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Safe & Cheap

Moon Li

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Safe & Cheap

A Capstone Project Submitted in Partial Fulfillment of the Requirements of the Renée Crown University Honors Program at Syracuse University

> Moon Li & Brian Burrow Candidates for B.S and Renée Crown University Honors April 2009

Honors Capstone Project in	<u>Finance</u>
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	(Fernando Diz)
Honors Reader:	
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	Samuel Gorovitz
Date:	
Dato.	

ABSTRACT

Summary

Our project bundles investment research reports spanning the authors' time in the Orange Value Fund (OVF), a student run hedge fund in the Whitman School of Management. Each report exemplifies the fund's unique, bottoms-up investment style. In contrast to traditional valuation methods that focus exclusively on projecting company earnings, the OVF adopts a micro-level approach to analyzing investment opportunities. Analysts study company documents such as annual reports, credit agreements, and proxy statements to identify safe and cheap opportunities.

Safe

A safe company has access to capital markets, a super-strong financial position, honest and competent management, and an understandable business. We define strong finances as the absence of liabilities and presence of high quality assets on the balance sheet. OVF analysts look for marketable assets such as income producing real estate, cash, and natural resources such as oil and gas reserves. Honest and competent management protects and enhances long-term shareholder value. Managers should focus on long-term wealth creation instead of short-term stock price fluctuations. In addition, we do not invest in businesses that require continual access to capital markets. Businesses that need daily short-term financing to fund operations fare poorly when credit dries up. Finally, we avoid businesses we don't understand.

Cheap

A business must be cheap to be considered for investment. Businesses are cheap when their stock price trades at a substantial discount to intrinsic value. We look for wide margins between 30% and 50% between market price and intrinsic value to shield against analyst mistakes. We prefer to be approximately right rather than exactly wrong.

OVF analysts use several valuation methods to determine intrinsic value. Generally, we prefer to use valuation methods that minimize assumptions. For example, we value real estate companies using Net Asset Value (NAV), which is the intrinsic value of assets less liabilities. We use market capitalization rates and sales data to determine asset values. In other industries, such as oil exploration and production, we value natural resource reserves based on industry merger and acquisition activity. We may also apply a multiple to normalized adjusted earnings before interest, taxes, depreciation, and amortization (EBITDA) after subtracting capital expenditures (CAPEX).

Closing Thoughts

Due diligence in difficult economic times is important and the OVF's investment style positions us to profit from incredible opportunities with minimal investment risk.

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Investment Research Report



By Moon Li

February 13, 2009

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ORIGINATION OF IDEA

CREE Inc. (CREE) is a current holding of the Orange Value Fund. We thought it is necessary to value the company in the context of a deteriorating credit market to determine whether it is still "safe and cheap."

VALUATION DATA

Exhibit C - 1

(in thousands, except per share	
data)	
Exchange	NASDAQ
Headquarters	North Carolina
Shares authorized	200,000
Basic Shares Outstanding	88,057
Diluted Shares Outstanding	88,511
52 Week High	35.50
52 Week Low	12.57
Current stock price	21.84
Market Capitalization	1,933,080
Value of Assets	1,027,628
Value of Liabilities	98,546
Private Value of Equity (PVE)	929,082
GAAP EBITDA	127,218
Adjusted EBITDA	128,265
EBITDAR	130,693
Total Assets	1,306,499
Total Current Liabilities	79,663
Total Long-term Liabilities	50,169
Book Value (Equity Value)	1,176,667
Price/Book Value	1.64
Price/EBITDA	15.20
Price/Adjusted EBITDA	15.07

Price/EBITDAR 14.79

ANALYST RECOMMENDATION

I recommend holding the common equity of CREE. Under both Net Asset Value and Discounted Cash Flow analysis, CREE has a fair value per share of \$13, which is lower than its current stock price. Although the Company's stock price is trading at a premium, I recommend holding Cree and examining if the acquisition of COTCO brings value to the Company as a whole by reducing cost of sales and increasing cash from operations. The Company has a strong cash position, but its cash generated from operations is weakening due to current financial crisis. Thus, reducing cost of sales is essential for Cree to continue competing in its industry.

INVESTMENT POSITIVES

As one of the major players in the LED industry, Cree remains stable and sound in its financial position. The Company adopted FAS 131 and has complete segment disclosure. Having Earnst & Young as independent auditor with an unqualified opinion on the financial statements, the Company's statements are free of material misstatements. The Company has a strong cash position. Having a cash ratio of 2.43, the company can get through the low point of its cycle. Cree's focus on international sales may be a good strategy since the US dollar is relatively weak. With over 50% of the company operating in Asia, and only 18% in United States, it gave the company an edge in avoiding the recent market slowdown in United States. The strategic acquisition of COTCO may potentially

reduce manufacturing costs and which may increase the gross margin of its products. The company has no debt except a small amount of contractual obligations.

INVESTMENT NEGATIVES

Although the Company remains profitable during this economic downturn, the Company's operating profit margin has been shrinking significantly over the past 4 years. Thirty-four percent of the Company's revenue comes from three major customers – Sumitomo, Seoul Semiconductors and Light Engine. This could reduce the company's profit margin if these three customers exercise their bargaining power. Relying on single or few vendors could also reduce the company's profit margin due to the vendor's bargaining power. Vendors could increase the price of their supplies and reduce the company's profit margin.

COMPANY DESCRIPTION

Cree, Inc. develops and manufactures LED products, SiC and GaN materials products, and power and RF products based on silicon carbide (SiC), gallium nitride (GaN) and related compounds. LED products include LED chips, LED components and LED lighting solutions. The majority of Cree, Inc. products are manufactured at its main production facility in Durham, North Carolina. Although the Company has three revenue sources – Products, Contracts, and Upfront Licensing Fees, it only has one reportable segment, which is the products segment as it generates 93% of the total revenues. Up-front Licensing fees are a

new revenue source in 2009, where there is a high gross margin of 91%. Thirty-four percent of the Company's revenue comes from three major customers – Sumitomo, Seoul Semiconductors and Light Engine. Geographically, 72% of the revenues come from countries in Asia. Eighteen percent of revenues came from the United States (Cree Inc, 2008).

Listed below are three major acquisitions the Company made in recent years. On February 29, 2008, the Company acquired LED Lighting Fixtures, Inc. (LLF) and renamed it as Cree LED Lighting Solutions, Inc. On March 30, 2007, the Company acquired COTCO Luminant Device Limited (COTCO), and renamed it as Cree Hong Kong Limited (Cree Inc, 2008). Current subsidiaries are listed in the Appendix.

Recent Acquisitions

Exhibit C - 2

Old Names	New Names
LED Lighting Fixtures, Inc.	Cree LED Lighting Solutions, Inc.
COTCO Luminant Device	Cree Hong Kong Limited
Limited	
INTRINSIC Semiconductor	Cree Dulles, Inc. (Now merged into
Corporation	Cree, Inc.)
(Cree Inc, 2008)	

NET ASSET VALUE (NAV) ANALYSIS

Trailing Twelve Month (TTM) Data

The Company's fiscal year ends in June. Thus, the trailing twelve month (TTM) data included all four quarters in 2008, which can be calculated as below.

Exhibit C - 3

Fiscal year ended in June	А		B (Note a)	С	D=A+B+C
	3 months ended		3 months ended	6 months ended	2008 TTM
In thousands	March, 2008		June, 2008	December, 2008	2000 I I WI
Operating Income (EBIT)	7,449		5,296	16,208	28,953
+ Depreciation & Amortization	24,970	(Note b	24,599	48,696	98,265
EBITDA	32,419		29,895	64,904	127,218
+ Loss on asset disposal	***_35		719	1,050	1,769
- Gain on asset disposal	722		-		722
Adjusted EBITDA	31,697		30,614	65,954	128,265

(Notes a and b are listed in the Appendix)

Net asset value of a company is calculated by subtracting long-term liabilities from the asset value. Asset value includes going concern value and resource conversion value. The going concern value is essentially the fixed-multiple enterprise value, which applies a multiple to the adjusted EBITDA or the adjusted EBITDAR in this case. EBITDAR is a more accurate proxy for Cree than EBITDA for calculating free cash flow because a significant portion of Cree's capital assets are rented or leased. The resource conversion value is based on the value of separate and salable assets, including excess cash, deferred tax assets, short-term and long-term investments, assets of discontinued operations and etc.

Exhibit C - 4

		2008 TTM	
In thousands	4x	6x	8x
Value of Assets			
NAVgoing concern			
Operating Income (EBIT)	\$ 28,953	\$ 28,953	\$ 28,953
+ Depreciation & Amortization	98,265	98,265	98,265
EBITDA	127,218	127,218	127,218
+ Loss on asset disposal	1,769	1,769	1,769
- Gain on asset disposal	722	722	722
Adjusted EBITDA	128,265	128,265	128,265
+ Rent	2,428	2,428	2,428
EBITDAR	130,693	130,693	130,693
x Multiple	4x	6x	8)
Fixed-Multiple Enterprise Value (FMEV)	522,772	784,158	1,045,544
NAVres ource conversion			
+ Excess Cash (Note d)	68,647	68,647	68,647
+ Deferred income tax, net	3,854	3,854	3,854
+ Short-term investments	126,956	126,956	126,956
+Long-term Investments	43,325	43,325	43,325
+ Assets of discontinued operations, net (Note g)	688	688	688
+ Assets that can be sold and lease back	0	0	0
Value of Assets	\$ 766,242	\$ 1,027,628	\$ 1,289,014

(*Notes d and g are listed in the Appendix*)

I evaluate the value of liabilities in two different scenarios based on the treatment of contingent liabilities related to acquisitions. The Company has paid \$60 million to the former shareholder of COTCO at the end of 2008, as COTCO reached the required EBITDA target for fiscal 2008 upon agreement. The Company is currently obligated to pay \$4.4 million to the former shareholders of LLF based on the Company management's review of the status of certain defined product development targets. The Company has chosen to pay in cash for both \$60 million and \$4.4 million contingent liabilities. In 2009, if both COTCO and LLF met the criteria again, the Company will be obligated to pay \$65 million to the former shareholder of COTCO, and \$21.9 million to the former shareholder of

LLF. If the Company chooses to pay in cash again, that may be an indication of its strong cash position and unwillingness of giving out shares at a discount. If the Company chooses to pay in common shares, the shares outstanding will increase and shareholders' ownership will be diluted. Either choice will have an impact of the valuation of net asset value per share, as listed below. Scenario 1 assumes these two contingent liabilities are paid in cash, while scenario 2 assumes paid in common shares.

Scenario 1 *Assuming contingent liabilities related to acquisitions are paid in <u>cash</u>*

Exhibit C - 5

Value of Liabilities					
- Long-term Debt	\$	-	\$ -	\$	-
- Capital lease obligations		-	-		-
- Operating lease obligations		3,376	3,376		3,376
- Purchase obligations		3,870	3,870		3,870
- Litigation loss estimates		-	-		-
- Contingent liabilities related to LLF acquisition for 2008		4,400	4,400		4,400
- Contingent liabilities related to LLF acquisition for 2009*		21,900	21,900		21,900
- Contingent liabilities related to COTCO acquisition for 2009*		65,000	65,000		65,000
- Minority Interest		-	-		-
Value of Liability	\$	98,546	\$ 98,546	\$	98,546
Private Value of Equity (PVE)	\$	667,696	\$ 929,082	\$ 1	1,190,468
Diluted shares outstanding		88,511	88,511		88,511
Net Assets Value (NAV) per share	\$	7.54	\$ 10.50	\$	13.45
Current stock price	\$	21.52	\$ 21.52	\$	21.52
Premium / (Discount)	·	185.27%	105.01%		60.00%

^{*} Assuming contingent liabilities related to acquisitions are paid in cash

Scenario 2 *Assuming contingent liabilities related to acquisitions are paid in <u>common shares</u>*

Exhibit C - 6

Value of Liability					
- Long-term Debt	\$ -	\$	-	\$	-
- Capital lease obligations	-		-		-
- Operating lease obligations	3,376		3,376		3,376
- Purchase obligations	3,870		3,870		3,870
- Litigation loss estimates	-		-		-
- Contingent liabilities related to LLF acquisition for 2008	4,400		4,400		4,400
- Minority Interest	-		-		-
Value of Liability	\$ 11,646	\$	11,646	\$	11,646
Private Value of Equity (PVE)	754,596	1	,015,982	1	,277,368
Diluted shares outstanding	88,511		88,511		88,511
Contingent liabilities related to LLF acquisition for 2009*	\$ 21,900	\$	21,900	\$	21,900
Contingent liabilities related to COTCO acquisition for 2009*	\$ 65,000	\$	65,000	\$	65,000
Shares outstanding increased if paid LLF in common shares*	1,018		1,018		1,018
Shares outstanding increased if paid COTCO in common shares*	3,020		3,020		3,020
Adjusted Diluted shares outstanding	92,549		92,549		92,549
Net Assets Value (NAV) per share	\$ 8.15	\$	10.98	\$	13.80
Current stock price	\$ 21.52	\$	21.52	\$	21.52
Premium / (Discount)	163.94%		96.03%		55.92%

^{*} Assuming contingent liabilities related to acquisitions are paid in common shares. Cree's current stock price is used to calculate shares outstnading increased.

Based on the valuation, if the Company pays the future contingent liabilities related to acquisitions by cash, the Company's Net Asset Value for a 4x multiple is \$12.39 per share, which is relatively lower than the alternative, which has a Net asset value of \$12.80 per share. However, considering the Company's strong cash position, it may be better off paying in cash instead of diluting the shareholders' ownership. Either case, the Company's stock price is trading at a huge premium. The contingent liabilities amount related to acquisitions are not

material compared to the Company's cash position. However, since the Company's cash position increased significantly over the past three years, further analysis is needed to figure out where the most cash is coming from and if the Company is solvent in terms of liquidity.

DISCOUNTED CASH FLOW (DCF) ANALYSIS

Exhibit C - 7

Fiscal Year	2004	2005	2006	2007	2008
Number of weeks	52	52	52	52	52
in thousands					
Net Sales	\$299,641.0	\$384,458.0	\$422,952.0	\$394,121.0	\$493,296.0
% Growth		28.3%	10.0%	-6.8%	25.2%
EBITDA	\$145,751.0	209,690.0	176,266.0	105,589.0	112,527.0
% Growth		43.9%	-15.9%	-40.1%	6.6%
% Margin	48.64%	54.54%	41.68%	26.79%	22.81%
Operating profit (EBIT)	90,187.0	139,972.0	101,908.0	20,920.0	13,247.0
% Growth		55.2%	-27.2%	-79.5%	-36.7%
% Margin	30.10%	36.41%	24.09%	5.31%	2.69%
Tax rate	31.3%	26.6%	28.8%	1.8%	22.5%
NOPAT	61,990.5	102,716.5	72,519.1	20,544.3	10,266.1
Depreciation and amortization	55,564.0	69,718.0	74,358.0	84,669.0	99,280.0
% Growth		25.5%	6.7%	13.9%	17.3%
% Margin	18.54%	18.13%	17.58%	21.48%	20.13%
Change in WC providing/(requiring) cash	10,592.0	(28,295.0)	(21,678.0)	(22,253.0)	(25,755.0)
Operating Cash Flows	128,146.5	144,139.5	125,199.1	82,960.3	83,791.1
Capex - Additions to PP&E	77,280.0	141,820.0	77,260.0	82,604.0	55,741.0
Capex/D&A	-1.39x	-2.03x	-1.04x	-0.98x	-0.56x
Capex % of sales	-25.8%	-36.9%	-18.3%	-21.0%	-11.3%
Unlevered FCF	205,426.5	285,959.5	202,459.1	165,564.3	139,532.1
Discount Rate (WACC)	9.7%				
Projection Year					
Discount Factor 1/((1+VVACC)^Protection Year)					
Present Value of Free Cash Flows (Unlevered FCF)					
Yoy % change in FCF					

Exhibit C-7 shows how much unlevered free cash flow Cree generated in the past 5 years. Exhibit C-8 is a discounted cash flow model that shows how much unlevered free cash flow Cree is likely to generate in the future years based on the assumption of low and continuously declining growth.

Exhibit C - 8

· ·	Forward Estimates				Lo	ng Term For	ward Estimate	S	Terminal Year	
Fircal Year	2009	2010	2011	2012	2013	2014	2015	2016		
Number of useks In thousands	52	52	52	52	52	52	52	52		
In mousands										
Net Sales	\$591,955.2	\$692,587.6	\$796,475.7	\$915,947.1	\$970,903.9	\$1,029,158.1	\$1,090,907.6	\$1,156,362.1		
% Growth	20.0%	17.0%	15.0%	15.0%	6.0%	6.0%	6.0%	6.0%		
EBITDA	102,436.0	95,636.1	87,983.4	79,297.2	81,802.2	84,388.6	87,059.2	89,816.9		
% Growth	-9.0%	-6.6%	-8.0%	-9.9%	3.2%	3.2%	3.2%	3.2%		
% Margin	17.30%	13.81%	11.05%	8.66%	8.43%	8.20%	7.98%	7.77%		
Operating profit (EBIT)	10,042.8	12,245.5	9,881.3	6,301.9	6,617.0	6,947.9	7,295.3	7,660.0	7,889.9	
% Growth	-24.2%	21.9%	-19.3%	-36.2%	5.0%	5.0%	5.0%	5.0%	3.0%	
% Margin	1.70%	1.77%	1.24%	0.69%	0.68%	0.68%	0.67%	0.66%		
Tax rate	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	
NOPAT	7,732.9	9,429.0	7,608.6	4,852.5	5,095.1	5,349.9	5,617.4	5,898.2	6,075.2	
Depreciation and amortization	92,393.3	83,390.6	78,102.1	72,995.3	75,185.1	77,440.7	79,763.9	82,156.8	82,156.8	
% Growth	-6.9%	-9.7%	-6.3%	-6.5%	3.0%	3.0%	3.0%	3.0%		
% Margin	15.61%	12.04%	9.81%	7.97%	7.74%	7.52%	7.31%	7.10%		
Change in WC providing/(requiring) cash	(26,821.4)	(27,857.4)	(29,000.7)	(33,506.8)	(33,506.8)	(33,506.8)	(33,506.8)	(33,506.8)	(33,506.8)	
Operating Cash Flows	73,304.8	64,962.2	56,710.0	44,340.9	46,773.4	49,283.7	51,874.5	54,548.2	54,725.2	
Capex - Additions to PP&E	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	
Capex/D&A	-0.54x	-0.60x	-0.64x	-0.68x	-0.67x	-0.65x	-0.63x	-0.61x	-0.61x	
Capex % of sales	-8.4%	-7.2%	-6.3%	-5.5%	-5.1%	-4.9%	-4.6%	-4.3%		
Unlevered FCF	123,304.8	114,962.2	106,710.0	94,340.9	96,773.4	99,283.7	101,874.5	104,548.2	104,725.2	
Discourt Pate (VACC)	9.72%	9.72%	9.72%	9.72%	9.72%	9.72%	9.72%	9.72%		
Discount Rate (VACC)	3.12%	9.72%	3.72%	5.72%	9.72% 5	9.72%	3.12%	3.72%		
Projection Year	0.01	_	-	و م	-	-	0.50	6 40		
Discount Factor 1/((1+WACC)***********************************	0.91	0.83	0.76	0.69	0.63	0.57	0.52	0.48		
Present Value of Free Cash Flows (Unlevered FCF)	112,381.7	95,496.4	80,789.0	65,097.4	60,860.4	56,907.9	53,220.1	49,778.6		
Yoy % change in FCF		-15.0%	-15.4%	-19.4%	-6.5%	-6.5%	-6.5%	-6.5%		

Exhibit C - 9

Assumptions					
Long term sales growth	6.00%				
Operating Leverage in LT Projections (if any)	-1.00%				
Long term growth rate in EBIT	3.00%				

Discount Rate (VACC) Vorksheet	
Public Market Price/Share	\$21.52
Diluted Shares O/S (TS Method)	87,044.3
Public Market Capitalization	1,873,193.0
Debt 2008A	0.0
Cash 2008A	261,633.0
Net Debt 2008A	0.0
Public Market Enterprise Value	1,873,193.0
Eł(D+E) @ Public Mkt Value	100.00%
D/(D+E) @ Public Mkt Value	0.00%
DI(DVE) @ 1 abilo 14 ik. Yalde	0.00/1
Avg. Pretaz Int.Exp. (Annual.) 2002A	0.00%
Marginal Tax Bate	35.0%
Cost of Equity= rf+beta(Rm-Rf)	9.72%
Risk Free rate: Rf	0.23%
Unlevered Beta	0.48
Risk premium (Rm-Rf)	19.77%
VACC=E/(D+E)" Re+ D/(D+E)"Rd(1-T)	9.72%

Current Share Price	•	\$21.52			
Actual Basic Share	· Count	86366.0			
Date of Share Cou	nt	6/24/2008			
Source of share oc	runt	2008 10K			
Options Data	D	ate:	6/24/2	008 Source:	2008 10
	<u>Options</u>	Strike	In the \$?	Include?	Proceeds
0.01 to 18.49	1795	\$14.06	Yes	1,795	\$25,237.
18.50 to 25.31	1675	\$20.80	Yes	1,675.00	\$34,840.
25.32 to 31.00	1954	\$27.21	No	0.000	\$0.
31.01 to 34.00	1556	\$31.26	No	0.000	\$0.
34.01 to 71.53	1887	\$44.68	No	0.000	\$0.
Total	8867			3,470	\$60,077.7
				Actual avg strike price	\$17.3
Basic Shares Outst	anding				86366
Fully Diluted Shares	Outstanding				88077
Fully Diluted Shares	Outstanding (1	Freasury Stock Met	hod)		87044

Exhibit C - 10

Terminal Value	
Sum of PV of FCF (8 years)	574,531.6
WACC	9.7%
Long term growth rate in EBIT	3.0%
Present value of terminal	
Value	676,316.2
Terminal Value as % of Total	
Value	54.1%

Intrinsic ("Fair") Value	Calculation
EV (Equity Value + Net	
Debt)	1,250,847.7
- Debt	0.0
+ Cash	261,633.0
Net Debt	0.0
Equity Value (Market	
Capitalization)	1,250,847.7
Diluted Shares O/S	87,044.3
	4
Fair Value Per Share	\$14.37

Under a discounted cash flow approach, the Company's fair value per share is \$14.37, which is close to the net asset value per share under a 8x multiple. Both discounted cash flow and net asset value model suggest that Intel's stock price is trading at a premium.

ANALYSIS OF STATEMENT OF CASH FLOWS

Exhibit C - 11

	2006	2007	2008
Cash from operations	151,130	110,932	102,807
Cash from investments	(161,124)	(97,714)	41,253
Cash from financing	27,437	(8,061)	16,389
Cash and cash	17,843	5,113	167,752
equivalents			
(Cree Inc, 2008)			

Exhibit C - 12

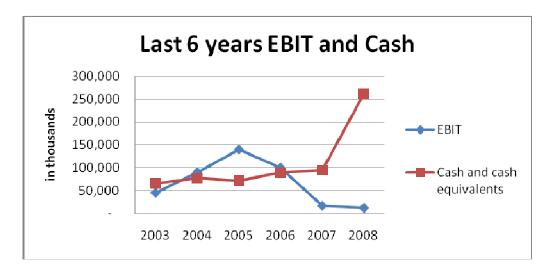
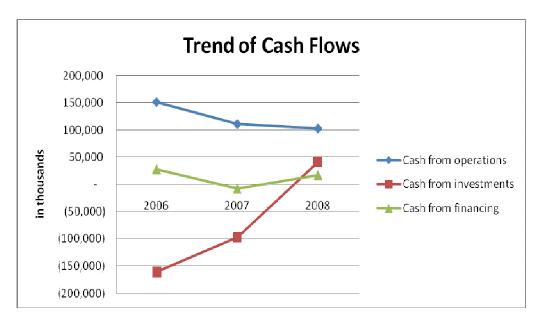


Exhibit C - 13



Although the Company's overall cash position strengthens from 2006 to 2008, cash flows from operation are shrinking over the past three years due to increasing competition. In order to reduce cost of revenue and increase gross profit, the Company acquired COTCO in March 2007, expecting to reduce the

manufacturing cost of its LED components. However, the Company's gross profit did not increase in 2007 and 2008, as shown below.

Exhibit C - 14

	2004	2005	2006	2007	2008
Gross Profit (FIFO)	50.33%	54.99%	47.50%	34.00%	33.62%

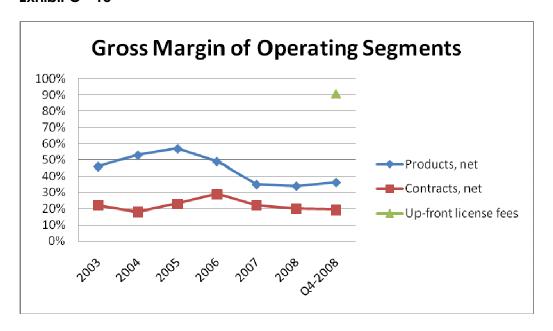
The Company spent most of its cash on the purchase of investments in the last three years. Most proceeds from maturities of investments in 2007 were used to acquire other companies, such as INTRINSIC and COTCO. Having \$507 million proceeds from maturities of investments in 2008, the Company reinvested \$414 million in the purchase of investments. Future proceeds may be used to do acquisitions, research and developments, repurchase of common stock etc, according to the trend of the cash spending in the past. Having a strong cash position with no debt may make the Company vulnerable for a takeover.

Exhibit C - 15

Cash flows from investing activities:	2008	2007	2006
Purchase of property and equipment	(55,741)	(82,604)	(77,260)
Purchase of INTRINSIC Semiconductor			
Corporation, net of cash acquired	_	(43,850)	(327)
Purchase of COTCO Luminant Device Ltd.,			
net of cash acquired		(79,289)	
Purchase of LED Lighting Fixtures, Inc., net of			
cash acquired	(7,180)		
Purchase of investments	(413,735)	(167,608)	(212,170)
Proceeds from maturities of investments	507,091	254,840	128,664
Proceeds from sale of property and			
equipment	1,465	550	1,163
Proceeds from sale of available-for-sale			
investments	17,000	26,646	2,928
Purchase of patent and licensing rights	(7,647)	(6,399)	(4,122)

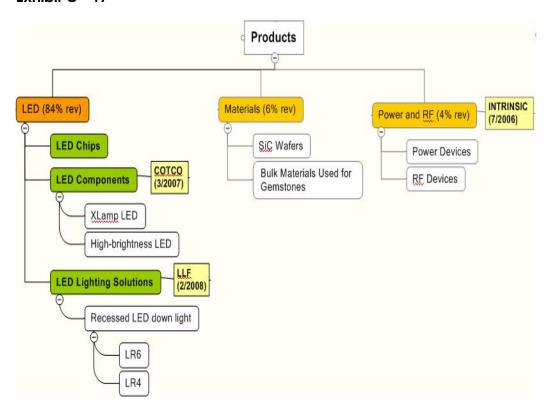
SEGMENT ANALYSIS

Exhibit C - 16



Although the Company only has one reportable segment – products segment – it is still necessary to look at other operating segments and see if there is any potential opportunity to further develop. As illustrated below, the gross margin of the Company's Products and Contracts segments in the last 6 years shows a declining growth. The new segment, Up-front licensing fees segment, has a gross margin of 91%, which is very profitable. The contracts segment has not much to improve, since the Company is contracting with the U.S. Government. For the products segment, which is the most important segment, the Company should reduce cost of sales by utilizing the recent requisitions.

Exhibit C - 17



Among the three main products, LED products generate the most revenues. The purpose of acquiring COTCO was to reduce the cost of LED component by manufacturing in Huizhou, China, while the purpose of acquiring LLF was to develop LED lighting products. The COTCO acquisition in 2007 was the largest acquisition of the Company in recent years and was meant to reduce costs of production. The gross margin of the products segment remains flat since the acquisition. A significant reduction in cost of sales, i.e. an increase in the gross margin, is expected for the products segment. Although the effect is expected to happen immediately, it is not happening yet.

LITIGATION

Cree is currently involved in a couple lawsuits about infringement of patents. In the case of Neumark v. Cree Inc., the Company's motion in July 2008 was denied and no trial date has been set. In the case of Honeywell International, Inc. V. Philips Lighting Co. and Cree, Inc., a hearing is scheduled for July 2010 and the trial for November 2010 (Cree Inc, 2008). While there is no estimation on the potential losses to the majority lawsuits, the Bridgelux Patent Litigation case has been settled. Both Cree and Bridgelux have dismissed all the claims and counterclaims (Cree Inc, 2008).

MANAGEMENT ANALYSIS

The Company has good compensation policies which balance the interests of both executives and shareholders. The executive compensations are considered fair. The package includes base salary, performance-based incentive compensation, long-term equity incentive compensation, and other benefits and perquisites. The compensations are targeted between the 50th percentile and the 75th percentile of competitive market compensation paid, which consists of companies similar in size and scope to the Company, as measured by revenue, market value, market capitalization, PE multiple, revenue growth and EBIT margin (Cree Inc., 2008).

The annual incentive payout for the CEO is performance based. Since the minimum annual financial goals were not met for fiscal 2007 or fiscal 2006, there was no annual incentive payout for the CEO. There were quarterly payouts in

each of those years for executives other than the CEO based on individual performance measured against quarterly goals. Generally, the Committee attempts to set the minimum, target and maximum levels such that the relative difficulty of achieving the target level is consistent from year to year. The attempt helps to ensure that all executives are not overreaching, yet motivated to do well. This balances the interest of both executives and shareholders.

Since GAAP gives management options to choose how to depreciate the property, it is necessary to examine what type of depreciation method the management uses and see if they overreach. The Company uses the straight-line depreciation method to depreciate its properties, which is common, simple and fair. The estimations of the properties' useful lives are reasonable.

POTENTIAL IMPACTS FROM THE ADOPTION OF NEW ACCOUNTING POLICIES

SFAS 157 and SFAS 159. Adopted in Q1-2009.

At the beginning of its first quarter of fiscal 2009, the Company adopted SFAS 157 "Fair Value Measurements" for all financial and nonfinancial assets and liabilities. Under SFAS 157, cash equivalents, short-term investments, and long-term investments are broken down into three levels based on the reliability of inputs, such as quoted prices in active markets, observable inputs and unobservable inputs. All financial instruments are carried at fair value in accordance with SFAS 157. The Company also adopted SFAS 159, which is

similar to SFAS 157, but provides the Company an option to choose to measure certain financial instruments on an instrument-by-instrument basis.

Under current market conditions, where lots of financial instruments are underwater, it may result in a decrease in the value of the Company's current assets. It is important to evaluate the Company's investments since the majority cash inflow and outflow comes from and to investments. In fact, gain on sales of investments six months ended in December 2008 is only \$65,000. Comparing to \$14,117,000 gain on sales of investments six months ended in December 2007, the Company's cash inflow from investment in 2008 is much less. The adoption of SAFS 157 and 159 will increase transparency of the Company's investment exit value.

SFAS 141R and SFAS 160. Intend to adopt in Q1-2010

SFAS 141R is the revision of SFAS 141 "Business Combinations," while SFAS 160 is "Noncontrolling interests in consolidated financial statements." This is important for the Company since the Company often has strategic acquisitions for growth. The adoption to SFAS 141R and SFAS 160 may result in an increase in depreciation expenses and a decrease in income to non-controlling interests, which may inflate the adjusted EBITDA in the Net Asset Value valuation.

Accounts that may be changed under SFAS 141R

Differential

Entity Differential is the total consideration given (Purchase price + Fair Value of Non-Controlling interests) subtracted by the Book Value.

Depreciation Expenses

Since the assets in the differential are stated at fair value and not the parent company's percentage of the increase in fair value, the accompanying depreciation of those assets is increased.

Accumulative Depreciation

For the same reasons as the depreciation expenses, accumulated depreciation is also larger to accommodate for stating the assets at their fair values.

Goodwill

Goodwill would be computed as the difference between the Fair market value of the entire entity and the Fair Value of Net Identifiable Assets (FVNIA). This is different from SFAS 141 because under SFAS 141, goodwill is the difference between the purchase price and the FVNIA. In generally, goodwill calculated under SFAS 141R is bigger than the one under SFAS 141.

Goodwill Impairment

Under 141R, there will be a larger impairment loss due to a larger initial goodwill.

Income to Non-Controlling Interest

The calculation of income to non-controlling interest is different under SFAS 141R.

(Net Income of the subsidiary – Depreciation Expenses – Goodwill impairment) x NC interest %

Non-Controlling Interest

The non-controlling interest equal to their percentage multiplied by the subsidiary's common stock, retained earnings, APIC (if applicable), and the differential. Under SFAS 141, differential is not accounted.

FSP No. FAS 142-3. Intend to adopt in Q1-2010

FSP No. FAS 142-3 is "Determination of the useful life of intangible assets," while SFAS 142 is "Goodwill and other intangible assets." The Company intends to adopt FSP No. FAS 142-3 in its first quarter of fiscal 2010, which is the amendment of SFAS No. 142. It is intended to improve the consistency between the useful life of an intangible asset determined under SFAS 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS 141R. This is important for the Company since the Company has lots of intangible assets related to acquisitions.

