

JDA Software Group Inc (JDAS)

Very Dangerous Risk/Reward Rating

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- JDAS has an Overall Risk/Reward Rating of Very Dangerous because the stock offers much more downside risk than upside potential.
- Figure 1 summarizes the five factors that drive our Overall Risk/Reward Rating for JDAS. Each factor offers insights into the profitability and valuation of JDAS.
- Misleading Trend means that reported EPS are positive and rising while economic EPS are negative and falling.
- The two biggest adjustments that lower economic EPS and are not captured in Reported EPS are: Reported Net Assets and Asset Write-Offs After Tax.
- The combination of negative economic EPS with a rich stock valuation drives a Risk/Reward Rating of Very Dangerous for JDAS.
- Our Risk/Reward Rating system identifies disconnects between the market's expectations for future cash flows and current cash flows.
- This report provides a detailed explanation of each diagnostic criterion and each rating for JDAS. Appendix 1 offers an explanation of how our Risk/Reward Rating system works.

Figure 1: New Constructs' Risk/Reward Rating

Overall Risk/Reward Rating	Quality of Earnings		Valuation		
	Economic vs Reported EPS	Return on Invested Capital (ROIC)	FCF Yield	Price-to-EBV Ratio	Growth Appreciation Period (yrs)
Very Dangerous	Misleading Trend	Bottom Quintile	<-5%	> 3.5 or -1 > 0	> 50
Dangerous	False Positive	4th Quintile	-5%<-1%	2.4 > 3.5 or < -1	20 > 50
Neutral	Neutral EP	3rd Quintile	-1%<3%	1.6 > 2.4	10 > 20
Attractive	Positive EP	2nd Quintile	3%<10%	1.1 > 1.6	3 > 10
Very Attractive	Rising EP	Top Quintile	>10%	0 > 1.1	0 > 3
Actual Values	(\$0.37) vs. \$0.50	4.7%	(14.8%)	4.83	65 years
S&P 500	\$0.80 vs. \$3.27	17.4%	3.3%	1.3	20 years
Russell 2000	-\$0.83 vs. \$0.89	5.8%	1.5%	1.3	56 years

Source: New Constructs, LLC

Economic vs Reported Earnings

Why Economic Earnings Matter

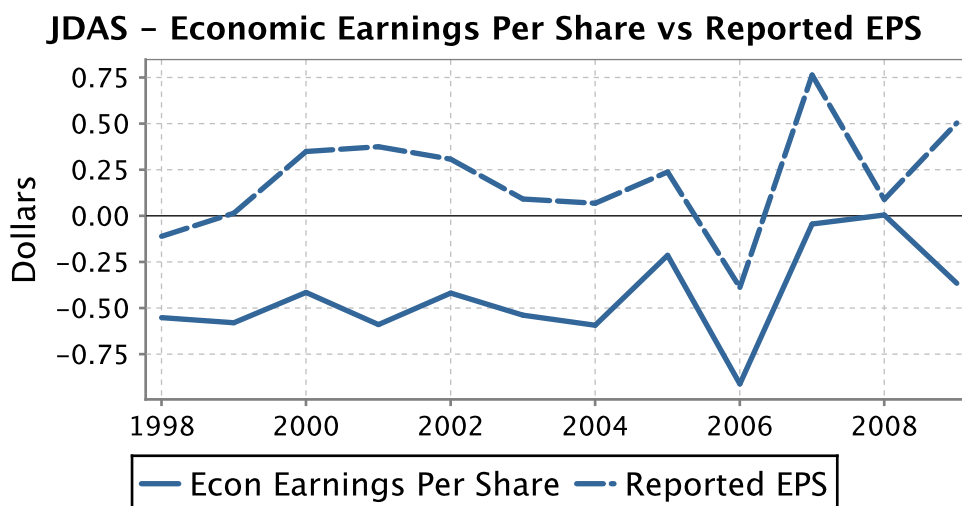
New Constructs rectifies accounting distortions in GAAP financial statements.

Economic earnings are almost always meaningfully different than GAAP earnings. We believe economic earnings provide a truer measure of profitability and shareholder value creation than offered by GAAP earnings. Investors should beware investing in companies that report profits meaningfully different than their economic profits.

Figure 2 highlights the differences between the reported and economic earnings for JDAS. Note the Misleading Trend caused by the company reporting positive and rising GAAP profits while the economics of its business are in decline.

During the last Fiscal Year, the two biggest drivers of the difference between reported and economic EPS are Reported Net Assets and Assets Write-Offs After Tax.

Figure 2: Economic Earnings Per Share vs Reported EPS



Source: New Constructs, LLC

Economic earnings and return on capital metrics are significantly more accurate when as-reported financial statements have been adjusted to reverse accounting distortions. The majority of the data required to reverse accounting distortions is available only in the Notes to the Financial Statements, which we analyze rigorously. Our core competency is gathering and analyzing all relevant financial data (from Financial Statements and the Notes) so that we can deliver earnings analyses that best represent the true profitability of businesses. See Figure 3 for a list of the adjustments we make to a company's reported GAAP profits in order to reverse accounting distortions and arrive at a better measure of a firm's profits.

