



Goldman Sachs Case Competition

Team 14: The Dream Team

❖ MayC Huang ❖ Arjan Puniani ❖ Jack Wei ❖ Jinghao Yan

Overview

I. Limitations and Assumptions

II. Standalone

- i. Assumptions
- ii. Valuation
- iii. Sensitivity Analysis

III. M&A

- i. Assumptions
- ii. Valuation
- iii. Sensitivity Analysis

IV. Sale & Recommendation



Limitations & Assumptions

Limitations

WACC not realistic/ β not constant

One-sided valuation

Lack of info on revenue by product

Inefficient market

Industrial organization unclear



Assumptions

INTC's Net debt < 0

Asymmetric information

WR has multiple customers

$WACC_{WR+INTC} = WACC_{INTC}$

INTC dual sources

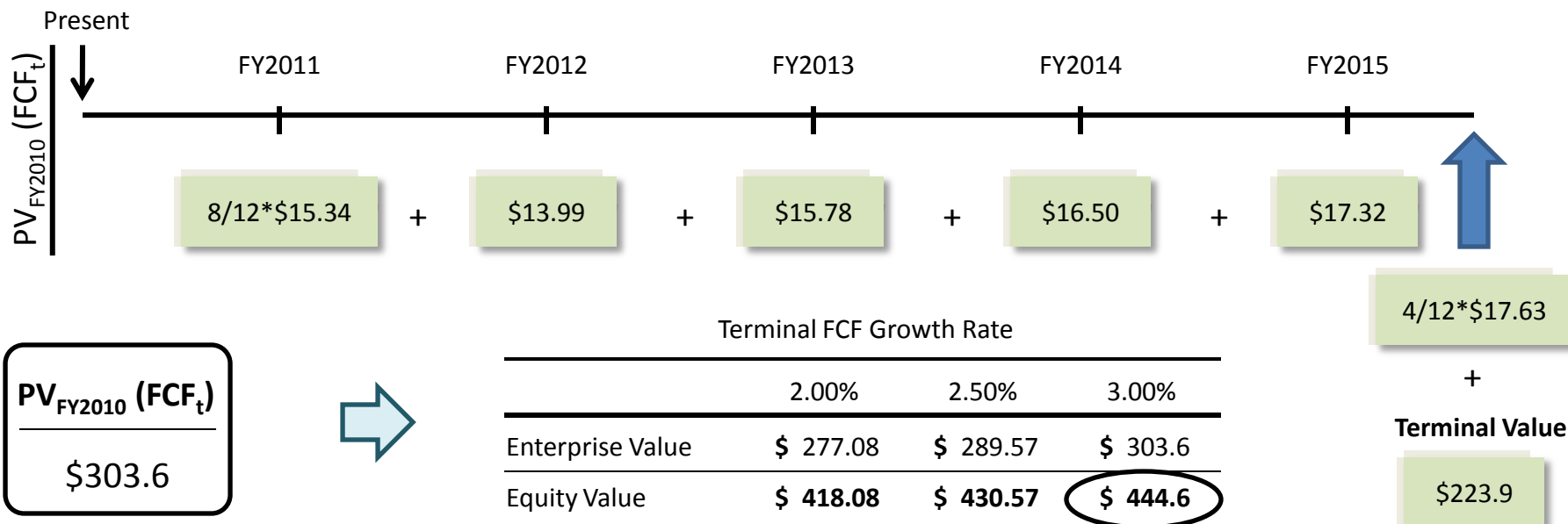
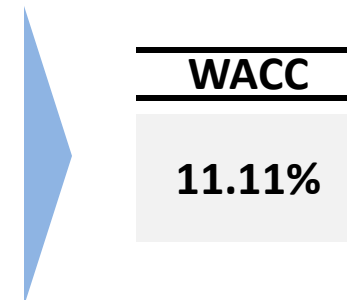
Acknowledgement

M&A advice not realistic without adequate information about industrial organization

Standalone Valuation

Assumptions	
Tax Rate	32%
Terminal FCF Growth Rate	3%
Operating Profit CAGR (2011-2015)	20%
Depr & Amort (2012-2015)	\$12.38
Capex (2012-2015)	\$11
ΔNWC (2012-2015)	\$2.9

Cost of Equity	
Risk-free Rate	3.91%
Market Risk Premium	5.07%
Beta	0.971
Size Premium Adjustment	2.35%
Cost of Equity	11.11%
<u>Current Capital Structure</u>	
Debt-to-Total Capitalization	0%

