Date: April 21, 2014 Analyst: Michael Sanders

CIF Stock Recommendation Report (Spring 2014)

Company Name and Ticker: Caterpillar (CAT)

Section (A) Investment Summary

Recommendation Buy: Yes No		Target Price:	Stop-Loss Price:
Sector: Industrials	Industry: Construction and Farm Machinery	Market Cap (in Billions): $ 65.58727	# of Shrs. O/S (in Millions): 637.82
Current Price: $ 102.83	52 WK Hi: $ 103.72	52 WK Low: $ 79.49	EBO Valuation: $50.27
Morningstar (MS) Fair Value Est.: $97	MS FV Uncertainty: High	MS Consider Buying: $ 58.20	MS Consider Selling: $ 150.35
EPS (TTM): 5.75	EPS (FY1): 5.92	EPS (FY2): 6.89	MS Star Rating: ★★★
Next Fiscal Yr. End "Year": 2014 "Month": December	Last Fiscal Qtr. End: Less Than 8 WK: Y N	If Less Than 8 WK, next Earnings Ann. Date: April 24, 2014	Analyst Consensus Recommendation: 2.42 (Reuters)
Forward P/E: 14.92	Mean LT Growth: 13.45 %	PEG: 1.11	Beta: 1.69
% Inst. Ownership: 70.01%	Inst. Ownership- Net Buy: Y N	Short Interest Ratio: 4.40	Short as % of Float: 4.30
Ratio Analysis	**Company**	**Industry**	**Sector**
P/E (TTM)	17.88	16.73	29.57
P/S (TTM)	1.18	1.53	2.27
P/B (MRQ)	3.15	2.36	2.21
P/CF (TTM)	9.51	8.77	14.32
Dividend Yield	2.33	2.65	1.78
Total Debt/Equity (MRQ)	181.39	17.18	63.13
Net Profit Margin (TTM)	6.84	9.21	8.62
ROA (TTM)	4.38	8.62	5.28
ROE (TTM)	19.76	15.07	11.00

Investment Thesis

After analyzing Caterpillar (CAT), I recommend that the Cougar Investment Fund not buy this stock.

Overall, there seems to be a rally for CAT in the last three months, but this trend is unlikely to continue. Much of the recent decline in revenue and earnings in the last year is due to the mining industry and China. CAT is influenced by commodity prices, and the current demand of the mining industry. The mining industry has had decrease in demand for commodities such as coal. China has lowered the expected growth rate for the next year, and this rate is not expected to rise anytime soon. In addition, with the recent rend of switching from coal to cleaner forms of energy, the mining industry has lacked growth in recent years.

Pros:

- The construction and Power segments have been growing and are expected to have strong growth in the next few years as the economy picks up.
- Short Interest positions have decreased in the recent months.
- Continues to outperform the S&P 500 and has proved to be a strong long term performer.

Cons:

- The mining industry has struggled in the recent year and is predicted to continue to struggle.
- Revenue and earnings have been down in the last year, and are expected to decrease.
- Recent law suit due to $2.8 billion in tax avoidance.

Summary

Company Profile: Caterpillar (CAT) is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. CAT is headquartered in Peoria, Illinois, but has other offices in the United States and internationally, but operates globally.

Fundamental Valuation: The EBO put the implied price at $ 50.27. This half what the current price is ($102.83) as of Friday. This indicates that the current price is overvalued. See Section C for details.

Relative Valuation: The relative valuation indicated that the current price was valued somewhat accurately. The relative valuation also put the implied price within the 52-week range.

Revenue and Earnings Estimates:
Revenue and earnings are both down compared to the previous quarter and the first quarter of last year.

Analyst Recommendations: Analysts are mostly recommending a hold position, but several are recommending outperform and buy positions.

Institutional Ownership: Currently, CAT is 70% institutionally owned with the top institutional holdings being State Street Corp, Vanguard, BlackRock, and Capital World Investors.

Short Interest: The short interest positions and days to cover have decreased in the recent two months. Over the past year short interest and days to cover has been exceedingly high, most likely due to poor performance in 2013.

Stock Price Chart: CAT has outperformed the S&P 500 in the three months, one year, and five year charts. CAT also outperformed the sector ETF in the three month and five year price charts. The six month and two year moving average charts show bullish trends.

Section (B)   Company Profile

(B-1) Profile

Caterpillar (CAT) is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. CAT is headquartered in Peoria, Illinois, but has other offices in the United States and internationally, but operates globally. CAT does about 33% of sales and revenues inside the United states, and approximately 67% of sales and revenue internationally. CAT operates within two major business segments and four sub-business segments. The two major business segments are power systems and machinery, and financial products. The four sub business segments, are what will be focused on in this report, they consist of: construction industries, resource industries, power systems, and financial products. Most of the revenues generated, along with the only research and development activities, for CAT reside in the construction industries, resource industries, and power systems business segments.

The construction industry segment supports customers using machinery for infrastructure and building construction applications. Most sales are made from heavy construction, general construction, mining and quarry and aggregates markets. The customer demand for construction machinery has been characterized by the demand from developed to developing economies. The developing economies prioritize the purchase price when making their investment decisions, while customers in developed economies generally weigh productivity and performance over cost. There has been an increase in the demand for construction machinery in developing economies, and CAT has developed products that will target customers in those markets. The competitive environment for construction machinery is characterized by some global competitors such as Komatsu Ltd. or Volvo Construction Equipment. Most competitors are regional and specialized local competitors such as Guanxi LiuGong Machinery Co in China. Construction industries had the second largest revenue by segment (table 1).

Resource industries segment is primarily responsible for supporting CAT's customers who are using machinery in mine and quarry applications. Since CAT's acquisition of Bucyrus International, Inc in July 2011, CAT now offers the broadest product range in the industry. The former Bucyrus distribution business is still being transitioned into the CAT dealers who support mining customers. The resource industries also served forestry, paving tunneling, and industrial waste. The competitive market in the resource industries is considered to be a wide moat for CAT. There are few large global competitors, but the smaller local competitors are where risk exists. The smaller competitors however, are not able to compete with the wide range of products that CAT has to offer. The resource industries experienced a significant decrease in the recent year when looking at revenues (table 1). The projection for the mining industry as a whole is expected to decrease this year and possibly next year as well.