Figure 3: Accounting Issues that Distort GAAP

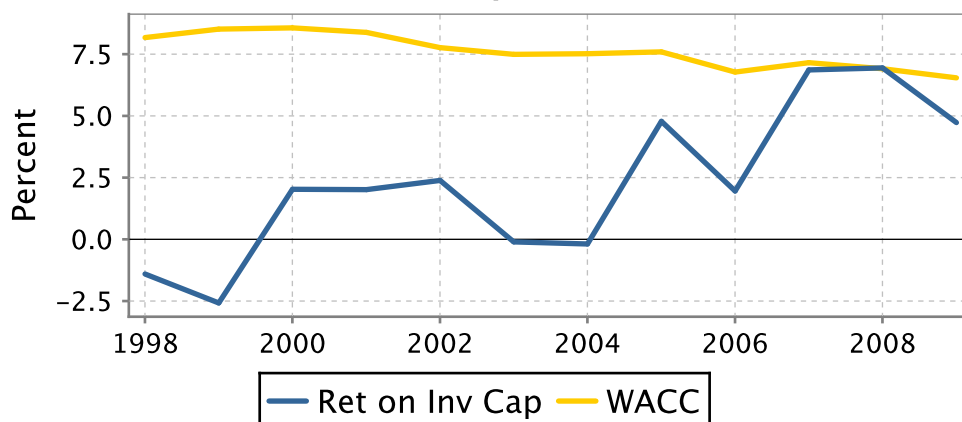
- Employee Stock Options
- Pension Over/Under Funding
- Excess Cash
- Restructuring charges
- Pooling Goodwill
- Minority Interests
- Off-Balance-Sheet Financing
- LIFO Reserve
- Unrealized Gains/Losses
- Goodwill Amortization
- Unconsolidated Subsidiaries
- Capitalized Expenses

Source: New Constructs, LLC

Figure 4 compares JDAS's Return on Invested Capital (ROIC) to its Weighted-Average Cost of Capital (WACC). This company's ROIC during its last fiscal year ranks in the Bottom Quintile.

Figure 4: Return on Invested Capital vs Weighted Average Cost of Capital

JDAS – Return on Invested Capital vs Weighted Average Cost of Capital



Source: New Constructs, LLC

How We Measure Economic Earnings

The metrics we use to measure the economic performance of companies are Economic Profit Margin and Economic Earnings. The Economic Profit Margin for a company equals its Return on Invested Capital (ROIC) minus its Weighted-Average Cost of Capital (WACC). The Economic Earnings of a company equal its Economic Profit Margin multiplied by its Invested Capital. Economic Earnings per Share equal Economic Earnings divided by Basic Shares Outstanding. ROIC equals Net Operating Profit After Tax (NOPAT) divided by Invested Capital.

We believe our measures of economic performance are substantially more accurate than accounting metrics because we make adjustments for all the issues listed in Figure 3.

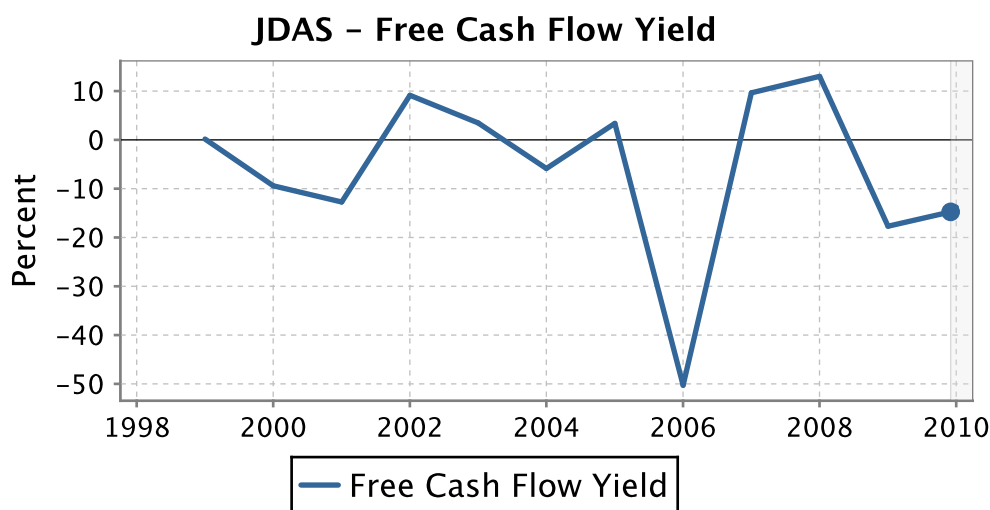
Appendix 3 provides a line item by line item reconciliation of Net Income to Economic Earnings.

Free Cash Flow Yield

Rigorous back-testing shows that stocks with a Free Cash Flow Yield of at least 10% significantly out-performed both the S&P 500 and a survivor-bias-adjusted index. For more detail on Free Cash Flow Yield and our backtesting, see our report "Cash Is King," which was published November 30th, 2004.

Using Free-Cash-Flow Yields to pick stocks is not a new strategy. However, our strategy yields superior results because we use a better measure of Free Cash Flow (FCF), in our opinion. In the same way our economic EPS are better measures of profitability than reported EPS, our measure of FCF is better than traditional accounting-based FCF. We measure Free Cash Flow by subtracting the change in Invested Capital from NOPAT.