SFAS 161. Intend to adopt in Q2-2009

SFAS 161 is "Disclosures about derivative instruments and hedging activities – an amendment of SFAS 133." The Company intends to adopt it at the beginning of its second quarter of fiscal 2009. This adoption does not have a material impact on the Company's consolidated financial statements since the Company currently does not hold any derivative instruments.

Assess the impact of adopting International Financial Reporting Standards (IFRS)

The Company may be required in fiscal 2015 to prepare financial statements in accordance with IFRS, depending on the decision that SEC will make in 2011 regarding the mandatory adoption of IFRS. Some of the significant differences between IFRS and U.S. GAAP for technology companies include the following:

Revenue recognition – greater flexibility,

Share-based payments – accelerated expense and more volatility in tax,

Research and development costs – increased capitalization due to the fact that

IFRS differentiates between "research" and development" costs, with

development costs capitalized.

Income taxes – a changed approach to uncertainty

Inventory – write-down will be reversed if the circumstances that previously caused inventories to be written down below cost no longer exist, or if there is clear evidence of an increase in net realizable value because of changed economic

circumstances. This may be less applicable to the Company under current market conditions. By 2011, the Company will be very likely to require adopting IFRS. It is better for the Company to begin preparing for it and filing IFRS financial statements as soon as possible.

APPENDIX

Exhibit C - 18

Fiscal year ended in June

Note a - Calculation of data 3 months ended in June 2008

	Е	F	B=F-E
	9 months ended	12 months ended	3 months ended
In thousands	March, 2008	June, 2008	June, 2008
Operating Income (EBIT)	6,745	12,041	5,296
+ Depreciation & Amortization	74,681	99,280	24,599
EBITDA	81,426	111,321	29,895
+ Loss on asset disposal	487	1,206	719
- Gain on asset disposal	328	34 <u>~</u>	323
Adjusted EBITDA	81,913	112,527	30,614

Note b - Calculation of Depreciation & Amortization of 3 months ended in March 2008

	G	Н	I=G-H
	9 months ended	6 minths ended	3 months ended
	March, 2008	December, 2007	March, 2008
Depreciation & Amortization	74,681	49,711	24,970

Exhibit C - 19

Note c - Calculation of contractual obligations

Operating lease obligations	6,878
Purchase obligations (authorized, but not obligated to purchase)	44,929
COTCO contingent consideration	60,000
Total contractual obligations	111,807

Exhibit C - 20

Note d - Calculation of Excess Cash

	December, 2008
Cash and cash equivalents	195,237
- Cash equivalents (Note 5 in December 2008 10Q)	95,324
Cash	99,913
- Cash for CAPEX	31,266
- Cash needed for working capital*	
- Dividends to the shareholders	9 5
Excess Cash	68,647
* Cash needed for working capital*	
Accounts receivable, net	108,552
+ Inventories	78,816
- Accounts payable, trade	43,988
Working Capital surplus/(needed)	143,380

Note e - Intangible Assets

For the intangible assets that have definite useful lives, they are amortized over their useful lives under the straight-line method. They are also subject to impairment test by comparing the estimations of the fair market value of the assets and the estimations of future cash flows expected to be generated by them. Any impairment loss will be included in the "Loss on disposal or impairment of long-lived assets" item in the income statement. However, it is hard to tell how much impairment of long-lived assets incurred since the item also includes loss on disposal. There is no full disclosure of the impaired amount in the notes. Since the impairment of long-lived assets includes both tangible and intangible assets, and there is lack of disclosure on that, it is hard to estimate the impairment loss of the intangibles. So far, the amount of the joint account is relatively low, which indirectly indicates a zero or low impairment loss.

Exhibit C - 21

Note g - Calculation of assets for discontinued operations, net

Assets of discontinued operations	2,002
- Liabilities of discontinued operations	480
- Long-term liabilities of discontinued operations	834
Assets of discontinued operations, net	688

Exhibit C - 22

Note h – Subsidiaries

Subsidiaries of Cree, Inc.	Jurisdiction
Cree Microwave, LLC	North Carolina
Cree Employee Services Corporation	North Carolina
Cl Holdings, Limited	North Carolina
Cree Asia-Pacific, Inc.	North Carolina
**Cree LED Lighting Solutions, Inc.	North Carolina
Cree Asia-Pacific Limited	Hong Kong
**Cree Hong Kong Limited	Hong Kong
Cree Europe GmbH	Germany
Cree International GmbH	Switzerland
Subsidiaries of Cree LED Lighting Solutions, Inc.	Jurisdiction
Cree LED Lighting Solutions Hong Kong Limited	Hong Kong
Subsidiaries of Cree Hong Kong Limited	Jurisdiction
COTCO International Limited	Hong Kong
Cree Huizhou Opto Limited	People's Republic of China
Cree Shanghai Opto Development Limited	People's Republic of China
Subsidiaries of COTCO International Limited	Jurisdiction
Cree Japan Limited	Japan

**Recent Acquisitions

Old Names	New Names
LED Lighting Fixtures, Inc.	Cree LED Lighting Solutions, Inc.
COTCO Luminant Device Limited	Cree Hong Kong Limited
INTRINSIC Semiconductor Corporation	Cree Dulles, Inc. (Now merged into Cree, Inc.)

(Cree Inc, 2008)

CREE, INC. CONSOLIDATED BALANCE SHEETS

	June 29, 2008	June 24, 2007 cept share data)
ASSETS	(IIIOusulius, ex	cepi silale aala)
Current assets:		
Cash and cash equivalents	\$ 261,633	\$ 93,881
Short-term investments:	50,795	148,774
SHOH-TEHTH HIVESHTIELHS.	30,7 93	140,774
Total cash, cash equivalents, and short-term		
investments	312,428	242,655
Accounts receivable, net	110,376	79,668
Income tax receivable	9,825	7,947
Inventories, net	80,161	71,068
Deferred income taxes	4,578	23,573
Prepaid expenses and other current assets	12,900	8,920
Assets of discontinued operations	2,600	301
Total current assets	532,868	424 120
	•	434,132
Property and equipment, net	348,013	372,345
Long-term investments	58,604	68,363
Intangible assets, net	126,037	96,138
Goodwill	244,003	141,777
Deferred income taxes	_	1,227
Other assets	3,882	2,248
Total assets	\$ 1,313,407	\$ 1,116,230
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable, trade	\$ 37,402	\$ 32,940
Accrued salaries and wages	13,471	10,241
Income taxes payable	5,314	4,504
Deferred income taxes	_	844
Other current liabilities	7,938	5,415
Consideration payable related to COTCO		
acquisition	60,000	_
Liabilities of discontinued operations	550	505
Total current liabilities	124,675	54,449
Long-term liabilities:	,	,
Deferred income taxes	38,048	38,758
Other long-term liabilities	4,199	5,921
Long-term liabilities of discontinued operations	745	1,103
Long term habilities of discorninated operations	740	1,100
Total long-term liabilities	42,992	45,782
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock, par value \$0.01; 3,000 shares		
authorized at <u>June 29, 2008</u> and <u>June 24, 2007</u> ;	_	_

none issued and outstanding		
Common stock, par value \$0.00125; 200,000		
shares authorized at <u>June 29, 2008</u> and <u>June 24,</u>		
2007; 88,088 and 84,675 shares issued and		
outstanding at June 29, 2008 and June 24, 2007,		
respectively	110	106
Additional paid-in-capital	811,015	713,778
Accumulated other comprehensive income, net		
of taxes	8,923	9,826
Retained earnings	325,692	292,289
Total shareholders' equity	1,145,740	1,015,999
Total liabilities and shareholders' equity	\$ 1,313,407 \$	1,116,230

CREE, INC. CONSOLIDATED STATEMENTS OF INCOME

CONSCIDATED STATEMENT	Fiscal Years Ended				
	June 29, June 24, June				
	2008	2007	2006		
		ds, except			
		data)			
Revenue:					
Product revenue, net	\$ 464,907	\$ 364,718	\$ 395,464		
Contract revenue, net	28,389	29,403	27,488		
Total revenue	493,296	394,121	422,952		
Cost of revenue:					
Product revenue, net	304,663		202,412		
Contract revenue, net	22,806	23,008	19,647		
Total cost of revenue	327,469	-	222,059		
Gross margin	165,827	133,988	200,893		
Operating expenses:					
Research and development	58,846	•	54,871		
Sales, general and administrative	76,607		44,760		
Amortization of acquisition related intangibles	17,127	4,192	_		
Loss on disposal or impairment of long-lived					
assets	1,206	1,199	2,421		
-	150 70/	117.000	100.050		
Total operating expenses	153,786	-	102,052		
Income from operations	12,041	16,656	98,841		
Non-operating income:	14117	10.000	507		
Gain on sale of investments, net	14,117	19,233	587		
Other non-operating income	364		42		
Interest income, net	14,527	14,984	12,893		
Income from continuing operations before	41.040	<i></i>	110.070		
income taxes	41,049	51,111	112,363		

Income from continuing operations 31,812 50,193 79,959 Income (loss) from discontinued operations, net of related income taxes 1,627 7,141 (3,286)	Income tax expense		9,237		918		32,404
net of related income taxes 1,627 7,141 (3,286) Net income \$ 33,439 \$ 57,334 \$ 76,673 Earnings (loss) per share: Basic:			31,812		50,193		79,959
Earnings (loss) per share: Basic: Income from continuing operations \$ 0.37 \$ 0.64 \$ 1.05 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.39 \$ 0.73 \$ 1.01 Diluted: Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: Basic 86,366 78,560 76,270	•		1,627		7,141		(3,286)
Basic: Income from continuing operations \$ 0.37 \$ 0.64 \$ 1.05 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.39 \$ 0.73 \$ 1.01 Diluted: Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270	Net income	\$	33,439	\$	57,334	\$	76,673
Income from continuing operations \$ 0.37 \$ 0.64 \$ 1.05 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.39 \$ 0.73 \$ 1.01 Diluted:	Earnings (loss) per share:						
Income from continuing operations \$ 0.37 \$ 0.64 \$ 1.05 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.39 \$ 0.73 \$ 1.01 Diluted:	Basic:						
Net income \$ 0.39 \$ 0.73 \$ 1.01 Diluted: Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270		\$	0.37	\$	0.64	\$	1.05
Diluted: Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270	Income (loss) from discontinued operations	\$	0.02	\$	0.09	\$	(0.04)
Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270	Net income	\$	0.39	\$	0.73	\$	1.01
Income from continuing operations \$ 0.36 \$ 0.63 \$ 1.02 Income (loss) from discontinued operations \$ 0.02 \$ 0.09 \$ (0.04) Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270	Diluted						
Net income \$ 0.38 \$ 0.72 \$ 0.98 Shares used in per share calculation: 86,366 78,560 76,270		\$	0.36	\$	0.63	\$	1.02
Shares used in per share calculation: Basic 86,366 78,560 76,270	Income (loss) from discontinued operations	\$	0.02	\$	0.09	\$	(0.04)
Shares used in per share calculation: Basic 86,366 78,560 76,270	Not income	ċ	0.30	Ċ	0.70	Ċ	0.00
Basic 86,366 78,560 76,270	Net income	Ş	0.30	Ş	0.72	Ş	0.90
Basic 86,366 78,560 76,270	Shares used in per share calculation:						
Diluted 88,077 79,496 78.207	·		86,366		78,560		76,270
	Diluted		88,077		79,496		78,207

CREE, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Years Ended				d	
	<u>June 29,</u> 2008			une 24, 2007		<u>ine 25,</u> 2006
				ousands		<u>2000</u>
Cash flows from operating activities:						
Net income	\$	33,439	\$	57,334	\$	76,673
Adjustments to reconcile net income to net cash						
provided by operating activities:						
Depreciation and amortization		99,280		84,669		74,358
In process research and development		_		950		_
Stock-based compensation		15,985		11,720		13,108
Excess tax benefit from share-based payment						
arrangements		(5,467))	(749)		_
Impairment of inventory or (gain)/loss on disposal						
or impairment of						
long-lived assets		(1,569))	1,193		5,607
Provision for doubtful accounts		1,339		484		198
Gain on sale of investment in securities		(14,117))	(19,233)		(587)
Amortization of premium/discount on investments		(1,153))	(758)		1,018

Deferred income taxes	825	(2,425)	2,833
Changes in operating assets and liabilities:			
Accounts and interest receivable	(31,046)	10,704	(35,317)
Inventories	(9,253)	(14,627)	1,872
Prepaid expenses and other current assets	(7,241)	1,489	8,107
Accounts payable, trade	2,410	(2,186)	827
Accrued expenses and other liabilities	19,375	(17,633)	2,833
Net cash provided by operating activities	102,807	110,932	151,530
Cash flows from investing activities:			
Purchase of property and equipment	(55,741)	(82,604)	(77,260)
Purchase of INTRINSIC Semiconductor			
Corporation, net of cash acquired		(43,850)	(327)
Purchase of COTCO Luminant Device Ltd., net of			
cash acquired	_	(79,289)	—
Purchase of LED Lighting Fixtures, Inc., net of cash			
acquired	(7,180)		
Purchase of investments	(413,735)	(167,608)	(212,170)
Proceeds from maturities of investments	507,091	254,840	128,664
Proceeds from sale of property and equipment	1,465	550	1,163
Proceeds from sale of available-for-sale			
investments	17,000	26,646	2,928
Purchase of patent and licensing rights	(7,647)	(6,399)	(4,122)
Net cash provided by (used in) investing activities	41,253	(97,714)	(161,124)
The cash provided by (asea in) investing derivines	41,200	(77,714)	(101,124)
Cash flows from financing activities:			
Net proceeds from issuance of common stock	62,243	10,570	27,437
Excess tax benefit from share-based payment			
arrangements	5,467	749	_
Repayments of capital lease obligations	_	(638)	_
Repurchase of common stock	(51,321)	(18,742)	_
	, , ,		
Net cash (used in) provided by financing			
activities	16,389	(8,061)	27,437
Effects of foreign exchange changes on cash			
and cash equivalents	7,303	(44)	_
Net increase (decrease) in cash and cash			
equivalents	167,752	5,113	17,843
Cash and cash equivalents:			
Beginning of period	\$ 93,881	\$ 88,768	\$ 70,925
End of period	\$ 261,633	\$ 93,881	\$ 88,768
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 5,202	\$ 12,000	\$ 22,538

CREE, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Common Stock

	Common	Common Slock			A a a compositante el	d Total	
	Number of Shares	Par Value	Additional Paid-in Capital (T	Retained Earnings housands)	Accumulated Other Comprehensive Income	Total Share- holders' Equity	
Balance at							
June 26, 2005	75,568	\$ 94	\$ 548,342	\$ 158,282	\$ 6,200	\$ 712,918	
Exercise of stock options and issuance of shares for cash	1,659	2	27,435	_	_	27,437	
Stock-based							
compensation	_	_	13,512	_	_	13,512	
Reversal of income tax benefit from the exercise of previously issued stock							
options, net		_	(8,485)	_	_	(8,485)	
Net income	_	_	_	76,673	_	76,673	
Unrealized gain on marketable securities, net of tax of \$3,102	_	_	_	_	5,798	5,798	
Reclassification of realized gain on sale of Color Kinetics' stock, net of tax of \$157	_		_	_	(240)		
ψ10 <i>7</i>					(240)	(240)	
Comprehensive income	_	_	_	_	_	82,231	
Balance at							
June 25, 2006 Exercise of stock options	77,227	96	580,804	234,955	11,758	827,613	
and issuance of shares for cash	869	1	10,569	_	_	10,570	
Stock-based							
compensation	_	_	11,826	_	_	11,826	
Income tax benefits from stock option exercises	_	_	1,531	_	_	1,531	

shares for cash Stock-based compensation	3,387	4	62,239	_		62,243
Exercise of stock options and issuance of shares for each	2 207	4	60.020			60 042
Balance at June 24, 2007	84,675 \$	106 \$	713,778	\$ 292,289 \$	9,826 \$1	,015,999
Comprehensive income	_	_	_	_	_	55,402
Reclassification of realized gain on sale of Color Kinetics' stock, net of tax of \$5,024	_	_	_	_	(8,481)	(8,481)
Unrealized gain on marketable securities, net of tax of \$3,219	_		_	_	5,386	5,386
Currency translation gain	_	_	_	_	1,163	1,163
Acquisition of COTCO Luminant Device Limited Net income	7,605 —	10	126,934	<u> </u>	_	126,944 57,334
Reversal of income tax benefit from the amendment of the Company's prior year income tax returns	_		(1,308)	_	_	(1,308)
Assumption of stock options in connection with the acquisition of INTRINSIC Semiconductor Corporation	<u> </u>		2,163	_	_	2,163
Purchase and retirement of restricted stock awards	41	_	(27)	_	_	(27)
Repurchase of common stock	(1,067)	(1)	(18,714)	_	_	(18,715)

Income tax benefits from stock option exercises	_	_	6,669	_	_	6,669
Issuance of restricted stock, net	151	_	_	_	_	_
Repurchase of common stock	(1,977)	(2)	(51,319)	_		(51,321)
Acquisition of LED Lighting Fixtures, Inc.	1,852	2	58,828	_	_	58,830
Assumption of stock options in connection with acquisition of LED Lighting						
Fixtures, Inc.	_	_	4,486	_	_	4,486
Net income	_	_	_	33,439	-	33,439
Currency translation gain	_		_		7,029	7,029
Cumulative effect of change in accounting				(2.1)		(0.4)
principle Unrealized gain on available- for-sale	_	_	_	(36)	_	(36)
securities, net of tax of \$436	_		_		731	731
Reclassification of realized gain on sale of Color Kinetics stock, net of tax of \$5,000	_		_	_	(8,663)	(8,663)
Comprehensive income	_	_	_	_	_	32,500
Balance at June 29, 2008	88,088 \$	110 \$	811,015	325,692 \$	8,923	\$1,145,740

CONSOLIDATED BALANCE SHEETS

	Dece	ember 28, 2008		
		Jnaudited)	Ju	ne 29, 2008
	(Thou	ısands, except p	er s	share data)
ASSETS				
Current assets:				
Cash and cash equivalents	\$	195,237	\$	261,633
Short-term investments		126,956		50,795
Total cash, cash equivalents, and short-				
term investments		322,193		312,428
Accounts receivable, net		108,552		110,376
Income tax receivable		18,064		9,825
Inventories, net		78,816		80,161
Deferred income taxes		5,032		4,578
Prepaid expenses and other current assets		14,125		13,000
Assets of discontinued operations		2,002		2,600
Total current assets		548,784		532,968
Property and equipment, net		339,793		348,013
Long-term investments		43,325		58,604
Intangible assets, net		118,890		125,037
Goodwill		248,365		244,003
Other assets		7,342		4,782
Total assets	\$	1,306,499	\$	1,313,407
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Accounts payable, trade	\$	43,988	\$	37,402
Accrued salaries and wages		15,206		13,471
Income taxes payable		9,780		5,314
Deferred income taxes		1,178		<u> </u>
Other current liabilities		4,631		7,938
Contingent payment due related to LLF				7,700
acquisition		4,400		_
Contingent payment due related to				
COTCO acquisition		_		60,000
Liabilities of discontinued operations		480		550
Total current liabilities		79,663		124,675
Long-term liabilities:				
Deferred income taxes		45,123		38,048
Other long-term liabilities		4,212		4,199
Long-term liabilities of discontinued		00.		-
operations		834		745

Total long-term liabilities

Commitments and contingencies (Note

42,992

50,169

12)		
Shareholders' equity:		
Preferred stock, par value \$0.01; 3,000		
shares authorized at <u>December 28, 2008</u>		
and <u>June 29, 2008</u> ; none issued and		
outstanding	_	_
Common stock, par value \$0.00125;		
200,000 shares authorized at <u>December 28</u> ,		
2008 and June 29, 2008; 88,113 and 88,088		
shares issued and outstanding at		
December 28, 2008 and June 29, 2008,		
respectively	110	110
Additional paid-in-capital	823,762	811,015
Accumulated other comprehensive		
income, net of taxes	10,488	8,923
Retained earnings	342,307	325,692
Total shareholders' equity	1,176,667	1,145,740
Total liabilities and shareholders' equity	\$ 1,306,499	\$ 1,313,407

CREE, INC.

CONSOLIDATED STATEMENTS OF INCOME

(UNAUDITED)

	Three Moi	nths Ended	Six Months Ended				
			December 28,	December 30,			
	<u>2008</u>	<u>2007</u>	<u>2008</u>	<u>2007</u>			
	(Thousands, exce	pt per share data)	(Thousands, exce	pt per share data)			
Revenue:							
Product							
revenue, net	\$ 137,595	\$ 111,341	\$ 272,288	\$ 217,304			
Contract							
revenue, net	4,446	7,658	10,131	15,081			
Up-front							
license fees	5,582	_	5,582	_			
Total revenue	147,623	118,999	288,001	232,385			
Cost of							
revenue:							
Product							
revenue, net	86,831	71,251	173,475	143,831			
<u>Contract</u>							
revenue, net	3,790	5,952	8,161	12,018			
Up-front							
license fees	506	_	506	_			

Total cost of	01.107	77.000	100 140	155.040
revenue Cross profit	91,127 56,496	77,203 41,796	182,142 105,859	155,849 76,536
Gross profit	50,490	41,/90	100,009	70,550
Operating expenses:				
Research				
and				
development	18,441	14,901	35,716	27,678
Sales, general				
and administrative	21,843	18,211	44,761	36,373
Amortization	21,040	10,211	44,701	30,373
of acquisition				
related				
intangibles	4,062	4,048	8,124	8,096
Loss on				
disposal or				
impairment				
of long-lived				
assets	645	474	1,050	1,209
Total				
operating				
expenses	44,991	37,634	89,651	73,356
Operating	77//1	07,004	07,001	70,000
income	11,505	4,162	16,208	3,180
Non-				
operating				
income:				
Gain on sale				
of investments				
investments, net	53		65	14,117
Other non-	00	_		14,117
operating				
(loss) income	(32)	66	153	78
Interest				
income, net	2,539	4,516	5,331	8,231
Income from				
continuing				
operations before				
income taxes	14,065	8,744	21,757	25,606
Income tax	14,000	0,7 44	21,707	20,000
expense	3,218	2,104	4,972	6,098
•			·	
Income from				
continuing				
operations	10,847	6,640	16,785	19,508

Loss from discontinued operations, net of related				
income taxes	(151)	(20)	(170)	(174)
Net income	\$ 10,696	\$ 6,620 \$	16,615	\$ 19,334
Earnings per share:				
Basic: Income from continuing				
operations	\$ 0.12	\$ 0.08 \$	0.19	\$ 0.23
Loss from discontinued				
operations	\$ (0.00)	\$ (0.00) \$	(0.00)	\$ (0.00)
Net income	\$ 0.12	\$ 0.08 \$	0.19	\$ 0.23
Diluted:				
Income from continuing operations	\$ 0.12	\$ 0.08 \$	0.19	\$ 0.22
Loss from				
discontinued operations	\$ (0.00)	\$ (0.00) \$	6 (0.00)	\$ (0.00)
Net income	\$ 0.12	\$ 0.08 \$	0.19	\$ 0.22
Shares used in per share calculation:				
Basic	88,057	85,190	87,954	84,936
Diluted	88,511	86,848	88,619	86,713

CREE, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

Six Months Ended

December 28, December 30,
2008 2007

	(Thousands)			
Cash flows from operating activities:				
Net income	\$	16,615	\$	19,334
Adjustments to reconcile net income to net cash				
provided by operating activities:				
Depreciation and amortization		48,696		49,711
Stock-based compensation		10,542		7,184
Excess tax benefit from share-based payment				
arrangements		(251)		(1,562)
Loss on disposal or impairment of long-lived assets		1,050		1,209
Provision for doubtful accounts		611		423
Gain on sale of investment in securities		(65)		(14,117)
Amortization of premium/discount on investments		605		(228)
Changes in operating assets and liabilities: Accounts receivable		1 522		(11 105)
Inventories		1,533 1,187		(11,125)
Prepaid expenses and other assets		(3,228)		(4,263) 3,442
Accounts payable, trade		6,972		3,442
Accounts payable, trade Accrued expenses and other liabilities		473		7,472
Accided expenses and other habilines		4/3		7,472
Net cash provided by operating activities		84,740		60,646
Cash flows from investing activities				
Cash flows from investing activities: Purchases of property and equipment		(31,266)		(21,095)
Purchases of patent and licensing rights		(3,937)		(3,443)
Payment of contingent consideration related to		(0,707)		(0,440)
COTCO acquisition		(60,000)		'
Purchases of investments		(212,127)		(32,769)
Proceeds from sales and maturities of investments		152,735		93,670
Proceeds from sale of property and equipment		36		52
Net cash (used in) provided by investing activities		(154,559)		36,415
Cash flows from financing activities:				
Net proceeds from issuance of common stock		6,395		12,849
Excess tax benefit from share-based payment				
arrangements		251		1,562
Repurchases of common stock		(2,744)		(168)
Net cash provided by financing activities		3,902		14,243
Net cash provided by illiancing activities		3,902		14,240
Effects of foreign exchange changes on cash and				
cash equivalents		(479)		_
Net (decrease) increase in cash and cash				
equivalents		(66,396)		111,304
Cash and cash equivalents:				
Beginning of period	\$	261,633	\$	93,881
End of period	\$	195,237	\$	205,185
		.,		



Investment Research Report



By Moon Li

March 27, 2009

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ORIGINATION OF IDEA

Intel Corporation (INTC) is a current holding of the Orange Value Fund.

We thought it is necessary to value the company in context of a deteriorating credit market to determine whether it is still "safe and cheap."

KEY STATISTICS

(In millions except per share data)

Exhibit I - 1

Exchange	NASDAQ
Headquarters	Delaware
Shares authorized	10,000
Basic Shares Outstanding	5,663
Diluted Shares Outstanding	5,748
52 Week High	25.29
52 Week Low	12.05
Current stock price	15.42
Market Capitalization	85,770
Value of Assets	91,416
Value of Liabilities	6,982
Private Value of Equity (PVE)	84,434
GAAP EBITDA	13,570
Adjusted EBITDA	13,785
EBITDAR	13,926
Total Assets	50,715
Total Current Liabilities	7,818
Total Long-term debt	1,886
Book Value (Equity Value)	41,011
Price/Book Value	2.09
Price/EBITDA	6.32
Price/Adjusted EBITDA	6.22
Price/EBITDAR	6.16
A NIA I NICE DE CONTRENDA DE	*ON*

ANALYST RECOMMENDATION

I recommend holding the common equity of Intel Corporation. Based on my assessments of Discounted Cash Flow and Net Asset Value, the Company's current pricing indicates a premium in excess of Intel's intrinsic value calculated by both models. The discounted cash flow model is very sensitive to the estimated

growth rate of each segment, which is assumed to be low and decreasing in the next 10 years. Although Intel is not trading at a discount based on the assumption and assessment of two models, the company's operations remain stable with no impairment to its business. As a leader in its industry, Intel is more capable of recovering and outperforming in the long run. Thus, holding the company's stock is recommended.

INVESTMENT POSTIVE

Intel is the largest semiconductor company in the world and has all of the advantages that its scale provides. The Company has \$11 billion in cash and cash equivalents on its books with very little debt, which indicates a strong financial position. Despite a low or negative growth in its segments, with its prevailing position in its industry, Intel is more likely to recover from the global slowdown than most of its competitors.

INVESTMENT NEGATIVE

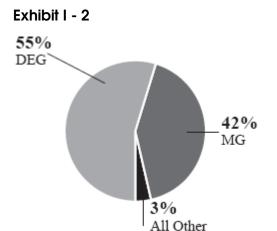
The global slowdown impairs growth in the Company's businesses. The Company currently has very low or negative growth in its operating segments. In addition, about 38% of its sales come from two major pc manufacturers, Dell and HP, who are also exposed to economic slowdowns.

COMPANY DESCRIPTION

Business

Intel Corporation is the world's largest semiconductor company. It also develops integrated circuits for industries such as computing and communications. The Company's products include chips, boards and other semiconductor products. Its primary component-level products include microprocessors, chipsets and flash memory (Intel Corporation, 2008). The Company has two reportable segments – Digital Enterprise Group and the Mobility Group – which represent in total 97% of the Company's net revenue as of December 27, 2008 (Exhibit I – 2).

Revenue by Major Operating Segment



DEG: Digital Enterprise

Group

Customers & Suppliers

Total: \$37,586

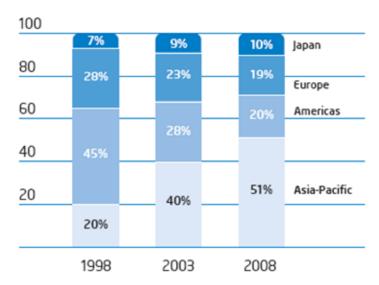
As of December 27, 2008, the Company has two major customers, Dell and HP, accounting for 38% of net revenue. Although it is generally not suggested to have major customers as it may give customers more bargaining power, being the major two customers of Intel for many years and accounting for only 38% of net revenue in total does not seem to be a big concern. These two largest customers accounted for 43% of net accounts receivable, which has slight increased from 2007. Since almost half of the accounts receivable comes from

these two customers, the Company's ability to collect money from these two customers will have an impact on its liquidity position. Among the unaffiliated customers by geographic region/country, Asia-Pacific is the most profitable region, which contributes 51% of the Company's revenue (Exhibit I – 3). Within Asian-Pacific, Taiwan, in particular, contributes 23% of the Company's revenue.

The company has thousands of suppliers and currently does not seem to rely on single or few of them. Thus, the bargaining power of suppliers is low.