Power systems segment is primarily responsible for supporting customers using reciprocating engines, turbines, and related parts across industries serving electric power, industrial, petroleum and marine applications as well as rail-related business. In September, 2013 CAT acquired Johan Walter Berg AB, which was a leading manufacturer of mechanically and electrically driven propulsion systems and marine controls for ships. This acquisition will allow CAT to enter into the marine propulsion systems market. Sales for the power systems segment have declined in the recent year (table 1); management attributes this to the lower volume in electric power, petroleum, and rail applications.

The financial products segment is primarily conducted by Cat Financial, a wholly owned finance subsidiary of CAT. Cat Financials business is to provide retail and wholesale financing alternatives for CAT products. Retail financing is the financing of CAT equipment and machinery. Wholesale financing is provided to CAT dealers and purchases short-term receivables from CAT and its subsidiaries. The goal of CAT financial is to increase the opportunity for sales, and to generate extra financial income for Cat financial. Cat Financial's retail sales contracts totaled 53 % of the segment, wholesales contracts totaled 14 %, and Cat Financial's retail notes receivables totaled 33 %. In addition, to the financial services mentioned above CAT is able to provide insurance for its products, using Cat Insurance which is a wholly owned subsidiary.

CAT is a cyclical firm that operates on a global scale, thus is sensitive to global economic conditions and geopolitical issues, especially in Singapore, Japan, China, Brazil, and Switzerland. Indicators that the purchase of CAT products will decrease are: higher unemployment, lower consumer spending, if corporate earnings and levels of government and business investment are lower.

There are many risks associated with CAT:

1. The energy and mining industries are major users of CAT's products, and thus the price and demand for commodities can influence the demand for CAT products.
2. The price of commodities such as steel, required for manufacturing CAT products, can increase the costs for operation.
3. Disruption of delivery from suppliers, particularly steel, could prevent the ability to meet commitments to their customers.
4. Subject to many potential environmental law suits
5. New regulations domestically or internationally could increase the overall cost to operate.
6. Changes in government monetary or fiscal policies can negatively impact revenue. The interest rate affects the economic growth, which affects the demand for residential and nonresidential structures, as well as energy and mined products.

Table 1:

Revenue by Segment from 2011-2013			
(Millions of dollars)	**2013**	**2012**	**2011**
Construction Industries	$ 18,455.00	$ 19,334.00	$ 1,966.00
Resource Industries	$ 13,270.00	$ 21,158.00	$ 15,629.00
Power Systems	$ 20,155.00	$ 21,122.00	$ 20,114.00
Financial Products	$ 3,224.00	$ 1,501.00	$ 2,021.00
Total	$ 55,094.00	$ 63,115.00	$ 39,730.00

(B-2) Revenue and Earnings History

Table 2:

REVENUE

Periods	2012	2013
March	15981.0	13210.0
June	17374.0	14621.0
September	16445.0	13423.0
December	16075.0	14402.0

Note: Units in Millions of U.S. Dollars

EARNINGS PER SHARE

Periods	2012	2013
March	2.36646	1.3103
June	2.53734	1.44862
September	2.54075	1.45114
December	1.04139	1.54189

Note: Units in U.S. Dollars

1) Revenue seems to be trending down from 2012 to 2013. Historically it appears that the second quarter which ends in June is the most profitable quarter. In 2012 the second strongest quarter was in September, while it was December for 2013. The seasonal trends indicate that CAT makes most of its sales in the second and third quarters. This does coincide with the construction, farming and manufacturing industries that do most of their business in the warmer months. The large revenue increase in December 2013 could be explained by the more recent demand for equipment in the mining industry.

2) It appears that earnings decreased significantly from September 2012 to December 2012. CAT did experience massive layoffs last year and a long period where its employees were striking. This could have contributed to the dramatic drop in earnings from September 2012 to December 2012. The earnings seem to trend upwards from quarter to quarter. The earnings from 2012 to 2013 are down. This is most likely from the lack of demand that the mining industry is experiencing and the lower earnings from 2012 to 2013.

(B-3) Most Recent Quarterly Earnings Release

1) February 18, 2014

2) Revenue was reported by CAT to be $55, 094.00 million. This missed the analyst estimates which were about $56,743.5 million, which is approximately a 3% miss.

3) Earnings in December beat the analyst estimates by 23.48%. The estimate was 1.28 and the actual was 1.58. However, earnings estimates for the entire year were mostly a miss.

4) The sales of mining equipment for Q4 and for the entire year of 2013 were much worse than expected. The construction and power systems segment didn't decline nearly as much as anticipated in 2013, which attributed to the small miss that was experienced in revenue. Management claims that they had a very positive year for cash flows, and set a new record in cash flows for machine and power systems.

5) Management is expecting the sales in 2014 first quarter to decline compared to 2013. The decline is due to the lack of demand from the mining industry. The outlook on the world economy is positive and they expect that their construction and power systems segments will continue to expand and grow. In addition to a decrease in revenue and earnings this first quarter, CAT is going to experience a restructuring cost in 2014 at some point. The total charges for this cost will amount to $400 to $500 million.

6) The earnings release seemed to have not affected the stock too dramatically. There was a slight dip of $1 from Feb 18 to Feb 19, but it recovered shortly after. The stock stayed between $94 and $97 throughout the month of February.

7) Although CAT did not beat earnings, they did outperform their original expectations for year 2013 and Q4. Analyst were more bullish about the revenues and earnings that CAT could achieve, and that is most likely why the stock was not affected. Also, the investor sentiment as whole for the mining industry seems to have increased in the recent months, which could have also been a factor for CAT's earnings not affecting the stock price.