Figure 5: Free Cash Flow Yield



Source: New Constructs, LLC. Note: Dot on the line(s) in the chart marks the current value(s).

Figure 5 shows JDAS's FCF Yield over the past several years. JDAS's current FCF Yield is (14.8%).

Free Cash Flow Yield equals unlevered FCF divided by enterprise value. The level of FCF does not always reflect the health of a business or its prospects. For example, a large amount of FCF can be a sign that a company has limited investment opportunities and, hence, limited growth prospects. On the other hand, negative FCF can be an attractive indication that a company has more investment opportunities than it can fund with cash from operations. Zero FCF could mean that the company generates just enough cash to internally fund its growth opportunities.

Price-to-EBV Per Share

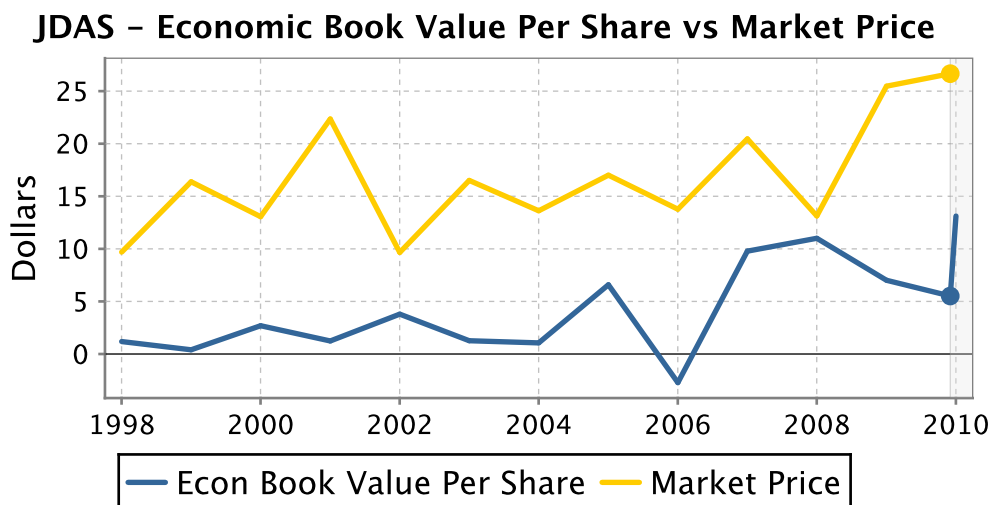
Figure 6 shows the differences between the stock market price and Economic Book Value (EBV) per share of JDAS. These differences reflect the portion of the stock price that is entirely dependent on future cash flow growth.

The lower the stock price is versus EBV, the lower the potential risk of investing in the stock.

The higher the stock price is versus EBV, the greater the potential risk of investing in the stock.

When stock prices are much higher than EBVs, the market predicts the economic profitability (as distinct from accounting profitability) of the company will meaningfully increase. When stock prices are much lower than EBVs, the market predicts the economic profitability of the company will meaningfully decrease. If the stock price equals the EBV, the market predicts the company's economic profitability will not change.

Figure 6: Economic Book Value Per Share vs Market Price



Source: New Constructs, LLC. Note: Dot on the line(s) in the chart marks the current value(s).

EBV measures the no-growth value of the company based on the current economic cash flows generated by the business. It is also known as the "pre-strategy value" of the company because it ignores the value attributable to future cash flows, which are, in theory, what business strategies should aim to improve.

The Formula for EBV is: $(NOPAT / WACC) + \text{Excess Cash} + \text{Unconsolidated Subsidiary Assets} + \text{Net Assets from Discontinued Operations} - \text{Debt (incl. Operating Leases)} - \text{Value of Outstanding Stock Options} - \text{Preferred Capital} - \text{Minority Interests}$. EBV per share equals EBV divided by shares outstanding.

Quantifying Market Expectations

We believe this stock has a Very Dangerous Risk/Reward Rating because there is a relatively large difference between the expected financial performance implied by its market price and the company's historical performance.

Stock prices reflect the market's expectations for the present value of future cash promised to the owner.

Figure 7 compares the future performance required to justify the company's stock market price to its historical performance. Specifically, Figure 7 shows: to justify the current stock price of \$26.66, JDAS must grow revenues at 7.1% and maintain a 0.9% Economic Earnings Margin for 65 years.

Figure 7: Future Performance Required to Justify Valuation

Performance Hurdles	Historical Performance			Future Performance
	5 Yr	3Yr	Last FY	Default <small>based on current price</small>
Stock Price	\$17.01	\$20.46	\$25.47	\$26.66
1. Revenue CAGR	15.6%	1.6%	(1.2%)	7.1%
2. Avg Economic Profit Margin	(1.9%)	(0.7%)	(1.8%)	0.9%
3. Growth Appreciation Period	-	-	-	65 years

Comparing the required future performance to historical performance positions investors to assess the feasibility of market expectations and valuations.

Source: New Constructs, LLC

Note: The Default Scenario is Based on the forecast set by the New Constructs analytical team, this scenario represents a likely financial performance path the company may follow to justify the current market price. Subscribers to our services may create alternate forecast scenarios based on their own estimates.