Geographic Breakdown of Revenue

Exhibit I - 3



(Intel Corporation, 2008)

DISCOUNTED CASH FLOW (DCF) ANALYSIS

Exhibit I - 2

			(1)	Forward Estimates			Lor	Long Term Forward Estimates				
Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of weeks	52	52	52	52	52	52	52	52	52	52	52	
(In Millions, Except Per Share Amounts)												
Net Sales	\$35,382.0	\$38,334.0	\$37,586.0	\$41,344.6	\$45,272.3	\$49,346.8	\$53,541.3	\$57,289.2	\$61,299.5	\$65,590.4	\$70,181.8	
% Growth		8.3%	-2.0%	10.0%	9.5%	9.0%	8.5%	7.0%	7.0%	7.0%	7.0%	
EBITDA	10,564.0	13,014.0	13,570.0	17,395.4	18,380.6	19,297.0	20,135.1	21,209.0	22,343.4	23,541.6	24,807.5	
% Growth		23.2%	4.3%	28.2%	5.7%	5.0%	4.3%	5.3%	5.3%	5.4%	5.4%	
% Margin	29.86%	33.95%	36.10%	42.07%	40.60%	39.10%	37.61%	37.02%	36.45%	35.89%	35.35%	
Operating profit (EBIT)	5,652.0	8,216.0	8,954.0	13,383.1	14,190.7	14,954.8	15,662.3	16,602.1	17,598.2	18,654.1	19,773.3	20,366.5
% Growth		45.4%	9.0%	49.5%	6.0%	5.4%	4.7%	6.0%	6.0%	6.0%	6.0%	3.0%
% Margin	15.97%	21.43%	23.82%	32.37%	31.35%	30.31%	29.25%	28.98%	28.71%	28.44%	28.17%	
Tax rate	28.6%	23.9%	31.1%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
NOPAT	4,033.5	6,253.0	6,165.0	9,368.2	9,933.5	10,468.3	10,963.6	11,621.4	12,318.7	13,057.8	13,841.3	14,256.6
Depreciation and amortization	4,912.0	4,798.0	4,616.0	4,012.3	4,190.0	4,342.3	4,472.8	4,607.0	4,745.2	4,887.5	5,034.2	5,034.2
% Growth		-2.3%	-3.8%	-13.1%	4.4%	3.6%	3.0%	3.0%	3.0%	3.0%	3.0%	
% Margin	13.88%	12.52%	12.28%	9.70%	9.26%	8.80%	8.35%	8.04%	7.74%	7.45%	7.17%	
Change in WC providing/(requiring) cash	(60.0)	74.0	(1,505.0)	(321.9)	(358.5)	(377.1)	(393.8)	(393.8)	(393.8)	(393.8)	(393.8)	(393.8)
Operating Cash Flows	8,885.5	11,125.0	9,276.0	13,058.6	13,765.0	14,433.5	15,042.6	15,834.6	16,670.1	17,551.6	18,481.7	18,896.9
Capex - Additions to PP&E	(5,860.0)	(5,000.0)	(5,197.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)
Capex/D&A	1.19x	1.04x	1.13x	1.25x	1.19x	1.15x	1.12x	1.09x	1.05x	1.02x	0.99x	0.99x
Capex % of sales	16.6%	13.0%	13.8%	12.1%	11.0%	10.1%	9.3%	8.7%	8.2%	7.6%	7.1%	
Unlevered FCF	3,025.5	6,125.0	4,079.0	8,058.6	8,765.0	9,433.5	10,042.6	10,834.6	11,670.1	12,551.6	13,481.7	13,896.9
Discount Data ANNOCS				11.86%	11.86%	11.86%	11.86%	11.86%	11.86%	11.86%	11.86%	
Discount Rate (WACC) Projection Year				11.00%	11.86%	11.80%	11.80%	11.80%	11.80%	11.00%	11.80%	
				0.00			1373		5000 B	0.40	2010	
Discount Factor 1/((1+WACC)A Projection Year)	- 4505)			0.89	0.80	0.71	0.64	0.57	0.51	0.46	0.41	
Present Value of Free Cash Flows (Unlever	ea FCF)			7,204.4	7,005.3	6,740.5	6,415.1	6,187.4	5,958.2	5,729.0	5,501.2	
Yoy % change in FCF					-2.8%	-3.8%	-4.8%	-3.5%	-3.7%	-3.8%	-4.0%	

Exhibit I - 3

Assumptions	
Long term sales growth	7.00%
Operating Leverage in LT Projections (if any)	-1.00%
Long term growth rate in EBIT	3.00%

Discount Rate (WACC)	Worksheet
Public Market Price/Share	\$15.42
Diluted Shares O/S (TS Method)	5,748.0
Public Market Capitalization	88,634.2
Debt 2008A	1,886.0
Cash 2008A	3,350.0
Net Debt 2008A	0.0
Public Market Enterprise Value	88,634.2
E/(D+E) @ Public Mkt Value	100.00%
D/(D+E) @ Public Mkt Value	0.00%
Avg. Pretax Int.Exp. (Annual.) 2002A	0.00%
Marginal Tax Rate	35.0%
Cost of Equity= rf+beta(Rm-Rf)	11.86%
Risk Free rate: Rf	0.23%
Unlevered Beta	1.19
Risk premium (Rm-Rf)	9.77%
WACC=E/(D+E)* Re+ D/(D+E)*Rd(1-T)	11.86%

Calculation of DilutedShares/Options Outstanding						
Current Share Price			\$15.42			
Actual Basic Share Co	unt		5663.0			
Date of Share Count			12/30/2008			
Source of share count	•		2008 10K			
Options Data		Da	ite:	12/27/2008	Source:	2008 10K
Option:	s (millions)		<u>Strike</u>	<u>In the \$?</u>	Include?	<u>Proceeds</u>
\$0.05-\$15.00	0.6	\$	5.26	Yes	0.6	\$3.2
\$15.01-\$20.00	86.5	\$	18.37	No	0.000	\$0.0
\$20.01-\$25.00	274.5	\$	22.53	No	0.000	\$0.0
\$25.01-\$30.00	122.2	\$	27.23	No	0.000	\$0.0
\$30.01-\$35.00	48.9	\$	31.35	No	0.000	\$0.0
\$35.01-\$40.00	20.0	\$	38.43	No	0.000	\$0.0
\$40.01-\$72.88	59.3	\$	59.85	No	0.000	\$0.0
Total	612				1	\$3.2
				Actual	avg strike price	\$5.26
Basic Shares Outstand	_					5663.0
Fully Diluted Shares Ou	_					5748.0
Fully Diluted Shares Ou	utstanding (Tre	asury Stock	Method)		5663.4

Sensitivity Analysis

Exhibit I - 4

				PV of Term	ninal Value Tual Growth Ra	ta afi		Enternine 1	dalua.	
	WACC	PV of FCF		2.0%	3.0%	4.0%		Enterpise \ 2.0%	3.0%	4.0%
From Model	11.86%	50,741.2		57,533.6	64,029.9	72,180.0		108,274.8	114,771.1	122,921
i i oni modei	8.00%	59,181.9		125,134.6	150,161.5	187,701.9		184,316.5	209,343.4	246,883
	9.00%	56,801.8	+	99,634.3	116,240.0	139,488.0	=	156,436.1	173,041.8	196,289
Sensitivity	10.00%	54,561.7	•	81,037.7	92,614.6	108,050.3		135,599.4	147,176.3	162,612
SCHOLLYLLY	11.00%	52,451.7		67,002.7	75,378.1	86,146.4		119,454.4	127,829.8	138,598
	12.00%	50,462.4		56,127.4	62,363.7	70,159.2		106,589.8	112,826.1	120,62
		Equity Valu	e (EV - Net Debt)	•		Fair Value I	Der Chare			
	WACC	2.0%	3.0%	4.0%	_	2.0%	3.0%	4.0%	_	
From Model	11.86%	108,274.8	114,771.1	122,921.2		\$18.84	\$19.97	\$21.39	_	
	8.00%	184,316.5	209,343.4	246,883.8		\$32.07	\$36.42	\$42.95		
	9.00%	156,436.1	173,041.8	196,289.8	=	\$27.22	\$30.10	\$34.15		
Sensitivity	10.00%	135,599.4	147,176.3	162,612.0		\$23.59	\$25.60	\$28.29		
,	11.00%	119,454.4	127,829.8	138,598.1		\$20.78	\$22.24	\$24.11		
	12.00%	106,589.8	112,826.1	120,621.6		\$18.54	\$19.63	\$20.98		
		Sensitivi	ity Anaysis 2 - Te	PV of Term	Approach - EB ninal Value as		tiple Method	i		
			ity Anaysis 2 - Te	PV of Term Multiple of	ninal Value as 2011 EBITDA	i	tiple Method	Enterpise \		
	wacc	PV of FCF	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x	ninal Value as 2011 EBITDA 7.0x	8.0x	tiple Method	Enterpise \	7.0x	8.0×
From Model	11.86%	PV of FCF 50,741.2	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6	ninal Value as 2011 EBITDA 7.0× 70,859.3	8.0x 80,982.1	tiple Method	Enterpise \ 6.0x 111,477.8	7.0x 121,600.5	131,72
From Model	11.86% 8.00%	PV of FCF 50,741.2 59,181.9	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6 80,416.2	ninal Value as 2011 EBITDA 7.0x 70,859.3 93,818.9	8.0x 80,982.1 107,221.6		Enterpise \ 6.0x 111,477.8 139,598.1	7.0x 121,600.5 153,000.8	131,72 3
	11.86% 8.00% 9.00%	P¥ of FCF 50,741.2 59,181.9 56,801.8	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2	ninal Value as 2011 EBITDA 7.0x 70,859.3 93,818.9 87,150.2	8.0x 80,982.1 107,221.6 99,600.3	tiple Method 	Enterpise V 6.0x 111,477.8 139,598.1 131,502.0	7.0x 121,600.5 153,000.8 143,952.0	131,72 3 166,403 156,403
From Model Sensitivity	11.86% 8.00% 9.00% 10.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2	7.0x 7.0x 70,859.3 93,818.9 87,150.2 81,010.1	8.0x 80,982.1 107,221.6 99,600.3 92,582.9		Enterpise N 6.0x 111,477.8 139,598.1 131,502.0 123,998.9	7.0x 121,600.5 153,000.8 143,952.0 135,571.8	131,72 : 166,403 156,403 147,144
	11.86% 8.00% 9.00% 10.00% 11.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0		Enterpise N 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 : 166,40: 156,40: 147,144 138,56:
	11.86% 8.00% 9.00% 10.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7	ity Anaysis 2 - Te	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2	7.0x 7.0x 70,859.3 93,818.9 87,150.2 81,010.1	8.0x 80,982.1 107,221.6 99,600.3 92,582.9		Enterpise N 6.0x 111,477.8 139,598.1 131,502.0 123,998.9	7.0x 121,600.5 153,000.8 143,952.0 135,571.8	131,72 : 166,40: 156,40: 147,144 138,56:
	11.86% 8.00% 9.00% 10.00% 11.00% 12.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Valu	+ e (EV - Net Debt)	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I	= Per Share	Enterpise V 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 : 166,40: 156,40: 147,144 138,56:
Sensitivity	11.86% 8.00% 9.00% 10.00% 11.00% 12.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Valu 6.0x	+ <u>e (EV - Net Debt)</u> 7.0x	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9 8.0x	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I	= Per Share 7.0x	Enterpise V 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 3 166,403 156,403 147,144 138,568
	11.86% 8.00% 9.00% 10.00% 11.00% 12.00% WACC 11.86%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Valu 6.0x 111,477.8	+ e (EV - Net Debt) 7.0x 121,600.5	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9 8.0x 131,723.3	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I 6.0x \$19.39	= Per Share 7.0x \$21.16	Enterpise N 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3 8.0x \$22.92	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 3 166,403 156,403 147,144 138,568
Sensitivity	11.86% 8.00% 9.00% 10.00% 11.00% 12.00% WACC 11.86% 8.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Value 6.0x 111,477.8 139,598.1	+ e (EV - Net Debt) 7.0x 121,600.5 153,000.8	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9 8.0x 131,723.3 166,403.5	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3 70,135.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I 6.0x \$19.39 \$24.29	= Per Share 7.0x \$21.16 \$26.62	Enterpise \(\) 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3 8.0x \$22.92 \$28.95	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 3 166,403 156,403 147,144 138,568
Sensitivity From Model	11.86% 8.00% 9.00% 10.00% 11.00% 12.00% WACC 11.86% 8.00% 9.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Valu 6.00 111,477.8 139,598.1 131,502.0	+ (EV - Net Debt) 7.0x 121,600.5 153,000.8 143,952.0	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9 8.0x 131,723.3 166,403.5 156,402.1	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I 6.0x \$19.39 \$24.29 \$22.88	= Per Share 7.0x \$21.16 \$26.62 \$25.04	Enterpise N 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3 8.0x \$22.92 \$28.95 \$27.21	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	131,72 3 166,403 156,402 147,144 138,568
Sensitivity	11.86% 8.00% 9.00% 10.00% 11.00% 12.00% WACC 11.86% 8.00%	PV of FCF 50,741.2 59,181.9 56,801.8 54,561.7 52,451.7 50,462.4 Equity Value 6.0x 111,477.8 139,598.1	+ e (EV - Net Debt) 7.0x 121,600.5 153,000.8	PV of Term Multiple of 6.0x 60,736.6 80,416.2 74,700.2 69,437.2 64,587.7 60,115.9 8.0x 131,723.3 166,403.5	7.0x 70,859.3 93,818.9 87,150.2 81,010.1 75,352.3 70,135.3	8.0x 80,982.1 107,221.6 99,600.3 92,582.9 86,117.0 80,154.6 Fair Value I 6.0x \$19.39 \$24.29	= Per Share 7.0x \$21.16 \$26.62	Enterpise \(\) 6.0x 111,477.8 139,598.1 131,502.0 123,998.9 117,039.4 110,578.3 8.0x \$22.92 \$28.95	7.0x 121,600.5 153,000.8 143,952.0 135,571.8 127,804.0	8.0x 131,723 166,403 156,402 147,144 138,568 130,617

Under a discounted cash flow analysis, Intel has a per share value of \$18.79, implying a 22% discount comparing to the Company's current stock price of \$15.42. The Company is more sensitive to growth rate than the multiple of terminal year EBITDA. This makes sense to a technology company. It implies that the growth rate we used to project the Company's unlevered free cash flow has the most impact on the fair value per share we got. Therefore, to be conservative, I applied a declining growth to project future sales.

NET ASSET VALUE (NAV) ANALYSIS

Exhibit I - 5
(Analysis based on Company as a whole)

(Analysis succed off company as a whole)		2008	
In thousands	4x	6x	8x
Value of Assets			
NAVgoing concern			
Operating Income (EBIT)	8,954	\$ 8,954	\$ 8,954
+ Depreciation	4,360	4,360	4,360
+ Amortization	256	256	256
EBITDA	13,570	13,570	13,570
+ Restructuring charge related to 2008 NAND plan (Note 15 in 2008 10K)	215	215	215
Adjusted EBITDA	13,785	13,785	13,785
x Multiple	4x	6x	8x
Fixed-Multiple Enterprise Value (FMEV)	55,140	82,710	110,280
NAVresource conversion			
+ Excess Cash (Note a)	(4,947)	(4,947)	(4,947)
+ Deferred tax assets	1,390	1,390	1,390
+ Short-term investments	5,331	5,331	5,331
+ Trading assets	3,162	3,162	3,162
+ Other long-term Investments	2,924	2,924	2,924
Value of Assets	\$ 63,000	\$ 90,570	\$ 118,140
Value of Liabilities			
- Long-term Debt	\$ 1,886	\$ 1,886	\$ 1,886
- Litigation loss estimates	5,096	5,096	5,096
- Minority Interest	-	-	-
Value of Liability	\$ 6,982	\$ 6,982	\$ 6,982
Private Value of Equity (PVE)	\$ 56,018	\$ 83,588	\$ 111,158
Diluted shares outstanding	5,748	5,748	5,748
Net Assets Value (NAV) per share	\$ 9.75	\$ 14.54	\$ 19.34
Current stock price	\$ 15.42	\$ 15.42	\$ 15.42
Premium / (Discount)	58.22%	6.04%	-20.26%

Net asset value or private value of equity of a company is calculated by subtracting long-term liabilities and minority interest from the asset value. Asset value includes going concern value and resource conversion value. The going concern value is essentially the fixed-multiple enterprise value, which applies a multiple to adjusted EBITDA. The resource conversion value is based on the value of separate and salable assets, including excess cash, deferred tax assets, short-term and long-term investments, trading assets, assets of discontinued operations, and etc.

Dividing the net asset value by diluted shares outstanding, I got the net asset value per share of \$9.75, \$14.54, and \$19.34 under a 4x, 6x, and 8x multiple to the Company's going concern value. In comparison with the current share price of \$15.42, the Company is trading at a 58.22% premium, 6.04% premium, and 20.26% discount under these three multiples. In general, technology is considered cheap when it is trading at a 50% discount or more. Based on my assessment, the Company is trading at a large premium, and thus, not considered cheap.

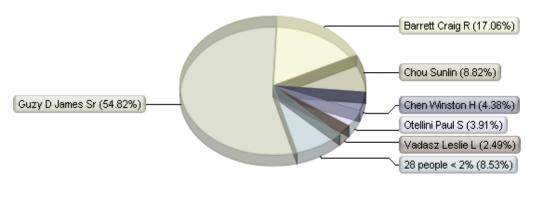
MANAGEMENT ANALYSIS

Ownership by Officers and Directors

According to DEF 14A statement, as of April 2, 2008, none of the Company's directors or executive officers beneficially owned more than 1% of the issued and outstanding shares of Intel common stock. This is good as the management does not have significant control over the voting results.

Exhibit I - 6

0.34% held by insiders



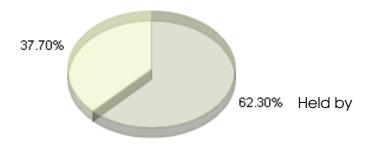
(Intel Corporation, 2009)

Although no director or executive officers has control over the company's affair as the total percentage of ownership by insiders is less than 1%, it is still necessary to see how diversified the ownership by insider is. Among the insiders, Guzy D James Sr, a director of Intel, owns more than half of the insider holding percentage, which implies that he has the most control compared to other insiders.

In regard to the ownership of stockholders, none of the stockholders owns more than 5% of the Company's common stock. Since the ownership of the Company's shares is widely spread, the voting results will be fair, and it is good for outside passive minority investors.

While 37.70% of the Company's shares are owned by individuals, 62.30% are owned by institutional holders (Exhibit I – 9). The biggest institutional holder of Intel is Barclays Global Investors UK Holdings Ltd, which owns 4.79% of the Company's shares.

Exhibit I - 7



(Intel Corporation, 2009)

Compensation

The Company has good compensation policies which balance the interests of both executives and shareholders. The executive compensations are considered fair. Compensation for directors is a mix of cash and equity-based compensation, and which is reviewed and determined by a "peer group," consisting of companies within the S&P 100 and technology companies generally considered comparable to Intel. The committee targets cash and equity compensation at the median of the peer group, which is conservative, considering Intel is the leader in its industry. After reviewing peer group director compensation data in 2007, the committee did not recommend any changes to director compensation, as the current level of compensation was deemed competitive.

DEBT ANALYSIS

Intel has a strong financial position with very little long term debt. The amount of long term debt is \$1.8 billion, which is very small compared to its \$12 billion cash position. Currently Intel generates approximately \$7 billion a year in unlevered free cash flow according to the discounted cash flow model for 2008. Intel is using this cash to buy back shares and is \$17.6 billion into a \$25 billion

share repurchase plan. Intel is in strong position to take advantage of opportunities should they come along and can leverage its balance sheet several times if necessary. It has sufficient liquidity with a 1.80 quick ratio (Exhibit I-10) and is solvent in that it could retire all of its debts with its current liquid assets.

Exhibit I - 8

	\$Billion
Current Assets less inventory	18.03
Current Liabilities	10.01
Total Liabilities	13.81
Quick Ratio	1.80
Current Assets less Inventory/Total Liabilities	1.31

Divesting the Company's NOR flash memory business to Numonyx, Intel takes 45.1% ownership of Numonyx in exchange and guarantees half of Numonyx's payment obligations, which is \$275 million out of a \$550 million senior credit facility.

LITIGATIONS

There are possible litigation losses of \$5,101 million from several cases.

2005, AMD v. Intel

AMD filed complaint in the US as well as Japan, alleging Intel's unfair interfere with AMD's ability to sell its microprocessors. Each suit is alleged for \$55 million damages. In addition, there are 82 separate class actions file in the US with the same complaint. If Intel loses, the Company might have to pay more than \$4,676 million (approximately 85 claims at \$55 million each).

June 2008, Korea Fair Trade Commission (KFTC) alleged and intents to fine Intel \$25 m for providing discounts to Samsung Electronics Co. and Trigem Computer Inc, violated Korea's Monopoly Regulation and Fair Trade Act.

2005, Intel v. CSIRO

Intel filed a lawsuit against CSIRO, an Australian research institute, claiming that CSIRO patent is invalid and that no Intel product infringes it. However, if CSIRO won, Intel might have to pay \$400 million.

INTEL CORPORATION CONSOLIDATED STATEMENTS OF INCOME

Three Years Ended <u>December 27, 2008</u> (In Millions, Except Per Share Amounts) Net revenue Cost of sales	\$.	2008 37,586 16,742	\$.	2007 38,334 18,430	\$3	2006 35,382 17,164
Gross margin	:	20,844		19,904		18,218
Research and development Marketing, general and administrative Restructuring and asset impairment charges		5,722 5,458 710		5,755 5,417 516		5,873 6,138 555
Operating expenses		11,890		11,688		12,566
Operating income Gains (losses) on equity method investments, net Gains (losses) on other equity investments, net Interest and other, net		8,954 (1,380) (376) 488 7,686		8,216 3 154 793 9,166		5,652 2 212 1,202 7,068
Provision for taxes		2,394		2,190		2,024
Net income	\$	5,292	\$	6,976	\$	5,044
Basic earnings per common share	\$	0.93	\$	1.20	\$	0.87
Diluted earnings per common share	\$	0.92	\$	1.18	\$	0.86
Weighted average shares outstanding: Basic		5,663		5,816		5,797
Diluted		5,748		5,936		5,880

INTEL CORPORATION CONSOLIDATED BALANCE SHEETS

December 27, 2008 and December 29, 2007 (In Millions, Except Par Value) Assets Current assets:	2008	2007
Current assets: Cash and cash equivalents Short-term investments Trading assets Accounts receivable, net of allowance for doubtful	\$ 3,350 5,331 3,162	=
accounts of \$17 (\$27 in 2007) Inventories Deferred tax assets Other current assets	1,712 3,744 1,390 1,182	3,370 1,186
Total current assets	19,871	23,885
Property, plant and equipment, net Marketable equity securities Other long-term investments Goodwill Other long-term assets	17,544 352 2,924 3,932 6,092	987 4,398 3,916
Total assets	\$50,715	\$55,651
Liabilities and stockholders' equity Current liabilities: Short-term debt Accounts payable Accrued compensation and benefits Accrued advertising Deferred income on shipments to distributors Other accrued liabilities	\$ 102 2,390 2,015 807 463 2,041	2,417 749 625
Total current liabilities	7,818	·
Long-term income taxes payable Deferred tax liabilities Long-term debt Other long-term liabilities Commitments and contingencies (Notes 18 and 24) Stockholders' equity: Preferred stock, \$0.001 par value, 50 shares authorized;	736 46 1,886 1,141	411 1,980
none issued	_	

Total liabilities and stockholders' equity	\$50,715	\$55,651
Total stockholders' equity	39,088	42,762
Retained earnings	26,537	30,848
Accumulated other comprehensive income (loss)	(393)	261
2007) and capital in excess of par value	12,944	11,653
authorized; 5,562 issued and outstanding (5,818 in		
Common stock, \$0.001 par value, 10,000 shares		

INTEL CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS

Three Years Ended <u>December 27, 2008</u> (In Millions) Cash and cash equivalents, beginning of year	2008 \$ 7,307	2007 \$ 6,598	2006 \$ 7,324
Cash flows provided by (used for) operating activities:			
Net income Adjustments to reconcile net income to net cash provided by operating activities:	5,292	6,976	5,044
Depreciation	4,360	4,546	4,654
Share-based compensation Restructuring, asset impairment, and net loss	851	952	1,375
on retirement of assets Excess tax benefit from share-based payment	795	564	635
arrangements	(30)	(118)	(123)
Amortization of intangibles (Gains) losses on equity method investments,	256	252	258
net	1,380	(3)	(2)
(Gains) losses on other equity investments, net	376	(154)	(212)
(Gains) losses on divestitures	(59)	(21)	(612)
Deferred taxes	(790)	(443)	(325)
Changes in assets and liabilities:			
Trading assets	193	(1,429)	324
Accounts receivable	260	316	1,229
Inventories	(395)	700	(1,116)
Accounts payable	29	102	7
Accrued compensation and benefits	(569)	354	(435)
Income taxes payable and receivable	(834)	(248)	(60)
Other assets and liabilities	(189)	279	(9)
Total adjustments	5,634	5,649	5,588

Net cash provided by operating activities	10,926	12,625	10,632
Cash flows provided by (used for) investing activities:			
Additions to property, plant and equipment	(5,197)	(5,000)	(5,860)
Acquisitions, net of cash acquired Purchases of available-for-sale investments Maturities and sales of available-for-sale	(16) (6,479)	(76) (11,728)	(5,272)
investments	7,993	8,011	7,147
Purchases of trading assets Maturities and sales of trading assets Investments in non-marketable equity	(2,676) 1,766	_	_
investments	(1,691)	(1,459)	(1,722)
Return of equity method investment Proceeds from divestitures	316 85	— 32	— 752
Other investing activities	34	294	(33)
Net cash used for investing activities	(5,865)	(9,926)	(4,988)
Cash flows provided by (used for) financing activities:			
Increase (decrease) in short-term debt, net	(40)	(39)	(114)
Proceeds from government grants	182	160	69
Excess tax benefit from share-based payment	20	110	100
arrangements Additions to long-term debt	30	118 125	123
Repayment of notes payable	_	_	(581)
Proceeds from sales of shares through			
employee equity incentive plans	1,105	3,052	1,046
Repurchase and retirement of common stock Payment of dividends to stockholders	(7,195) (3,100)	(2,788) (2,618)	(4,593) (2,320)
,		, ,	
Net cash used for financing activities	(9,018)	(1,990)	(6,370)
Net increase (decrease) in cash and cash equivalents	(3,957)	709	(726)
Cash and cash equivalents, end of year	\$ 3,350	\$ 7,307	\$ 6,598
Supplemental disclosures of cash flow information:			
Cash paid during the year for: Interest, net of amounts capitalized of \$86 in 2008 (\$57 in 2007 and \$60 in 2006)	-	\$ 15 \$ 2,762	-
Income taxes, net of refunds	۶ 4,007	۷ ۷٬۱۵۷ ب	y



The Orange Value $\mathbf{Fund}^{\mathbf{TM}}$

Investment Research Report



By Moon Li

12/13/2008

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ORIGINATION OF IDEA

Doing a screening of high ROE with a low P/E ratio, I selected few companies, such as CF Industries Holdings Inc, Foster Wheeler Ltd, MEMC Electronic Materials Inc, Western Digital Corp, Accenture Ltd, Teradata Corp, and eBay Inc for further research. After doing some research and performing a preliminary assessment of these companies, I finally chose to focus on Teradata Corp. Since the OVF portfolio is heavily invested in the financial sectors, which now subjects to large unrealized loss, with limited cash to average the cost, it might be a good time to invest in growth company like Teradata Corp. It may also be a potential replacement for some of the overvalued technology companies that OVF currently holds.

ANALYST RECOMMENDATION

I recommend starting a small position in the common stock of Teradata Corporation (TDC). Under my discounted cash flow assessment, the Company is trading at a 72% discount. Even on a highly conservative valuation basis with no grow assumption and increasing operating expenses, the Company is still trading at a 48% discount.

INVESTMENT POSTIVE

CHEAP

The Company is trading at a 72% discount under a reasonably estimated DCF.

SAFE

Strong Financial Position

The Company has strong cash position with no debt and no off-balance sheet financing.

Competent and Honest Management

The management team has substantial experience in the Data Storage

Devices industry and most executives have been associated with the company in
some capacity for many years. The management team's compensation is longterm incentives and mostly based on performance, which creates incentive for the

management to do well and stay with the Company.

Strategic Alliance with Deloitte

On November 19, 2008, the

Company established a strategic

Jane Griffin, principal of Deloitte
Consulting LLP, says, "Organizations
recognizes the strength behind
Teradata's enterprise data warehousing
and analytic capabilities. Coupled with
Deloitte's cross-functional advisory,
assessment, strategy and
implementation—related services, this
alliance can help companies in their
efforts to make better, faster decisions

alliance with Deloitte to provide comprehensive services and solutions to address

organizations' increasing enterprise data warehousing and information management needs (Teradata Corporation, 2007). Having a prestigious alliance like Deloitte, it creates more competitive advantage for the Company to compete with its competitors.

Advantages of foreign currency exchange

Under US GAAP, the Company uses translation (current rate method) to accounts for the differences resulting from the translation of non-US subsidiaries' assets and liabilities into US dollars. Under the current rate method, the weakening of US dollars will positively affect the Company's consolidated financial statement, as foreign accounts will translate more US dollars. Since the US dollar is weakening now due to inflated interest rate in this financial crisis, it results in a gain on foreign currency exchange when the Company consolidates its non-US subsidiaries.

Under IFRS, which will take place in 2016 or earlier if the Company chooses to adopt it early, there will not be foreign currency exchange. However, the Company will still benefit from that by the time the Company adopt IFRS, the financial crisis will fade away and the US dollar will be strengthening again.

INVESTMENT NEGATIVE

Although the Company has existed since 1979, the Company was spun-off from NCR a year ago. We only see 1 year performance of the Company since its spin-off. Therefore, there are lots of assumptions in building the financial models

and which may subject to various changes in the future. In addition, the Company may subject to slower growth due to current market conditions.

COMPANY DESCRIPTION

Business

Teradata Corporation (NYSE: TDC) is the world's largest company solely focused on raising intelligence through data warehousing and enterprise analytics.

Teradata is in more than 60 countries and on the Web at www.teradata.com.

Teradata Corporation provides enterprise data warehousing solutions, including enterprise analytic technologies and services worldwide. The company's data warehousing solutions include software, hardware, and related business consulting and support services. Its solutions integrate an organization's enterprise-wide data (about customers, financials and operations) into a single enterprise-wide data warehouse (Teradata Corporation, 2007).

History & Development

Teradata was formed in 1979 as a Delaware corporation. Teradata established a relational database management system on a proprietary platform in 1984. In 1990, Teradata partnered with NCR Corporation ("NCR") to jointly develop next-generation database systems. In 1991, AT&T Corp. ("AT&T") acquired NCR and, later that year, NCR purchased Teradata. In 1995, Teradata was merged into NCR's operations and ceased to exist as a separate legal entity.

In 1996, AT&T spun off NCR (including Teradata) to form an independent, publicly-traded company, NCR Corporation. In 1999, NCR consolidated its data warehousing operations and product offerings into a separate operating division. Since 1999, we have increased our investments and focus to extend the scope of our enterprise data warehousing solutions, including improvements to our leading database software, increasing our enterprise analytic software applications, and providing sophisticated support and professional consulting services (Teradata Corporation, 2007).

The Separation

On August 27, 2007, the Board of Directors of NCR approved the separation of NCR into two independent, publicly-traded companies through the distribution of 100% of its Teradata data warehousing business to shareholders of NCR.

To effect the Separation, Teradata was formed as a separate Delaware corporation on March 27, 2007, as a wholly-owned subsidiary of NCR.

Immediately prior to the Separation, the assets and liabilities of the Teradata data warehousing business of NCR were transferred to Teradata in return for 180.7 million shares of the Company's common shares. NCR accomplished the Separation through a distribution of one share of Teradata common stock for each share of NCR common stock on September 30, 2007. 100% of the Teradata shares were distributed to NCR shareholders of record as of September 14, 2007 (Teradata Corporation, 2007).

Customers & Suppliers

As of December 31, 2007, the Company served more than 850 customers worldwide, comprising 60% of the most admired global companies, which include

90% of the top ten global telecommunication firms,

70% of the top global airlines,

60% of the top transportation/logistics firms,

five of the top ten global retailers,

and 50% of the top global commercial and savings banks.

(Rankings are based on the July 2007 Fortune Global Rankings and

Teradata customers as of 2007.)

According to Note 13 in the 2007 annual report, no single customer accounts for more than 10% of the Company's revenue. The Company does not heavily rely on single or few suppliers. Thus, the concentration risk is low, and the Company is unlikely subject to bargaining power from customers and suppliers.

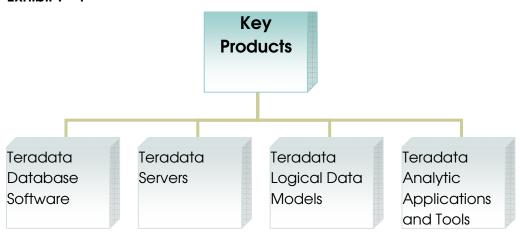
Main Competitors

The Company competes with IBM and Oracle.

PRODUCTS DESCRIPTION

The Company is a single-source provider of enterprise data warehousing solutions with a fully integrated business. Its key software and hardware products include *Teradata Database Software*, *Teradata Servers*, *Teradata Logical Data Models* and *Teradata Analytic Applications and Tools*. Teradata also provides professional consulting services, customer support services and training services (Teradata Corporation, 2007).

Exhibit T - 1



Teradata Database Software

The Company's Teradata database software analyzes large amounts of data and processing increasing volumes and complexity of queries. Its software combined with its massively parallel processing (MPP) architecture provides the foundation for its ability to support and manage a range of mixed workloads and data warehousing functions. These functions range from generating reports to ad hoc queries to data mining and simultaneous data loading, all from a single data warehouse that integrates data from across the enterprise to drive better, faster decision-making. The Company's Teradata database software delivers near real-time intelligence for its customers with features, such as support of short-term operational and long-term strategic workloads (mixed workloads), the ability to handle concurrent queries, system management, system availability, event monitoring, and integration into the enterprise. Teradata also offers subscriptions that provide its customers with when-and-if-available upgrades and enhancements to its database software (Teradata Corporation, 2007).

Teradata Servers

For the hardware component of the Company's solutions, Teradata integrates and optimizes open systems hardware components with fault-tolerant BYNET MPP interconnect. It utilizes Intel XEON 32/64-bit servers, along with storage offerings. As a result, its solutions perform in multiple operating environments, including UNIX, LINUX and Microsoft Windows. Further, Teradata servers are designed to protect its customers' technology investments so that new servers can co-exist with multiple generations of its hardware platform (Teradata Corporation, 2007).

Teradata Logical Data Models

Teradata's enterprise industry logical data models (LDMs) are designed to be easy-to-follow blueprints for designing an enterprise data warehouse that reflects business priorities tailored to the specific needs of a particular industry. Its LDMs organizes and structures information, defining which individual data elements are required and how they relate to one another to provide a data model for the entire enterprise. The Company's LDMs are licensed to its customers as a key component of its data warehousing solutions. Teradata also offers subscriptions that provide its customers with when-and-if-available upgrades and enhancements to its LDMs (Teradata Corporation, 2007).

Teradata Analytic Applications and Tools

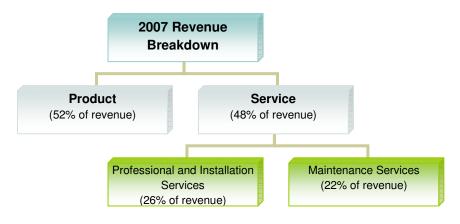
Teradata offers a suite of data access and management tools and applications that leverage enterprise intelligence to solve business problems.

These tools and applications include data mining, master data management, customer management, enterprise risk management, finance and performance management, demand and supply chain management, and profitability analytics (Teradata Corporation, 2007).

REVENUE BREAKDOWN BY PRODUCT & SERVICE

Revenues are primarily generated in the multi-billion dollar data warehousing market.