Section (C) Fundamental Valuation (EBO)

CAT	PARAMETERS	FY1	FY2	Ltg
	EPS Forecasts	5.92	6.89	13.45%
	Total Equity	20811.00		
	Preferred Stock	0.00		
	Book Value (end of last fye)	20811.00		
	Common Equity Shr. O/S	4709.00		
	Book value/share (last fye)	4.419		
	30- Year T-Bond Rate	3.52%		
	$E(r_m)$	9.50%		
	Beta	1.69		
	Discount Rate	13.63%		
	Dividend Payout Ratio (POR)	39.40%		
	Next Fsc Year end	2014		
	Current Fsc Mth (1 to 12)	4		
	Target ROE (industry avg.)	15.07%		

Fundamental Valuation (EBO)
Model 1: 12-year forecasting horizon (T=12).
and a 7-year growth period.

Please download and save this template to your own storage device
You only need to input values to cells highlighted in "yellow"
The rest of the spreadsheet is calculated automatically
Please read "Guidelines_for_FundamentalValuation_ProfLee_Spreadsheet" file carefully

			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	Year		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	Long-term EPS Growth Rate (Ltg)				0.1345	0.1345	0.1345	0.1345	0.1345					
	Forecasted EPS		5.92	6.89	7.82	8.87	10.06	11.41	12.95					
	Beg. of year BV/Shr		4.419	8.007	12.182	16.919	22.293	28.390	35.307					
	Implied ROE			0.861	0.642	0.524	0.451	0.402	0.367					
ROE	(Beg. ROE, from EPS forecasts)		1.340	0.861	0.642	0.524	0.451	0.402	0.367	0.324	0.280	0.237	0.194	0.151
Abnormal ROE	(ROE-k)		1.203	0.724	0.505	0.388	0.315	0.266	0.230	0.187	0.144	0.101	0.058	0.014
growth rate for B	(1-POR)*(ROEt-1)		0.000	0.812	0.521	0.389	0.318	0.273	0.244	0.222	0.196	0.170	0.144	0.118
Compounded growth			1.000	1.812	2.757	3.828	5.044	6.424	7.989	9.765	11.679	13.663	15.627	17.463
growth*AROE			**1.203**	**1.312**	**1.393**	**1.485**	**1.589**	**1.707**	**1.841**	**1.829**	**1.683**	**1.378**	**0.901**	**0.252**
required rate (k)		0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136
Compound discount rate			1.136	1.291	1.467	1.667	1.894	2.152	2.445	2.779	3.157	3.587	4.076	4.632
div. payout rate (k)		0.394												
Add to P/B	PV(growth*AROE)		1.06	1.02	0.95	0.89	0.84	0.79	0.75	0.66	0.53	0.38	0.22	0.05
Cum P/B			2.06	3.08	4.02	4.92	5.75	6.55	7.30	7.96	8.49	8.88	9.10	9.15
Add: Perpetuity														
beyond current yr	(Assume this yr's AROE forever)		7.77	7.46	6.97	6.54	6.16	5.82	5.53	4.83	3.91	2.82	1.62	0.40
Total P/B	(P/B if we stop est. this period)		9.83	10.53	10.99	11.45	11.91	12.37	12.83	12.79	12.40	11.70	10.72	9.55
Implied price			45.42	48.67	50.79	52.92	55.04	57.15	59.26	59.09	57.31	54.04	49.52	44.13
Check:														
Beg. BV/Shr			4.419	8.007	12.182	16.919	22.293	28.390	35.307	43.154	51.615	60.384	69.061	77.176
Implied EPS			5.920	6.890	7.817	8.868	10.061	11.414	12.949	13.962	14.470	14.318	13.392	11.630
Implied EPS growth				0.164	0.135	0.135	0.135	0.135	0.135	0.078	0.036	-0.010	-0.065	-0.132

Inputs (provide below input values used in your analysis)

EPS forecasts (FY1 & FY2): 5.92 FY1 & 6.89 FY2

Long-term growth rate: 13.45%

Book value: 20,811.00

# of shares outstanding: 4,709.00 (millions)

Book value / share: 4.419

Dividend payout ratio: 39.4 %

Next fiscal year end: December 2014

Current fiscal month: 4

Target ROE: 15.07 %

Discount rate 13.63 %

Input for discount rate:

Risk-free rate: 3.52 % (April 17,22014 rate)

Beta: 1.69

Market risk premium: 9.50 %

Output

Above normal growth period chosen: 2016

The above normal growth period chosen was 2016, two years from now. The reason for this growth period is two fold. First, management is expecting to do restructuring within the next fiscal year 2014. Second, the mining industry is experiencing a slow down of growth. This is especially true for China, which has lowered the expected growth rate for its economy to 7.4% this year. CAT does a large portion of international business in China, and is affected by this growth slowing down. In addition, to the outlook in China, commodity prices are expected to drop in the next few years which will influence the growth for CAT. Should commodity prices decrease or devalue, then CAT will experience stagnation in growth.

EBO valuation (Implied price from the spreadsheet): $ 50.79

1) The fundamental valuation doesn't represent the price of CAT stock in the slightest. The 52-week range is between ~$ 79 and ~$ 103, and the implied price is $ 50.79. This is about half the current price of the stock (~$ 102). Even considering an extremely abnormal growth rate of 7 years the implied price only reaches $59.26. This does indicate according to this evaluation that the stock is overvalued.

2) A soft spot could be the beta for CAT (1.69); this is .5 greater than the industry average. If the industry average is used then implied price is closer $ 70, which is much closer to the 52-week low. Another possible soft spot are the earnings per share forecast. The management team for CAT and analysts continue to remain bearish for the EPS forecasts in the future, and demonstrate that the stock would be undervalued if they met the estimates. However, CAT has continued to beat earnings estimates, which could indicate that the EPS forecast was too low.

Sensitivity Analysis

1) The above normal growth rate was changed to six years or 2020; the implied price would be $ 59.26. This would be closer to the 52-week rage, but still significantly below that range. Changing the growth rate from the mean to the highest and lowest estimate, did note change the price too drastically. The lowest estimate caused the implied price to decrease by about one dollar, and the highest estimate caused the implied price to increase by

approximately one dollar. The discount rate seems to have the most effect on the price, because it caused the implied price to jump up to $ 71.26.

