1/2010	1739.36	2578.77		1.033899	1.011667		
2/22/2010	1682.33	2549.03		1.079268	0.997906		
2/15/2010	1558.77	2554.38		0.97619	1.007987		
2/8/2010	1596.79	2534.14		1.030673	1.006018		
2/1/2010	1549.27	2518.98		1	0.964831		
1/25/2010	1549.27	2610.8		0.947676	1.000176		
1/18/2010	1634.81	2610.34		1.048782	0.986117		
1/11/2010	1558.77	2647.09		0.993936	1.012515		
1/4/2010	1568.28	2614.37		1.064518	1.03157		
12/28/2009	1473.23	2534.36		1.04027	1.024033		
12/21/2009	1416.2	2474.88		0.986755	0.986173		
12/14/2009	1435.21	2509.58		0.967951	0.996221		
12/7/2009	1482.73	2519.1		1	1.00301		
11/30/2009	1482.73	2511.54		1.026317	1.049308		
11/23/2009	1444.71	2393.52		0.926827	0.962273		
11/16/2009	1558.77	2487.36		1.018631	1.024955		
11/9/2009	1530.26	2426.8		1.018991	1.013231		
11/2/2009	1501.74	2395.11		0.975308	1.011577		
10/26/2009	1539.76	2367.7		1.018865	0.959379		
10/19/2009	1511.25	2467.95		0.957833	0.980976		
10/12/2009	1577.78	2515.81		1.064105	1.016735		
10/5/2009	1482.73	2474.4		1.138687	0.997802		
9/28/2009	1302.14	2479.85		1.037876	1.014428		
9/14/2009	1254.62	2444.58		0.992485	1.01185		
9/7/2009	1264.12	2415.95		1.031	1.040129		
8/31/2009	1226.11	2322.74		1.015748	0.97707		
8/24/2009	1207.1	2377.25		0.969465	1.018574		
8/17/2009	1245.12	2333.9		0.992428	0.977812		
8/10/2009	1254.62	2386.86		0.963506	1.016061		
8/3/2009	1302.14	2349.13		0.944826	1.011144		
7/27/2009	1378.18	2323.24		1.050722	1.062952		

7/20/2009	1311.65	2185.65		1.078128	1.037648		
7/13/2009	1216.6	2106.35		1.057849	1.020969		
7/6/2009	1150.07	2063.09		1.090093	0.994117		
6/29/2009	1055.02	2075.3		1	1.017209		
6/22/2009	1055.02	2040.19		1.088233	1.024979		
6/15/2009	969.48	1990.47		0.902656	0.95195		
6/8/2009	1074.03	2090.94		1.046293	1.005777		
6/1/2009	1026.51	2078.93		1.080003	1.084567		
5/25/2009	950.47	1916.83		1.030923	1.018664		
5/18/2009	921.96	1881.71		1.127918	1.074704		
5/11/2009	817.4	1750.91		0.914891	0.940071		
5/4/2009	893.44	1862.53		1.362325	1.076868		
4/27/2009	655.82	1729.58		1.045448	1.08687		
4/20/2009	627.31	1591.34		1	0.973422		
4/13/2009	627.31	1634.79		1.118638	1.115327		
4/6/2009	560.78	1465.75		1.017251	0.976932		
3/30/2009	551.27	1500.36		1.017535	1.025719		
3/23/2009	541.77	1462.74		1.055567	1.074841		
3/16/2009	513.25	1360.89		1.038463	1.025199		
3/9/2009	494.24	1327.44		1.019598	1.03167		
3/2/2009	484.74	1286.69		0.927271	1.000941		
2/23/2009	522.76	1285.48		1.018529	0.991164		
2/16/2009	513.25	1296.94		0.981808	0.968777		
2/9/2009	522.76	1338.74		1	0.991189		
2/2/2009	522.76	1350.64		0.948283	1.013484		
1/26/2009	551.27	1332.67		1.017535	1.01299		
1/19/2009	541.77	1315.58		0.919361	0.964586		
1/12/2009	589.29	1363.88		0.898554	0.962737		
1/5/2009	655.82	1416.67		1.095224	1.045197		
12/29/2008	598.8	1355.41		1	1.010829		
12/22/2008	598.8	1340.89		0.984383	0.994512		
12/15/2008	608.3	1348.29		1.454532	1.067555		
12/8/2008	418.21	1262.97		1.073186	1.050427		
12/1/2008	389.69	1202.34		0.942532	0.968426		
11/24/2008	413.45	1241.54		1.023518	1.083104		
11/17/2008	403.95	1146.28		0.894744	0.906595		
11/10/2008	451.47	1264.38		0.904749	0.944723		
11/3/2008	499	1338.36		1.179781	1.06498		
10/27/2008	422.96	1256.7		1.098769	1.009511		
10/20/2008	384.94	1244.86		0.750005	0.889554		
10/13/2008	513.25	1399.42		0.635289	0.964007		
9/29/2008	807.9	1451.67		1	0.786348		
9/22/2008	807.9	1846.09		1.011911	0.975874		
9/15/2008	798.39	1891.73		1.024378	1.048596		
9/8/2008	779.39	1804.06		0.766362	0.891969		

9/1/2008	1017	2022.56		0.930433	0.933802		
8/25/2008	1093.04	2165.94		1.045451	1.021434		
8/18/2008	1045.52	2120.49		0.982142	1.016948		
8/11/2008	1064.53	2085.15		1.009014	0.949552		
8/4/2008	1055.02	2195.93		0.973679	0.976511		
7/28/2008	1083.54	2248.75		0.991309	1.001519		
7/21/2008	1093.04	2245.34		1.138619	1.048666		
7/14/2008	959.97	2141.14		0.885957	0.940396		
7/7/2008	1083.54	2276.85		1	0.983627		
6/30/2008	1083.54	2314.75		1.017858	0.992556		
6/23/2008	1064.53	2332.11		1.009014	0.983274		
6/16/2008	1055.02	2371.78		1.018349	0.988893		
6/9/2008	1036.01	2398.42		1.009255	0.99841		
6/2/2008	1026.51	2402.24		0.972977	0.982773		
5/26/2008	1055.02	2444.35		0.9823	0.991237		
5/19/2008	1074.03	2465.96		1.036698	0.998833		
5/12/2008	1036.01	2468.84		1.184783	1.039498		
5/5/2008	874.43	2375.03		0.978723	1.013774		
4/28/2008	893.44	2342.76		1.032962	1.045604		
4/21/2008	864.93	2240.58		0.96809	0.953735		
4/14/2008	893.44	2349.27		1	1.019679		
4/7/2008	893.44	2303.93		0.862385	1.011791		
3/31/2008	1036.01	2277.08		0.908335	0.919071		
3/24/2008	1140.56	2477.59		1.034475	1.066286		
3/17/2008	1102.55	2323.57		0.983059	0.974889		
3/10/2008	1121.55	2383.42		0.867643	0.897217		
3/3/2008	1292.64	2656.46		0.985507	0.975944		
2/25/2008	1311.65	2721.94		0.951726	0.992981		
2/18/2008	1378.18	2741.18		0.973154	1.019712		
2/11/2008	1416.2	2688.19		1.049294	1.018605		
2/4/2008	1349.67	2639.09		0.91026	0.99708		
1/28/2008	1482.73	2646.82		1	1.010048		
1/21/2008	1482.73	2620.49		1.114282	1.003585		
1/14/2008	1330.66	2611.13		0.82353	0.922576		
1/7/2008	1615.8	2830.26		0.994155	1.023532		
1/1/2008	1625.3	2765.19					