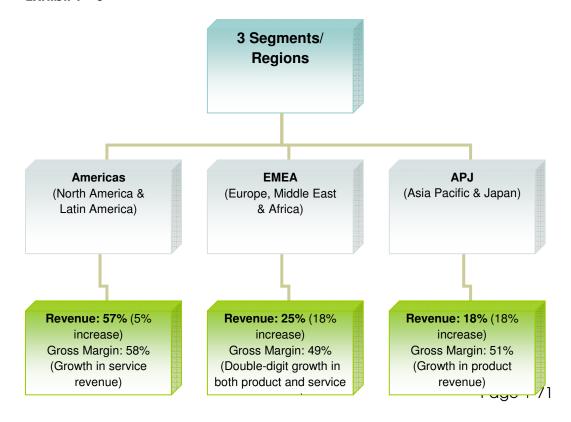
Exhibit T - 2



REVENUE BREAKDOWN BY SEGMENTS

Teradata operates in three geographic regions: (1) the North America and Latin Americas ("Americas") region; (2) the Europe, Middle East and Africa ("EMEA") region; and (3) the Asia Pacific and Japan ("APJ") region. These three regions are also the Company's operating segments. In the United States, the Company operates from three main locations: Atlanta, Georgia; Miamisburg, Ohio, and Rancho Bernardo, California.

Exhibit T - 3



TRAILING TWELVE MONTHS (TTM) DATA CALCULATION

Exhibit T - 4

	A	В	C=A-B	D	E=C+D
	2007	2007	2007	2008	ΤΙΜ
In Millions	01-04	01-03	Q4	01-03	11141
EBIT	405	224	181	231	422
Dep & Amort	68	51	17	47	64
EBITDA	473	275	198	278	486
Segment Gross Margin					
Americas	560	402	158	394	552
EMEA	207	144	63	175	238
APJ	159	109	50	111	161
- Corp-related costs	10	0	10	0	0
Total Gross Margin	916	655	261	680	951
- SG&A (b/f unusual items)	385	339	46	371	417
- R&D	126	92	34	78	112
EBIT	405	224	181	231	422
Margin % (EBIT/GM)	44%	34%	69%	34%	44%
 Interest Expense/ (Income) 	(2)	0	(2)	4	2
EBT	407	224	183	227	420
- Income Tax Expense	122	103	19	64	83
Tax Rate	30%				20%
Net Income	285	121	164	163	337
+ Dep. & Amort.	68	51	17	47	64
+ Other non cash charges	119	117	2	112	114
Operating Cash Flow	472	289	183	322	515
- Capex	100	69	31	60	91
Unlevered FCF	372	220	152	262	424

According to the past few years' financial results, operating segment "Americas" has the lowest growth, while the other two operating segments have around 18% growth in 2007 and a declining growth in 2008 due to macroeconomic impacts.

Extreme Conservative Assumptions

Assuming an increasing negative growth in "Americas" and 0% growth for the other two segments for the future years, while the operating expenses continues to increase. Under a discounted cash flow analysis, the Company is trading at a **48% discount**, given the share price at \$13.43 as of November 28, 2008.

The following are the detailed calculations of the equity value per share under these conservative assumptions:

Exhibit T - 5

		Fisca	Fiscal Year			rward B	ward Estimates			Long-Term Forward Estimates				Terminal Year
Segment Gross Margin	2005	2006	2007	2008 TTM	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Americas														
Gross Margin	507	545	560	552	544	536	528	520	512	504	496	488	480	472
Growth %		6.97%	2.68%	-1.45%	-1.47%	-1.49%	-1.52%	-1.54%	-1.56%	-1.59%	-1.61%	-1.64%	-1.67%	-1.69%
EMEA														
Gross Margin	165	168	207	238	238	238	238	238	238	238	238	238	238	238
Growth %		1.79%	18.84%	13.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
APJ														
Gross Margin	130	126	159	161	161	161	161	161	161	161	161	161	161	161
Growth %		-3.17%	20.75%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Subtotal	802	839	926	951	943	935	927	919	911	903	895	887	879	871
- Corp-related costs	7	10	10	0	0	0	0	0	0	0	0	0	0	0
Total Gross Margin	795	829	916	951	943	935	927	919	911	903	895	887	879	871

Exhibit T - 6

		Fiscal	Year		Foi	ward Es	timates		Lon	g-Term	-Term Forward Estimates			Terminal Year	
	2005	2006	2007 2	008 TTM	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Total Gross Margin	795	829	916	951	943	935	927	919	911	903	895	887	879	871	
- SG&A (bif unusual items)	391	410	385	417	425	434	443	451	460	470	479	489	498	508	
- R&D	120	117	126	112	114	117	119	121	124	126	129	131	134	137	
EBIT	284	302	405	422	403	385	366	346	327	307	287	267	247	226	
Margin % (EBIT/GM)	36%	36%	44%	44%	43%	41%	39%	38%	36%	34%	32%	30%	28%	26%	
- Interest Exp./ (Inc.)	0	0	(2)	2	2	2	2	2	2	2	2	2	2	2	
EBT	284	302	407	420	401	383	364	344	325	305	285	265	245	224	
- Income Tax Exp.	78	110	122	83	100	96	91	86	81	76	71	66	61	56	
Tax Rate	27%	36%	30%	20%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
Net Income	206	192	285	337	301	287	273	258	244	229	214	199	184	168	
+ Dep. & Amort.	55	55	68	64	65	65	65	65	65	65	65	65	65	65	
+ Other non cash charges	(69)	(28)	119	114	100	100	100	100	100	100	100	100	100	100	
Operating Cash Flow	192	219	472	515	466	452	438	423	409	394	379	364	349	333	
- Capex			100	91	100	100	100	100	100	100	100	100	100	100	
Unlevered FCF	192	219	372	424	366	352	338	323	309	294	279	264	249	233	
WACC	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	
Projection Year					1	2	3	4	5	6	7	8	9		
Discount Factor					0.90	0.81	0.73	0.66	0.59	0.53	0.48	0.43	0.39		
PV of Unlevered FCF					330	286	247	213	183	157	134	115	97		

Exhibit T - 7

Sum of PV of FCF	1,762
Add: Terminal Value	1,519
Value of FCF	3,281
- Debt	0
+ Cash	328
Equity Value	3,609
Equity Value Diluted Shares O/S	3,609
	7
Diluted Shares O/S	181

A More Reasonable Assumption

The following are the detailed calculations of the equity value per share under a more reasonable assumption:

Exhibit T - 8

		Fisca	l Year		Fo	rward E	stimates		Lo	ng-Term	Forward	Estimat	es	Terminal Year
Segment Gross Margin	2005	2006	2007	2008 TTM	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Americas														
Gross Margin	507	545	560	552	544	536	528	520	512	504	496	488	480	472
Growth %		6.97%	2.68%	-1.45%	-1.47%	-1.49%	-1.52%	-1.54%	-1.56%	-1.59%	-1.61%	-1.64%	-1.67%	-1.69%
ЕМЕА														
Gross Margin	165	168	207	238	250	260	270	280	285	290	300	310	320	320
Growth %		1.79%	18.84%	13.8	4.80%	3.85%	3.70%	3.57%	1.75%	1.72%	3.33%	3.23%	3.13%	0.00%
АРЈ														
Gross Margin	130	126	159	161	161	161	161	161	161	161	161	161	161	161
Growth %		-3.17%	20.75%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Subtotal	802	839	926	951	955	957	959	961	958	955	957	959	961	953
- Corp-related costs	7	10	10	0	0	0	0	0	0	0	0	0	0	0
Total Gross Margin	795	829	916	951	955	957	959	961	958	955	957	959	961	953

Other assumptions remain unchanged. Assuming a low and gradually declining growth for the EMEA segment

for the future years, while the operating expenses continues to increase. Under a discounted cash flow analysis, the Company is trading at a **72% discount**, given the share price at \$13.43 as of November 28, 2008.

Sum of PV of FCF	1,933
Add: Terminal Value	1,920
Value of FCF	3,853
- Debt	0
+ Cash	328
Equity Value	4,181
Diluted Shares O/S	181
Equity Value Per Share	\$23.06
Current share Price	\$13.43
Premium/(Discount)	-72%

The Company's intrinsic value is very sensitive to the growth rate of its operating segments. With no or declining growth in the segments, the Company is trading at 72% discount. Even under the extremely conservative approach, the Company is still trading at 42% discount. Therefore, the Company is worth a BUY.

NET ASSET VALUE (NAV) ANALYSIS

(In Millions Except Per Share Amounts)

Exhibit T - 9

		2007		ПМ (Q4-07, Q1,Q2,Q3- 08)			
	4x	6x	8x	4x	6x	8x	
Operating Profit	405	405	405	422	422	422	
Dep. & Amort.	68	68	68	64	64	64	
EBITDA	473	473	473	486	486	486	
Multiple	4x	6x	8x	4x	6x	8x	
Fixed-multiple EV	1,892	2,838	3,784	1,944	2,916	3,888	
- debt	0	0	0	0	0	0	
+ Cash	270	270	270	328	328	328	
Equity Value	2,162	3,108	4,054	2,272	3,244	4,216	
Diluted shares							
outstanding	181	181	181	181	181	181	
Equity Value per							
share	11.92	17.14	22.36	12.55	17.92	23.29	
Current share price	13.43	13.43	13.43	13.43	13.43	13.43	
Premium / (Discount)	12.62%	- 21.66%	- 39.94%	6.99%	- 25.07%	- 42.34%	

Using a Net Asset Value approach, the Company is trading at a 6.99% premium, 25.07% discount, and 42.34% discount under a 4x, 6x, and 8x multiple respectively. The equity value per share calculated using trailing twelve months data is higher, compared to the one using 2007 annual report numbers. This indicates a trend of increase in the Company's equity value per share, which may due to an increase in the Company's ability to generate earnings and maintain strong cash position.

MANAGEMENT ANALYSIS

Ownership by Officers and Directors

According to DEF 14A statement, as of January 21, 2008, none of the Company's directors or executive officers beneficially owned more than 1.0% of the issued and outstanding shares of Teradata common stock. As a group, such directors and executive officers beneficially owned 0.76% of Teradata's issued and outstanding shares of common stock. This is good as the management does not have significant control over the voting results. Since the ownership of the Company's shares is widely spread, the voting results will be fair, and it is good for outside passive minority investors (Teradata Corporation, 2008).

Ownership over 5%

The following stockholders beneficially own more than 5% of the Company's outstanding stock.

Exhibit T - 10

Name and Address of Beneficial Owner	Total # of Shares	
Delaware Management Business Trust (1)	14,447,648	7.98%
Cramer Rosenthal McGlynn, LLC (2)	9,449,239	5.20%
Stephen F. Mandel, Jr. (individually and for Lone		
Pine Assoc. LLC, et al.) (3)	9,254,453	5.10%

(Teradata Corporation, 2008)

All shares outstanding are evenly distributed among individual or institutional holders. There are only 3 parties that hold more than 5% of the Company's outstanding stock, which is considered immaterial and will not significantly influence the voting results.

Board of Directors

The Board of Directors is currently divided into three classes. Directors are elected by stockholders for terms of three years and hold office until their successors are elected and qualify. One of the three classes is elected each year to succeed the directors whose terms are expiring. Most of our non-employee directors were directors of NCR Corporation ("NCR"). This is reasonable as NCR shareholders have shares in TDC after the spin-off. If TDC shareholders elect the same people for board of directors for TDC, this may indicate a high confidential level of the TDC shareholders on the NCR directors (Teradata Corporation, 2008).

Compensation

A significant portion of the Company's executive officers' compensation is variable and contingent upon achieving specific results – namely, revenue and profitability. In general, the pay for performance elements includes the Company's annual incentives (cash-based compensation) and long-term incentives (equity-based compensation).

In 2007, approximately two thirds of the total direct compensation for the Company's Named Executive Officers was weighted towards variable components. In general, the percentage of performance-based compensation – particularly long-term incentives (equty-based compensation) – increases as the levels of executive responsibility increase (Teradata Corporation, 2008). This is good as it creates more incentive for executives to stay with the Company and do

well, under the condition that most of their compensations tied to the performance of the Company.

DEBT ANALYSIS

The Company has no debt.

\$300 million Revolving Credit Facility

According to Note 13 in the Company's 2007 annual report, the Company entered into a five-year, \$300 million unsecured credit agreement with a syndicate of financial institutions and Bank of America, N.A., as Administrative Agent. The Credit Agreement provides for a revolving credit commitment of up to \$300 million, and expires on October 1, 2012. The borrowing subjects to a floating rate based on the London Interbank Offered Rate ("LIBOR"). If the facility had been fully drawn at December 31, 2007, the spread over the LIBOR would have been 32 basis points given the Company's leverage ratio at that date (Teradata Corporation, 2007).

The Company had no short- or long-term debt outstanding as of September 30, 2008, and was in compliance with all covenants of the revolving credit facility. This is a good sign of the Company's liquidity position since the Company does not need to borrow money yet. Even if it does, the Company's cash and short-term investment resources, cash flows from operations and its \$300 million credit facility will be sufficient to satisfy future working capital,

research and development activities, capital expenditures, pension contributions, and other financing requirements for the foreseeable future.

Commitments and Contingencies

There is a total reserve of \$7 million for litigation commitments, which is immaterial for the Company. The lease and purchase obligations for foreseeable futures are \$221 million in total, which is relatively small compare to the Company's cash position (Teradata Corporation, 2007).

LIQUIDITY AND EFFICIENCY ANALYSIS

Liquidity Ratio

Exhibit T - 11

	Company	Industry	Sector	S&P 500
Quick Ratio (MRQ)	1.66	1.71	1.97	1.04
Current Ratio (MRQ)	1.74	1.85	2.36	1.28
LT Debt to Equity (MRQ)	0.00	41.06	18.28	151.80
Total Debt to Equity (MRQ)	0.00	56.71	27.38	197.45

Having a quick ratio of 1.66 and a current ratio of 1.74, the Company does not seem to have liquidity issue in the short run.

Efficiency Ratios

Exhibit T - 12

	Company	Industry	Sector	S&P 500
Revenue/Employee (TTM)	294,068	123,314	12,398,560	857,796
Net Income/Employee (TTM)	42,373	8,751	1,243,125	98,793
Receivable Turnover (TTM)	4.48	0.61	3.09	10.70
Inventory Turnover (TTM)	19.60	2.02	3.09	9.71
Asset Turnover (TTM)	1.46	0.09	0.46	0.79

The Company's high inventory turnover ratio corresponds to its high revenue or net income to employee ratio. The Company outperforms its industry,

its sectors, as well as the average of S&P 500 in terms of efficiency. Thus, it is a good sign for the Company's ability to survive and grow under the current market conditions.

SUBSEQUENT EVENTS

Stock Repurchases

On February 11, 2008, the Board of Directors of the Company authorized two stock repurchase programs. The Company repurchased approximately 1.6 million shares for approximately \$38 million. In other words, the repurchase price is \$23.75 per share. Stock repurchase is a good indication of the Company's perception on its share value. Companies usually repurchase their stocks when the stock price is undervalued (Teradata Corporation, 2007).

Strategic Alliance with Deloitte

On November 19, 2008, the Company established a strategic alliance with Deloitte to provide comprehensive services and solutions to address organizations' increasing enterprise data warehousing and information management needs (Teradata Corporation, 2007).

TERADATA CORPORATION Consolidated Statements of Income In millions, except per share amounts

Revenue Product revenue \$ 884 \$ 807 \$ 786 Service revenue \$ 1,702 \$ 1,547 \$ 1,467 Operating expenses Cost of products 312 289 286 Cost of services 474 429 386 Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Basic \$ 1.11 \$ 1.06 \$ 1.14 Other income \$ 1.11 \$ 1.06 \$ 1.14 Other income \$ 1.11 </th <th>For the year ended December 31</th> <th>2007</th> <th>2006</th> <th>2005</th>	For the year ended December 31	2007	2006	2005
Service revenue 818 740 681 Total revenue 1,702 1,547 1,467 Operating expenses Cost of products 312 289 286 Cost of products 474 429 386 Cost of services 470 410 391 Research and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 322 302 284 Income \$ 200 \$ 192 \$ 206 Net income Basic \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares 180.8 180.7 180.7	Revenue			
Total revenue 1,702 1,547 1,467 Operating expenses Cost of products 312 289 286 Cost of services 474 429 386 Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share Basic \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.0 \$ 1.0 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Product revenue	\$ 884	\$ 807	\$ 786
Operating expenses Cost of products 312 289 286 Cost of services 474 429 386 Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Service revenue	818	740	681
Cost of products 312 289 286 Cost of services 474 429 386 Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$200 \$192 \$206 Net income per common share \$1.11 \$1.06 \$1.14 Diluted \$1.10 \$1.06 \$1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Total revenue	1,702	1,547	1,467
Cost of services 474 429 386 Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 322 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Operating expenses			
Selling, general and administrative expenses 470 410 391 Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding \$ 180.8 180.7 180.7	Cost of products	312	289	286
Research and development expenses 126 117 120 Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Cost of services	474	429	386
Total operating expenses 1,382 1,245 1,183 Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Selling, general and administrative expenses	470	410	391
Income from operations 320 302 284 Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Research and development expenses	126	117	120
Interest income (2) — — Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Total operating expenses	1,382	1,245	1,183
Income before income taxes 322 302 284 Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Income from operations	320	302	284
Income tax expense 122 110 78 Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Interest income	(2)	_	_
Net income \$ 200 \$ 192 \$ 206 Net income per common share \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Income before income taxes	322	302	284
Net income per common share Basic \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Income tax expense	122	110	78
Net income per common share Basic \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7				
Basic \$ 1.11 \$ 1.06 \$ 1.14 Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Net income	\$ 200	\$ 192	\$ 206
Diluted \$ 1.10 \$ 1.06 \$ 1.14 Weighted average common shares outstanding Basic 180.8 180.7 180.7	Net income per common share			
Weighted average common shares outstanding Basic 180.8 180.7 180.7	Basic	\$ 1.11	\$ 1.06	\$ 1.14
Basic 180.8 180.7 180.7	Diluted	\$ 1.10	\$ 1.06	\$ 1.14
	Weighted average common shares outstanding			
	Basic	180.8	180.7	180.7
Diluted 181.3 180.7 180.7	Diluted	181.3	180.7	180.7

TERADATA CORPORATION

Consolidated Balance Sheets In millions, except per share amounts

At December 31 Assets	2	2007	2	2006
Current Assets				
	Φ.	250	Φ.	
Cash and cash equivalents	\$	270	\$	
Accounts receivable, net		507		379
Inventories, net		51		39
Other current assets		45		84
Total current assets		873		502
Property, plant and equipment, net		94		64
Capitalized software, net		61		59
Goodwill		90		90
Deferred income taxes		140		265
Other assets		36		23
Outer assets		30		23
Total assets	\$1	,294	\$1	,003
Liabilities and stockholders' equity				
Current liabilities				
Accounts payable	\$	120	\$	67
Payroll and benefits liabilities	Ψ	88	Ψ	78
Deferred revenue		246		194
Other current liabilities		118		54
Other Current Indomities		110		54
Total current liabilities		572		393
Pension and other postemployment plan liabilities		88		
Other liabilities		3		19
Other fraofitities		3		19
Total liabilities		663		412
Commitments and contingencies (Note 10)				
Stockholders' equity				
Preferred stock: par value \$0.01 per share, 100.0 shares authorized, no shares				
issued and outstanding at <u>December 31, 2007</u> and <u>2006</u> respectively		_		_
Common stock: par value \$0.01 per share, 500.0 shares authorized, 181.0 shares				
issued and outstanding at <u>December 31, 2007</u> ; no shares issued and outstanding				
at December 31, 2006		2		
Paid-in capital		555		_
Retained earnings		79		
Parent company investment				573
Accumulated other comprehensive (loss) income		(5)		18
1. Totalian and a comprehensive (1998) income		(3)		10
Total stockholders' equity		631		591

TERADATA CORPORATION Consolidated Statements of Cash Flows In millions

For the year ended December 31	2007	2006	2005
Operating activities			
Net income	\$ 200	\$ 192	\$ 206
Adjustments to reconcile net income to net cash provided by operating	, , , , , , ,		
activities:			
Depreciation and amortization	68	55	55
Stock-based compensation expense	17	9	1
Deferred income taxes	80	(14)	(18)
Non-cash income tax adjustment	_	<u> </u>	(33)
Changes in assets and liabilities:			
Receivables	(128)	(29)	(16)
Inventories	(12)	(10)	(5)
Current payables and accrued expenses	71	1	(2)
Deferred revenue	52	15	10
Employee severance and pension	2	_	_
Other assets and liabilities	37	_	(6)
			. ,
Net cash provided by operating activities	387	219	192
1 tot cash provided by operating activities	307	21)	1,2
Investing activities			
Expenditures for property, plant and equipment	(50)	(20)	(18)
Additions to capitalized software	(50)	(48)	(37)
Other investing activities, net	(4)	(21)	(8)
Net cash used in investing activities	(104)	(89)	(63)
Financing activities			
Cash contributions from parent	200	_	
Transfer to parent, net	(216)	(130)	(129)
Excess tax benefit from stock-based compensation	1	_	_
Other financing activities, net	1	_	—
Net cash used in financing activities	(14)	(130)	(129)
Effect of exchange rate changes on cash and cash equivalents	1	_	_
Increase in cash and cash equivalents	270	_	_
Cash and cash equivalents at beginning of year	_	_	
1			
Cash and cash equivalents at end of year	\$ 270	\$ —	\$ —
Supplemental data			

Cash paid during the year for:

Income taxes \$ 1 \$ -- \$ -- Interest \$ -- \$ -- \$ --

The Orange Value $\mathbf{Fund}^{\mathbf{TM}}$

Investment Research Report

Tech Data Corp

NASDAQ: TECD

 $\mathbf{B}\mathbf{y}$

Brian Burrow

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ANALYST RECOMMENDATION

I recommend waiting for the common equity of Tech Data Corp (TECD) to get cheaper before considering purchase. Although the company appears cheap using fixed multiple enterprise value FMEV) and relative valuation methodologies, industry constraints limit growth and will continually deteriorate operating margins. The computer peripheral and equipment and software industry is intensely competitive and Tech Data Corp's gross, margins, although among the best in the industry, consistently range below 5 percent. However, TECD employs a conservative balance sheet and trades at almost half of book.

Furthermore, the company is cash rich with nearly \$8 per share cash and consistently generates positive cash flow from operations. Consequently, the common equity can be a good value when presented with a larger margin of safety.

ORIGIN OF IDEA

I am intrigued by the challenge of modeling technology companies and determined to find businesses that meet strict value investing criteria. I intend to find technology businesses that meet the Orange Value Fund's (OVF) definition of safe and cheap. TECD is cheap relative to competitors and several valuation

methods, and consequently meets the OVF quantitative criteria. However, the company does not meet qualitative standards.

COMPANY DESCRIPTION

Tech Data Corp is a leading distributor of information technology (IT) products, logistics management, and other value-added services. The company primarily serves value-added resellers (VARS), direct marketers, retailers and corporate sellers in North America, Latin America, and Europe. TECD distributes product lines such as disk drivers, terminals, computers, keyboards, printers, software, and other computer equipment to businesses. Proliferation of hardware technology and global suppliers necessitates the need for wholesalers such as TECD. The company also sells training and technical support, external financing, configuration services, outbound telemarketing, marketing services, and other electronic commerce solutions to supplement wholesale distribution (*Tech Data Corp 2009 Quarterly Report*, 2008).

TECD makes money by leveraging its efficient cost structure and numerous services to create cost efficiencies for suppliers and customers.

Businesses save money through TECD because purchasing technology supplies infrequently or in small scale is more expensive than buying from low cost wholesalers. Furthermore, TECD's value-added services complement technology purchases and streamline customer product integration. The company essentially captures the spread it creates from efficiently purchasing computer and software

products in large scale and reselling to customers (*Computers & Computer Peripheral Equipment & Software*, 2007).

Unfortunately, the wholesale distribution industry is characterized by intense competition and deteriorating margins. Competition between the big three industry players (Tech Data Corp, Ingram Micro, and Synnex) keeps prices low and "forces distributors to earn their contracts" ("Computers & Computer Peripheral Equipment & Software, 2008). Synnex is the lowest cost producer, forcing TECD to compete on service and technology integration. In addition, customers are accustomed low prices and create excessive end-user demands. "The industry is currently facing competition from low-cost manufacturers in Japan, Korea, and China" (*Tech Data Corp*, 2009, p. 1).

VALUATION DATA

Tech Data Corps's stagnant EBITDA growth reflects an intensely competitive, low margin industry. Accordingly, my valuation assumes zero growth. I use an average of the previous five year's adjusted EBITDA in both my ratio and net asset value analysis. I believe the company's value lies in a strong balance sheet and current earnings power. Net debt is currently below \$50 million and working capital continues to improve into 2009. Furthermore, current market prices reflect a substantial discount to current asset value and earnings.

I adjust EBITDA by adding back losses on asset sales, goodwill impairment, and restructuring charges. TECD generally does not sell tangible assets or investments for capital gain. The company's largest asset is inventory,

which is recorded in ordinary business income. Consequently, the loss should be added back to 2008 EBITDA. I also add back an impairment charge in 2007. TECD's European reporting unit reported less cash flow as a result of restructuring activity and subsequently recorded impairment to goodwill. Although indicative of paying too much for acquisitions, TECD physically can't take any more substantial goodwill charges because it only has a few million dollars in goodwill remaining. Finally, I add back restructuring charges to EBITDA because the company finished its restructuring program in Europe. TECD's enterprise value is currently half of the previous four year average, reflecting depressed market prices.

Exhibit Tech - 1

Adjusted EBITDA	2008	2007	2006	2005	2004
Operating Income	\$ 188.35	\$ (4.18)	\$ 163.30	\$ 235.51	\$ 165.62
Depreciation & Amortization	53.88	53.28	53.74	55.47	55.08
Loss on Asset Sale	14.47	-	-	-	-
Goodwill Impairment	-	136.09	-	-	3.07
Restructuring Charge	16.15	23.76	30.95	-	-
Adjusted EBITDA	\$ 272.86	\$ 208.95	\$ 247.99	\$ 290.99	\$ 223.77
Normalized EBITDA	\$ 248.91				

Exhibit Tech - 2

Enterprise Value	Current	2008	2007	2006	2005	2004
Shares Outstanding	50.01					
Market Price	\$ 19.63					
Market Cap	981.72	2036.64	2200.14	2316.76	2479.1	2391.79
Preferred Equity	-	-	-	-	-	-
Minority Interest	-	-	-	-	-	-
Total Debt	430.21	383.20	443.18	251.07	377.18	397.41
Cash & Equivalents	385.17	447.34	265.01	156.67	195.06	108.80
Enterprise Value	1,026.76	1,972.50	2,378.31	2,411.17	2,661.23	2,680.40

Tech Data's current price to tangible book value reflects the equity's depressed price. The company usually trades above 1 times book. In addition, Tech Data's low enterprise to adjusted EBITDA multiple suggests market capitalization is below intrinsic value. The balance sheet also reflects large cash holdings, as indicated in a current \$7.70 per share cash balance. TECD managed to maintain a large cash balance throughout 2008, reflecting a healthy operating cash flow and a low price to cash flow multiple.

Exhibit Tech - 3

Valutation Data	Cu	Current 20		2008 2007 2006		2006	2005	2004		
Price/Book		0.58		1.06		1.29		1.32	1.29	1.44
Price/Tangible Book		0.59		1.12		1.37		1.52	1.49	1.70
EV/Adjusted EBITDA		3.76		7.23		11.38		9.72	9.15	11.98
Price/Cash Flow		2.75		5.70		NA		9.00	23.18	7.89
Cash/Share	\$	7.70	\$	8.47	\$	4.82	\$	2.79	\$ 3.31	\$ 1.89

FIXED MULTIPLE ENTERPRISE VALUE ANALYSIS

Using adjusted EBITDA, I derive a reasonable net asset value (NAV) from a fixed multiple enterprise value (FMEV) calculation. I subtract 2008 capital expenditures (CAPEX) from normalized adjusted EBITDA. Capital expenditures (CAPEX) consist of personalty such as furniture and capitalized software expenditures. CAPEX is generally low. I next apply reasonable multiples to discount current earnings to present value to derive FMEV. Finally, I subtract net debt and divide by shares outstanding to calculate NAV per share. TECD is trading at a 20 percent discount to reasonably ascertainable NAV using a 6 times multiple. The margin of safety considering the current economic environment is inadequate. There are better securities trading at greater discounts to intrinsic value, some of which the OVF currently holds.

Nevertheless, TECD could supplement the fund's current technology portfolio if the margin of safety improves.

Exhibit Tech - 4

Fixed Multiple Enterprise Value Calculation			
Adjusted Normalized EBITDA	\$ 248.91	\$ 248.91	\$ 248.91
Less CAPEX	(38.36)	(38.36)	(38.36)
	\$ 210.55	\$ 210.55	\$ 210.55
Multiple	4.0x	6.0x	8.0x
FMEV	\$ 842.20	\$1,263.30	\$1,684.40
Less Net Debt	45.05	45.05	45.05
Going Concern Net Asset Value	\$ 797.15	\$1,218.25	\$1,639.35
Shares Outstanding	50.01		
NAV per Share	15.94	24.36	32.78
Market Price per Share	\$ 19.63		
Premium(Discount) to NAV	23.15%	-19.42%	-40.12%

RESOURCE CONVERSION ANALYSIS

Computer peripheral equipment and software (SIC: 5045) resource conversion transaction multiples from mergers, acquisitions, spin-offs, and divestitures suggest that outside passive minority investors (OPMIs) can realize a premium to current market prices in a resource conversion. TECD trades at a significant discount to mean industry EBITDA and enterprise value transaction multiples. Furthermore, I exclude several large outliers in the data set, deflating mean EBITDA and enterprise value multiples.

Exhibit Tech - 5

Deal Multiples (2003-2009)	Low	Mean	High
EBITDA	2.68	7.91	18.87
Enterprise Value	0.21	1.20	1.80
Book Value	0.55	1.99	5.73
Revenue	0.15	1.99	5.73
Resource Conversion Valuations			
EBITDA			
Normalized Adj EBITDA	248.91	248.91	248.91
EBITDA Multiples	2.68x	7.91x	18.87x
Transaction Value	667.08	1,968.87	4,696.91
Resource Conversion per Share	\$ 13.34	\$ 39.37	\$ 93.92
Enterprise Value			
Enterprise Value	1,026.76	1,026.76	1,026.76
Enterprise Value Multiples	0.21x	1.20x	1.80x
Transaction Value	215.62	1,232.12	1,848.17
Resource Conversion per Share	\$ 4.31	\$ 24.64	\$ 36.96

Mean enterprise value and EBITDA transaction multiples further indicate that TECD is trading at a discount to intrinsic value. Resource conversion activity over the last six years supports my FMEV analysis. In fact, a mean 8 times EBITDA multiple suggests that my analysis may be overly conservative.

EPV ANALYSIS

I value TECD using current earnings power and factoring in the effective tax rate. I subtract maintenance CAPEX from adjusted normalized EBITDA.

Maintenance CAPEX is the required level of expenditures necessary to maintain current income generating assets. I calculate maintenance CAPEX by averaging the property, plant, and equipment to sales ratio over the last five years. I then apply the five year ratio to the difference between 2008 and 2007 sales to derive growth CAPEX. I subtract growth CAPEX from total CAPEX to calculate maintenance CAPEX.

Exhibit Tech - 6

Maintenance CAPEX	2008	2007	2006	2005	2004	Average
PPE/Sales	0.0055	0.0066	0.0069	0.0074	0.0090	0.0071
Total CAPEX	38.36					
Less Growth CAPEX	14.03					
Maintenance CAPEX	24.33					

After subtracting maintenance CAPEX from normalized adjusted EBITDA, I subtract taxes to derive adjusted earnings. I assume a 38 percent effective tax rate. I multiply adjusted earnings by the company's weighted average cost of capital (WACC) to calculate TECD's zero growth value. The earnings power value (EPV) per share is larger than the mid case NAV, indicating that my original valuation may be conservative. The EPV is slightly below book value (\$1,674 million), further highlighting the company's difficult competitive position. TECD will earn below average cash flow and suffer deteriorating margins unless management differentiates products and services from competitors.

Exhibit Tech - 7

EPV Calculation		
WACC		9.29%
Effective Tax Rate		38.00%
Adjusted Normalized EBITDA	Ś	248.91
Maintence CAPEX	\$	24.33
EBITDA less CAPEX	\$	224.58
Tax Adjusted Earnings	\$	85.34 139.24
Zero Growth Multiple		10.76
EPV	\$ 1	,498.81
EPV per Share	\$	29.97

RELATIVE VALUATION

Tech Data is undervalued compared to its peer group in the computer peripheral equipment and software sector. The company's price to book (0.58) is less than half the current industry average while its enterprise value to EBITDA multiple is in line with industry norms. However, TECD's price to earnings ratio is slightly above average at 8.39 times earnings.