2) I did include a change to the beta from 1.69 to 1.10. This would increase the implied price to $ 70.51, and if the above normal growth period was to change as well then the implied price would be well within the 52-week range. The reason I chose 1.10 is because it is the industry average beta. Unfortunately, I do believe that the beta of 1.69 is more accurate because CAT has been a publically traded company for a long time. Generally, the longer a stock is traded the more accurate the beta will become.

EBO valuation would be:

<u>$ 59.26</u> if changing above normal growth period to <u>2020</u>

<u>$ 51.57</u> if changing growth rate from mean (consensus) to the highest estimate <u>15.34 %</u>

<u>$49.38</u> if changing growth rate from mean (consensus) to the lowest estimate <u>10.00 %</u>

<u>$ 71.26</u> if changing discount rate to <u>10.00 %</u>

<u>$ 50.79</u> if changing target ROE to <u>19.76 %</u>

<u>$ 70.51</u> if changing the beta to <u>1.10</u>

Section (D) Relative Valuation

Cougar Investment Fund Relative Valuation Template

Please download and save this template to your own storage device

You only need to input values to cells highlighted in "yellow"

The rest of the spreadsheet is calculated automatically

Please read "Stock Recommendation Guidelines" document carefully

CAT

	Ticker	Name	Mkt Cap	Current Price	Mean FY2 Earnings Estimate (next fiscal year)	Forward P/E	Mean LT Growth Rate	PEG	P/B (MRQ)	ROE 5 yr ave	Value Ratio	P/S TTM	P/CF TTM
1	DE	Deere & Co.	$ 34,530.14	$ 93.40	$ 7.67	12.18	8.00%	1.52	3.39	36.61%	0.09	0.91	7.24
2	JOY	Joy Global Inc.	$ 6,163.39	$ 61.55	$ 3.78	16.28	-9.17%	-1.78	2.26	33.99%	0.07	1.31	10.87
3	CMI.N	Cummins Inc.	$ 26,897.84	$ 146.28	$ 10.83	13.51	13.10%	1.03	3.64	24.87%	0.15	1.55	13.48
4	TEX	Terex Corp.	$ 4,676.69	$ 42.07	$ 3.66	11.49	22.49%	0.51	2.11	-3.25%	-0.65	0.66	13.13
	CAT	Caterpillar	$ 65,555.38	$ 102.83	$ 6.89	14.92	13.45%	1.11	3.15	28.37%	0.11	1.18	9.51
		Implied Price based on:				P/E		PEG	P/B		Value	P/S	P/CF
1	DE	Deere & Co.				$83.90		$141.06	$110.66		$85.76	$79.30	$78.28
2	JOY	Joy Global Inc.				$112.19		-$164.55	$73.78		$61.58	$114.16	$117.54
3	CMI.N	Cummins Inc.				$93.06		$95.55	$118.83		$135.55	$135.07	$145.76
4	TEX	Terex Corp.				$79.20		$47.36	$68.88		-$601.27	$57.52	$141.97
		High				$112.19		$141.06	$118.83		$135.55	$135.07	$145.76
		Low				$79.20		-$164.55	$68.88		-$601.27	$57.52	$78.28
		Median				$88.48		$71.46	$92.22		$73.67	$96.73	$129.75

1) The forward P/E for CAT is calculated to be 14.92. The PEG for CAT came to be 1.11, where as the high PEG for CAT's competitors was 1.52 (DE), and a low of -1.78 (JOY). The implied prices for P/E were in a range of $79.20 (TEX) to $112.19 (JOY). This seems to make sense when looking at the forward P/E for TEX of 11.49 and the forward PE of JOY at 16.28. These two firms had the lowest P/E TEX and the highest P/E JOY. When looking at the PEG implied price it does not seem right to include JOY in this part of the analysis for two reasons. First, the PEG ratio that JOY has from Reuters is negative, and the way this spreadsheet is set up, it will lead a negative implied price. That is why the implied price from JOY is -$164.5. So removing JOY from the PEG implied price we can see that the range is from $71.46 (TEX) to $141.06 (DE). I still think these numbers are inflated, when comparing CAT to these companies. The PEG ratio for all of these companies seems to be in a wide range of 1.52(CAT) to -1.78 (JOY). The only real comparison to make is the implied price from CMI which is $ 95.55. The P/B seems to have the smallest range in implied price which is $68.88 (JOY) to $118.83 (CMI). I believe that this is the best comparison to CAT since most all P/B ratios are within a smaller range of each other than any other ratio. The P/S and P/CF had extremely high implied prices, and an extreme range of implied prices. This indicates that the implied prices are not very comparable.

2) The only implied prices that yielded results within the 52-week range were within the P/E implied price. The low price in the P/E was $79.20, almost identical to the actual 52-week price of $ 79.49. The high implied price for the P/E ratio $112.19 was higher than the 52-week high of $ 103.72. Some of the outliers were found in the PEG ratio which I mentioned above, and the P/S and P/CF implied prices. The P/S outlier was from TEX which implied price was $57.53. The P/CF had three major outliers, which were $ 117.54 (JOY), $141.97 (TEX), and $145.76 (CMI).

3) Morning Star evaluated CAT at $ 97, which is within all of the ranges. The closest implied price found in this evaluating was from the CMI implied price using the PEG ratio which was $ 95.55.

4) This valuation is much more accurate than the Fundamental valuation. First, comparing the implied prices to the fundamental valuation the range is within the 52-week high and low. Second, the implied price from the fundamental valuation was very sensitive to multiple variables, specifically the beta, discount rate, and EPS. The relative valuation uses more variables to compare four firms within CAT's industry to determine an implied price.