Historically, JDAS has generated a Revenue CAGR of 15.6%, 1.6%, and (1.2%) and Economic Profit Margins of (1.9%), (0.7%), and (1.8%) over the past 5, 3 and 1 year(s).

The market expects JDAS to achieve a Revenue CAGR of 7.1% and Economic Earnings Margins of 0.9% for 65 years.

GAP measures the number of years implied by the stock price over which the company must maintain an edge over its current and future competitors. Specifically, GAP measures the number of years a company will earn returns on invested capital greater than its cost of capital on new investments. The law of competition dictates that a company can only grow its economic profits for the finite period over which it can maintain a competitive advantage.

See Appendix 8 for the specific estimates used in this company's valuation model.

The Market-implied GAP of the S&P 500 is 20 years. For the Russell 1000, it is 23 years. JDAS has a GAP of 65 years, which is much greater than the indices. Based on this criterion, JDAS has a much lesser chance of seeing price appreciation versus versus the indices.

Appendix 2 details each Adjustment made to this company's reported financial results.

Our Overall Rating is Very Dangerous. Other criteria (per pages above) in our rating system also indicate that JDAS is not an Attractive investment.

GAP analysis comes from our dynamic discounted cash flow model, a multi-stage DCF model that values companies across multiple forecast horizons. Each forecast horizon (i.e., Growth AppreciationPeriod - GAP), assumes the company cannot grow profits beyond the GAP period. Our model exclusively uses no-growth terminal value assumptions for calculating the value of the stock for each GAP.

The forecast drivers for our DCF model are: (1) Revenue Growth; (2) NOPBT Margin, (i.e. EBIT Margin with Adjustments*), (3) Cash Tax Rate, (4) Incremental Net Working and Fixed Capital needs. See Appendix 8 for the forecasts that drive our DCF model for this company.

Our Company Models value stocks based on the present value of expected free cash flows, with that free cash flow measured according to our economic (as distinct from conventional accounting) methodology. Website subscribers forecast economic free cash flow by assigning estimates to three value drivers:

1. Revenue Growth

Compounded over the indicated time frame.

2. Economic Profit Margin

The Return On Invested Capital minus the weighted-average cost of capital.

3. Growth Appreciation Period

Number of years the company can earn a positive Economic Profit Margin on incremental investments, i.e. the number of years it can create economic value.

An alternative way to conceptualize the three value drivers is:

1. "How fast will the company grow?"
2. "How profitable will the company be?"
3. "For how many years will the company grow economic profits or create incremental value?"

Appendix 1: Explanation of New Constructs' Stock Ratings Scale

Our Risk/Reward Rating (Figure 1) system grades every stock under our coverage according to what we believe are the 5 most important criteria for assessing the risk versus reward of a stock. Each grade reflects the balance of potential risk and reward of buying that stock. Our Risk/Reward analysis results in the 5 ratings described below. Most Attractive corresponds to a "Buy" rating, Most Dangerous corresponds to a "Sell" rating, and everything in-between corresponds to a "Hold" rating.

Overall Risk/Reward Rating

The Overall Risk/Reward Rating provides a final rating based on the equal-weighted average rating of each criterion.

Very Dangerous	All criteria are equal-weighted in the average calculation except 2yr FCF Yield is excluded.
Dangerous	All criteria are equal-weighted in the average calculation except 2yr FCF Yield is excluded.
Neutral	All criteria are equal-weighted in the average calculation.
Attractive	All criteria are equal-weighted in the average calculation.
Very Attractive	All criteria are equal-weighted in the average calculation.

Economic vs Reported EPS

Ranks stocks based on how their Economic Earnings compare their Reported Earnings. Values based on Latest Fiscal Year.

Misleading Trend	Very Dangerous = negative and declining Economic Earnings despite positive and rising Reported Earnings
False Positive	Dangerous = same as above except Reported EPS are not positive or are not rising
Neutral EP	Neutral = Negative Economic and Reported Earnings
Positive EP	Attractive = Economic Earnings are positive
Rising EP	Very Attractive = Economic Earnings are positive and rising

Return on Invested Capital (ROIC)

Ranks stocks based on their ROIC. Values based on Latest Fiscal Year.

Bottom Quintile	Very Dangerous = in the bottom 20% of all companies
4th Quintile	Dangerous = in the bottom 40% of all companies
3rd Quintile	Neutral = in the middle 20% of all companies
2nd Quintile	Attractive = in the top 40% of all companies
Top Quintile	Very Attractive = in the top 20% of all companies

FCF Yield

Ranks stocks based on their Free Cash Flow Yield. Values based on Latest Closing Stock price and Latest Fiscal Year.

< -5%	Very Dangerous = less than or equal to -5%
-5% < -1%	Dangerous = more than -5% but less than or equal to -1%
-1% < 3%	Neutral = more than -1% but less than or equal to +3%
3% < 10%	Attractive = more than +3% but less than or equal to +10%
> 10%	Very Attractive = more than +10%

Price-to-EBV Ratio

Ranks stocks based on their Price-to-Economic Book Value Ratio. Values based on Latest Closing Stock price and Latest Fiscal Year.