Exhibit Tech - 8

	Relative \	/aluation		
Name	P/E	P/B	P/FCF	EV/EBITDA
Took Boto Com	0.00	0.50	0.00	2.70
Tech Data Corp	8.39	0.58	8.23	3.78
Insight Enterprise	0.76	0.24	2.05	2.15
Cray Inc	3.90	0.76		
Lenovo Group LTD	4.25	1.16		
Radiant Systems	5.78	0.71	20.35	4.84
NCR Corp	6.08	3.67	6.70	2.69
Lexmark INTL - A	6.29	2.10	6.95	2.16
Synnex Corp	6.51	0.77	16.49	5.66
Systemax Inc	6.63	1.19	11.10	3.16
Super Micro Comp	8.03	0.96	14.82	3.05
PC Connection	8.18	0.57	3.95	2.70
Emulex Corp	8.23	0.94	28.82	2.15
Avocent Corp	8.81	0.73	10.37	6.05
Transact Tech	9.45	1.11	90.60	4.09
Diebold Inc	9.94	1.73	8.32	7.35
Scansource Inc	9.96	1.17	7.11	5.14
Rimage Corp	10.88	1.18	12.83	3.96
Astro-Med Inc	10.89	0.83	9.27	3.16
Icad Inc	12.00	0.83	17.38	6.37
Minimum	0.76	0.24	2.05	2.15
Mean	7.63	1.12	16.20	4.03
Median	8.18	0.94	10.37	3.78
Maximum	12.00	3.67	90.60	7.35

DEBT ANALYSIS

TECD's balance sheet reflects little interest bearing debt and significant cash holdings. In fact, net debt is less than \$50 million. Total Assets cover total debt nearly 8 times and total debt is only 1.58 times above adjusted EBITDA,

indicating that current earnings power will adequately pay interest expense and principal debt balance. Working capital is strong as indicated by a 1.56 current ratio. However, inventory comprises a large component of current assets.

Although classified as a current asset by Generally Accepted Accounting Principles (GAAP), inventory is really an illiquid fixed asset when analyzing businesses as going concerns. TECD requires between \$1.6 and \$2.0 billion of inventory to maintain current earnings power and generate wealth for shareholders. Current assets less inventory is reflected in a quick ratio of less than 1 and a troubling cash ratio of 0.12.

TECD's business model requires substantial capital to finance accounts receivable and product inventory. Consequently, the company has numerous credit lines to supplement cash from operations. TECD legally isolates nearly \$1,100 million receivables in a wholly-owned bankruptcy remote special purpose entity (SPE) as collateral for borrowings up to \$305 million. In addition, TECD has a multi-currency revolving credit facility with several banks to borrow up to \$250 million. Several of the company's subsidiaries guarantee the debt on this credit line. Finally, TECD has approximately \$768.5 million in additional unsecured short-term credit lines. The majority of outstanding credit expires within a year and may prove troublesome in a prolonged credit crunch beyond 2009. TECD has drawn about \$70 million from total credit facilities of approximately \$1,100 million (*Tech Data Corp 2009 Quarterly Report*, 2008).

TECD's credit covenants restrict resource conversion activity. The company is prohibited from merging with an entity if TECD is fully absorbed. In

addition, TECD's covenants restrict the company's right to its receivables. Receivables held as collateral against a \$305 million credit facility are prohibited from being sold. Nearly half of TECD's receivables are affected. Furthermore, credit covenants prohibit TECD from modifying receivable terms. Restrictions could affect liquidity if TECD needs to raise cash. The company will not be able to readily sell receivables.

Exhibit Tech - 9

Debt Analysis	Current	2008	2007	2006	2005	2004
Net Debt	45.05	(64.14)	178.17	94.41	182.13	288.61
Tot Debt/Tot Assets	7.95	7.34	9.42	5.70	8.28	9.54
Tot Debt/Com Equity	25.63	19.95	26.03	14.26	19.57	23.96
Total Debt/Adj EBITDA	1.58	1.40	2.12	1.01	1.30	1.78

Exhibit Tech - 10

Liquidity Analysis	Q3 08	2008	2007	2006	2005	2004
Cash Ratio	0.12	0.16	0.10	0.06	0.08	0.05
Quick Ratio	0.96	1.14	1.10	0.95	1.00	1.09
Current Ratio	1.56	1.71	1.70	1.54	1.58	1.71
Total Debt/Total Capital	20.40	16.63	20.65	12.48	16.37	19.33
Working Capital	1,837.48	2,044.42	1,816.56	1,392.11	1,488.62	1,525.43
Total Line of Credit	1,300.00	1,400.00	1,300.00	-	-	-
Available Line of Credit	1,281.70	1,322.80	1,100.00	-	-	-

CONTINGENCIES

Litigation

One of TECD's European subsidiaries is charged of improperly collecting and remitting value-added tax (VAT). The company doesn't believe the outcome

will materially affect the financial statements. Regardless if TECD is correct, the company's liability will be limited to any additional tax the subsidiary owes.

Leases

TECD owes substantial long-term lease obligations totaling over \$270. Most obligations will be expensed on the income statement as operating leases. The company is also responsible for an off balance sheet lease arrangement expiring in June 2013. The lease arrangement gives TECD the option to purchase properties at cost at expiration. Minimum payments under the synthetic lease agreement until June 2013 will be \$34.1 million. Total lease obligations including off balance sheet arrangements will total over \$318 million (*Tech Data Corp 2009 Quarterly Report*, 2008).

Exhibit Tech - 11

Total Capital Leases, Supplemental	2008	2007	2006	2005	2004
Capital Lease Payments Due in Year 1	2.25	3.38	2.52	2.70	2.58
Capital Lease Payments Due in Year 2	2.07	1.97	2.52	2.70	2.58
Capital Lease Payments Due in Year 3	2.07	1.81	1.75	2.70	2.58
Capital Lease Payments Due in Year 4	2.07	1.81	1.60	1.88	2.58
Capital Lease Payments Due in Year 5	2.07	1.81	1.60	1.71	1.79
Cap. Lease Pymts. Due in Year 6 & Beyond	4.37	5.20	6.00	7.15	7.29
Total	14.88	15.98	15.98	18.84	19.40

Total Operating Leases, Supplemental	2008	2007	2006	2005	2004
Operating Lease Payments Due in Year 1	65.66	65.29	62.49	67.93	63.95
Operating Lease Payments Due in Year 2	54.29	55.37	54.84	57.10	56.46
Operating Lease Payments Due in Year 3	46.14	43.34	44.85	43.89	44.95
Operating Lease Payments Due in Year 4	27.32	33.46	37.38	30.18	38.82
Operating Lease Payments Due in Year 5	25.50	19.00	29.45	24.79	27.49
Oper. Lse. Pymts. Due in Year 6 & Beyond	50.81	66.84	68.73	108.04	123.64
Total	269.73	283.29	297.74	331.93	355.30

Guarantees

TECD has arrangements with several finance companies to provide inventory financing facilities for customers. The company also agrees to repurchase inventory that finance companies repossess from customers. The aggregate amount of guarantees is \$21.5 million. Although historical losses on the company's guarantees are insignificant, TECD probably will suffer greater losses throughout the next few years as customer credit deteriorates. The current outstanding balance is \$11.9 million.

Exhibit Tech - 12

	Operating leases	Capital leases	Long-term debt	Total
Fiscal year:				
2009	\$ 65,663	\$ 2,253	s —	\$ 67,916
2010	54,293	2,065	_	56,358
2011	46,138	2,065	_	48,203
2012	27,323	2,065	350,000	379,388
2013	25,498	2,065	_	27,563
Thereafter	50,810	8,335	_	59,145
Total payments Less amounts representing	269,725	18,848	350,000	638,573
interest		(3,966)	_	(3,966)
Total principal payments	\$ 269,725	\$ 14,882	\$350,000	\$ 634,607

Source: Tech Data Corp 2008 Annual Report (2009, February)

MANAGEMENT ANALYSIS

Chief Executive Officer (CEO) Robert Dutkowsky joined TECD in October 2006 after 30 years in the IT industry. He worked in sales, marketing, and channel distribution for IBM, EMC, and J.D. Edwards. His compensation is high at \$4,103,068 in 2008, a down year for the company. Dutkowsky only owns

about \$600,000 in TECD stock. Jeffery Howells is the executive vice president and chief financial officer of TECD. He joined the company in 1991 after 12 years working for PricewaterhouseCoopers.

Exhibit Tech - 13

Management Ownership

Shares Held	1,641,233
Shares Held (% Outstanding)	3.28%
Shares Bought (6 Months)	6,000
Shares Sold (6 Months)	14,364
Board Members w/ No Shares	2

Management only owns about 3.28 percent of outstanding shares. In fact, insiders have sold 8,364 net shares in the last 6 months. During the same period of time, the company authorized a share repurchase program to buy back \$100 million of common stock. One wonders why the board of directors would use company capital to buy back shares at prices they were selling shares at.

Furthermore, 2 board members don't own a single share in TECD. Management ownership is troubling. Good management teams with faith in their company and leadership skills "eat their own cooking."

Also troubling is the company's growth. Revenue is growing at the expense of profit, suggesting the company has poor capital allocation skills. The three top competitors, including TECD, engage in price wars that depress margins and reduce return on assets (ROA). TECD's margins will get worse employing the current growth strategy. Management should allocate more profit to

shareholders through share repurchases or dividends while it retools a better strategic course.

INVESTMENT POSITIVES

TECD is a strong competitor in the computer peripheral equipment and software industry. The company appears to be trading at a discount to intrinsic value on both a relative and resource conversion basis. A conservative mid case NAV suggests that TECD is trading at a 20 percent discount to real value. The company's balance sheet employs little interest bearing debt and enjoys a large cash balance. Furthermore, TECD generates healthy operating cash flow.

INVESTMENT NEGATIVES

TECD requires continual access to capital markets to fund receivables and make payments on a large accounts payable balance. Although the company has over \$1.0 billion in untapped credit facilities, over half of the facilities expire within a year. Furthermore, the credit covenants restrict TECD's ability to sell receivables or modify payment terms. Consequently, the company could be exposed to liquidity problems if it can't extend current credit facilities or package receivables for resale.

TECD operates a commodity business. Although the company differentiates from competitors though comprehensive customer service, wholesale distribution market share will ultimately go to low priced businesses.

U.S. competitors are engaged in a vicious price war, depressing margins and curtailing profit growth. Furthermore, low cost competitors from Korea, Japan, and China threaten U.S. industry players. TECD could be a "value trap:" the company seems cheap, but long-term trends suggest that the business model is permanently impaired.

APPENDIX

BALANCE SHEET

	Janua	ary 31,
	2008	2007
		usands, re amounts)
Assets		
Current assets:		
Cash and cash equivalents	\$ 447,340	\$ 265,006
Accounts receivable, net	2,659,446	2,464,735
Inventories	1,642,317	1,556,008
Prepaid expenses and other assets	173,879	122,103
Total current assets	4,922,982	4,407,852
Property and equipment, net	129,139	140,762
Goodwill	2,966	2,966
Other assets, net	165,848	152,284
Total assets	\$5,220,935	\$4,703,864
Liabilities And Shareholders' Equity Current liabilities:		
Revolving credit loans	\$ 18,315	\$ 77,195
Accounts payable	2,288,740	2,011,203
Current portion of long-term debt	1,243	2,376
Accrued expenses and other liabilities	570,266	500,514
Total current liabilities	2,878,564	2,591,288
Long-term debt	363,639	363,604
Other long-term liabilities	58,011	46,252
Total liabilities	3,300,214	3,001,144
Commitments and contingencies (Note 14)		
Shareholders' equity:		
Common stock, par value \$.0015; 200,000,000 shares authorized; 59,239,085 shares issued		
at January 31, 2008 and 2007	89	89
Additional paid-in capital	737,759	732,378
Treasury stock, at cost (6,446,603 and 4,313,103 shares at January 31, 2008 and 2007)	(236,960)	(157,628)
Retained earnings	948,596 471,237	841,402 286,479
·		
Total shareholders' equity	1,920,721	1,702,720
Total liabilities and shareholders' equity	\$5,220,935	\$4,703,864

INCOME STATEMENT

		Yea	r en	ded January	31,	
		2008		2007		2006
	(In thousand	s, ex	cept per sha	are a	amounts)
Net sales.	\$2	3,423,078	\$2	1,440,445	\$2	20,482,851
Cost of products sold	2	2,288,670	2	0,433,674		19,460,332
Gross profit		1,134,408		1,006,771		1,022,519
Operating expenses:						
Selling, general and administrative expenses		915,434		851,097		828,278
Goodwill impairment				136,093		_
Loss on disposal of subsidiaries		14,471		22.764		20.046
Restructuring charges	_	16,149		23,764		30,946
	_	946,054		1,010,954		859,224
Operating income (loss)	_	188,354		(4,183)		163,295
Other expense (income):		20.754		20 506		24 422
Interest expense		28,751		38,506		31,422
Interest income.		7,219 (13,495)		12,509 (9,764)		5,503 (7,426)
Net foreign currency exchange (gain) loss.		(3,994)		(15)		1,816
3 7 7 7	_	18,481		41,236		31,315
Income (loss) from continuing operations before income taxes	_	•		,		,
and minority interest		169,873		(45,419)		131,980
Provision for income taxes		65,163		55,508		109,013
Income (loss) from continuing operations before minority interest		104,710		(100,927)		22,967
Minority interest in net loss of joint venture		3,559		_		
Income (loss) from continuing operations		108,269		(100,927)		22,967
Discontinued operations, net of tax		_		3,946		3,619
Net income (loss)	\$	108,269	\$	(96,981)	\$	26,586
Income (loss) per common share—basic:						
Continuing operations	\$	1.97	\$	(1.83)	\$	0.40
Discontinued operations		_		0.07		0.06
Net income (loss)	\$	1.97	\$	(1.76)	\$	0.46
Income (loss) per common share—diluted:						
Continuing operations	\$	1.96	\$	(1.83)	\$	0.39
Discontinued operations		_		0.07		0.06
Net income (loss)	\$	1.96	\$	(1.76)	\$	0.45
Weighted average common shares outstanding:						
Basic		54,904		55,129		57,749
Diluted		55,287		55,129		58,414

CASH FLOW STATEMENT

		Yea	ar ended	January	31,	
		2008	20	07		2006
			(In tho	usands)		
Cash flows from operating activities: Cash received from customers Cash paid to suppliers and employees Interest paid, net. Income taxes paid.		23,473,295 23,053,048) (14,273) (48,552)	(85,902 91,764) 26,910) 81,216)		20,504,871 20,160,865) (21,082) (65,485)
Net cash provided by (used in) operating activities		357,422	(13,988)		257,439
Cash flows from investing activities: Acquisition of business, net of cash acquired Proceeds from sale of business Proceeds from sale of property and equipment Expenditures for property and equipment. Software and software development costs		(21,503) 7,161 — (21,474) (16,885)	(— 16,500 3,563 31,667) 12,062)		9,169 (41,973) (18,779)
Net cash used in investing activities		(52,701)	(23,666)		(51,583)
Cash flows from financing activities: Proceeds from the issuance of common stock and						
reissuance of treasury stock. Cash paid for purchase of treasury stock Capital contributions from joint venture partner. Proceeds from issuance of convertible debentures, net of expenses Net (repayments) borrowings on revolving credit loans. Principal payments on long-term debt Excess tax benefit from stock-based compensation.		12,542 (100,019) 9,000 — (56,297) (2,371) 212	(3 (1	25,183 80,093) — 42,554 64,824) (1,611) 544		16,686 (127,027) — — 166,530 (291,627) —
Net cash (used in) provided by financing activities	_	(136,933)	1	21,753		(235,438)
Effect of exchange rate changes on cash and cash equivalents	_	14,546		24,242		(8,809)
Net increase (decrease) in cash and cash equivalents		182,334 265,006		08,341 56,665		(38,391) 195,056
Cash and cash equivalents at end of year	\$	447,340	\$ 2	65,006	\$	156,665
Reconciliation of net income (loss) to net cash provided by (used in) operating activities: Net income (loss)	\$	108,269	\$ (96,981)	\$	26,586



The Orange Value $\mathbf{Fund}^{\mathbf{TM}}$

Investment Research Report

Toyota Industries

JPY: 6201

Ву

Brian Burrow

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Exhibit TI- 1

Valuation Data (In Mi	llio	on Yen)			
Market Price	¥	1,988	Net Income	¥	80,460
Shares Outstanding		311.589	Look through Earnings	¥	112,546
Market Capitalization	¥	619,439	Adjusted Earnings	¥	193,006
Add Interest Bearing Debt	¥	539,582	Total Assets	¥	2,249,077
Add Preferred Stock	¥	-	Tangible Assets	¥	2,129,709
Add Minority Interest	¥	54,410	Total Liabilities	¥	1,260,958
Less Excess Cash	¥	111,541	Minority Interest	¥	54,410
Enterprise Value	¥	1,101,890	Intangible Assets	¥	119,368
		•	Book Value	¥	933,709
Operating Earnings	¥	96,853	Tangible Book Value	¥	814,341
Add Depreciation & Amortization	¥	119,905			
Add Look Through Earnings	¥	112,546	Mid Case Net Asset Value	¥	1,048,525
Adjusted EBITDA		\$329,304			
			Book Value per Share	¥	2,997
Return on Assets (ROA)		2.50%	Tangible BV per Share	¥	2,614
Return on Equity (ROE)		5.10%	NAV per Share	¥	3,365
Return on Sales (ROS)		4.00%			
			Price/BV		0.66x
			Price/Tangible BV		0.76x
			Price/NAV		0.59x
			EV/Adj EBITDA		3.35x
			Adj Price/Adj EBITDA		1.88x
			Price/ Adj Earnings		3.21x

INVESTMENT IDEA ORIGIN

Toyota Industries (TYO: 6201) is a current holding of the Orange Value Fund. The company is a core holding because of consistent operating performance and hidden affiliate value. Toyota Industries owns large stakes in companies such as Toyota Motor and Denso using the cost method of accounting, which excludes the equity value of affiliate net income. Most financial analysis excludes the value of look through earnings, creating a unique opportunity for value investors to purchase other companies for free through Toyota Industries common stock.

ANALYST RECOMMENDATION

I recommend purchasing the common equity of Toyota Motor. The company is trading at substantial discounts to both Net Asset Value (NAV) and tangible book value at a price to NAV of 0.41x and a price to tangible book of 0.76x. A reasonable mid case NAV represents a 40.92% discount to the current market price of the stock. In addition the company has substantial ownership in companies such as Toyota Motor and Denso that provide steady dividend income and look through earnings. Furthermore, the qualitative aspects of Toyota Motor support the quantitative analysis. Management seems competent with a long term focus on quality and cost reduction. Toyota Motor is also competitively positioned with conservative leverage and a healthy cash position to withstand the current economic environment.

COMPANY DESCRIPTION

Toyota Industries Corporation is a member of the Toyota Motor Group, operating in five distinct manufacturing segments. The Automobile Segment is the company's largest business segment, comprising 48% of consolidated net sales. The Materials Handling Equipment Segment is the second largest business unit, responsible for manufacturing and selling industrial vehicles, automated storage, and automatic guided vehicles. Toyota Industries also has a Logistics Solutions Business that generates revenue by helping customers organize and reduce logistic costs. The Textile Machinery Segment produces and sells spinning and

weaving machinery. Finally, the company incorporates semi-conductor package substrates and other manufacturing segments into the Others Segment.

Toyota Industries is recognized as a leader in cost reduction, quality manufacturing, and corporate responsibility (*Toyota Indusries Report 2008*, 2008). The company actively mitigates its impact on global climate change and capitalizes on environmental trends. Toyota Industries routinely sets challenging emission targets, reducing the environmental impact of its businesses. It intends to reduce environmental impact by substituting environmentally unfriendly raw materials for safer substances and utilizing inputs more efficiently through an environmental based management system (EMS). The company also conducts internal and external audits to identify inefficient operations and reduce waste. Toyota Industries is capitalizing on global climate trends by developing several clean technologies. The company is increasing production of clean diesel engines, including the engine for the new Land Rover. In addition, the company produces DC-DC and DC-AC converters for hybrid vehicles such as the Toyota Prius, Harrier Hybrid, and Camry Hybrid.

Toyota Industries is focused on quality control and cost reduction. The company employs the Toyota Production System (TPS) to develop human resources, foster teamwork, and improve management skills. The company is well-recognized for achieving superior manufacturing quality at minimal cost. The Automobile Segment won the Superior Quality Performance Award from Toyota Motor Corporation 8 out of the last 10 years. In addition, the company won a gold medal in the mechanical device control category at the International

Skills Festival and three gold medals at the national competition in Japan in 2008. Toyota Industries has also won technology awards for its diesel engine in the new Land Cruiser and converters for the Lexus LS600H. Facilitating manufacturing teams and developing employee skills and education has improved product quality, reduced cost, and enhanced innovation. Consequently, Toyota Industries maintains profit margins despite increasing raw material costs for iron, coal, and crude oil.

SEGMENT DESCRIPTION

The company's four major segments by size include: Automobile, Materials Handling, Logistics, and Textile Machinery (*Toyota Indusries Report* 2008, 2008). The bulk of Toyota Industries' value is derived in the Automobile and Materials Handling segments. However, the logistics segment is growing rapidly and may prove profitable in future years.

Exhibit TI- 2

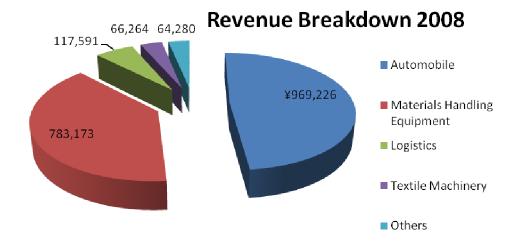
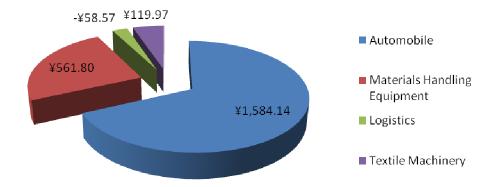


Exhibit TI- 3

Segment FMEV per share



Materials Handling Equipment

The Materials Handling Equipment Segment engages in the development, production, sales, and services of industrial vehicles such as counterbalanced lift trucks, warehouse equipment, and systems for transportation, storage, and retrieval of goods. The company's main brands include Toyota, BT, Raymond, and Aichi. Net sales totaled ¥783.1 billion for the fiscal year ended 2008, a year over year increase of ¥15.9 billion driven by strong sales in emerging economies such as China and India.

Logistics

Toyota industries' Logistics Business incorporates planning, design and operation of distribution centers, high value-added services, and distribution of automotive parts. Planning, design, and operation of distribution centers is conducted by the Advanced Logistics Division and its subsidiary. High value-added services are provided through Asahi Security Company and Wanbishi Archives to offer security and risk management outsourcing. The distribution of automotive parts is handled by the Taikoh Transportation Group, which provides transportation for numerous automotive parts manufacturers. Net sales increased ¥28.1 billion to ¥117.5 billion in fiscal year 2008, a 31 percent year over year increase.

Automobile

Toyota Industries manufactures and develops vehicles, engines, cars electronics products, and stamping dies. The segment currently manufacturers Toyota models such as the Yaris, RAV4, and Mark X Zio. Vehicle production has steadily increased to 368,000 units in fiscal year 2008. The segment also produces clean diesel engines for the new Land Cruiser and converters for hybrid vehicles such as the Prius, Harrier, Camry, and Lexus LS600h. The segment is well known for quality manufacturing, winning several quality and technology awards in 2008. It is the largest of the company's business units, recording ¥969.2 billion in sales during fiscal year 2008.

Textile Machinery

Toyota Industries develops, manufactures and sells weaving and spinning machinery such as air-jet looms. Sales of jet looms surpassed 10,000 units in fiscal year 2008 as a result of rising sales in China. The segment is a small portion of overall sales with revenue of ¥66.2 billion in fiscal 2008.

Other Segments

Net sales of combined other segments amounted to ¥64.2 billion in fiscal 2008. This includes revenue from a joint venture with Ibiden Co to produce

semiconductor package substrates. Other segments include manufacturing equipment such as car air conditioning compressors.

MANAGEMENT ANALYSIS

Management is focused on creating long-term value for shareholders. The company facilitates human capital development through continual education and team building skills to improve product quality and streamline operations. A relentless focus on quality and cost control creates an important competitive position in the current economy. For example, Toyota Industries has partially offset the rise in raw material costs as a result of its efforts. In addition, the company's experience in organizational structure and logistics benefits its logistics division, which markets expertise to other businesses.

Management also invests heavily in research and development for new and old product innovation, particularly for sustainable manufacturing.

Consequently, Toyota Industries has developed key components for successful hybrid vehicles and other automobiles. As the market for clean technology grows, the company should be well positioned to sell its technology in developed and emerging economies.

Management is also well reflected in its active role to encourage corporate responsibility. Toyota Industries promotes environmental responsibility through an environmental management system that reduces waste and encourages raw material efficiency (*Toyota Indusries Report 2008*, 2008). Furthermore, the

company conducts both internal and external environmental audits to identify wasteful operations and areas for improvement. Management also facilitates a healthy, team-oriented work environment to promote product quality and workplace safety. Toyota Industries encourages social welfare by instituting a volunteer support center in the communities in it which operates and hosting many community service activities throughout the year. Finally, management disclosure is excellent and compensation seems reasonable. Their long-term value creation outlook coincides well with an outside passive minority investor's (OPMI) investment horizon.

NET ASSET VALUE ANALYSIS

I first valued Toyota Industries using a Fixed Multiple Enterprise Value (FMEV) methodology. I calculate the adjusted EBITDA, subtract capital expenditures, and multiply the resulting value by growth multiples of 6, 8, and 10 to arrive at terminal value. Next, I subtract the company's net debt (total short-term and long-term debt less cash) from terminal value to derive going concern net asset value. Finally, I divide total net asset value by shares outstanding to calculate net asset value per share.

Exhibit TI- 4

GOING CONCERN VALUE								
Fixed Multiple Enterprise Value	(FIV	MEV) Analy	sis					
Operating Income	¥	96,853	¥	96,853	¥	96,853		
Add								
Depreciation & Amortization		119,905		119,905		119,905		
Look Through Earnings		112,546		112,546		112,546		
Total		329,304		329,304		329,304		
Adjusted EBITDA		329,304		329,304		329,304		
Less CAPEX		142,158		142,158		142,158		
Multiple		6.0x		8.0x		10.0x		
FMEV		1,122,876		1,497,168		1,871,461		
Less								
Net Debt		448,643		448,643		448,643		
Going Concern NAV		674,233		1,048,525		1,422,818		
Total NAV		674,233		1,048,525		1,422,818		
Shares Outstanding		311.589		311.589		311.589		
NAV per Share		¥2,163.85		¥3,365.09		¥4,566.33		
Current Market Price	¥	1,988	¥	1,988	¥	1,988		
Premium(Discount) to NAV		-8.13%		-40.92%		-56.46%		

The adjusted EBITDA is much larger than ¥216,758 billion unadjusted EBITDA because I include proportionate earnings in equities reported on the balance sheet. I calculate the look-through earnings of the company's top 5 ownership positions and include the total in adjusted EBITDA. Look-through earnings represent the undistributed earnings (net earnings less dividends) of a

company's ownership positions that comprise less than 20 percent of another company. Holdings consisting less than 20 percent ownership in another company are reported using the cost method, which reports dividends in net income.

Consequently, the adjusted EBITDA is significantly higher by including look-through earnings; however, the long-term value of Toyota Industries is better represented.

Although Toyota Motor is responsible for most of Toyota Industries' look-through earnings, other holdings create sizable value. In fact, the combined value of Toyota Industries other holdings exceed that of Toyota Motor; however, I only include the top 5 holdings in the interest of materiality and conservatism.

Exhibit TI-5

	Look Through Earnings of Top 5 Holdings												
	Shares					Ea	rnings per	Di	vidends	Loc	k Through		
Company	Owned	Sha	re Price	M۷	/ Holdings		Share	ре	er Share	E	Earnings	Per	Share TI
Toyota Motor	201.195	¥	3,090	¥	621,693	¥	540.99	¥	140.00	¥	80,677	¥	258.92
Denso	69.373	¥	1,764	¥	122,374	¥	299.70	¥	54.00	¥	17,045	¥	54.70
Toyota Tsusho	39.365	¥	843	¥	33,185	¥	192.08	¥	30.00	¥	6,380	¥	20.48
Aisin Seiki Co	19.658	¥	1,420	¥	27,914	¥	322.15	¥	60.00	¥	5,153	¥	16.54
Aichi Corp	40.521	¥	396	¥	16,046	¥	101.20	¥	20.00	¥	3,290	¥	10.56
Total	·		•	¥	821,212		·			¥	112,546	¥	361.20

After calculating adjusted EBITDA, I subtract out capital expenditures (CAPEX). I use the fiscal year 2008 CAPEX in my valuation. Next, I multiply the total by a 6, 8, and 10 multiple to derive terminal value. I then combine the value of short-term debt, long-term debt, and contingent liabilities; subtract cash; and subtract the total from terminal value to derive going concern NAV. I then factor

the market value of securities held to calculate total NAV.I derive a mid case NAV of ¥3,365.09 per share, representing more than a 58 percent discount from current equity prices.

Using normalized EBITDA by calculating the adjusted EBITDA over a five year period, the total NAV is smaller. However, normalized EBITDA distorts going concern NAV because Toyota Industries has grown rapidly over the previous five years, nearly doubling operating income and EBITDA.

Exhibit TI- 6

			_			
GOING C	ON	ICERN VALI	JE			
Fixed Multiple Enterprise Value	(FN	/IEV) Analy	sis			
Normalized EBITDA		273,623		273,623		273,623
Less CAPEX		142,158		142,158		142,158
Multiple		6.0x		8.0x		10.0x
FMEV		788,789		1,051,719		1,314,649
Less						
Net Debt		448,643		448,643		448,643
Going Concern NAV		340,146		603,076		866,006
Total NAV		340,146		603,076		866,006
Shares Outstanding		311.589		311.589		311.589
NAV per Share		¥1,091.65		¥1,935.49		¥2,779.32
Current Market Price	¥	1,988	¥	1,988	¥	1,988
Premium(Discount) to NAV		82.11%		2.71%		-28.47%

I value Toyota Industries using an alternative resource conversion methodology: excluding long-term value of look-through earnings and including

dividend income in adjusted EBITDA. I then factor in the market value of the company's investment portfolio. This methodology separates the value of ongoing operations and separate and saleable assets. The discount is substantial, reflecting the value of the company's investment portfolio. The resource conversion approach illustrates the value of Toyota Industries in an arm's length business transaction.

Toyota Industries' holdings have increased over fivefold since acquisition creating separate and saleable value (*Toyota Indusries Report 2008*, 2008).

Marketable assets separate from the going concern of operations can be valuable to shareholders, particularly control investors. They can be sold without affecting a company's operating performance. Control investors such as Carl Icahn often target companies with valuable non-operating assets to sell them and immediately realize value. In Toyota Industries' case, separate and saleable assets are almost twice the going concern NAV. However, Japanese companies such as Toyota Industries create a web of controlling interests through equity ownership to defend against control investors. Consequently, it is unlikely that shareholders

Exhibit TI- 7
4. Marketable securities

			Millions of yen		Thousands of U.S. dollars					
		Acquisition cost	Carrying amount	Difference	Acquisition cost	Carrying amount	Difference			
Securities with carrying am	ount									
exceeding acquisition cos	t:									
Stocks		¥219,262	¥1,472,631	¥1,253,369	\$2,188,464	\$14,698,392	\$12,509,928			
Subtotal		219,262	1,472,631	1,253,369	2,188,464	14,698,392	12,509,928			
Securities with carrying am	ount									
not exceeding acquisition	cost:									
Stocks		7,081	6,318	(763)	70,678	63,062	(7,617			
Others		340	340	_	3,396	3,396	_			
Subtotal		7,421	6,658	(763)	74,074	66,457	(7,617)			
Total		¥226,683	¥1,479,290	¥1,252,606	\$2,262,537	\$14,764,849	\$12,502,312			
(b) Other securities sold dur	ing the year ended Millions of yen	March 31, 2008 are as	follows:		housands of U.S. (dollars				
Proceeds	Realized gains	Realized losses	Pro	oceeds	Realized gains		lized losses			
¥6,567	¥5,866		0.0	5.550	\$58,556					

will realize short-term resource conversion value.

Exhibit TI-8

RESOURCE C	ON	VERSION V	ALI	JE					
Fixed Multiple Enterprise Value (FMEV) Analysis									
Operating Income	¥	96,853	¥	96,853	¥	96,853			
Add									
Depreciation & Amortization		119,905		119,905		119,905			
Affiliate Dividends		34,850		34,850		34,850			
Total		251,608		251,608		251,608			
Adjusted EBITDA		251,608		251,608		251,608			
Less CAPEX		142,158		142,158		142,158			
Multiple		6.0x		8.0x		10.0x			
FMEV		656,700		875,600		1,094,500			
Less									
Net Debt		448,643		448,643		448,643			
Going Concern NAV		208,057		426,957		645,857			
Market Value of Held Securities		821,212		821,212		821,212			
Total NAV		1,029,269		1,248,169		1,467,069			
Shares Outstanding		311.589		311.589		311.589			
NAV per Share		¥3,303.29		¥4,005.82		¥4,708.35			
Current Market Price	¥	1,988	¥	1,988	¥	1,988			
Premium(Discount) to NAV		-39.82%		-50.37%		-57.78%			

Valuing the company using normalized EBITDA in a resource conversion yields a slight discount at mid case total NAV. However, normalized EBITDA most likely does not appropriately value going concern NAV because of the company's explosive growth in the last five years. Normalized EBITDA better reflects lower growth or cyclical businesses.