Section (E) Revenue and Earnings Estimates

(E-1)

HISTORICAL SURPRISES

Sales and Profit Figures in US Dollar (USD)
Earnings and Dividend Figures in US Dollar (USD)

Estimates vs Actual	Estimate	Actual	Difference	Surprise %
SALES (in millions)				
Quarter Ending Dec-13	13,638.50	14,402.00	763.50	5.60
Quarter Ending Sep-13	14,351.40	13,423.00	928.42	6.47
Quarter Ending Jun-13	14,924.80	14,621.00	303.77	2.04
Quarter Ending Mar-13	13,828.80	13,210.00	618.77	4.47
Quarter Ending Dec-12	16,122.60	16,075.00	47.63	0.30
Earnings (per share)				
Quarter Ending Dec-13	1.28	1.58	0.30	23.48
Quarter Ending Sep-13	1.66	1.45	0.21	12.90
Quarter Ending Jun-13	1.70	1.45	0.25	14.57
Quarter Ending Mar-13	1.40	1.31	0.09	6.48
Quarter Ending Dec-12	1.69	1.46	0.23	13.64

CAT has a pattern of surprising analysts when it comes to both earnings and revenue. The revenue surprises overall are negative, however there is a positive surpise in the quarter that ended Dec-13 of 5.60 %. The earnings estimates are similar to the revenues estimates, where there was only one positive surprise in Dec of 2013. The surprises for earnings had a higher percentage surprise than revenue, but that is in part because the numbers are so low. For example, a change of 0.09 was a 6.48% surprise for earnings, but a 6% surprise for revenues requires a much larger jump in either direction (negative or positive). Looking at the stock price over the time period that has these historical surprises, it appears as though the price isn't affected. The only surprises that seem to have had an affect on the stock price were in February 2012, when the stock dipped. This makes sense because CAT's annual report is filed during that time. However, even when there were negative surprises it doesn't appear that the stock rises or falls with these published reports

(E-2)

CONSENSUS ESTIMATES ANALYSIS

Sales and Profit Figures in US Dollar (USD)
Earnings and Dividend Figures in US Dollar (USD)

	# of Estimates	Mean	High	Low	1 Year Ago
SALES (in millions)					
Quarter Ending Jun-14	14	14,503.90	14,950.00	13,904.00	18,585.30
Quarter Ending Sep-14	14	13,889.90	14,263.00	13,460.00	18,513.80
Year Ending Dec-14	17	56,301.00	57,253.00	55,440.10	68,257.00
Year Ending Dec-15	18	58,888.80	61,753.00	55,491.50	76,021.60
Earnings (per share)					
Quarter Ending Jun-14	18	1.54	1.72	1.37	2.39
Quarter Ending Sep-14	18	1.53	1.72	1.35	2.48
Year Ending Dec-14	21	5.92	6.25	5.70	8.97
Year Ending Dec-15	26	6.89	7.75	6.32	10.13
LT Growth Rate (%)	3	13.45	15.34	10.00	14.00

(1) The percent difference between the high estimate from the mean is 14.05%. **(2)** The percent difference between the low estimate from the mean is 25.65%. **(3)** The divergence for the revenue estimates for the quarter ending in June is smaller, than the divergence occurring between analysts for the quarter ending in September. The divergence between analysts is very close to the same in Quarters ending in June and September for earnings. The difference between analyst estimates is greater for FY2 for revenues. The divergence in FY2 seems to be greater for earnings than in FY1. The divergence between analysts is greater for earnings than for the revenue estimates. This is due to the smaller range than analysts have to estimate within. Earnings create a larger percent change for each increase or decrease in one tenth of an analyst's estimate. **(4)** There are significantly less analysts providing long term growth rate estimates. There are only 3 analysts providing this estimate where as there are 14 or more analysts estimating each segment.

(E-3)

CONSENSUS ESTIMATES TREND

Sales and Profit Figures in US Dollar (USD)
Earnings and Dividend Figures in US Dollar (USD)

	Current	1 Week Ago	1 Month Ago	2 Month Ago	1 Year Ago
SALES (in millions)					
Quarter Ending Jun-14	14,503.90	14,503.90	14,503.90	14,550.10	18,585.30
Quarter Ending Sep-14	13,889.90	13,889.90	13,889.90	13,861.20	18,513.80
Year Ending Dec-14	56,301.00	56,301.00	56,307.60	56,281.10	68,257.00
Year Ending Dec-15	58,888.80	58,888.80	58,884.00	58,755.40	76,021.60
Earnings (per share)					
Quarter Ending Jun-14	1.54	1.55	1.55	1.56	2.39
Quarter Ending Sep-14	1.53	1.53	1.53	1.53	2.48
Quarter Ending Dec-14	5.92	5.93	5.93	5.92	8.97
Quarter Ending Dec-15	6.89	6.88	6.88	6.89	10.13

Analyst estimates have been trending down in all areas from one year ago, for both earnings, revenues, for both quarters, FY1 and FY2. The trend seems to be most dramatic for FY2. While the quarter to quarter estimates have increased for both June and September in the recent months, they were downgraded from a year ago significantly.

(E-4)

ESTIMATES REVISIONS SUMMARY

	Last Week		Last 4 Weeks	
Number Of Revisions:	**Up**	**Down**	**Up**	**Down**
Revenue				
Quarter Ending Jun-14	0	0	0	0
Quarter Ending Sep-14	0	0	0	0
Year Ending Dec-14	0	0	0	1
Year Ending Dec-15	0	0	1	1
Earnings				
Quarter Ending Jun-14	0	0	2	0
Quarter Ending Sep-14	0	0	1	0
Year Ending Dec-14	0	0	1	0
Year Ending Dec-15	1	0	2	1

Review the number of analysts revising up or down their estimates (both revenue and earnings) in the last and last four weeks. There have been ten revised estimates in the last four weeks and only one revised estimate in the last week. The last four weeks has estimates trending mostly up, with the exception being year end FY1 for revenue and FY2 year end for both earnings and revenue. The more notable increase has been for earnings with one analyst upgrading CAT's earnings estimate for FY2 year end. The increases in earnings are most likely from the tax breaks that CAT has been receiving, which was mentioned during the last earnings conference call. Also, the last four week upgrades and two downgrades are most likely in revision to the next earnings report that will be released on April 24, 2014.