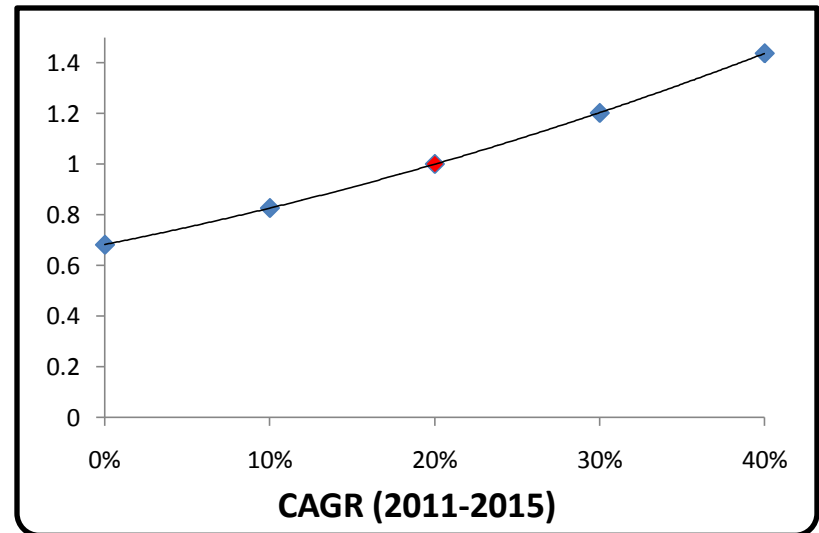
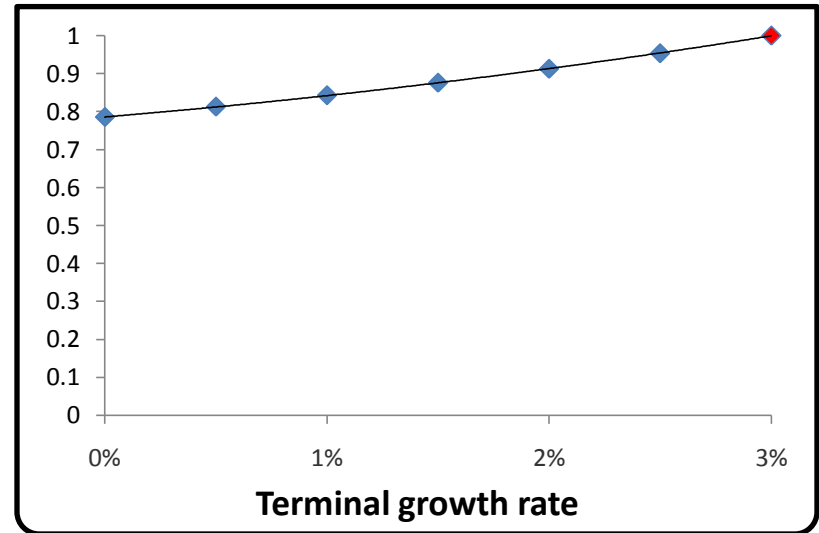
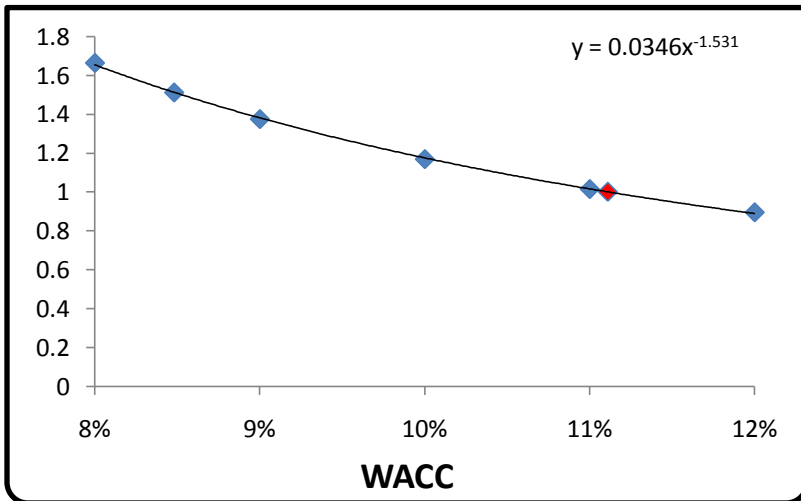


vs. \$644 equity market value
Asymmetric information or takeover speculation?