Exhibit TI- 9

RESOURCE CONVERSION VALUE								
Fixed Multiple Enterprise Value (FMEV) Analysis								
Normalized EBITDA		182,526		182,526		182,526		
Less CAPEX		142,158		142,158		142,158		
Multiple		6.0x		8.0x		10.0x		
FMEV		242,208		322,944		403,680		
Less								
Net Debt		448,643		448,643		448,643		
Going Concern NAV		-206,435		-125,699		-44,963		
Market Value of Held Securities		821,212		821,212		821,212		
Total NAV		614,777		695,513		776,249		
Shares Outstanding		311.589		311.589		311.589		
NAV per Share		¥1,973.04		¥2,232.15		¥2,491.26		
Current Market Price	¥	1,988	¥	1,988	¥	1,988		
Premium(Discount) to NAV		0.76%		-10.94%		-20.20%		

CREDIT ANALYSIS

Toyota Industries is conservatively leveraged with a low ratio of net debt to total assets. Furthermore, its working capital is adequate to fund current liabilities, as reflected in a current ratio close to 1. Total debt to adjusted EBITDA is low and adjusted EBITDA covers interest expense almost 17 times. Moreover, EBITDA excluding the value of look-through earnings covers interest expense over 7 times.

Exhibit TI- 11

Contingent Liabilities	An	nount
Guarantees	¥	402
Subsidiary Guarantees	¥	324
Minimum Lease PMT	¥	19,876
Total	¥	20,602

Exhibit TI- 10

Long-Term D	ebt
Bonds Payable	¥228,024
Long-Term Loans	¥195,961
Total	¥423,985

Exhibit TI- 13

Short-Term Debt	Amount
Short-Term Bank Loans	¥ 66,793
Commercial Paper	¥ 22,615
Current Portion of bonds	¥ 26,189
Total	¥115,597
Total Debt	¥560,184
Less Cash	¥111,541
Net Debt	¥448,643

Exhibit TI- 12

Credit Analysis	
,	
Current Ratio	1.11x
EBITDA/Interest Expense	16.93x
Cash Ratio	0.23x
Total Debt/EBITDA	1.70x
Total Debt/Assets	0.56x

Exhibit TI- 14

(1) Long-term debt a	s of March 31,	2008 and 2007	consists of the	following:
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	Millions	Millions of yen	
	2008	2007	2008
The Company:			
2.70% bonds due 2008 without collateral	¥ –	¥ 30,000	\$ -
2.15% bonds due 2008 without collateral	20,000	20,000	199,621
1.94% bonds due 2009 without collateral	15,000	15,000	149,716
1.91% bonds due 2010 without collateral	20,000	20,000	199,621
0.41% bonds due 2007 without collateral	_	30,000	_
1.13% bonds due 2012 without collateral	50,000	50,000	499,052
1.03% bonds due 2012 without collateral	30,000	30,000	299,431
1.46% bonds due 2014 without collateral	20,000	20,000	199,621
1.01% bonds due 2010 without collateral	20,000	20,000	199,621
1.66% bonds due 2015 without collateral	30,000	30,000	299,431
Consolidated subsidiaries:			
0.49-4.813% medium-term notes due 2009-2010	25,775	25,770	257,263
1.95% bonds due 2016 without collateral	19,991	19,990	199,535
Long-term bank loans	192,019	145,940	1,916,552
Less: current portion of long-term debt and bonds	(26,506)	(64,372)	(264,560)
Total	¥416,279	¥392,328	\$4,154,903

(2) Annual maturities of long-term debt as of March 31, 2008 are as follows:

Year ending March 31	Millions of yen	Thousands of U.S. dollars
2010	¥ 46,713	\$ 466,253
2011	61,083	609,672
2012	41,870	417,913
2013	75,120	749,782
2014 and thereafter	191,491	1,911,283
Total	¥416,279	\$4,154,903

Although the company does not disclose its credit agreements, a conservative balance sheet and healthy leverage ratios suggest that Toyota Industries is not in danger of default. Furthermore, the company's current debt has very low interest rates ranging from 2 to 4 percent, positioning Toyota Industries well in the current economic environment. Furthermore, the company's debt obligations are spread evenly over the next decade. Most debt is not due until after 2014 (*Toyota Indusries Report 2008*, *2008*). The company's balance sheet can easily assume more debt, enabling Toyota Industries to capitalize on opportunities currently unavailable to competitors. Unfortunately, the company does not have a revolving line of credit, potentially limiting its access to capital markets.

INVESTMENT POSITIVES

Toyota Industries is a growing manufacturing firm operating in several profitable business segments. The company's focus on quality and cost control is a competitive advantage enabling it to expand in both developed and emerging economies. The company's environmental initiative has further reduced operating costs by reducing waste and enhancing materials efficiency. Toyota Industries is also an innovator, becoming a first mover into clean technologies for hybrid vehicles, clean diesel engines for automobiles, and fuel-efficient industrial vehicles. By capitalizing on environmental trends, the company is well positioned to benefit from growing environmental awareness in developed economies in

Europe, Japan, and North America. In fact, cars with diesel engines account for nearly half of all sales in Europe and demand for hybrid vehicles has increased along with rising fuel costs.

Management is highly competent and focused on building long-term value. Toyota Industries is devoted to developing human resources through continual education and training. The result has been superior manufacturing quality at minimal operating cost, further solidifying the company's international competitive advantage.

Finally, Toyota Industries is trading at a significant discount to a reasonably ascertained NAV. Given the company's strong cash position, low leverage, and valuable competitive advantages, the quantitative analysis supports purchase of the common stock.

INVESTMENT NEGATIVES

The main issue is Toyota Industries' reliance on Toyota Motor

Corporation (TMC). TMC accounted for nearly 35.6 percent of consolidated net sales. Consequently, Toyota Industries is vulnerable to TMC's performance, which has suffered in the current economic environment. Vehicle sales have substantially reduced and Toyota Industries' bottom line will be affected in the next fiscal year. In addition, TMC also has substantial voting rights in Toyota Industries as a 24.6 percent owner. OPMIs may be subject to adverse shareholder decisions as a result of TMC's large ownership position.

Toyota Industries is also operating in an unstable business environment.

Raw material prices have increased as a result of demand from emerging economies. Prices have risen 70 percent for iron and have nearly tripled for coal.

Moreover, the credit crisis has spread from the United States to Europe and emerging economies, slowing economic growth in key markets such as China and India. It is problematic that the company does not have a revolving line of credit available given current market conditions.

Finally, OPMIs in Toyota Industries may never fully realize the company's intrinsic value. It has consistently traded at a discount, even during the bull market earlier this decade.

APPENDIX

Segment Information

20. Segment information

(1) Business segments As of and for the years ended March 31, 2008, 2007 and 2006:

		Millions of you		Thousands of U.S. dollars
	2008	2007	2006	2008
Sales:				
Automobile				
Outside customer sales	¥ 969,226	¥ 904,893	¥ 746,795	\$ 9,673,884
Intersegment transactions	26,026	21,134	20,768	259,771
Maladah Usadha Padasah	995,252	926,028	767,564	9,933,655
Materials Handling Equipment Outside customer sales	783,173	767,237	595,236	7,816,887
Intersegment transactions	3,415	805	482	34,088
indisegricit transactions	786,589	768,042	595,718	7,850,975
Logistics	100,000	100,042	000,710	1,000,010
Outside customer sales	117,591	89.470	65,145	1,173,684
Intersegment transactions	7,942	7,275	6,355	79,271
	125,533	96,746	71,500	1,252,955
Textile Machinery				
Outside customer sales	66,264	58,403	49,789	661,389
Intersegment transactions	7	5	22	73
	66,271	58,409	49,811	661,462
Others				
Outside customer sales	64,280	58,392	48,988	641,583
Intersegment transactions	21,386	21,855	20,851	213,455
	85,666	80,248	69,839	855,038
Subtotal	2,059,313	1,929,475	1,554,436	20,554,084
Elimination of intersegment transactions Total	(58,777) ¥2,000,536	(51,077) ¥1,878,398	(48,480) ¥1,505,955	(586,657)
	4 2,000,030	#1,070,d80	# 1,0U0,800	\$19,967,427
Operating costs and expenses:	V 050 704	V 000 405	V 747 400	0.0540.000
Automobile Maladala Mandina Fautomont	¥ 953,734	¥ 892,435	¥ 747,468	\$ 9,519,262
Materials Handling Equipment	746,747 121,303	720,840	556,950	7,453,315
Logistics Textile Machinery	61,974	94,965 57,327	69,913 49,882	1,210,733 618,571
Others	78,958	73,920	66,107	788,083
Elimination of intersegment transactions	(59,035)	(51,046)	(48,407)	(589,237)
Total	¥1,903,682	¥1,788,443	¥1,441,915	\$19,000,727
Operating income (loss):	**,500,000	* 1,100,110	.,,,	410,000,121
Automobile	¥ 41,518	¥ 33,592	¥ 20,095	\$ 414,393
Materials Handling Equipment	39,841	47,201	38,768	397,660
Logistics	4,230	1,780	1,587	42,222
Textile Machinery	4,297	1,081	(70)	42,891
Others	6,708	6,328	3,732	66,954
Elimination of intersegment transactions	258	(30)	(73)	2,580
Total	¥ 96,853	¥ 89,954	¥ 64,040	\$ 966,700
Assets:				
Automobile	¥ 434,952	¥444,564	¥ 420,204	\$ 4,341,278
Materials Handling Equipment	601,299	593,607	509,366	6,001,591
Logistics	187,064	132,857	106,356	1,867,094
Textile Machinery	17,811	17,034	16,516	177,780
Others	81,342	113,156	103,083	811,881
Corporate assets or elimination	1,643,115	2,284,637	2,089,813	16,399,992
Total	¥2,965,585	¥3,585,857	¥3,245,341	\$29,599,616
Depreciation and amortization:		v =====	V 45 575	
Automobile	¥ 57,987	¥ 53,557	¥ 48,370	\$ 578,776
Materials Handling Equipment	46,609 9,012	41,947	30,044	465,210 89,954
Logistics Textile Machinery	1,310	4,178 1,087	3,309 1,010	13,081
Others	4,985	5,288	4,544	49,763
Corporate or elimination of intersegment transactions	4,000	0,200	9	40,700
Total	¥ 119,905	¥ 106,060	¥ 87,287	\$ 1,196,783
Capital expenditures:	4 110,000	+ 100,000	+ 01,101	V 1,100,100
Automobile	¥ 50,145	¥ 74,967	¥ 101,897	\$ 500,505
Materials Handling Equipment	68,945	67,152	43,520	688,146
Logistics	15,067	5,863	4,046	150,393
Textile Machinery	1,869	1,472	730	18,659
			8,620	61,187
Others	6.130	7 . 1.164.54		
Others Corporate or elimination of intersegment transactions	6,130	17,049	20	- 01,107

Balance Sheet

		A 575
	FY2009 Third Quarter (As of December 31, 2008)	(Million yen) FY2008 (As of March 31, 2008)
Assets		
Current assets		
Cash and deposits	111,541	115,557
Trade Notes and accounts receivable	172,866	244,035
Short-term investments	51,313	40,621
Merchandise and finished goods	48,134	57,959
Work in process	39,282	35,873
Raw materials and supplies	29,929	30,799
Deferred tax assets	15,411	18,860
Other current assets	61,622	54,391
Allowance for doubtful accounts	(2,245)	(2,486)
Total current assets	527,856	595,612
Fixed assets		
Property, plant and equipment		
Buildings and structures, net	182,044	188,776
Machinery, equipment and vehicles, net	255,982	266,347
Tools, furniture and fixtures, net	26,679	28,145
Land	109,239	107,727
Construction in progress	53,303	31,849
Total property, plant and equipment	627,248	622,847
Intangible assets		
Goodwill	108,021	137,163
Software	11,347	12,522
Total intangible assets	119,368	149,685
Investments and other assets		
Investment securities	831,524	1,513,779
Long-term loans receivable	6,235	8,056
Deferred tax assets	9,513	8,578
Other investments and other assets	127,507	67,202
Allowance for doubtful accounts	(177)	(177)
Total investments and other assets	974,604	1,597,439
Total fixed assets	1,721,221	2,369,972
Total assets	2,249,077	2,965,585

(Million yen)

		(Million yen)
	FY2009	FY2008
	Third Quarter	
	(As of December 31, 2008)	(As of March 31, 2008)
Liabilities		
Current liabilities		
Trade notes and accounts payable	141,364	214,084
Short-term loans payable	66,793	52,326
Commercial papers	22,615	33,700
Current portion of bonds	26,189	20,000
Accounts payable-other	32,655	30,389
Income taxes payable	4,357	27,137
Deferred tax liabilities	269	1,881
Provision for directors' bonuses	418	626
Other current liabilities	165,038	157,894
Total current liabilities	459,703	538,041
Long-term liabilities	,	,
Bonds payable	228,024	230,766
Long-term loans payable	195,961	185,513
Deferred tax liabilities	216,695	482,787
Provision for retirement benefits	44,517	47,102
Other long-term liabilities	116,055	27,376
Total long-term liabilities	801,255	973,547
Total liabilities	1,260,958	1,511,588
Net assets		
Shareholders' equity		
Capital stock	80,462	80,462
Capital surplus	106,180	106,184
Retained earnings	472,535	466,780
Treasury stock	(50,667)	(50,644)
Total shareholders' equity	608,511	602,783
Valuation and translation adjustments		
Valuation difference on available-for-sale	339,827	752,553
Deferred gains or losses on hedges	162	140
Foreign currency translation adjustment	(15,880)	41,477
Total valuation and translation	324,110	794,171
Subscription rights to shares	1,086	695
Minority interests	54,410	56,345
Total net assets	988,118	1,453,996
Total liabilities and net assets	2,249,077	2,965,585

Income Statement

Consolidated Statements of Income

Toyota Industries Corporation For the years ended March 31, 2008, 2007 and 2006

		Millions of yen		Thousands of U.S. dollars (Note 1)
	2008	2007	2006	2008
Net sales	¥2,000,536	¥1,878,398	¥1,505,955	\$19,967,427
Cost of sales (Note 12)	1,678,493	1,586,781	1,276,499	16,753,103
Gross profit	322,043	291,616	229,456	3,214,324
Selling, general and administrative expenses (Notes 12 and 15)				
Sales commissions	11,650	11,325	10,875	116,284
Salaries and allowances	82,362	74,360	58,382	822,064
Retirement benefit expenses	2,063	1,678	1,982	20,600
Depreciation	10,058	8,733	6,507	100,391
Research and development expenses	22,365	21,527	20,307	223,230
Other	96,688	84,036	67,361	965,055
Operating income	96,853	89,954	64,040	966,700
Non-operating income				
Interest income	14,737	13,760	9,113	147,098
Dividends income	34,850	27,547	20,090	347,847
Gain on sales of marketable securities	3,043	-	1,280	30,378
Rental income of fixed assets	987	2,389	2,110	9,860
Equity in net earnings of unconsolidated subsidiaries and	2,749	317	3,593	27,445
affiliated companies				
Other non-operating income	8,547	6,868	7,665	85,308
Non-operating expenses				
Interest expenses	(19,453)	(17,855)	(11,955)	(194,164)
Depreciation	-	(1,932)	(1,716)	-
Loss on disposal of fixed assets	(2,988)	(3,567)	(4,487)	(29,824)
Other non-operating expenses	(12,840)	(8,997)	(9,099)	(128,162)
Ordinary income	126,488	108,484	80,635	1,262,487
Extraordinary gains				
Proceeds from sales of investment securities	5,866	4,305	-	58,556
Extraordinary losses				
Losses of discontinuing production of designated electronic parts	-	(4,390)		_
Income before income taxes and minority interests	132,355	108,399	80,635	1,321,043
Income taxes — current (Note 16)	47,057	43,750	30,446	469,682
Income taxes — deferred (Note 16)	(2,528)	(2,209)	(2,137)	(25,237)
Minority interests in consolidated subsidiaries	7,365	7,390	5,249	73,514
Net income	¥ 80,460	¥ 59,468	¥ 47,077	\$ 803,083
		Yon		U.S. dollars (Note 1)
Net income per share — basic (Note 22)	¥ 257.50	¥ 189.88	¥ 146.16	\$ 2.57
Net income per share — diluted (Note 22)	257.43	189.66	146.02	2.57
Equity per share (Note 23)	4,483.32	5,612.11	5,044.45	44.75

The accompanying notes are an integral part of these financial statements.

Cash dividends per share

38.00

0.60

60.00

50.00

Cash Flow Statement

Consolidated Statements of Cash Flows

Toyota Industries Corporation
For the years ended March 31, 2008, 2007 and 2006

Income before income taxes and minority interests		Millions of yan		Thousands of U.S. dollars (Note 1)	
Income before income taxes and minority interests		2008	2007	2006	2008
Adjustments to reconcile income before income taxes and minority interests to not cash provided by operating activities. Deprecisions and amortization (368) (250) (101 (3,843) Interest and dividends income (49,588) (41,307) (29,204) (494,945) Interest expenses (19,483) 17,855 (11,955) (11,955) (194,164) (Cash flows from operating activities				
minority interests to net cash provided by operating activities: Depreciation and amortization Increase (decrease) in allowanne for doubtful accounts (865) (250) 101 (3,648) Interest and dividends income (49,688) (41,307) (29,204) (494,945) Interest expenses Interest expenses Equity in net earnings of affiliates (2,749) (317) (3,589) (27,485) (norcease) decrease in receivables (6,623) (25,895) (27,495) (66,107) (norcease) decrease in receivables (7,490) (9,221) (9,227) (7,476) Increase) decrease in payables (7,490) (9,221) (9,227) (7,476) Increase) decrease in payables (8,777) (7,298) (1,277) (1,788) Increase (decrease) in payables (8,777) (17,298) (1,277) (1,788) Increase (decrease) in payables (9,777) (17,298) (1,277) (1,788) Increase (decrease) in payables (19,316) (1,777) (1,298) (1,216) (1,777) (1,090) (192,816) Increase and dividends income received (19,316) (1,777) (1,090) (192,816) Increase paid (47,080) (33,802) (30,480) (480,803) Net cash provided by operating activities Payments for purchases of property, plant and equipment (195,681) (155,550) (161,504) (1,383,040) Proceeds from sales of property, plant and equipment (195,681) (17,604) (17,727) (15,682) Payments for purchases of investment securities (2,320) (1,7,804) (1,7,704) (1,7,705) (16,682) Payments for acquisition of subsidiaries' stock resulting in change in scope of consolidation Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from financing activities Increase (decrease) in short-term loans (1,0210) (14,020) (3,365) (10,193) Proceeds from financing activities (1,681) (1,682) (1,682) (1,683) Cash flows from financing activities (1,682) (1,683) (1,684) (1,684) (1,685) (1,685) Increase (decrease) in short-term loans (1,682) (1,682) (1,682) (1,682) (1,682) Increase (decrease) in short-term loans (1,684) (1,684) (1,684) (1,684) (1,684) (1,684)	Income before income taxes and minority interests	¥ 132,355	¥ 108,399	¥ 80,635	\$ 1,321,043
Depreciation and amortization 119,905 106,000 87,287 1,196,783 Increase (decrease) in allowance for doubtful accounts (385) (250) 101 (3,643) (41,907) (29,204) (494,945) (49,568) (41,907) (29,204) (494,945) (494,945) (49,568) (41,907) (49,204) (494,945) (49,568) (41,907) (49,204) (494,945) (49,204) (494,945) (49,204) (494,945) (49,204) (49,2	Adjustments to reconcile income before income taxes and				
Increase (decrease) in allowance for doubtful accounts Interest and dividends income Interest expenses Increase) decrease in inventories Increase) decrease in inventories Increase) decrease in inventories Increase) decrease in inventories Increase (decrease) in psysteles Increase (decrease) in psysteles Increase (decrease) in psysteles Increase (decrease) decrease in inventories Increase (decrease) in psysteles Interest expenses psid Interest exp	minority interests to net cash provided by operating activities:				
Interest and dividends income Interest expenses Increase (decrease) in receivables Increase (decrease) in payables Increase (decrease) in commercial paper Increase (decrease) in canable (Increase) (decrease) in commercial paper Increase (decrease) in canable (Increase) (d	Depreciation and amortization	119,905	106,060	87,287	1,196,783
Interest expenses 19,453 17,855 11,956 194,104 Equity in net earnings of affiliates (2,749) (317) (3,593) (27,445) (66,107) (Increase) decrease in roceivables (6,623) (25,836) (27,455) (66,107) (Increase) decrease in inventories (7,490) (9,221) (9,227) (74,766) (16,769) (17,476) (1	Increase (decrease) in allowance for doubtful accounts	(365)	(250)	101	(3,643)
Equity in net earnings of affiliates (2,749) (217) (3,503) (27,445) (norease) decrease in receivables (6,623) (25,836) (27,445) (68,107) (norease) decrease in reventroise (7,490) (9,221) (9,227) (74,766) (15,022) (1,376) (75,580) (15,022) (1,376) (75,580) (15,022) (21,376) (75,580) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (75,680) (15,022) (21,376) (15,022) (21,376) (15,022) (21,376) (15,022) (21,376) (15,022) (21,376) (21,022) (21,376) (21,022)	Interest and dividends income	(49,588)	(41,307)	(29,204)	(494,945)
(Increase) decrease in receivables (6,623) (25,836) (27,435) (66,107) (Increase) decrease in inventories (7,490) (9,221) (9,227) (74,766) (Increase) decrease in inventories (7,490) (9,221) (9,227) (74,766) (Increase) decrease) in payables (7,686) 15,022 21,376 75,539 (10,477) (17,238) 12,161 (67,649) (17,777) (17,238) 12,161 (67,649) (17,777) (17,238) 12,161 (67,649) (17,777) (17,238) 12,161 (67,649) (17,777) (17,238) 12,161 (67,649) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,777) (17,238) (17,23	Interest expenses	19,453	17,855	11,955	194,164
(Increase) decrease in inventories	Equity in net earnings of affiliates	(2,749)	(317)	(3,593)	(27,445)
Increase (decrease) in psyables 7,588 15,022 21,376 75,539 Others, net (6,777) 17,238 12,161 (67,649) Subtotal 205,687 187,642 144,055 2,052,972 Interest and dividends income received 49,506 41,294 29,236 494,122 Interest expenses paid (19,318) (17,777 (11,009) (192,815) Income taxes paid 47,089 (33,692) (30,498) (489,806) Net cash provided by operating activities 188,805 177,467 131,764 1,884,474 Cash flows from investing activities 28,656 (155,560) (161,504) (1,383,040) Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 154,269 Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Payments for purchases of investment securities 26,551 8,419 2,045 2265,010 Payments for operating activities 26,551 (1,939) - 3(88,597) Payments for occupiation of subsidiaries' stock resulting in (36,929) (1,939) - 3(88,597) Proceeds from sacquisition of subsidiaries' stock resulting in 424 4,240 Proceeds from long-taxes and least the subsidiaries' stock resulting in 424 4,240 Proceeds from long-taxes and least the subsidiaries' stock resulting in 424 4,240 Proceeds from long-taxes and least the subsidiaries' stock resulting in 4,400 (3,172) (2,256) (23,164) Proceeds from long-taxes and least the subsidiaries' stock resulting in 4,400 (3,172) (2,256) (23,164) Proceeds from social consolidation 4,240 4,240 Proceeds from social consolidation 4,400 (3,164) (3,165)	(Increase) decrease in receivables	(6,623)	(25,836)	(27,435)	(66,107)
Others, net (6,777) 17,238 12,161 (67,649) Subtotal 205,687 187,642 144,055 2,052,972 Interest and dividends income received 49,506 41,294 29,236 494,122 Interest expenses paid (19,318) (17,777) (11,009) (192,815) Income taxes paid (47,069) (33,692) (30,498) (489,805) Net cash provided by operating activities 188,805 177,467 131,784 1,884,474 Cash flows from investing activities 6 6 7,624 8,415 154,869 Payments for purchases of property, plant and equipment 15,456 7,624 8,415 154,269 Payments for purchases of investment securities 15,456 7,624 8,415 154,269 Payments for purchases of investment securities 26,551 8,419 2,045 265,010 Payments for purchases of investment securities 26,551 8,419 2,045 265,010 Payments for purchases of investment securities 26,551 8,419 2,045 265,010	(Increase) decrease in inventories	(7,490)	(9,221)	(9,227)	(74,766)
Subtotal 205,887 187,642 144,055 2,052,972 Interest and dividends income received 49,506 41,294 29,236 494,122 Interest expenses paid (19,318) (17,777) (11,009) (192,815) Income taxes paid (47,069) (33,692) (30,498) (489,806) Net cash provided by operating activities 188,805 177,467 131,784 1,884,474 Cash flows from investing activities 188,605 177,467 131,784 1,884,474 Cash flows from investing activities 15,456 (155,550) (161,504) (1,353,040) Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 164,289 Payments for purchases of property, plant and equipment 15,456 7,624 8,415 164,289 Payments for purchases of investment securities (1,568) (17,604) (47,725) (15,652) Proceeds from sales of investment securities (1,568) (17,604) (47,725) (15,652) Payments for purchases of investment securities (36,929) (1,939) - (368,697) Change in scope of consolidation (36,929) (1,939) - (368,697) Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from acquisition of subsidiaries' stock resulting in 424 -	Increase (decrease) in payables	7,568	15,022	21,376	75,539
Interest and dividends income received 49,506 41,294 29,236 494,122 Interest expenses paid (19,316) (17,777) (11,009) (192,816) Income taxes paid (47,069) (33,692) (30,498) (469,808) Net cash provided by operating activities 188,805 177,467 131,784 1,884,474 Cash flows from investing activities 192,5661 (155,550) (161,504) (1,353,040) Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 154,289 Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Payments for massles of property, plant and equipment (136,651) (1,568) (17,604) (47,726) (15,652) Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Payments for macquisition of subsidiaries' stock resulting in (36,929) (1,939) - (368,597) Payments for occupional subsidiaries' stock resulting in (36,929) (1,939) - (4,240) Proceeds from acquisition of subsidiaries' stock resulting in (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans (3,059) (4,400) (3,264) (3,054) Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from financing activities (138,789) (164,446) (205,013) (1,385,261) Proceeds from financing activities (138,789) (164,446) (205,013) (1,385,261) Proceeds from financing activities (1,584) (1,694)	Others, net	(6,777)	17,238	12,161	(67,649)
Interest expenses paid (19,318) (17,777) (11,009) (192,815) Income taxes paid (47,069) (33,692) (30,496) (469,866) Net cash provided by operating activities 188,805 177,467 131,784 1,884,474	Subtotal	205,687	187,642	144,055	2,052,972
Income taxes paid (47,069) (33,692) (30,498) (469,806) Net cash provided by operating activities 188,805 177,467 131,764 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,474 1,864,676 1,7624 1,7624 1,7626 1,7624 1,7626 1,7624 1,7626 1,7624 1,7626 1,7624 1,7626 1,7626 1,7624 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7626 1,7627 1,7226 1,7626 1,7	Interest and dividends income received	49,506	41,294	29,236	494,122
Net cash provided by operating activities	Interest expenses paid	(19,318)	(17,777)	(11,009)	(192,815)
Cash flows from investing activities Payments for purchases of property, plant and equipment (135,561) (155,550) (161,504) (1,353,040) Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 154,269 Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Proceeds from sales of investment securities 26,551 8,419 2,045 265,010 Payments for purchases of investment securities 26,551 8,419 2,045 265,010 Payments for load sidion of subsidiaries' stock resulting in change in scope of consolidation 424 – – 4,240 Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation 424 – – 4,240 Payments for loans made (2,320) (3,172) (2,256) (23,164) Posseds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (7,861) Net cash used in investing activities (138,789) (16,446) (205,	Income taxes paid	(47,069)	(33,692)	(30,498)	(469,806)
Cash flows from investing activities Payments for purchases of property, plant and equipment (135,561) (155,550) (161,504) (1,353,040) Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 154,269 Payments for purchases of investment securities (1,568) (17,604) (47,726) (15,652) Proceeds from sales of investment securities 26,551 8,419 2,045 265,010 Payments for purchases of investment securities 26,551 8,419 2,045 265,010 Payments for load sidion of subsidiaries' stock resulting in change in scope of consolidation 424 – – 4,240 Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation 424 – – 4,240 Payments for loans made (2,320) (3,172) (2,256) (23,164) Posseds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (7,861) Net cash used in investing activities (138,789) (16,446) (205,	Net cash provided by operating activities	188,805	177,467	131,784	1,884,474
Proceeds from sales of property, plant and equipment 15,456 7,624 8,415 154,269 Payments for purchases of investment securities 26,551 8,419 2,045 266,010 Payments for purchases of investment securities 26,551 8,419 2,045 266,010 Payments for acquisition of subsidiaries' stock resulting in 36,929 (1,939) - 368,597) change in scope of consolidation Proceeds from acquisition of subsidiaries' stock resulting in 424 4,240 change in scope of consolidation Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities Increase (decrease) in short-term loans Increase (decrease) in commercial paper 29,520 Proceeds from long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds (60,000) (15,980) (20,300) (598,862) Repayments of bonds (60,000) (15,980) (20,300) (598,862) Cash dividends paid to minority shareholders (1,789) (1,255) (11,784) (17,450) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net (2,520) (1,740) (1,027) (1,026) (1,580) (2,500) Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Cash flows from investing activities				
Payments for purchases of investment securities 1,568 1,7604 1,726 1,652 Proceeds from sales of investment securities 26,551 8,419 2,045 265,010 Payments for acquisition of subsidiaries' stock resulting in change in scope of consolidation Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation Payments for loans made 2,320 3,172 2,256 23,164 Proceeds from collections of loans 3,059 4,490 3,264 30,534 Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901 (6,714 (7,250 (78,861 Net cash used in investing activities (138,789 (164,446 (205,013 (1,385,281 Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434 (22,902 71,025 Increase (decrease) in commercial paper 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210 (14,020 (3,365 (101,913 Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000 (15,980 (20,300 (598,682 Payments for repurchase of treasury stock (8,728 (35,524 (62) (87,122 Cash dividends paid to minority shareholders (1,594 (1,039 (854 (15,919 Others, net 5,262 7,388 7,357 52,426 Net cash provided by (used in) financing activities (3,309 2,700 117 (33,027 Translation adjustments of cash and cash equivalents (3,309 2,700 117 (33,027 Net increase (decrease) in cash and cash equivalents 12,714 (4,027 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Payments for purchases of property, plant and equipment	(135,561)	(155,550)	(161,504)	(1,353,040)
Proceeds from sales of investment securities Payments for acquisition of subsidiaries' stock resulting in change in scope of consolidation Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities Cash flows from financing activities Increase (decrease) in short-term loans Increase (decrease) in commercial paper Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans Fepayments of bonds Repayments of bonds Repayments of bonds Repayments for repurchase of treasury stock (8,728) (35,524) (62) (87,122) Cash dividends paid to minority shareholders (11,594) (1,039) (854) (15,919) Others, net Net cash provided by (used in) financing activities (33,902) (19,749) 85,172 (33,927) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year	Proceeds from sales of property, plant and equipment	15,456	7,624	8,415	154,269
Payments for acquisition of subsidiaries' stock resulting in change in scope of consolidation Proceeds from acquisition of subsidiaries' stock resulting in d24 — 4.240 — 4.24	Payments for purchases of investment securities	(1,568)	(17,604)	(47,726)	(15,652)
change in scope of consolidation 424 - - 4,240 Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation 3,059 4,490 3,264 30,534 Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities 7,115 (12,434) (22,902) 71,025 Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913)	Proceeds from sales of investment securities	26,551	8,419	2,045	265,010
Proceeds from acquisition of subsidiaries' stock resulting in change in scope of consolidation 424 - - 4,240 Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (80,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (62) <td>Payments for acquisition of subsidiaries' stock resulting in</td> <td>(36,929)</td> <td>(1,939)</td> <td>_</td> <td>(368,597)</td>	Payments for acquisition of subsidiaries' stock resulting in	(36,929)	(1,939)	_	(368,597)
change in scope of consolidation (2,320) (3,172) (2,256) (23,164) Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities 7,115 (12,434) (22,902) 71,025 Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock<	change in scope of consolidation				
Payments for loans made (2,320) (3,172) (2,256) (23,164) Proceeds from collections of loans 3,069 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities 7,115 (12,434) (22,902) 71,025 Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends p	Proceeds from acquisition of subsidiaries' stock resulting in	424	_	_	4,240
Proceeds from collections of loans 3,059 4,490 3,264 30,534 Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919)	change in scope of consolidation				
Others, net (7,901) (6,714) (7,250) (78,861) Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 <	Payments for loans made	(2,320)	(3,172)	(2,256)	(23,164)
Net cash used in investing activities (138,789) (164,446) (205,013) (1,385,261) Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172	Proceeds from collections of loans	3,059	4,490	3,264	30,534
Cash flows from financing activities Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents 12,714 (4,027)	Others, net	(7,901)	(6,714)	(7,250)	(78,861)
Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,624 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents 12,714 (4,027) 12,060 126,906 Cash	Net cash used in investing activities	(138,789)	(164,446)	(205,013)	(1,385,261)
Increase (decrease) in short-term loans 7,115 (12,434) (22,902) 71,025 Increase (decrease) in commercial paper - - 29,520 - Proceeds from long-term loans 51,662 40,004 38,624 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents 12,714 (4,027) 12,060 126,906 Cash	Cash flows from financing activities				
Proceeds from long-term loans 51,662 40,004 38,824 515,648 Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,906 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636 <td></td> <td>7,115</td> <td>(12,434)</td> <td>(22,902)</td> <td>71,025</td>		7,115	(12,434)	(22,902)	71,025
Repayments of long-term loans (10,210) (14,020) (3,365) (101,913) Proceeds from issuances of bonds — 25,107 68,730 — Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,906 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Increase (decrease) in commercial paper	_	_	29,520	_
Proceeds from issuances of bonds - 25,107 68,730 - Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,906 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Proceeds from long-term loans	51,662	40,004	38,824	515,648
Repayments of bonds (60,000) (15,980) (20,300) (598,862) Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 106,569 112,596 100,535 1,083,636	Repayments of long-term loans	(10,210)	(14,020)	(3,365)	(101,913)
Payments for repurchase of treasury stock (8,728) (35,524) (52) (87,122) Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 106,569 112,596 100,535 1,083,636	Proceeds from issuances of bonds	_	25,107	68,730	_
Cash dividends paid (17,489) (13,250) (11,784) (174,560) Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Repayments of bonds	(60,000)	(15,980)	(20,300)	(598,862)
Cash dividends paid to minority shareholders (1,594) (1,039) (854) (15,919) Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Payments for repurchase of treasury stock	(8,728)	(35,524)	(52)	(87,122)
Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Cash dividends paid	(17,489)	(13,250)	(11,784)	(174,560)
Others, net 5,252 7,388 7,357 52,426 Net cash provided by (used in) financing activities (33,992) (19,749) 85,172 (339,278) Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	•				(15,919)
Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Others, net	5,252	7,388	7,357	52,426
Translation adjustments of cash and cash equivalents (3,309) 2,700 117 (33,027) Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636	Net cash provided by (used in) financing activities	(33,992)	(19,749)	85,172	(339,278)
Net increase (decrease) in cash and cash equivalents 12,714 (4,027) 12,060 126,908 Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636		(3,309)	2,700	117	(33,027)
Cash and cash equivalents at beginning of year 108,569 112,596 100,535 1,083,636				12,060	
				100,535	
	Cash and cash equivalents at end of year	¥ 121,284	¥ 108,569	¥ 112,596	\$ 1,210,543



The Orange Value $\mathbf{Fund}^{\mathbf{TM}}$

Investment Research Report:

Cheung Kong Holdings Limited 0001 HK

By

Moon Li

&

Brian Burrow

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Exhibit Cheung- 1

Valuation Data (In Mill	ions)				
Current Price	HK\$	65.45	Net Income	нк\$	27,678
Shares Outstanding		2,316	Shareholders Equity	HK\$	232,489
Market Capitalization	HK\$	151,593			
			ROI		7.369
Add Interest Bearing Debt	HK\$	40,651	ROA		9.749
Add Preferred Stock	HK\$	-	ROE		11.919
Add Minority Interest	HK\$	3,905			
Less Excess Cash	HK\$	5,475	Book Value per Share	HK\$	100.38
Enterprise Value	HK\$	190,674	Tangible BV per Share	HK\$	100.38
			NAV per Share	HK\$	89.97
Net Revenue	HK\$	13,277			
Add Other Income	HK\$	7,182	Price/BV		0.65
Add Other Finance Charges	HK\$	984.0	Price/TangibleBV		0.65
Add Depreciation	HK\$	257.0	Price/NAV		0.73
Add Profit from Associates	HK\$	15,682.0	EV/EBITDA		7.12
Less Operating Expenses	HK\$	8,787	Price/EBITDA		5.66
Less Gain in Property Appraisal	HK\$	1,815	Price/Earnings		5.48
EBITDA	HK\$	26,780			
			Total Debt/Assets		0.17
Total Assets	HK\$	284,128			
Tangible Assets	HK\$	284,128			
Total Liabilities	HK\$	47,734			
Minority Interest	HK\$	3,905			
Intangible Assets	HK\$	-			
Book Value	HK\$	232,489			
Tangible Book Value	HK\$	232,489			
Net Asset Value	HK\$	208,397			

ORIGIN OF IDEA

The Orange Value Fund currently owns Cheung Kong (Holdings) Limited.