(E-5) ***"Consensus Earnings Revisions"*** **from** ***CNBC***

Revision Date	**Revision Type**	**Revision Up/Down**	**Current**	**Previous**	**% Change**	**# of Analysts Reporting**
Most recent revision date						
April 17, 2014	Down	2/2	$ 1.23	$ 1.25	1.36 %	18
Earliest revision date in the last month						

1) The most recent earnings was February 18, 2014 and the next earnings date is April 24, 2014.

2) The only revision was on the 17th of April, which is near the next earnings date.

3) No the greatest revision was 1.36%.

4) N/A

5) The most recent revision was last Friday, and it was a downgrade. This is a bearish indicator, even though the stock price did not seem to be affected by the revision. The issue is the next earnings report is coming out in less than a week, and if analyst sentiment is bearish and earnings beat estimates then the stock price could go up, but if earnings misses estimates, it could be very detrimental to CAT's stock price.

Section (F) Analysts' Recommendations

(F-1) Reuters Most Recent Three Months Analysts Recommendations

ANALYST RECOMMENDATIONS AND REVISIONS

1-5 Linear Scale	Current	1 Month Ago	2 Month Ago	3 Month Ago
(1) BUY	5	5	4	4
(2) OUTPERFORM	5	5	5	5
(3) HOLD	16	16	15	15
(4) UNDERPERFORM	0	0	0	0
(5) SELL	0	0	0	0
No Opinion	0	0	0	0
Mean Rating	2.42	2.42	2.46	2.46

1) There haven't been any analysts changing their recommendation over the last three months. However, one month ago two additional analysts started reporting on CAT. Their recommendations were a hold and a buy, which is semi-bullish.

2) CAT currently has a mean rating of 2.42, received a mean rating of 2.42 one month ago, received a mean rating of 2.46 two months ago, and received a mean rating of 2.46 three months ago.

3) Most analysts are recommending a hold position. There are 5/26 analysts recommending a buy and 5/26 analysts recommending an outperform.

4) **(1)** Mornings Star's research report is very bearish, and the recommendation for CAT is a hold position. Morning Star's position is due to the conditions in China, specifically the lack of growth seen in the last year. China has slowed down significantly in the recent years, making it unlikely the CAT will have rapid growth in the near future. **(2)** The nasdaq analysts are recommending a hold/buy position. Of the 20 analysts reporting 8 suggest a strong buy and 12 suggest a hold.

5) Majority of the analysts that are reporting on CAT are recommending a hold/buy position. This is a bullish indication for CAT stock. However, it seems that the analyst recommendations have not changed for the last three months when the stock was valued well below the current price.

(F-2) Most Recent One Month Analysts Upgrades/Downgrades from CNBC

Go to http://www.cnbc.com/, *"news", "earnings", "calendar", "upgrades"* and *"downgrades"*. Look for whether your stock was up- or down-graded by one or more analysts today. Copy/paste the information to the following table if any. Go back one day, copy/paste the information if there was (were) upgrades or downgrades. Repeat the process back one month. Add rows to the table if needed.

Revision Date	**Current Recommendation**	**Previous Recommendation**	**Firm**	**Last Revision**
Most recent revision date				
Earliest revision date in the last month				

1) The most recent earnings was February 18, 2014 and the next earnings date is April 24, 2014.
2) **N/A**
3) **N/A**
4) **N/A**
5) There weren't any upgrades or downgrades within the last month for CNBC.

Section (G) Institutional Ownership

CAT				
Ownership Activity	**# of Holders**	**% Beg. Holders**	**Shares**	**% Shares**
Shares Outstanding			429,734,996	100.00%
# of Holders/Total Shares Held/% Shares	1,486	100.34%	409,494,478	95.29%
# New Positions	14	0.95%		
# Closed Positions	9	0.61%		
# Increased Positions	72	4.86%		
# Decreased Positions	109	7.36%		
Beg. Total Inst. Positions	1,481	100.00%	409,171,225	95.21%
# Net Buyers/3 Mo. Net Chg	-37	39.78%	323,253	0.08%

Ownership Information	**% Outstanding**
% Institutional Ownership	NA
Top 10 Institutions % Ownership	35.92%
Mutual Fund % Ownership	27.56%
5%/Insider Ownership	0.55%
Float %	89.00%

> 5% Ownership Holder Name	% Change	% Outstanding	Report Date
State Street Corp	-1.71%	10.51%	12/31/2013
Vanguard Group, Inc.	0.88%	5.40%	12/31/2013
BlackRock Advisors LLC	NA	4.71%	1/31/2014
Capital World Investors	14.46%	4.26%	12/31/2013

Combine information provided in all three sections to discuss:

1) The institutional ownership has been increasing dramatically for Capital World Investors, and has decreased for State Street. The total net change in buyers over the last three months according to Reuters is -37. This is not very high when compared to the total number holders.

2) CAT has 35.92% top 10 institutions owning their stock. This isn't a very large number, and indicates the large institutions are not necessarily attracted to CAT.

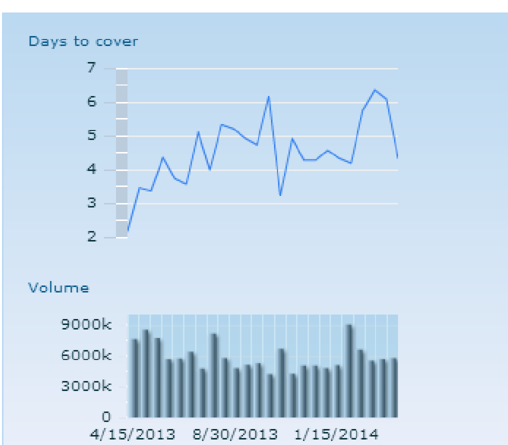
3) The firms that hold > %5 ownership are not mutual funds. Mutual funds are holding less than 2% ownership.

4) Institutional ownership seems to be rather low except for State Street. This is a bullish indicator, but they have decreased their position by 1.71% which makes it bearish. Overall, institutional ownership for CAT seems to be a bearish indicator. CAT hasn't attracted large institutional ownership, and has very low amounts of mutual fund involvement.