> 3.5 or -1 > 0	Very Dangerous = greater than or equal to 3.5 or less than 0 but greater than -1
2.4 > 3.5 or < -1	Dangerous = greater than or equal to 2.4 but less than 3.5 and less than or equal to -1
1.6 > 2.4	Neutral = greater than or equal to 1.6 but less than 2.4
1.1 > 1.6	Attractive = greater than or equal to 1.1 but less than 1.6
0 > 1.1	Very Attractive = greater than or equal to 0 but less than 1.1

Growth Appreciation Period (yrs)

Ranks stocks based on their Market-Implied Growth Appreciation Period. Values based on Latest Closing Stock price and Default Forecast Scenario.

> 50	Very Dangerous = greater than or equal to 50 years
20 > 50	Dangerous = greater than or equal to 20 years but less than 50
10 > 20	Neutral = greater than or equal to 10 years but less than 20
3 > 10	Attractive = greater than or equal to 3 years but less than 10
0 > 3	Very Attractive = greater than or equal to 0 years but less than 3

Appendix 2: Economic Adjustments Summary

Values in millions except per share amounts

	2005	2006	2007	2008	2009
<i>NOPAT Adjustments - Impact Analysis</i>					
GAAP Net Income	\$6.96	(\$11.34)	\$26.52	\$3.12	\$17.75
Net Non-Operating Expense	\$9.72	\$13.22	\$10.42	\$46.30	\$12.28
Change in Total Reserves	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Goodwill Amortization	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ESO Expense (Employee Stock Options)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Implied Interest for PV of Operating Leases	\$0.42	\$3.45	\$3.08	\$1.80	\$1.53
Non-Operating Taxes	(\$6.61)	(\$5.40)	(\$5.26)	(\$18.70)	(\$6.83)
After-tax Charge	\$0.00	\$10.90	\$0.00	\$0.00	\$8.59
After-tax Income	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
NOPAT (Net Operating Profit After Tax)	\$10.49	\$10.82	\$34.77	\$32.53	\$33.33
<i>Invested Capital Adjustments - Impact Analysis</i>					
Reported Net Assets	\$281.97	\$502.33	\$502.58	\$407.41	\$699.80
Excess Cash	(\$100.72)	(\$39.69)	(\$76.61)	(\$13.18)	(\$56.68)
Total Reserves	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Deferred Tax Liability	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Unconsolidated Subsidiary Assets (non-operating)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Net Assets from Discontinued Operations	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Off-Balance-Sheet Operating Leases	\$12.23	\$66.48	\$59.52	\$47.19	\$39.87
Accumulated Unrecorded Goodwill	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Accumulated Goodwill Amortization	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39
Cumulative Asset Write-Offs After Tax	\$20.43	\$20.56	\$20.56	\$20.56	\$20.56
Accumulated OCI (Other Comprehensive Income)	\$1.19	(\$1.02)	(\$3.81)	\$2.02	(\$3.27)
Invested Capital	\$219.49	\$553.05	\$506.62	\$468.39	\$704.67

Appendix 3: Reconciling Net Income to Economic Earnings

Values in millions except per share amounts

	2005	2006	2007	2008	2009
NOPAT = Net Income with Adjustments as per below					
GAAP Net Income	\$6.96	(\$11.34)	\$26.52	\$3.12	\$17.75
Net Non-Operating Expense	9.7	13.2	10.4	46.3	12.3
<i>As a % of Revenue</i>	4.5%	4.8%	2.8%	11.9%	3.2%
Change in Total Reserves	0.0	0.0	0.0	0.0	0.0
<i>As a % of Revenue</i>	0.0%	0.0%	0.0%	0.0%	0.0%
Goodwill Amortization	0.0	0.0	0.0	0.0	0.0
<i>As a % of Revenue</i>	0.0%	0.0%	0.0%	0.0%	0.0%
ESO Expense (Employee Stock Options)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
<i>As a % of Revenue</i>	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Implied Interest for PV of Operating Leases	0.4	3.4	3.1	1.8	1.5
<i>As a % of Revenue</i>	0.2%	1.2%	0.8%	0.5%	0.4%
Non-Operating Taxes	(6.6)	(5.4)	(5.3)	(18.7)	(6.8)
<i>As a % of Revenue</i>	(3.1%)	(1.9%)	(1.4%)	(4.8%)	(1.8%)
After-tax Charge	\$0.00	\$10.90	\$0.00	\$0.00	\$8.59
<i>As a % of Revenue</i>	0.0%	3.9%	0.0%	0.0%	2.2%
After-tax Income	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
<i>As a % of Revenue</i>	0.0%	0.0%	0.0%	0.0%	0.0%
NOPAT (Net Operating Profit After Tax)	\$10.49	\$10.82	\$34.77	\$32.53	\$33.33
Capital Charge = WACC * Invested Capital as detailed below					
Capital Charge for Reported Net Assets	(21.4)	(34.0)	(36.0)	(28.2)	(45.8)
<i>As a % of Revenue</i>	(9.9%)	(12.3%)	(9.6%)	(7.2%)	(11.9%)
Capital Charge for Excess Cash	7.6	2.7	5.5	0.9	3.7
<i>As a % of Revenue</i>	3.5%	1.0%	1.5%	0.2%	1.0%
Total Reserves Capital Charge	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
<i>As a % of Revenue</i>	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Deferred Tax Liability Capital Charge	0.0	0.0	0.0	0.0	0.0
<i>As a % of Revenue</i>	0.0%	0.0%	0.0%	0.0%	0.0%
Capital Charge for Unconsolidated Subsidiary Assets (non-operating)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
<i>As a % of Revenue</i>	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Capital Charge for Net Assets from Discontinued Operations	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
<i>As a % of Revenue</i>	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Off-Balance-Sheet Operating Leases Capital Charge	(0.9)	(4.5)	(4.3)	(3.3)	(2.6)
<i>As a % of Revenue</i>	(0.4%)	(1.6%)	(1.1%)	(0.8%)	(0.7%)
Unrecorded Goodwill Capital Charge	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
<i>As a % of Revenue</i>	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Accumulated Goodwill Amortization Capital Charge	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
<i>As a % of Revenue</i>	(0.2%)	(0.1%)	(0.1%)	(0.1%)	(0.1%)
Asset Write-Offs After Tax Capital Charge	(1.6)	(1.4)	(1.5)	(1.4)	(1.3)
<i>As a % of Revenue</i>	(0.7%)	(0.5%)	(0.4%)	(0.4%)	(0.3%)
Accumulated OCI Capital Charge	(0.1)	0.1	0.3	(0.1)	0.2
<i>As a % of Revenue</i>	(0.0%)	0.0%	0.1%	(0.0%)	0.1%
Invested Capital	\$219.49	\$553.05	\$506.62	\$468.39	\$704.67
WACC * Invested Capital is the charge for capital deducted from NOPAT					
Invested Capital * WACC	\$16.67	\$37.47	\$36.25	\$32.37	\$46.10
Economic Earnings = NOPAT minus Capital Charge					
Economic Earnings	(6.2)	(26.6)	(1.5)	0.2	(12.8)
Economic Earnings per Share	(\$0.21)	(\$0.91)	(\$0.04)	\$0.00	(\$0.37)
Basic EPS	\$0.24	(\$0.39)	\$0.79	\$0.09	\$0.51