We thought it necessary to value the company in context of a deteriorating credit
market to determine whether it is still "safe and cheap."

ANALYST RECOMMENDATION

We recommend purchasing the common equity of Cheung Kong (Holdings) Limited ("Cheung Kong"). The company is trading at a significant discount to a reasonably ascertained Net Asset Value (NAV). Our base case scenario suggests that Cheung Kong is trading at a 27.26% discount to NAV. Furthermore, the company is trading at a price to tangible book of 0.65. Our debt analysis of the company illustrates a conservative capital structure with total debt to assets at 0.17 and an EBITDA to interest expense of over 27.

COMPANY DESCRIPTION

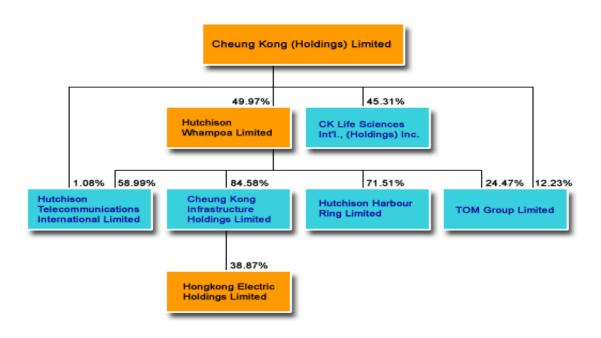
Cheung Kong (Holdings) Limited ("Cheung Kong Holdings") is the flagship of the Cheung Kong Group, the leading Hong Kong based multi-national conglomerate. In Hong Kong alone, members of the Cheung Kong Group include Cheung Kong Holdings (stock code: 0001), Hutchison Whampoa Limited (stock code: 0013) and Hongkong Electric Holdings Limited (stock code: 0006), which are constituent stocks of the Hang Seng Index; Cheung Kong Infrastructure Holdings Limited (stock code: 1038), CK Life Sciences Int'l., (Holdings) Inc. (stock code: 0775), Hutchison Telecommunications International Limited (stock code: 2332), Hutchison Harbour Ring Limited (stock code: 0715) and TOM Group Limited (stock code: 2383), which are companies listed on the Main Board of the Hong Kong Stock Exchange. The combined market capitalization of the

Cheung Kong Group's Hong Kong listed companies amounted to HK\$687 billion as at 30 September, 2008.

Cheung Kong Holdings is a property development and strategic investment company. The company is one of the largest developers in Hong Kong of residential, commercial and industrial properties. Its investment properties comprise mainly retail shopping malls and commercial office properties in Hong Kong (Cheung Kong, 2009).

CORPORATE STRUCTURE

Exhibit Cheung- 2



constituent stocks of the Hang Seng Index companies listed on the Main Board of the Hong Kong Stock Exchange

The above only features listed companies of Cheung Kong Group in Hong Kong. Companies listed outside of Hong Kong are not depicted here.

PRIMARY ASSOCIATES

An associate is a company that is not a subsidiary or jointly controlled entity, in which the parent has significant influence over management. Cheung Kong (Holdings) Limited has two primary associates – Hutchison Whampoa Limited and CK Life Sciences Int'l., (Holding) Inc.

Hutchison Whampoa Limited (49.97%)

Cheung Kong Holdings is the largest shareholder of Hutchison Whampoa Limited (HWL), owning a 49.97% interest. HWL is a leading international corporation committed to innovation and technology with businesses spanning the globe. Its diverse array of holdings range from some of the world's biggest port operators and retailers to property development and infrastructure to the most technologically-advanced and marketing-savvy telecommunications operators. HWL reports revenue of HKD309 billion (USD40 billion) and HKD176 billion (USD23 billion) for 2007 and the six months ended 30 June, 2008 respectively. Hutchison has five core businesses - ports and related services; property and hotels; retail; energy, infrastructure, investments and others; and telecommunications.

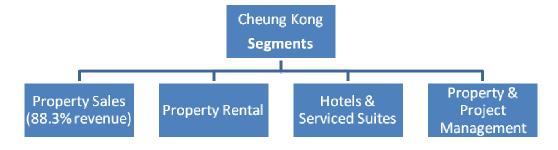
CK Life Sciences Int'l., (Holdings) Inc. (45.31%)

In 2000, Cheung Kong Holdings started biotechnology operations. CK Life Sciences Int'l., (Holdings) Inc. ("CK Life Sciences") is engaged in the research and development, commercialization, marketing, and sale of biotechnology products. CK Life Sciences products are categorized in human health and environmental sustainability.

COMPANY SEGMENTS & PROJECTS

Cheung Kong's four main business segments are Property Sales, Property Rental, Hotels & Serviced Suites, and Property & Project Management.

Exhibit Cheung-3



Property Sales

Of HK\$10,286M of total revenue, HK\$9,083M was from the property sales segment (88.3%). As of June 30th 2008, overall revenues have risen from HK\$3,511M to HK\$10,286M, primarily because of a 248% increase in property sales since June 30th 2007. In addition, Cheung recognized HK\$2,155M in revenue from joint ventures for total revenue of HK\$12,441M; a 132% increase from June 30th 2007. The company also booked a HK\$1,069 increase in the fair value of investment properties.

The company booked HK\$5,249M profit from property sales for the first half of 2008, an increase of HK\$3,447M when compared with the same period last year. The company sold remaining residential units in four property projects completed in prior periods, as well as units in two new property projects: The Legend at Jardine's Lookout, Le Point, Central Park Towers Phase 1, Sausalito in Hong Kong, CASA 880 in Hong Kong, and Maison des Artistes in Mainland China. CASA 880 and Maison des Artistes were completed recently. Looking forward to the second half of 2008, sales revenue is expected to come from residential unit sales in The Riverside in Mainland China, The Capital and Seasons Monarch in Hong Kong, and other projects scheduled for completion (Cheung Kong, 2009).

Property Rental

The property rental segment generates revenue from commercial property. The company booked HK\$715 profit from rental revenue for the first half of 2008, a HK\$119M increase from the same period last year. The rental segment is driven by strong demand for office space; however, property rental and property sales are likely to experience slowdowns in a deteriorating global real estate market.

Hotels & Serviced Suites

Profit generated in the first two quarters of 2008 from hotels & serviced suites was HK\$364M, an increase of HK\$106M. A large increase in revenue occurred in the Harbourview Horizon All-Suite Hotel, Harbourfront Horizon All-Suite Hotel, and other jointly held projects reaching full reservation capacity.

Property & Project Management

The property & project management segment is immaterial to overall revenue. First half 2008 revenue decreased from HK\$90M to HK\$86M. Profit margins are high at about 50%, presenting a profitable opportunity for business expansion (Cheung Kong, 2009).

MANAGEMENT ANALYSIS

Cheung Kong's management has been with the company for many years, enduring Chinese real estate market volatility for over two decades. Founder and Chairman, Li Ka-Shing, is cutting costs in several major projects to reduce expenses in a deteriorating real estate market (Cheung Kong, 2009).

Cheung Kong's management is closely related. For example, Li Ka-Shing appointed his son, Li Tzar Kuoi, as Deputy Chairman; and his brother in law, Kam Hing Lam, as Deputy Managing Director. Two of the Directors, Leung Siu Hon and Chow Kun Chee, are first cousins. Although normal for many Asian companies, closely related management increases the probability of perpetuating fraud and screwing minority shareholders.

Management is involved in numerous related-party transactions that may have a negative impact on outside passive minority investors (OPMI). Cheung Kong entered into numerous agreements with related subsidiaries to advance money, guarantee bank loans, and guarantee revenue streams. Although we subtract contingent liabilities in our NAV analysis, related-party transactions are indicative of adverse shareholder management decisions. Consequently, controlling shareholders are critical in blocking management from acting adversely against OPMIs. Third Avenue Management and JP Morgan own a substantial stake in Cheung Kong and may influence management's interest to benefit OPMIs.

Exhibit 4 displays the top nine insider shareholders (not including unexercised options and shares held by trust entities).

Exhibit Cheung- 4

	Shares Held	% Shares Issued
Li Ka-Shing	930,876,744	40.19
Li Tzar-Kuoi	859,643,744	37.11
LEUNG Siu Hon	10,000	0.0004
YEH Yuan Chang	700,000	0.03
Simon Murray	65,600	0.003
George Colin Magnus	250,000	0.01
Chow Kun Chee	384,000	0.02
Hung Siu-Lin	74,000	0.003
Kam Lam Hing	20,000	0.0009

DEBT ANALYSIS

The Company's long-term debt includes bank loans, other loans, and a loan from a joint development partner. As of December 2007, total outstanding bank loans are \$23,787 million, with \$786 million secured by specific assets of the Group. Other loans have an outstanding amount of \$8,740, payable in the next 9 years. Exhibit 5 displays the repayment schedule of bank loans and other loans. Actual payables may vary because some loans are subject to floating rates, which can be volatile, particularly in the current credit market (Cheung Kong, 2009).

Exhibit Cheung-5

Debt analysis			
In \$ Million			
	2005	2006	2007
Current ratio			
Current assets	38,203	57,658	69,826
Net current assets	31,126	46,067	52,768
Current liabilities	7,077	11,591	17,058
Current ratio	5.40	4.97	4.09

Use cash ratio instead of quick ratio, assuming the company's

	100	_
	ıra	 О

Cash & Cash equivalents	8,310	3,782	5,609
Current liabilities	7,077	11,591	17,058
Cash ratio	1.17	0.33	0.33

The Company's cash balance over the last 3 years has declined due to revenue and investment impairment. However, the average cash balance indicates that the company can easily pay current liabilities and interest. Cheng Kong does not seem to have liquidity issues in short run and foreseeable long run.

Exhibit Cheung- 6

			Repay	able Sched	lule			
2008	2009	2010	2011	2012	2013	2014	2015	2016
		•						
6,172	4,170	4,482	4,482	4,482				
3.24	3.24	41.95						
70.97								
133.55								
120.77								
37.81								
0.34								
2.59	41.29							
2.84	2.84	2.84	2.84	2.84	2.84	2.84	67.35	
0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	20.34
4.81	136.49							
4.95	4.95	4.95	136.63					
3.23	3.23	343.13						
386.09	193.04	393.86	140.46	3.83	3.83	3.83	68.34	20.34
6558.09	4363.04	4875.53	4622.12	4485.49	3.83	3.83	68.34	20.34

NET ASSET VALUE

Our Net Asset Value (NAV) analysis values Cheung Kong's four major operating segments and its substantial holdings in Hutchison Whampoa and CK Life Science.

Capitalization Rates

Cheung Kong appraises its rental properties (Balance Sheet: Investment

Properties) to fair value each year through a global real estate advisory consultant

(DTZ Debenham Tie Leung Limited). Consequently, we can calculate the implied capitalization rates by dividing net operating income by capital asset value reported in the financial statements. Capitalization rates in Hong Kong and China steadily decreased to 3.55% in 2006. However, deteriorating credit markets increased capitalization rates to 4.19% by the end of 2007 and over 5% six months into 2008. We will use a 5 percent capitalization rate as the best case scenario in our valuation of the rental segment.

Investment Property

Investment Properties are classified as rental properties on Cheung Kong's Balance sheet. They are appraised at fair value at year end and the profit or loss is passed through the income statement. We calculated the implied capitalization rate of the segment by dividing the net operating income reported in note 3 (Turnover and Profit Contribution) to the financial statements by the appraised value found in note 24 (Segment Information). We included the capital asset value and net operating income of both Cheung Kong and its investment in jointly controlled entities. We use the implied capitalization rate derived at June 30, 2008 (5.52 percent) as the high value, and assumed a 6 percent and 7 percent capitalization rate for the mid and low case scenarios.

Exhibit Cheung-7

Investment Property		Low		Low Mid		High
Net Operating Income	HK\$	1,430				
Capitalization Rate		7.00%		6.00%		5.52%
Capital Asset Value	HK\$	20,428.57	HK\$	23,833.33	HK\$	25,909.00

Hotel & Serviced Suites

We apply a similar approach in deriving a range of values for the hotel and serviced suites segment. However, Cheung Kong reports this segment at cost on the balance sheet. Consequently, we cannot derive the implied capitalization rates over the last few years. After talking with a Third Avenue research analyst, I was directed to the Asia-Pacific Quarterly digest from Jones Lang LaSalle Research. I used market trends and capitalization rates described in the quarter one 2008 report to calculate an asset value from the reported net operating income.

Exhibit Cheung-8

Hotels & Serviced Suites						
Net Operating Income	HK\$	728				
Capitalization Rate		7.40%		6.00%		4.90%
Capital Asset Value	HK\$	9,837.84	HK\$	12,133.33	HK\$	14,857.14

Property Management

There is inadequate disclosure of the property management segment. The assets held on the balance sheet at cost are immaterial at about HK\$ 132 million. The net operating income is about HK\$ 100 million, suggesting that the book value of the segment may be undervalued. However, with little information as to what capitalization rate to apply, I applied the same range of rates as in the hotel segment. Regardless, the asset value is probably immaterial.

Exhibit Cheung- 9

Property Management				
6 Month Revenue	HK\$	86		
Less Non-Interest Expense	HK\$	40		
Net Operating Income	HK\$	46		
Multiple		2.0x		
Estimated 2008 NOI	HK\$	92		
Capitalization Rate		7.40%	6.00%	4.90%
Gross Asset Value	HK\$	1,243.24 HK\$	1,533.33 HK\$	1,877.55

Property Development

The property development sector consists of stock of properties for sale.

Note 24 to the financial statements in Cheung Kong's annual reports nicely detail
the book value for each segment. The book value of development properties and
properties for sale are recorded at the lower of cost or net realizable value. The
cost of property includes development expenses and interest charges.

Unfortunately, the company does not disclose enough information to derive revenue per square foot in order to apply a value to the existing stock of developed and developing properties. Consequently, we approached valuing the segment by calculating the average five year profit margin for the segment. We then used the average profit margin in our high calculation and more conservative margins for our mid and low case scenarios.

Exhibit Cheung- 11

Property Development	2	004	2	005	2	006	2007	2008
Gross Sales	HK\$	10,773	HK\$	4,717	HK\$	9,401	HK\$ 11,241	HK\$ 9,083
Profits	HK\$	845	HK\$	1,269	HK\$	4,513	HK\$ 5,114	HK\$ 3,999
Profit Margin		7.84%		26.90%		48.01%	45.49%	44.03%

Exhibit Cheung- 10

Property Development				
Appraised Book Value	HK\$	72,496		
Estimated Profit Margin		20.0%	25.0%	30.0%
Estimated Gross Value	HK\$	86,995 HK\$	90,620 HK\$	94,245

Investment Holdings

A large portion of Cheung Kong's value is in investment holdings with Hutchison Whampoa and CK Life Sciences. We approach valuing the company's holdings in a simplistic manner, discounting the reported value of holdings on the balance sheet at a multiple of 1.0, 0.8, and 0.6 for the high, mid, and low case respectively. According to the 2007 annual report, "Investments in associates are carried in the balance sheet at cost plus the Group's share of their aggregate post-acquisition results and reserves less dividends received and a provision for impairment." For comparative purposes, we also value the company's holdings at book and current equity prices to get a sense of relative values.

Our approach may be overly conservative because of the potential hidden value in Hutchison Whampoa ("Hutchison"). Hutchison is trading at a price to book of nearly 0.5, indicating that the intrinsic value of Cheung Kong's holdings in Hutchison is probably over HK\$150,000. Consequently, our mid and low case scenarios may not reflect intrinsic value. They are, however, a realistic reflection of current equity value.

Exhibit Cheung- 12

Associate Valuation	Boo	Book Value		ket Cap	Interest
Hutchison Whampoa (0013.HK)	HK\$	310,966	HK\$	150,774	49.97%
CK Life Science (0775.HK)	HK\$	5,208	HK\$	1,921	45.31%
Total	HK\$	157,750	HK\$	76,212	
Associate Valuation		Low	Mid		High
Balance Sheet Value	HK\$	148,936			
Multiple		0.6x		0.8x	1.0x
Estimated Value	HKŚ	89,362	шиć	119,149	HK\$148,936

Other Assets

Cheung Kong's other assets consist of line items such as cash, receivables, and investments. The major component of other assets is the company's investment holdings as described in the previous section.

Exhibit Cheung- 13

Other Assets						
Investments for Sale	HK\$	8,701				
Investments for Trading	HK\$	520				
Derivative Instruments	HK\$	1,126				
Cash	HK\$	5,475				
Receivables	HK\$	5,196				
Investment Holdings	HK\$	89,362	HK\$	119,149	HK\$	148,936
Gross Asset Value	HK\$	228,884	HK\$	268,287	HK\$	306,842

Liabilities

We subtract out Cheung Kong's liabilities, including contingent liabilities arising from several related-party transactions, from the company's gross asset value. We derive the NAV per share and calculate the discount to our net asset value.

Exhibit Cheung- 14

Liabilities						
ST Bank Loans	HK\$	7,773				
LT Bank Loans	HK\$	28,878				
Accounts Payable	HK\$	3,725				
Derivative Instruments	HK\$	523				
Tax Provision	HK\$	1,429				
Loan from Partner	HK\$	4,000				
Guaranteed PMT to Subsidiary	HK\$	4,500				
Guarantee on subsidiary Loan	HK\$	2,329				
Profit Sharing Agreement	HK\$	1,422				
Deferred Tax Liability	HK\$	1,406				
Minority Interest	HK\$	3,905				
Total Liabilities	нк\$	59,890				
Net Asset Value	HK\$	168,994	HK\$	208,397	HK\$	246,952
Shares Outstanding		2,316				
NAV per Share	HK\$	72.96	HK\$	89.97	HK\$	106.62
Market Price of Share		65.45				
Premium(Discount) to NAV		-10.30%		-27.26%		-38.61%

Our mid case scenario indicates that Cheung Kong is trading at a 27.26% discount to reasonably ascertained NAV. The company meets the quantitative criteria of "safe and cheap" based on our conservative valuation.

INVESTMENT POSITIVES

Cheung Kong is a well capitalized company with a strong balance sheet and property portfolio. The company has little net debt and healthy leverage ratios. The EBITDA to interest expense ratio is over 27 and the company's current assets

are more than sufficient to meet upcoming debt obligations over the next few years. The company's rental property and hotel segments generate revenue to meet overhead expenses and reduce the need to finance capital expenditures and development properties with long-term debt and bank loans. In addition, Cheung Kong has a promising property pipeline in mainland China and Hong Kong. The company is also trading at a discount to both a conservative NAV and tangible book value.

INVESTMENT NEGATIVES

Management is involved in several related-party transactions with different subsidiaries. Although the contingent liabilities associated with these transactions are immaterial to the bottom line, they indicate adverse shareholder decisions by management.

The Hong Kong and mainland China real estate market continues to deteriorate. This is bad news for Cheung Kong since the company generates most of its cash flow from property sales. The company will probably sell property at undervalued prices to meet overhead obligations and development costs of new projects. Unfortunately, this destroys a portion of shareholder wealth because Cheung Kong cannot wait to sell property until the credit crisis alleviates unless it incurs more debt.

APPENDIX

Income Statement

Consolidated Profit and Loss Account

For the year ended 31st December, 2007

	Note	2007 \$ Million	200 \$ Millio
Group turnover Share of property sales of jointly controlled entities		13,277 2,165	10,95 4,39!
Turnover	(3)	15,442	15,346
Group turnover Investment and other income Operating costs		13,277 5,485	10,951 1,306
Property and related costs Salaries and related expenses Interest and other finance costs Other expenses		(6,521) (825) (984) (457)	(4,908 (698 (589 (392
Share of net profit of jointly controlled entities Increase in fair value of investment properties		(8,787) 1,697 1,815	(6,585 1,673 1,936
Operating profit Share of net profit of associates		13,487 15,682	9,28° 10,21°
Profit before taxation Taxation	(4) (5)	29,169 (1,197)	19,492 (1,213
Profit for the year Profit attributable to minority interests		27,972 (294)	18,279 (204
Profit attributable to shareholders	(6)	27,678	18,075
Dividends Interim dividend paid at \$0.50 (2006 – \$0.46) per share		1,158	1,065
Final dividend proposed at \$1.95 (2006 – \$1.74) per share		4,517	4,031
		5,675	5,096
Earnings per share	(7)	\$11.95	\$7.80

Balance Sheet

Consolidated Balance Sheet

As at 31st December, 2007

	Note	2007 \$ Million	20 \$ Mill
Non-current assets Fixed assets Investment properties Associates Jointly controlled entities Investments available for sale Long term loans	(8) (9) (11) (12) (13)	10,560 15,497 146,109 23,614 10,060 956	10,2 14,5 134,5 24,1 8,6
		206,796	192,
Current assets Stock of properties Debtors, deposits and prepayments Investments held for trading Derivative financial instruments Bank balances and deposits	(14) (15) (16)	58,418 4,066 1,439 294 5,609	45,8 6,6 1,2
Current liabilities Bank and other loans Creditors and accruals Derivative financial instruments Provision for taxation	(17) (18)	69,826 8,872 6,889 437 860	57,6 6,8 2,9 1,2
Net current assets		52,768	46,0
Total assets less current liabilities		259,564	238,2
Non-current liabilities Bank and other loans Loan from joint development partner Deferred tax liabilities	(17) (19) (20)	23,655 4,000 1,300	27,6 4,0
		28,955	32,
Net assets		230,609	205,6
Representing: Share capital Share premium Reserves	(21)	1,158 9,331 216,714	1,1 9,3 189,9
Shareholders' funds Minority interests		227,203 3,406	200,4 5,2
Total equity		230,609	205,6

Cash Flow Statement

Consolidated Cash Flow Statement

For the year ended 31st December, 2007

		2007	2006
	Note	\$ Million	\$ Million
Operating activities			
Cash generated from/(used in) operations	(a)	962	(16,930)
Investment in/advance to jointly controlled entities		(1,561)	(1,485)
Dividend/repayment from jointly controlled entities		2,705	3,214
Dividend from associates		3,825	3,694
Dividend from investments in securities		975	146
Interest received		407	505
Dividend paid to shareholders		(5,189)	(4,724)
Dividend paid to minorities		(179)	(32)
Profits tax paid		(1,222)	(136)
Net cash from/(used in) operating activities		723	(15,748)
nvesting activities			(15,7,40)
Net cash acquired upon associates			
becoming subsidiaries	(b)	74	-
Investment in/advance to associates		(26)	(1,552)
Repayment from associates		116	31
Disposal of associates		415	_
Investment in/advance to jointly controlled entities		(1,708)	(546)
Repayment from jointly controlled entities		1,904	_
Disposal of jointly controlled entities		2,593	_
Purchase of investments available for sale		(1,133)	(2,630)
Disposal/redemption of investments available for sale		4,448	2,521
Addition of investment properties		(4)	(862)
Addition of fixed assets		(505)	(574)
Net cash from/(used in) investing activities		6,174	(3,612)
inancing activities			
Borrowing of bank and other loans		7,353	16,689
Repayment of bank and other loans		(10,030)	(4,843)
Loan from joint development partner		(10,030)	4,000
Increase/(decrease) in funding from minorities		(622)	321
Interest and other finance costs paid		(1,771)	(1,335)
<u> </u>		(1,771)	(1,555)
Net cash from/(used in) financing activities		(5,070)	14,832
Net increase/(decrease) in cash and cash equivalent	s	1,827	(4,528)
Cash and cash equivalents at 1st January		3,782	8,310
Cash and cash equivalents at 31st December	(c)	5,609	3,782

Segment Information

24. Segment Information

Assets and liabilities of the Group analysed by operating activities are as follows:

	Company and	Jointly controlled		
	subsidiaries	entities	Assets	Liabilities
	\$ Million	\$ Million	\$ Million	\$ Million
At 31st December, 2007				
Property development	61,680	10,816	72,496	(8,859
Property investment	16,197	9,352	25,549	(269
Hotels and serviced suites	10,159	3,323	13,482	(504
Property and project management	132		132	(61
Total segment assets/(liabilities)			111,659	(9,693
Investments in listed associates			145,250	.,
Cash and investments in securities			15,232	-
Bank and other loans			_	(32,527
Other assets/(liabilities)			4,481	(3,793
Total assets/(liabilities)			276,622	(46,013
At 31st December, 2006				
Property development	54,231	10,517	64,748	(5,918
Property investment	15,004	9,771	24,775	(173
Hotels and serviced suites	9,953	3,703	13,656	(424
Property and project management	149		149	(46
Total segment assets/(liabilities)			103,328	(6,561
Investments in listed associates			133,494	-
Cash and investments in securities			11,400	-
Bank and other loans			_	(34,481
Other assets/(liabilities)			1,579	(3,078

Debt Repayment Schedule

	Amount			Interest R	Fixed / Flo	Issue - Due Date				Repayab	le Sched	ule			
Year							2008	2009	2010	2011	2012	2013	2014	2015	2016
Bank Loans	786.00 US\$						6,172	4,170	4,482	4,482	4,482				
	300.00 HK\$	0.13	38.71 US\$	8.38%	Fixed	2000 - 1/2010	3.24	3.24	41.95						
	500.00 HK\$	0.13	64.52 US\$	10.00%	Floating	2005 - 5/2008	70.97								
	1000.00 HK\$	0.13	129.03 US\$	3.50%	Fixed	2005 - 7/2008	133.55								
	900.00 HK\$	0.13	116.13 US\$	4.00%	Fixed	2003 - 10/2008	120.77								
S III	280.44 HK\$	0.13	36.19 US\$	4.50%	Floating	2007 - 11/2008	37.81								
Š	2.52 US\$	0.13	0.33 US\$	4.70%	Floating	2007 - 11/2008	0.34								
Other Loans	300.00 HK\$	0.13	38.71 US\$	6.68%	Floating	2004 - 2/2009	2.59	41.29							
ಕ	500.00 HK\$	0.13	64.52 US\$	4.40%	Fixed	2005 - 4/2015	2.84	2.84	2.84	2.84	2.84	2.84	2.84	67.35	
	150.00 HK\$	0.13	19.35 US\$	5.10%	Fixed	2006 - 4/2016	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	20.34
	200.00 SGD	0.66	131.68 US\$	3.66%	Fixed	2006 - 10/2009	4.81	136.49							
	200.00 SGD	0.66	131.68 US\$	3.76%	Fixed	2006 - 10/2011	4.95	4.95	4.95	136.63					
	33000.00 JPY	0.01	339.90 US\$	0.95%	Fixed	2005 - 8/2010	3.23	3.23	343.13						
0	ther Loans US\$						386.09	193.04	393.86	140.46	3.83	3.83	3.83	68.34	20.34
Bank & O	ther Loans US\$						6558.09	4363.04	4875.53	4622.12	4485.49	3.83	3.83	68.34	20.34



Investment Research Report:

Forestar Real Estate Group

NYSE: FOR

By

Brian Burrow

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VALUATION DATA

\$ 12.87	EBITDA	\$	51,470	Debt/Equity		0.668
\$ 29.49	BV	\$	452,912	Revenue	\$	176,070
				Operating Cash		
35,680	Price/Book		1.01x	Flow	\$	(48,630)
				Levered Free		
\$ 459,202	EV/EBITDA		14.54x	Cash Flow	\$	36,000
\$ 748,464	EV/Revenue		4.25x	Net Asset Value	\$	1,038,992
\$ 297,024	Holders		205	Price/NAV		0.44x
	\$ 29.49 35,680 \$ 459,202 \$ 748,464	\$ 29.49 BV 35,680 Price/Book \$ 459,202 EV/EBITDA \$ 748,464 EV/Revenue	\$ 29.49 BV \$ 35,680 Price/Book \$ 459,202 EV/EBITDA \$ 748,464 EV/Revenue	\$ 29.49 BV \$ 452,912 35,680 Price/Book 1.01x \$ 459,202 EV/EBITDA 14.54x \$ 748,464 EV/Revenue 4.25x	\$ 29.49 BV \$ 452,912 Revenue Operating Cash 35,680 Price/Book 1.01x Flow Levered Free \$ 459,202 EV/EBITDA 14.54x Cash Flow \$ 748,464 EV/Revenue 4.25x Net Asset Value	\$ 29.49 BV \$ 452,912 Revenue Operating Cash 35,680 Price/Book 1.01x Flow Levered Free \$ 459,202 EV/EBITDA 14.54x Cash Flow \$ \$ 748,464 EV/Revenue 4.25x Net Asset Value \$

ANALYST RECOMMENDATION

I recommend starting a small position in the common stock of Forestar Real Estate Group (FOR). Even on a highly conservative valuation basis, the common equity appears very cheap, trading evenly with book value and a 60.79 percent discount to my base case Net Asset Value (NAV). Furthermore, the company appears reasonably able to withstand a prolonged credit crisis with its income producing timberland and oil and gas production properties. The debt load seems reasonable and the company should be able to maintain its credit covenants throughout the housing downturn. Moreover, management seems capable and the company has a strong strategy to create long-term shareholder value.