Sensitivity Analysis (Multipliers)

Enterprise Value Multipliers

- Sensitivity of **enterprise value** to individual estimates/assumptions (red: default assumption)
- Range indicates potential impact from bad assumptions/unanticipated changes



Conclusions

- Valuation strongly sensitive to WACC estimates
- Decrease in size premium strongly raises value
- Largely safe from term. growth estimation errors
- CAGR estimate critical to realistic valuation

Acquisition Value

WACC Calculation

Target Capital Structure

Debt-to-Total Capitalization	30%
Equity-to-Total Capitalization	70%

Cost of Debt

Cost of Debt	5.91%
Tax Rate	32%
After-tax Cost of Debt	3.34%

Cost of Equity

Risk-free Rate	3.91%
Market Risk Premium	5.07%
Beta	0.971
Size Premium Adjustment	-0.35%
Cost of Equity	8.48%

Assumptions (Before FY2011)

Cash, etc. \$109.73 ¹	Rev. Growth 3%-19%	S&M ≈33% x Rev.	COGS ≈25% x Rev.
-------------------------------------	-----------------------	--------------------	---------------------



pressure on bottom line

Assumptions (Starting FY2011)

Note: hold other values constant. M&A in FY2010 – changes in FY2011

Rev. Growth 3%/year starting '11
--



- WR becomes INTC's sole supplier
- WR loses other customers in DSO
- WR still sells non-competing products

SG&M -20%/year for '11, '12



- Consolidate departments (HR, Finance)
- Less need to market to INTC
- INTC shares marketing responsibilities



WACC
6.95%

¹average of cash & equivalents in 2009 and 2010

All dollar figures, unless otherwise specified, are in millions

Acquisition Value



	2009A	2010E	Projections				
			2011E	2012	2013	2014	2015
Revenue	\$359.60	\$369.80	\$382.10	\$393.56	\$405.37	\$417.53	\$430.06
Total Cost of Revenue	\$83.80	\$88.40	\$96.50	\$98.39	\$101.34	\$104.38	\$107.51
Gross Profit	\$275.80	\$281.40	\$285.60	\$295.17	\$304.03	\$313.15	\$322.54
Sales and Marketing	\$130.20	\$131.50	\$105.20	\$84.16	\$84.16	\$84.16	\$84.16
R&D	\$80.50	\$80.70	\$80.80	\$80.70	\$80.70	\$80.70	\$80.70
General and Admin	\$28.20	\$28.30	\$22.64	\$18.11	\$18.11	\$18.11	\$18.11
Amort. of Purchased Intanibles	\$13.30	\$4.90	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
Stock-Based Compensation	\$14.10	\$15.00	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20
Other Expenses	\$2.90	\$5.70	\$4.00	\$4.20	\$4.20	\$4.20	\$4.20
Operating Income	\$6.60	\$15.30	\$53.76	\$88.80	\$97.66	\$106.78	\$116.17