Appendix 4: Net Operating Profit After Tax (NOPAT) - Operating Approach

Values in millions except per share amounts

	2005	2006	2007	2008	2009
Operating Revenue					
Net Sales Revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Net Interest Income	0.0	0.0	0.0	0.0	0.0
Licensing Revenue	58.5	49.0	73.6	92.9	88.8
Service Revenue	151.3	219.4	289.1	286.9	287.0
Fee Income	0.0	0.0	0.0	0.0	0.0
Commission Income	0.0	0.0	0.0	0.0	0.0
Gain on Sale (operating revenue)	0.0	0.0	0.0	0.0	0.0
Revenue from Company-Owned Life Insurance	0.0	0.0	0.0	0.0	0.0
Other Revenue	6.0	9.1	10.9	10.5	10.1
Total Operating Revenue	\$215.82	\$277.47	\$373.58	\$390.33	\$385.80
Operating Income					
Income from Discontinued Operations (operating)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Gain on Sale of Discontinued Operations (operating)	0.0	0.0	0.0	0.0	0.0
Income from Unconsolidated Subsidiaries (operating)	0.0	0.0	0.0	0.0	0.0
Income from Unconsolidated Subsidiaries After-tax (operating)	0.0	0.0	0.0	0.0	0.0
Gain on Sale (operating income)	0.0	0.0	0.0	0.0	0.0
Other Income	0.0	0.0	0.0	0.0	0.0
Total Operating Income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operating Expenses and Adjustments					
Cost of Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost of Licensing Revenue	1.6	2.0	2.5	3.5	3.2
Cost of Service Revenue	73.6	97.6	128.4	127.7	128.4
Other Cost of Revenue	6.0	9.1	10.9	10.5	10.1
Credit Loss Provision	0.0	0.0	0.0	0.0	0.0
Total Cost of Sales	\$81.22	\$108.75	\$141.76	\$141.70	\$141.75
Gross Profit	\$134.61	\$168.72	\$231.82	\$248.63	\$244.05
Gross Margin	62.4%	60.8%	62.1%	63.7%	63.3%
General and Administrative	\$27.07	\$34.80	\$41.52	\$44.21	\$47.66
Sales and Marketing	40.4	48.2	63.2	66.5	66.0
Occupancy and Equipment	0.0	0.0	0.0	0.0	0.0
Research and Development Expense	44.4	56.3	51.2	53.9	51.3
Depreciation and Amortization	8.6	15.8	22.2	29.6	27.6
Energy Depreciation, Depletion, and Amortization	0.0	0.0	0.0	0.0	0.0
Goodwill Amortization	0.0	0.0	0.0	0.0	0.0
Interest Expense (operating)	0.0	0.0	0.0	0.0	0.0
Stock Compensation	0.0	0.0	0.0	0.0	0.0
Other Compensation	0.0	0.0	0.0	0.0	0.0
Loss on Sale (operating)	0.0	0.0	0.0	0.0	0.0
Non-Income Taxes	0.0	0.0	0.0	0.0	0.0
Property Operating Expense	0.0	0.0	0.0	0.0	0.0
Energy Operating Expense	0.0	0.0	0.0	0.0	0.0
Losses from Discontinued Operations (operating)	0.0	0.0	0.0	0.0	0.0
Losses from Unconsolidated Subsidiaries (operating)	0.0	0.0	0.0	0.0	0.0
Insurance Expense	0.0	0.0	0.0	0.0	0.0
Operating Other Real Estate Owned Expense	0.0	0.0	0.0	0.0	0.0
Other Operating Expense	0.0	0.0	2.9	0.8	0.0
Total Operating Expense	\$201.61	\$263.75	\$322.72	\$336.58	\$334.29