Section (H) Short Interest

(H-1) Short Interest Data from http://www.nasdaq.com/ (NASDAQ's website)

Settlement Date	Short Interest	Avg Daily Share Volume	Days To Cover
3/31/2014	24,940,659	5,773,788	4.319635
3/14/2014	34,629,924	5,687,115	6.089190
2/28/2014	34,885,850	5,489,610	6.354887
2/14/2014	38,021,999	6,616,732	5.746341
1/31/2014	37,822,319	9,037,051	4.185250
1/15/2014	21,999,905	5,073,898	4.335898
12/31/2013	21,898,290	4,791,293	4.570434
12/13/2013	21,609,004	5,049,673	4.279288
11/29/2013	21,459,719	5,017,876	4.276654
11/15/2013	20,817,869	4,241,041	4.908670
10/31/2013	21,465,854	6,671,908	3.217349
10/15/2013	25,990,264	4,207,143	6.177652
9/30/2013	24,768,139	5,234,721	4.731511
9/13/2013	25,129,267	5,107,880	4.919706
8/30/2013	24,846,350	4,776,746	5.201522
8/15/2013	30,829,605	5,774,361	5.339051
7/31/2013	32,602,161	8,168,046	3.991427
7/15/2013	24,290,352	4,754,956	5.108428
6/28/2013	22,861,722	6,403,429	3.570231
6/14/2013	21,439,508	5,753,963	3.726042
5/31/2013	24,693,584	5,670,294	4.354904
5/15/2013	26,015,607	7,720,254	3.369786
4/30/2013	29,556,976	8,547,526	3.457957
4/15/2013	16,558,498	7,614,993	2.174460



(H-2) Short Interest Data From http://finance.yahoo.com/

Copy/paste required data from the *"share statistics" table* to the following table for (1) your stock, and (2) two competitors (in separate tables).

Avg Vol (3 month)	Avg Vol (10 day)	Shares Outstanding	Float
6,349,670	4,797,740	637.82M	636.04M
Shares Short (Mar 31, 2014)	**Short Ratio (Mar 31, 2014)**	**Short % of Float (Mar 31, 2014)**	**Shares Short (2 weeks prior)**
24.94M	4.40	4.30	34.63M

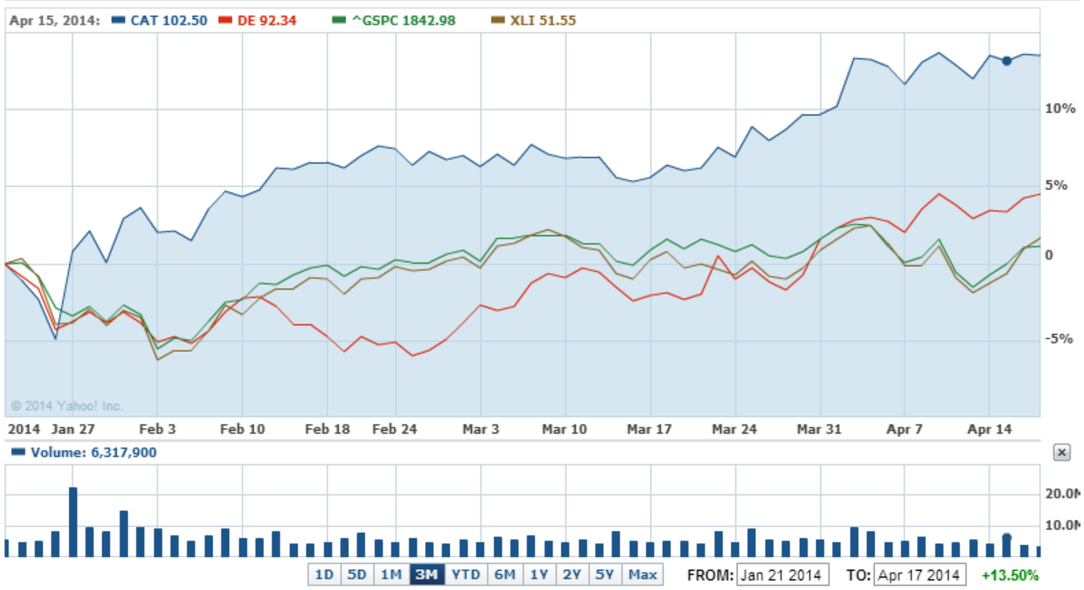
1) The most recent earnings report was February 18, 2014 and the next earnings date is April 24, 2014.
2) Market sentiment over the last year has been bullish to bearish, depending on the season when analyzing the data. The market seems to have started very bullish for CAT since last year, and since have moved to a very bearish position. In the last month you can see that the short interest positions have decreased rather significantly. If you look at the month of February you can see that the short interest positions increased dramatically. This is most likely a response to the bearish indicators that were released with the annual earnings report. Looking at the data from yahoo finance, it is clear that the market has been shifting short positions. The decrease in short positions is most likely due to the increase in demand for mining equipment across the globe.
3) The days to cover spiked right before the annual earnings report was released in February. The highest days to cover was 6.35 on February 28, 2014, which was only a week an a half from the filing from the earnings report. I believe that this was in response to the announcement of a restructuring year for CAT, investors became bullish. The stock price does not seem to have been affected by the short positions. In fact it appears to have had an inverse reaction to the shorting positions (price increased).
4) The days to cover and total short positions have decreased over the last month and a half. This is a bullish indicator, but not a strong one. The days to cover is till above 4, and the total short positions is above 20 million. This is much higher than last year at the same time, and looking to the future it doesn't seem as though the number of short positions will return to its year time low. The short

positions do not seem to have a strong correlation with the stock price. The stock price has only increased since the short positions increased, which is most likely why the total number of short positions and the days to cover has decreased in the last two months.