Meaningful increase

Meaningful decline

3% Revenue Growth

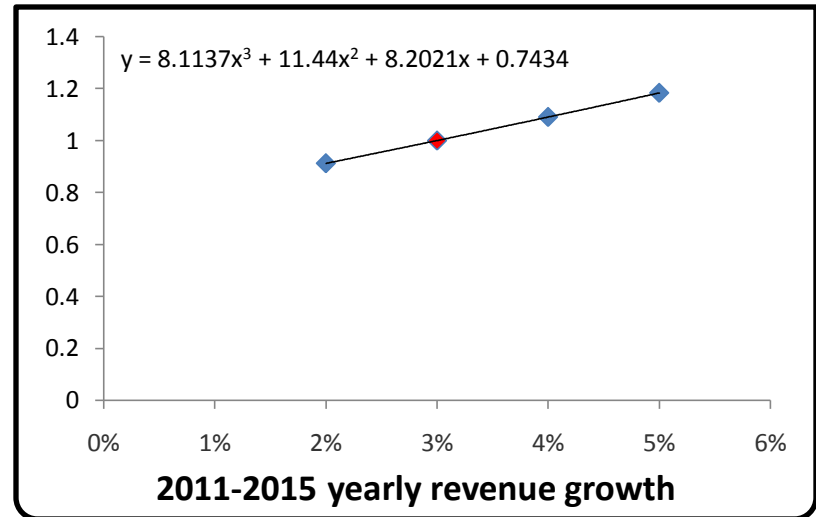
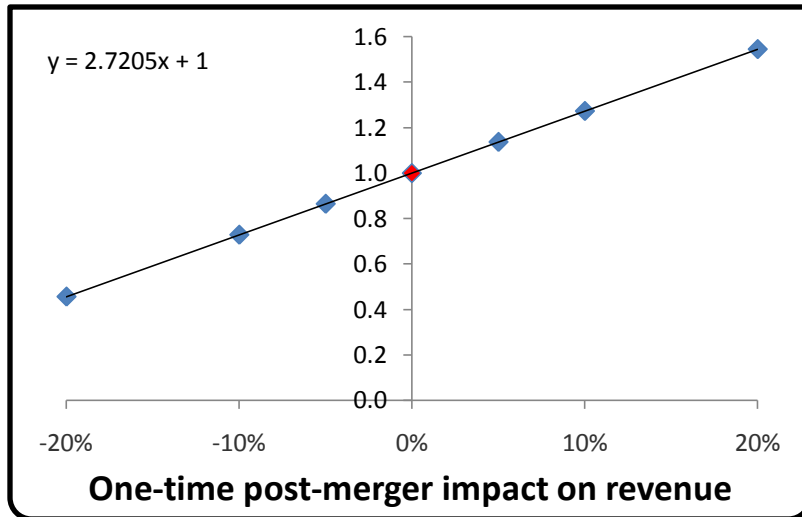
	Terminal FCF Growth Rate		
	2.00%	2.50%	3.00%
Enterprise Value	\$978.71	\$1,048.20	\$1,130.36
Equity Value	\$1088.44	\$1157.93	\$1240.09

5% Revenue Growth

	Terminal FCF Growth Rate		
	2.00%	2.50%	3.00%
Enterprise Value	\$1,192.93	\$1,278.76	\$1,380.24
Equity Value	\$1302.66	\$1388.49	\$1489.97

$$\begin{array}{r}
 \downarrow \\
 \underline{\$1157.93} \quad - \quad \underline{\$315.92} \quad = \quad \underline{\$842.01} \quad \text{or} \quad \boxed{266\%} \\
 \text{Post-M\&A} \quad \quad \quad \text{Pre-M\&A} \quad \quad \quad \text{Value Added}
 \end{array}$$

Sensitivity Analysis (Post-M&A)



- Limiting sales to non-INTC customers may cause significant drop in revenue
- WR becoming INTC's sole supplier may boost revenue significantly
- **Impact of estimates significant to valuation**

- Revenue growth estimated from past growth (~3%/year for 3 years)
- **Impact of revenue growth estimates not critical**

Note: see appendix for specific input and output

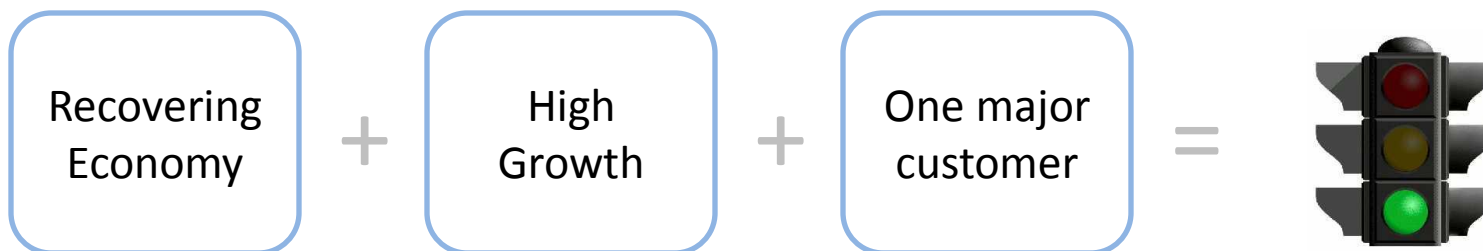
Sale Evaluation

Business Profile

- Sector Technology
- Product and Services DSO, etc.
- Customers and End Markets Intel, etc.
- Distribution Channels Unknown

Competitive Advantages

- Proprietary technology
 - Partner with INTC
 - Higher growth prospects
- Mentor Graphics
Microsoft