	2005	2006	2007	2008	2009
Net Operating Profit After-Tax (NOPAT) - Operating Approach (continued)					
Asset Write-Offs Included in Total Operating Expenses	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Non-operating Expenses Included in Total Operating Expense	(0.0)	0.1	0.0	(0.0)	0.0
ESO Expense (Employee Stock Options)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
ESO Expense as a % of Revenue	0.0%	0.0%	0.0%	0.0%	0.0%
Adjusted Total Operating Expenses	\$201.61	\$263.82	\$322.74	\$336.57	\$334.33
EBIT	\$14.22	\$13.64	\$50.84	\$53.76	\$51.47
Goodwill Amortization	0.0	0.0	0.0	0.0	0.0
EBITA	\$14.22	\$13.64	\$50.84	\$53.76	\$51.47
Change in Total Reserves	0.0	0.0	0.0	0.0	0.0
Implied Interest for PV of Operating Leases	0.4	3.4	3.1	1.8	1.5
Capitalized Items Net Adjustment	\$0.42	\$3.45	\$3.08	\$1.80	\$1.53
NOPBT (Net Operating Profit Before Tax)	\$14.64	\$17.09	\$53.92	\$55.56	\$53.00
NOPBT Margin	6.8%	6.2%	14.4%	14.2%	13.7%
Taxes and Adjustments					
NOPBT (Net Operating Profit Before Tax)	\$14.64	\$17.09	\$53.92	\$55.56	\$53.00
Cash Tax Rate	28.3%	36.7%	35.5%	41.5%	37.1%
Cash Operating Taxes	\$4.15	\$6.27	\$19.15	\$23.04	\$19.68
NOPAT (Net Operating Profit After Tax)	\$10.49	\$10.82	\$34.77	\$32.53	\$33.33

Appendix 5: Invested Capital - Operating Approach

Values in millions except per share amounts

	2005	2006	2007	2008	2009
Current Assets / Investment Assets					
Cash and Equivalents (non-operating)	\$71.04	\$53.56	\$95.29	\$32.70	\$75.97
Short-Term Investments (non-operating)	40.5	0.0	0.0	0.0	0.0
Long-Term Investments (non-operating)	0.0	0.0	0.0	0.0	0.0
Company Owned Life Insurance (non-operating)	0.0	0.0	0.0	0.0	0.0
Total Cash and Investments	\$111.51	\$53.56	\$95.29	\$32.70	\$75.97
Required Cash as % of Revenue	5.0%	5.0%	5.0%	5.0%	5.0%
Excess Cash	100.7	39.7	76.6	13.2	56.7
Required Cash	10.8	13.9	18.7	19.5	19.3
Cash and Equivalents (operating)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Restricted Cash	0.0	0.0	0.0	0.0	287.9
Available for Sale Securities (operating)	0.0	0.0	0.0	0.0	0.0
Held to Maturity Securities (operating)	0.0	0.0	0.0	0.0	0.0
Trading Securities (operating)	0.0	0.0	0.0	0.0	0.0
Other Investment Securities (operating)	0.0	0.0	0.0	0.0	0.0
Accounts Receivable	42.4	79.5	74.7	79.4	68.9
Inventory	0.0	0.0	0.0	0.0	0.0
Prepaid Expenses	0.0	0.0	0.0	0.0	0.0
Current Deferred Costs	0.0	0.0	0.0	0.0	0.0
Current Deferred Taxes	4.4	16.7	8.2	22.9	19.1
Allowance for Doubtful Accounts	0.0	0.0	0.0	0.0	0.0
Loan Loss Reserves	0.0	0.0	0.0	0.0	0.0
LIFO Reserves	0.0	0.0	0.0	0.0	0.0
Inventory Reserves	0.0	0.0	0.0	0.0	0.0
Other Receivables	1.2	0.0	0.5	0.3	0.0
Net Loans	0.0	0.0	0.0	0.0	0.0
Loans Held for Sale	0.0	0.0	0.0	0.0	0.0
Separate Accounts	0.0	0.0	0.0	0.0	0.0
Interest-Bearing Deposits	0.0	0.0	0.0	0.0	0.0
Federal Funds Sold and Securities Purchased for Resale	0.0	0.0	0.0	0.0	0.0
Other Current or Investment Assets	8.1	17.0	15.9	14.2	15.7
Total Current Assets (adjusted)	\$66.92	\$127.11	\$117.93	\$136.33	\$410.86