Section (I) Stock Charts

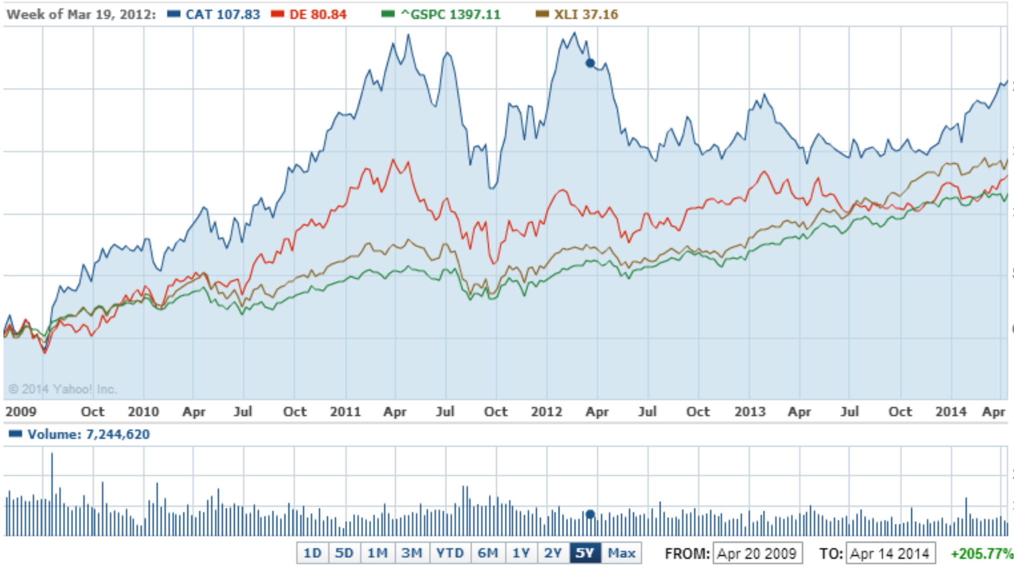
For (I-1) – (I-3), the stock price charts should include (1) your stock, (2) 1 competitor, (3) sector ETF, and (4) SP500

(I-1) A three months price chart



(I-2) A one year price chart

(I-3) A five year price chart



1) The three month price chart indicates that CAT has outperformed Deere, the industrial ETF, and the S&P 500. Most likely the reason for this performance is the increased demand that the mining industry has had in the last two months. This is a very good indication that the stock has had strong recent performance that could continue in the future. When observing the one year chart CAT doesn't perform as well as the three months chart. CAT does outperform Deere and the S&P, but CAT fails to outperform the sector ETF. It is important to note that CAT did have a 27% return in the last year, and the ETF had a total return of ~30% on the year. Keeping pace with a 30% return is a bullish indicator, especially since the previous year was a rough one for CAT. The five year chart shows CAT outperforming the S&P, ETF, and Deere. The five year chart is very bullish indicating that CAT outperformed its competitor by about 50 %.
2) While these charts are rather bullish indicators it is important to note why CAT had such a massive return in the last five years. CAT's price dropped to below $ 35 immediately after the recession, and had to climb out of that hole. The price dipped again in 2010 due to a poor mining acquisition in China. The firm that CAT acquired had falsified its accounting books, and thus CAT overpaid. This dropped CAT's price again, but they recovered. CAT's stock price continues to go up despite set backs, and continues to grow despite poor performance.

(I-4) Technical Indicators ("Moving Average" and "Relative Strength Index" from http://finance.yahoo.com/)

Six-Month Moving Average:

Two-Year Moving Average:

1) The six month moving average has one death cross and one golden cross, and the RSI value remaining above 40. The death cross occurred in November of 2013, this was most likely because of a lawsuit that started around this time. CAT had avoided paying $2.4 billion in taxes, and this lawsuit has only recently started to finish. The golden cross occurred in mid-December. This is a bullish indicator, suggesting a strong buy, and since then the moving average lines haven't crossed and growth has remained positive. The RSI The two-year moving average had two death crosses, and three golden crosses. The most recent golden

cross happened in December, and has remained above the 200 day moving average. The first death cross occurred in June of 2012. The golden cross associated with the first death cross did not occur until the beginning of February. Most likely this was analyst bullish sentiment, before the down grades occurred in March of 2013. The next death cross occurred in April of 2013, and the 200 day remained above the 50 day until December.

Works Cited

Earnings Release 2012-2013:
http://www.caterpillar.com/en/investors/quarterly-results.html

CAT Earnings Report Q4 2013:
http://s7d2.scene7.com/is/content/Caterpillar/C10085836

CAT 10-k
http://investing.businessweek.com/research/stocks/financials/drawFiling.asp?docKey=136-000001823014000058-2F3F9RNRJTJNF8KH0UHT6304S7&docFormat=HTM&formType=10-K#s13F2F8839847895C9DFB24FFA4F30908

Reuters - Caterpillar Tax Evasion
http://www.reuters.com/article/2014/04/01/us-usa-tax-levin-hearing-idUSBREA3025020140401?type=companyNews

NYTimes- First Quarter China Reports
http://www.nytimes.com/2014/04/16/business/international/growth-rate-rose-7-4-in-1st-quarter-china-reports.html?_r=0

NYTimes- Caterpillar Workers Ratify deal They Dislike
http://www.nytimes.com/2012/08/18/business/striking-caterpillar-workers-ratify-contract-offer.html?_r=0

Chicago Tribune- Caterpillar Mining Equipment Sales take a Hit in 2014
http://articles.chicagotribune.com/2014-01-28/business/ct-caterpillar-forecast-0128-biz-20140128_1_peoria-based-caterpillar-caterpillar-ceo-doug-oberhelman-caterpillar-inc

Morning Star Direct
http://www.morningstar.com/

Nasdaq Short Interest
http://www.nasdaq.com/symbol/cat/short-interest

MSN Money Institutional Ownership
http://investing.money.msn.com/investments/mutual-fund-ownership?symbol=CAT

CNBN Earnings Central
http://www.cnbc.com/id/15906175

T-Bill Rate
http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield

Yahoo Financial Charts
http://finance.yahoo.com/

Reuters
http://www.reuters.com/