However, the Orange Value Fund's (OVF) exposure to the real estate market through St. Joe (JOE), Radian (RDN), and MBIA (MBI) would dictate smaller scale investment in FOR for portfolio management purposes.

Nevertheless, I think the company can be a strong complement to the fund's holding in JOE, which has appreciated in value to the point in which capital may be better invested in other real estate opportunities.

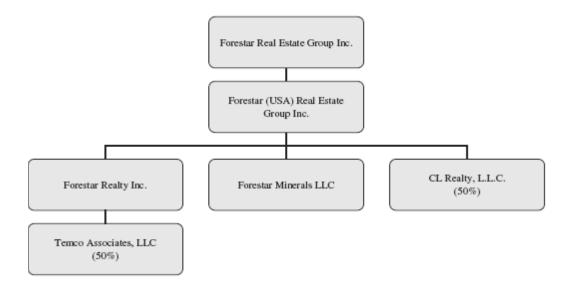
COMPANY DESCRIPTION

Forestar Real Estate Group was a subsidiary of Temple-Inland Inc. prior to its spin-off on December 28, 2007. The company attempts to create value through entitlement and development of real estate around the broad Atlanta, Georgia area, with the majority of acreage located in Texas. The company finances overhead expenses and creates positive cash flow for future investment in real estate through their mineral and timber segments, which are leased to oil exploration and production and paper companies. The company owns and manages projects directly and through joint ventures to maximize capital allocation (Forestar, 2008).

Forestar dates back to the 1955 incorporation of Lumberman's Investment Corporation, which in 2006 changed its name to Forestar (USA) Real Estate Group, Inc. The company has operated in real estate development and sales for decades as a subsidiary to Temple-Inland Inc. In 2006, Temple Inland began reporting Forestar as a separate business segment. In 2007, Temple-Inland distributed 100% of Forestar's shares in a spin-off, creating an entirely new capitalized business.

CORPORATE STRUCTURE

Exhibit FOR - 1



Source - Forestar, 2009

THE SPIN-OFF

On December 28, 2007, Temple-Inland distributed 100 percent of the issued and outstanding stock to the holders of Temple-Inland common shares in which each shareholder received 1 share of FOR for every 3 shares of Temple-Inland. The company obtained a private letter ruling from the Internal Revenue service prior to the transaction to ensure that there would be no federal tax liability. The transaction was structured as to transfer all of the assets and liabilities associated with the real estate, mineral, and timberland segments of Temple-Inland to FOR. Temple-Inland's liabilities resulting from the company's

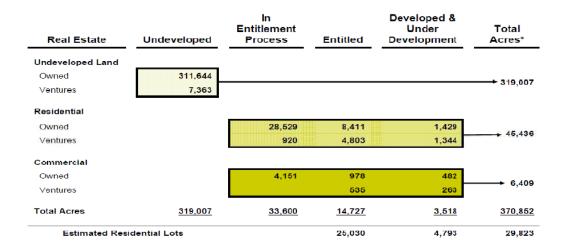
other businesses and holding company operations were not transferred to FOR, creating a relatively clean balance sheet at year end 2007 (Forestar, 2008).

BUSINESS SEGMENTS

FOR manages their operations though three distinct segments: real estate, mineral resources, and fiber resources.

The company secures entitlements and develops infrastructure on its land for single-family residential and mixed-use communities. FOR owns about 371,000 acres of real estate located in 10 states and 13 markets, with approximately 302,000 acres located in the broad area around Atlanta, Georgia, with the balance resting primarily in Texas. The company's strategy involves acquiring land in strategic growth corridors across the southern half of the United States. They target projects that will, at a minimum, return of 35% over development and acquisition cost.

Exhibit FOR - 2



Source – Forestar, 2009

The company has substantial value in its property pipeline, particularly the entitled and in-entitlement projects located in high growth areas. FOR owns directly or through ventures approximately 622,000 acres of oil and gas mineral interests in Texas, Louisiana, Alabama, and Georgia. The company has 122,000 acres under lease and an additional 26,000 acres held by production. The company has been able to substantially enhance acres under lease as indicated in the quarter over quarter increase below. FOR generates stable royalty revenue of approximately \$10 million to \$15 million annually, with significant bonus payments of 18% to 27% of production revenues tied to oil and natural gas production. The company charges \$100 to \$400 per acre on their leasing arrangements.

Exhibit FOR - 3

	2nd Qtr. 2008	2nd Qtr. 2007	1st Qtr. 2008
Minerals			
Net Acres Leased	47,394	10,802	5,293
Avg. Bonus / Acre	\$391	\$166	\$678
Natural Gas Production (MMCF)	276.5	204.3	255.9
Average Price / MCF	\$7.86	\$6.75	\$6.80
Oil Production (Barrels)	23,400	25,900	19,400
Average Price / Barrel	\$109.90	\$60.31	\$92.62
Segment Revenues (\$ in Millions)	\$24.4	\$5.2	\$6.3
Segment Earnings (\$ in Millions)	\$23.2	\$4.7	\$6.5

Source - Forestar, 2009

The company's fiber resources segment focuses on the management of 345,000 acres of timber holdings on its undeveloped land. Currently, about 18,000 acres are under lease in Georgia. In addition, the company sells wood fiber and leases recreational land for hunting and other uses. The segment does not currently produce significant income, but the margins are very high because of small capital requirements. Consequently, there could be opportunities for future growth.

Exhibit FOR - 4

	2nd Qtr. 2008	2nd Qtr. 2007	1st Qtr. 2008
Fiber Sales			
Tons Sold	262,200	325,900	209,200
Average Price / Ton	\$10	\$11	\$10
Recreational Leases (acres)	283,700	283,500	284,500
Segment Revenues (\$ in Millions)	\$3.1	\$3.8	\$2.5
Segment Earnings (\$ in Millions)	\$1.4	\$2.4	\$2.8

Source - Forestar, 2009

MANAGEMENT ANALYSIS

Most of FOR's management team was retained in the spin-off from Temple-Inland. Jim Decosmo, President and Chief Executive Officer (CEO), served as CEO of FOR since 2006, vice president of Temple-Inland from 2005 to 2007, and vice president of forest operations from 2000 to 2005. Craig Knight, the Chief Investment Officer (CIO), served as the CIO of FOR since 2006 and the president of Forestar (USA), a subsidiary of FOR, from 1994 to 2006. Christopher Nines is new to the Chief Financial Officer (CFO) position, acquiring the job in April 2007 after serving as the director of financial relations since 2003. David Grimm, the Chief Administrative Officer, has been in various legal positions with Temple-Inland since 1992. The executive Vice President of real estate services,

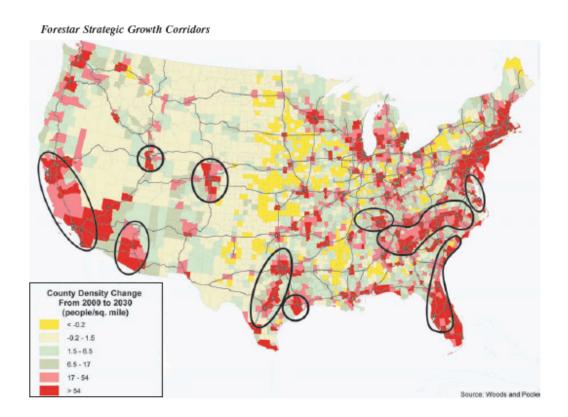
who is responsible for project oversight and underwriting, joined FOR in 2003 and has worked in a similar capacity in the industry for over 25 years. The defining characteristics of FOR's management team has been long-term commitment and substantial industry experience.

Management seems honest and competent. The company has a strong strategy focused on growing long-term value through strategic real estate acquisitions in high growth corridor areas in the southern half of the United States. Furthermore, FOR is able to maintain a reasonably strong balance sheet through income producing timberland and oil and gas production properties. Management compensation seems reasonable. The company benchmarks their compensation to competitors such as Forest City Enterprises, The St. Joe Company, Brookfield Homes Corporation, and Tejon Ranch Company. Jim Decosmo (CEO) earns the highest base salary at \$500,000, with the remaining executives earning between \$250,000 and \$350,000 in 2008. FOR's bonus in 2008 will be calculated as a percentage of the company's ROA. FOR also rewards restricted stock to its executives and officers to promote long-term value management decisions. Option awards are not a material component of management compensation.

Management does not own a significant interest in FOR as total director and executive officer ownership amounts to 1.82%. The majority of ownership (1.55%) lies with Kenneth Jastrow II, Chairman of the Board and former CEO of Temple-Inland from 2000 to 2007. However, all major executive officers have filed Form 4s in the past two months to either acquire common stock in the

company or exercise available options. This has occurred under the backdrop of a significantly falling stock price.

Exhibit FOR - 5



Source – Forestar, 2009

DEBT ANALYSIS

Exhibit FOR - 6

Coverage	Event of Default	Current
Total Debt/EBITDA		5.77
EBITDA/Interest Expense	1.5	5.26
Revenue/Capital Expenditure	0.7	1.7
Total Debt as % Total Assets		0.37

Exhibit FOR - 7

Debt	Interest Rate	Amount	
Term Loan Facility	LIBOR + 4%	\$ 175,000	
Revolving Loan Facility	LIBOR + 4%	\$ 30,000	
Secured Promissory Note	7.30%	\$ 16,142	
Other Indebtedness	5% - 9.5%	\$ 75,882	
		\$ 297,024	

The company has a senior credit facility providing for a \$175 million term loan and a \$290 million revolving line of credit maturing in December 2010. As of the second quarter 2008, FOR has approximately \$175 million in net unused borrowing capacity. The borrowings under the credit facility are secured by 250,000 acres of undeveloped land, assignments of current and future leases, a security interest in the holding company's primary operating account, a pledge of the equity interests in current and future material operating subsidiaries or joint venture interests, and a negative pledge on all other wholly owned assets. FOR is required to maintain an interest coverage ratio of at least 1.5, a minimum revenue to capital expenditure ratio of 0.7, a minimum liquidity of \$35 million, a total leverage ratio not exceeding 40 percent, and a net worth of at least \$350 million. The company is not in danger of default as it is easily meeting its credit covenants. However, FOR's EBITDA is down as a result of the current state of the U.S. real estate market, as indicated in the EBITDA to interest expense ratio.

The company also has about \$16 million in liens on commercial operating properties and approximately \$76 million of non-recourse debt tied to under development land. Additionally, FOR has about \$50 million in off-balance sheet

liabilities consisting of performance bonds, letters of credit, operating leases, and other recourse obligations.

NET ASSET VALUE ANALYSIS

In determining the NAV for FOR, I first analyzed their real estate portfolio. Beginning with the residential real estate segment, I broke apart the value of developed, entitled, and in-entitlement land. For developed properties, I averaged the residential real estate sales from 2005 to 2008 to arrive at a minimum, mean, and maximum value per acre for real estate sales. The appraisal value for entitled land was not available in the company's credit agreements. Consequently, I took a different valuation approach. I used the same value per acre number as the developed properties to determine a sales value. Then I capitalized the future development costs assuming a 20 percent profit over project cost. I believe this is a reasonable assumption as FOR targets projects returning a minimum of 35 percent. Finally, I used the undeveloped land value per acre for in-entitlement residential acres. This value was difficult to determine because FOR has been selling undeveloped land for as high as \$7 thousand an acre. However, it is not reasonable to assume that the majority of their acreage can be sold at these values. Consequently, I arrived at the undeveloped land value by looking at competitor sales in similar regions.

Residential

Exhibit FOR - 8

	2005	2006	2007	2008
Residential Real Estate	\$60,340	\$ 74,833	\$58,467	\$ 24,931
Lots	1,355	1,710	1,076	499
Price per Lot	\$ 44.53	\$ 43.76	\$ 54.34	\$ 49.96
Average Price Per Lot	\$ 48.15			
Commercial Real Estate	\$13,968	\$49,699	\$41,484	\$ 5,692
Acres	264	220	166	37
Price per Acre	\$52.91	\$225.90	\$249.90	\$153.84
Average Price Per Acre	\$ 170.64			
Undeveloped Land	\$ 22,388	\$ 27,253	\$ 19,939	\$ 9,228
Acres	3,067	3,441	2,486	1,853
Price per Acre	\$7.30	\$7.92	\$8.02	\$4.98
Average Price Per Acre	\$ 7.06			

Exhibit FOR - 9

Residential (In Thousands)	Low	Mid	High
Developed/Under Development Residential			
Acres	2,773	2,773	2,773
Price per Acre	75.64	83.14	93.92
Gross Value	209,751	230,535	260,437
Entitled Residential			
Acres	13,214	13,214	13,214
Price per Acre	\$ 75.64	\$ 83.14	\$ 93.92
Sales Value	\$ 999,514	\$ 1,098,553	\$ 1,241,045
Profit	20%	20%	20%
Development Costs	\$ 832,929	\$ 915,461	\$ 1,034,204
Gross Value	\$ 166,586	\$ 183,092	\$ 206,841
In-Entitlement Residential			
Acres	29,449	29,449	29,449
Price per Acre	\$ 1.25	\$ 1.50	\$ 1.75
Gross Value	\$ 36,811	\$ 44,174	\$ 51,536

I used the same valuation method for the commercial segment. There are significant valuation differences between the minimum and maximum value per acre as the real estate sales varied significantly over the past 4 years.

Commercial

Exhibit FOR - 10

Developed/Under Development Commercial			
Acres	745	745	745
Price per Acre	\$ 52.91	\$ 185.20	\$ 249.90
Gross Value	\$ 39,417	\$ 137,972	\$ 186,178
Entitled Commercial			
Acres	1,513	1,513	1,513
Price per Acre	\$ 52.91	\$ 185.20	\$ 249.90
Sales Value	\$ 80,051	\$ 280,204	\$ 378,104
Profit	20%	20%	20%
Development Costs	\$ 66,710	\$ 233,503	\$ 315,087
Gross Value	\$ 13,342	\$ 46,701	\$ 63,017
In-Entitlement Commercial			
Acres	4,151	4,151	4,151
Price per Acre	\$ 1.25	\$ 1.50	\$ 1.75
Gross Value	\$ 5,189	\$ 6,227	\$ 7,264

Undeveloped Land

Undeveloped Land

Undeveloped Land			
Acres	319,007	319,007	319,007
Price per Acre	\$ 1.25	\$ 1.50	\$ 1.75
Gross Value	\$ 398,759	\$ 478,511	\$ 558,262

Upon determining the gross value of FOR's real estate segment, I analyzed the mineral resource and fiber resource components. Both of these segments have grown significantly within the past year as the company's leases have grown, making the year-end 2007 revenue numbers inaccurate in determining net operating income (NOI). Consequently, I multiplied the first six months revenue less non-interest expenses to arrive at an estimated annual NOI

for both segments. I then assume a 10, 9, and 8 percent capitalization rate for the low, mid, and high case scenarios respectively.

Exhibit FOR - 11

Fiber Resources		Low	Mid	High
First 6 Months Revenue	\$	5,605	\$ 5,605	\$ 5,605
Less: Non-Interest Expense	\$	2,730	\$ 2,730	\$ 2,730
Multiple		2.0x	2.0x	2.0x
NOI	\$	5,750	\$ 5,750	\$ 5,750
Cap Rate		10.0%	9.0%	8.0%
Capital Cost (Asset Price)	\$	57,500	\$ 63,889	\$ 71,875
Mineral Resources		Low	Mid	High
Mineral Resources First 6 Months Revenue	\$	Low 30,654	\$ Mid 30,654	\$ High 30,654
	\$ \$		\$	\$ •
First 6 Months Revenue		30,654	30,654	30,654
First 6 Months Revenue Less: Non-Recurring Bonus Payments	\$	30,654 20,567	\$ 30,654 20,567	\$ 30,654 20,567
First 6 Months Revenue Less: Non-Recurring Bonus Payments Less: Non-Interest Expense	\$	30,654 20,567 1,937	\$ 30,654 20,567 1,937	\$ 30,654 20,567 1,937
First 6 Months Revenue Less: Non-Recurring Bonus Payments Less: Non-Interest Expense Multiple	\$	30,654 20,567 1,937 2.0x	\$ 30,654 20,567 1,937 2.0x	\$ 30,654 20,567 1,937 2.0x

After totaling the real estate assets, I add FOR's cash, tangible other assets, and deferred tax asset to arrive at a gross asset value number. I then subtract out the total debt, off-balance sheet liabilities, and other liabilities to calculate FOR's net asset value. Using a conservative valuation, FOR appears to be trading at a significant discount to its intrinsic value. The company is trading at over a 50% discount to my low case scenario. Consequently, I believe the company meets the "cheap" criteria at a market price with considerable protection against a "worst case" valuation.

Exhibit FOR - 12

Total Real Estate Assets	869,855	1,127,210	1,333,536
Add Cash	7,762	\$ 7,762	\$ 7,762
Other Assets	22,671	\$ 23,557	\$ 24,443
Deferred Tax Asset	4,916	\$ 6,554	\$ 8,193
Mineral Resources	163,000	\$ 181,111	\$ 203,750
Fiber Resources	57,500	\$ 63,889	\$ 71,875
Gross Asset Value	1,125,704	1,410,084	1,649,559

Exhibit FOR - 13

Liabilities	
Long-Term Debt	
Term Loan Facility	\$ 175,000
Revolving Loan Facility	\$ 30,000
Non-Recourse Secured Debt	\$ 75,882
Liens on Properties	\$ 16,142
Off-Balance Sheet Recourse Obligations	\$ 48,969
Total LT Debt	\$ 345,993
Other Debt	
Accounts Payable	\$ 8,288
Other Liabilities	\$ 10,561
Remediation Liability	\$ 6,250
Total Liabilities	\$ 371,092

Exhibit FOR - 14

Net Asset Value			
NAV	\$ 754,612	\$ 1,038,992	\$ 1,278,467
Shares Outstanding	35,677		
NAV per Share	\$ 21.15	\$ 29.12	\$ 35.83
Market Price	\$ 11.42	\$ 11.42	\$ 11.42
Premium (Discount) from NAV	-46.01%	-60.79%	-68.13%

INVESTMENT POSITIVES

FOR is trading at a significant discount to a reasonably estimated NAV. It is almost valued in the market as a net-net, with a price to book of about 1.

Furthermore, the company has a strong balance sheet comprising of residential and commercial real estate, timber resources, and mineral resources. FOR has increased its leasing activities, building revenue streams from its income producing properties to buffer against the current real estate downturn and maintain a reasonably strong balance sheet. This will allow the company to take advantage of lower land prices in the southern half of the United States.

In addition, FOR's management team has substantial experience in the real estate development industry and most executives have been associated with the company in some capacity for many years. This experience has molded a long-term outlook focused on growing value by acquiring undeveloped properties in high growth corridors and expanding their entitled, under development, and development pipeline. Management also appears honest as indicated by reasonable compensation policies linked to the mean of their industry competitors. Finally, the company has access to capital markets in the current environment with substantial unused credit in their revolving facility, which will enable FOR to take advantage of opportunities as they arise.

Additionally, the discounted market value of the common equity may make FOR an attractive resource conversion target. They own valuable real estate, oil and gas producing properties, and timber producing properties throughout the

southern half of the United States. Competitors such as Brookfield Homes may find such properties attractive at current prices. However, the tax agreement under the spin-off places certain restrictions on resource conversion activities such as mergers, acquisitions, and asset transfers for two years, making it highly unlikely that any serious transactions will occur until early 2010. This enables OPMIs to take advantage of an attractive buying opportunity with reasonable protection from activist shareholders such as Carl Icahn while the market value of the company is severely depressed. Furthermore, an OPMI may realize significant value in the company when the credit markets stabilize and control investors such as Icahn attempt to "flip" the company at a significant premium.

INVESTMENT NEGATIVES

FOR's management team does not have experience operating as a public company. They may face challenges responding to market risk in the current environment since they have little experience dealing with shareholders. In addition, the company's limited operating history makes valuation difficult, particularly because of the lack of historical data on land sales and acquisition.

The major issue for an outside passive minority investor (OPMI) is probably the spin-off from Temple-Inland in December 2007. Although the transaction was structured to be non-taxable for U.S. federal income tax purposes, the IRS could still determine that the spin-off should be treated as a taxable transaction. If the spin-off fails to qualify for tax-free treatment, FOR will incur

substantial liabilities to Temple-Inland under the spin-off agreement. Furthermore, the tax agreement FOR entered into with Temple-Inland creates a two year limitation in issuing equity, acquiring businesses, and entering into mergers or asset transfers. However, these limitations may actually serve as a buffer for OPMIs against adverse shareholder transactions.

In addition, there are only 205 holders of record, mostly institutional owners, which leave OPMI's vulnerable to the company deregistering from the NYSE to "go dark." Under SEC and NYSE regulations a public company can delist and trade over the over the counter markets if they have fewer than 300 shareholders of record. Companies usually "go dark" to reduce costly regulatory, compliance, and accounting obligations under Sarbanes Oxley. Under the NYSE, companies need approval of the audit committee to "go dark" and do not need formal approval from the shareholders. Unfortunately, this reduces liquidity for OPMIs and may impair the tendency of the stock to trend towards long-term efficiency.

TOP SHAREHOLDERS

Exhibit FOR - 15

		Borcontago
Holder Name	Shares Held	Percentage Outstanding
Icahn Associates Corp.	3,455,493	9.69
Franklin Mutual Advisers LLC	2,160,232	6.06
Barclays Global Investors NA (California)	2,148,071	6.02
Keeley Asset Management Corp.	1,988,887	5.58
Janus Capital Management LLC	1,610,108	4.51
Ironbound Capital Management LP	1,404,917	3.94
Morgan Stanley & Co., Inc.	1,263,617	3.54
Vanguard Group, Inc.	1,192,447	3.34
Foundation Resource Management, Inc.	1,119,821	3.14
Loomis, Sayles & Co. LP	1,040,478	2.92
Credit Suisse (United States)	1,028,015	2.88
Fidelity Management & Research	937,599	2.63

APPENDIX

Balance Sheet

FORESTAR REAL ESTATE GROUP INC. CONSOLIDATED BALANCE SHEETS

	At Year-End	
	(In thousands except share data)	
ASSETS	except si	iare data)
Cash and cash equivalents	\$ 7,520	\$ 10,350
Prepaid expense	2,267	2,378
Real estate.	552,210	447,817
Investment in unconsolidated ventures	101,687	90,444
Receivables, net of allowance for bad debts of \$226 in 2007 and 2006	3,767	6,091
Timber	54,593	58,966
Property and equipment, net of accumulated depreciation of \$2,455 in 2007 and	01,000	2 0,5 00
\$2,387 in 2006	1,568	1,688
Deferred tax asset	5,106	88
Other assets	20,008	2,440
TOTAL ASSETS	\$748,726	\$620,174
LIABILITIES AND STOCKHOLDERS'/PARENT'S EQUITY		
Accounts payable	\$ 8,002	\$ 4.838
Accrued employee compensation and benefits.	3,857	2,114
Accrued interest.	896	210
Accrued property taxes	4,459	4,577
Other accrued expenses	15,318	2,810
Deferred tax liability		14,438
Other liabilities	8,349	4,272
Note payable to Temple-Inland.		110,506
Debt	266,015	50,611
TOTAL LIABILITIES	306,896	194,376
		NO VENDOR
MINORITY INTEREST IN CONSOLIDATED VENTURES	8,629	7,746
STOCKHOLDERS'/PARENT'S EQUITY		
Preferred stock, par value \$0.01 per share, 25,000,000 authorized shares, none		
issued	2 - 2	S:
Common stock, par value \$1.00 per share, 200,000,000 authorized shares, 35,380,385 issued	35,380	
		33 3
Additional paid-in capital	373,026 24,795	
Temple-Inland's net investment	1-00000 (100000)	418,052
All and the second of the seco	422.201	
TOTAL STOCKHOLDERS'/PARENT'S EQUITY	433,201	418,052
TOTAL LIABILITIES AND STOCKHOLDERS'/PARENT'S EQUITY	\$748,726	\$620,174

Income Statement

FORESTAR REAL ESTATE GROUP INC. CONSOLIDATED STATEMENTS OF INCOME

	For the Year		
	2007	2006	2005
	(In thousands except per share data)		
REVENUES			
Real estate sales	\$ 117,890	\$ 151,785	\$ 96,696
Commercial operating properties and other	24,839	28,366	21,425
Real estate	142,729	180,151	118,121
Natural resources and other	35,257	45,409	37,366
	177,986	225,560	155,487
EXPENSES			
Cost of real estate sales	(58,046)	(90,629)	(57,404)
Cost of commercial operating properties and other	(17,936)	(17,307)	(16,212)
Cost of natural resources and other	(6,793)	(5,238)	(4,733)
Other operating	(27,320)	(25,418)	(22,071)
General and administrative	(18,624)	(15,144)	(9,481)
	(128,719)	(153,736)	(109,901)
OPERATING INCOME	49,267	71,824	45,586
Equity in earnings of unconsolidated ventures	3,732	19,371	17,180
Minority interest in consolidated ventures	(5,771)	(3,231)	(1,054)
Interest expense	(9,229)	(6,229)	(6,439)
Other non-operating income (expense)	705	79	483
INCOME BEFORE TAXES	38,704	81,814	55,756
Income tax expense	(13,909)	(29,970)	(20,859)
NET INCOME	\$ 24,795	\$ 51,844	\$ 34,897
NET INCOME PER COMMON SHARE — BASIC AND		72 8 88	us desire
DILUTED	\$ 0.70	\$ 1.47	\$ 0.99
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING — BASIC AND DILUTED.	35,380	35,380	35,380

Cash Flow Statement

FORESTAR REAL ESTATE GROUP INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year		
	2007	2006	2005
		(In thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	\$ 24,795	\$ 51,844	\$ 34,897
Depreciation and amortization	2,915	2,355	2,249
Deferred income taxes	(19,544)	(4,912)	1,578
Equity in earnings of unconsolidated ventures	(3,732)	(19,371)	(17,180)
Distributions of earnings of unconsolidated ventures	2,863	1,519	4,090
Minority interest in consolidated ventures	5,771	3,231	1,054
Distributions to minority interest	(11,948)	(517)	(1,989)
Non-cash real estate cost of sales	46,975	86,393	53,741
Real estate development and acquisition expenditures	(140,013)	(159,886)	(65,117)
Reimbursements from utility or improvement districts	10,628	5,790	1,000
Other changes in real estate	(1,364)	(2,174)	2,730
Gain on termination of timber lease	(2,243)		-
Cost of timber cut	4,060	3,441	3,218
Asset impairments	6,518	_	_
Other	(65)	286	653
Receivables	659	(313)	(3,586)
Prepaid expenses and other	(66)	(298)	1,926
Accounts payable and other accrued liabilities	7,507	3,541	1,830
Net cash (used in) provided by operating activities	(66,284)	(29,071)	21,094
Property, equipment, software, and reforestation	(3,198)	(3,991)	(1,616)
Investment in unconsolidated ventures	(14,492)	(17,611)	(29,612)
Return of investment in unconsolidated ventures	3,239	22,208	20,830
Notes receivable sold or collected	491	5,493	3,767
Proceeds from sale of property and equipment	166	1,311	1,099
Proceeds from termination of timber lease	2,966		
Net cash (used in) provided by investing activities	(10,828)	7,410	(5,532)
Note payable to Temple-Inland, net	(93,063)	97,678	1.802
Payments of debt	(22,534)	(89,144)	(29,733)
Proceeds from issuance of debt	226,446	30,636	38,882
Dividends and other transfers to Temple-Inland	(27,704)	(20,241)	(27.931)
Deferred financing fees.	(10,010)		
Other	1,147	140	149
Net cash provided by (used in) financing activities	74,282	19,069	(16,831)
Net decrease in cash and cash equivalents	(2,830)	(2,592)	(1,269)
Cash and cash equivalents at beginning of year	10,350	12,942	14,211
Cash and cash equivalents at year-end	\$ 7,520	\$ 10,350	\$ 12,942
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the year for:			
Interest	\$ 10,014	\$ 4,309	\$ 7,171
Income taxes	\$ 33,428	\$ 125	\$ 3,444
SUPPLEMENTAL DISCLOSURE OF NON-CASH INFORMATION: Capitalized interest.	\$ 695	\$ 543	\$ 1,444

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PROJECT DESCRIPTION

We are investment analysts for the Orange Value Fund (OVF), a student run hedge fund in the Whitman School of Management. The OVF is an intensive two year analyst program designed to teach students value investing. Students take required courses in value investing, distress investing, derivatives, and financial modeling. We learn how to interpret U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) to dissect and understand company financial disclosures. OVF analysts read Securities and Exchange Commission (SEC) disclosures such as 10ks, 10qs, 8ks, credit agreements, and Def14As to understand and value businesses. We also study U.S. bankruptcy and tax code to understand transaction tax consequences, model bankruptcy workouts, and determine debt subordination.

Our project is a cross section of investment research reports spanning several companies and industries. Each report illustrates the OVF's micro-level approach. We use our value investing tool bag spanning Accounting, Finance, and Law to find out what's wrong with a business. Rather than accumulate positive evidence to pitch an investment, we spend our time analyzing quantitative and qualitative data to determine what can go wrong.

METHODOLOGY

We like safe and cheap companies. OVF analysts look for safe businesses with super-strong financial positions, access to capital markets, honest and competent management, and understandable businesses.

We define strong finances as an absence of liabilities and the presence of high quality assets on the balance sheet. OVF analysts look for marketable assets such as income producing real estate, cash, and natural resources such as oil and gas reserves. High quality assets help preserve and grow shareholder wealth. In contrast, we view certain assets such as inventory unfavorably. Although defined as a current asset on the balance sheet, inventory is really a fixed asset. For instance, retailers would go out of business without inventory. OVF analysts also study credit agreements and analyze leverage to determine whether a business is safe.

Honest and competent management protects and enhances long-term shareholder value. Managers should focus on long-term wealth creation instead of short-term impacts on stock price. OVF researchers analyze management through SEC disclosures. Detailed and understandable disclosure suggests honest management. We also look at incentive compensation plans. Restricted stock awards align management interests with shareholders because they increase their own wealth in the process. In contrast, excessive compensation or option packages promote short-term focus.

Finally, we won't invest in businesses unless we understand them. OVF analysts do their homework before investing. We also do not invest in businesses that require continual access to capital markets. Businesses that need daily short-term financing to fund operations fare poorly when credit dries up. They won't be able to use their "credit card" to refinance existing loans or pay daily expenses.

A business also must fulfill our cheap criteria to be considered for investment. A company is considered cheap when its stock price is trading at a discount to intrinsic value. We look for wide margins between 30% and 50% between market price and intrinsic value to shield against analyst mistakes. We prefer to be approximately right rather than exactly wrong.

OVF analysts use several valuation methods to determine intrinsic value. Generally, we prefer to use valuation methods that minimize assumptions. For example, we value real estate companies using Net Asset Value (NAV), which is the intrinsic value of assets less liabilities. We use market capitalization rates and sales data to determine asset values. In other industries such as oil exploration and production, we value natural resource reserves based on industry merger and acquisition activity. We may also apply a multiple to normalized adjusted earnings before interest, taxes, depreciation, and amortization (EBITDA) after subtracting capital expenditures (CAPEX).

PROJECT SIGNIFICANCE

Our short works cited page reflects the finance industry's lack of diversity. During the Spring 2009 semester, the authors and several other OVF analysts attended a stock pitch competition at the University of Michigan. Over 20 schools attended, including some of the best business schools in the nation such as Yale and Carnegie Mellon. Despite the diversity in companies, every school except for Syracuse valued their investment the same way: teams forecasted cash flows for the next ten years, assumed a long term growth rate for earnings before interest

and taxes (EBIT), and discounted cash flows using the weighted average cost of capital (WACC). Nobody questions how they view risk or whether piling assumptions on top of one another to forecast cash flows into perpetuity is really an accurate gauge of value.

Most investors view risk as market volatility. Traditional risk theory stipulates that more volatile stocks are riskier. OVF analysts add adjectives to risk. We believe there are many types of risk. Market volatility, or market risk, is not a concern to us because of our long-term investment horizon. We care about investment risk, which we define as permanent loss of capital. Investment risk occurs because of bad management, over-leveraging, or permanent impairments to a business model.

Finally, it's important to combat the dissociation between a business and its stock. People view a public company through its ticker symbol. Common sense about building wealth and creating long-term value are overshadowed by earnings announcements and short-term trading. We don't buy stocks: we buy pieces of businesses. Good businesses that produce lots of cash and invest wisely create long-term wealth regardless of what their current stock price is. Earnings are not the most important aspect of a business. In fact, maximizing earnings is often an inefficient way to build wealth because state and federal government gets upward of 40 cents on the dollar. Good companies maximize wealth as opposed to earnings.