Recommendation

Valuation Methods

DCF: \$444.6

Comparables: \$486

Equity Mkt Cap: \$644

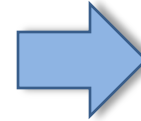


Limitations

Too many parameters

Lack of competitor data

Acquisition speculation

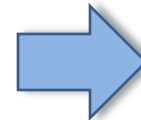


Fair Standalone Value

Weighted average
(70%, 10%, 20%):

\$455

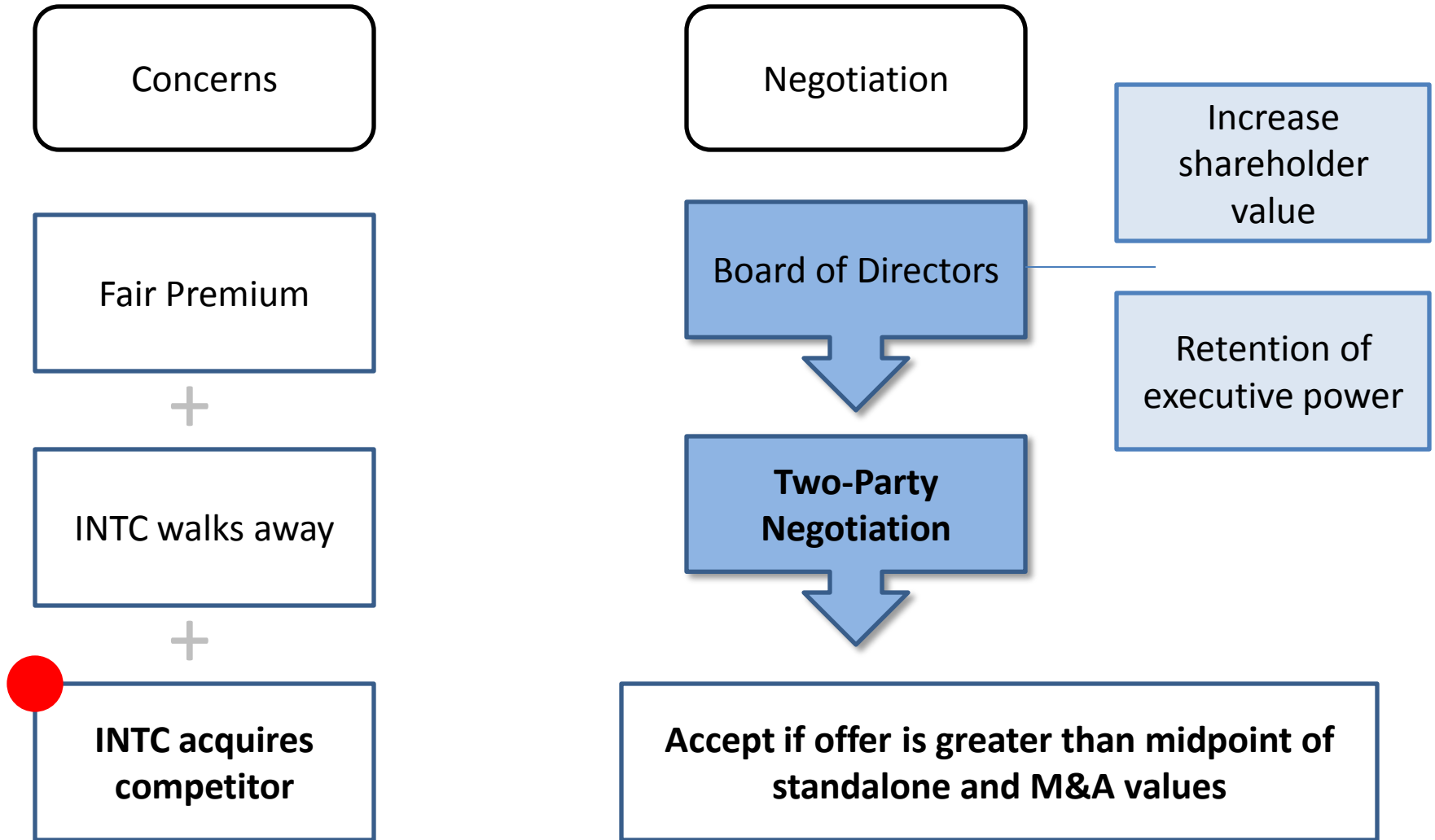
- Large synergies with acquirer (complementary products)
- Reduced WACC (size premium)
- Reduced SG&A
- Greater access liquidity/less need to hoard cash
- Willing to pay up to combined value



Sell to INTC

Best acquirer
(largest combined
potential/ability to
pay)

Sales Procedure



Appendix

Standalone Valuation

	Projections					
	2010E	2011E	2012	2013	2014	June 2015
Operating Profit	\$15.30	\$20.80	\$24.96	\$29.95	\$35.94	\$38.19
Operating Profit (1-Tax)	\$10.36	\$14.08	\$16.90	\$20.27	\$24.33	\$25.85
Depr & Amort.	\$12.20	\$12.10	\$12.10	\$12.10	\$12.10	\$12.10
CAPEX	-\$11.10	-\$11.50	-\$11.00	-\$11.00	-\$11.00	-\$11.00
Change in NWC	\$5.00	\$2.00	\$2.90	\$2.90	\$2.90	\$2.90
FCF	\$16.46	\$16.68	\$20.90	\$24.27	\$28.33	\$29.85
FCF _{FY2010}	\$10.23*	\$13.99	\$15.78	\$16.50	\$17.33	\$5.88*

Factor	Change
Tax	32%
5-year EPS CAGR	20%
WACC	11.11%
Terminal Growth Rate	3%
CAPEX	\$11
ΔNWC	\$2.9
Depr & Amort	\$12.1

Trend (2009-2011)







- Operating Profit
- Free Cash Flow




* Partial year data (June-Jan for 2010, and Feb-May for 2015)



M&A Projections



	Projections						
	2009A	2010E	2011E	2012	2013	2014	2015
Revenue	\$359.60	\$369.80	\$382.10	\$393.56	\$405.37	\$417.53	\$430.06
Total Cost of Revenue	\$83.80	\$88.40	\$96.50	\$98.39	\$101.34	\$104.38	\$107.51
Gross Profit	\$275.80	\$281.40	\$285.60	\$295.17	\$304.03	\$313.15	\$322.54
Sales and Marketing	\$130.20	\$131.50	\$105.20	\$84.16	\$84.16	\$84.16	\$84.16
R&D	\$80.50	\$80.70	\$80.80	\$80.70	\$80.70	\$80.70	\$80.70
General and Admin	\$28.20	\$28.30	\$22.64	\$18.11	\$18.11	\$18.11	\$18.11
Amort. of Purchased Intanibles	\$13.30	\$4.90	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
Stock-Based Compensation	\$14.10	\$15.00	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20
Other Expenses	\$2.90	\$5.70	\$4.00	\$4.20	\$4.20	\$4.20	\$4.20
Operating Income	\$6.60	\$15.30	\$53.76	\$88.80	\$97.66	\$106.78	\$116.17

 Sales and Marketing
 General and Admin
 Amort. Of Purch. Intang.
 Other Expenses

 Revenue
 Cost of Revenue
 Operating Income

 Meaningful increase
 Meaningful decline

M&A Projections

Term. Growth Rate	2.00%	2.50%	3.00%	(5% rev g)			
Enterprise Value	\$1,192.93	\$1,278.76	\$1,380.24				
Equity Value	\$1,302.66	\$1,388.49	\$1,489.97				
				Cash & Equivalents	\$	\$	\$
					109.73	78.80	125.20

Term. Growth Rate	2.00%	2.50%	3.00%	(3% rev g)
Enterprise Value	\$978.71	\$1,048.20	\$1,130.36	
Equity Value	\$1,088.44	\$1,157.93	\$1,240.09	

Acquirer	Target	Equity Consideration	Aggregate Consideration	1D Premium
Ansys	Ansoft	\$ 858.00	\$ 828.00	39.3%
Synopsys	Synplicity	\$ 226.00	\$ 180.00	52.1%
Oracle	BEA Systems	\$ 8,314.00	\$ 7,071.00	24.4%
IBM	Telelogic AB	\$ 742.00	\$ 725.00	-2.3%
Temasek	STATS	\$ 2,294.00	\$ 2,843.00	13.2%
Investor Group	Intergraph	\$ 1,331.00	\$ 1,083.00	18.0%
Silver Lake	SERENA	\$ 1,026.00	\$ 1,087.00	2.7%
IBM	Ascential	\$ 1,121.00	\$ 641.00	17.8%