	2005	2006	2007	2008	2009
<i>Invested Capital - Operating Approach (continued)</i>					
Current Liabilities / Investment Liabilities					
Accounts Payable	\$1.77	\$4.84	\$3.56	\$3.27	\$7.19
Accrued Expenses	0.0	1.7	3.7	3.4	4.4
Accrued Compensation	13.0	17.0	22.7	27.8	28.3
Accrued Interest	0.0	2.8	1.9	0.1	1.3
Accrued Other Taxes	0.0	0.0	0.0	0.0	0.0
Income Taxes Payable	1.4	3.7	0.0	0.0	3.5
Deferred Income Taxes	0.0	0.0	0.0	0.0	0.0
Accrued Restructuring Charges	0.0	1.8	0.7	2.5	0.4
Current Deferred Revenue	26.8	66.7	67.5	62.0	65.7
Deposits	0.0	2.5	1.1	1.5	1.1
Separate Accounts	0.0	0.0	0.0	0.0	0.0
Federal Funds Purchased and Securities Loaned for Repurch:	0.0	0.0	0.0	0.0	0.0
Other NIBCL or Investment Liabilities	5.7	21.3	18.5	16.7	10.0
Investment Liabilities - Debt	0.0	0.0	0.0	0.0	0.0
NIBCL (Non-Interest-Bearing Current Liabilities)	\$48.61	\$122.41	\$119.65	\$117.37	\$121.87
Net Working Capital	\$18.32	\$4.70	(\$1.72)	\$18.96	\$288.99
Fixed Assets					
PPE (Property, Plant, and Equipment)	\$42.82	\$48.39	\$44.86	\$43.09	\$40.84
Net Goodwill	60.5	146.0	134.6	135.3	135.3
Net Other Intangibles	42.9	199.0	176.8	147.2	119.7
Net Combined Intangibles	0.0	0.0	0.0	0.0	0.0
Restricted Cash	0.0	0.0	0.0	0.0	0.0
Deferred Tax Assets	16.7	54.2	62.0	44.8	44.4
Prepaid Expenses	0.0	0.0	0.0	0.0	0.0
Deferred Costs	0.0	0.0	0.0	0.0	0.0
Deposits	0.0	0.0	0.0	0.0	0.0
Receivables	0.0	0.0	0.0	0.0	0.0
Company Owned Life Insurance (operating)	0.0	0.0	0.0	0.0	0.0
Federal Home Loan Bank Stock	0.0	0.0	0.0	0.0	0.0
Discontinued Operations (operating)	0.0	0.0	0.0	0.0	0.0
Unconsolidated Subsidiary Assets (operating)	0.0	0.0	0.0	0.0	0.0
Other Real Estate Owned	0.0	0.0	0.0	0.0	0.0
Other Fixed Assets	0.0	10.4	9.4	4.9	14.0
Off-Balance-Sheet Operating Leases	12.2	66.5	59.5	47.2	39.9
Cumulative Asset Write-Offs After Tax	20.4	20.6	20.6	20.6	20.6
Accumulated Unrecorded Goodwill	0.0	0.0	0.0	0.0	0.0
Accumulated Goodwill Amortization	4.4	4.4	4.4	4.4	4.4
Accumulated OCI (Other Comprehensive Income)	1.2	(1.0)	(3.8)	2.0	(3.3)
Total Adjusted Fixed Assets	\$201.17	\$548.35	\$508.34	\$449.43	\$415.68
Invested Capital	\$219.49	\$553.05	\$506.62	\$468.39	\$704.67

Appendix 6: WACC (Weighted Average Cost of Capital)

Values in millions except per share amounts

	2005	2006	2007	2008	2009	Current
Cost of Equity Capital according to the Capital Asset Pricing Model (CAPM)						
Risk-Free Rate (10-yr Treasury)	4.29%	4.79%	4.63%	3.67%	3.26%	3.29%
Beta Adjusted	0.81	0.81	0.81	0.81	0.81	0.81
Expected Market Return	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
Equity Risk Premium	4.21%	3.71%	3.87%	4.83%	5.24%	5.21%
Cost of Equity	7.70%	7.79%	7.76%	7.58%	7.50%	7.51%
Market Value of Basic Equity	\$490.31	\$402.52	\$683.22	\$450.87	\$879.67	\$1,107.31
Equity Per Total Adjusted Capital	97.57%	60.98%	76.57%	82.27%	73.81%	78.01%
Weighted Cost of Equity Capital	7.51%	4.75%	5.94%	6.23%	5.54%	5.86%
Cost of Debt Capital						
Risk-Free Rate (10-yr Treasury)	4.29%	4.79%	4.63%	3.67%	3.26%	3.29%
Debt Spread Adjusted	0.52%	3.40%	3.40%	2.85%	2.85%	2.85%
Cash Tax Rate	28.33%	36.67%	35.52%	41.46%	37.12%	37.12%
Cost of Debt After Tax	3.45%	5.19%	5.18%	3.82%	3.84%	3.86%
Adjusted Total Debt	12.2	257.6	209.1	97.2	312.1	312.1
Debt Per Total Adjusted Capital	2.43%	39.02%	23.43%	17.73%	26.19%	21.99%
Weighted Cost of Debt After Tax	0.08%	2.02%	1.21%	0.68%	1.01%	0.85%
Cost of Preferred Capital						
Preferred Dividends	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Preferred Capital	0.0	0.0	0.0	0.0	0.0	0.0
Cost of Preferred Capital	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
WACC (Weighted Average Cost of Capital)	7.59%	6.78%	7.16%	6.91%	6.54%	6.70%

Appendix 7: Key Economic Metrics Summary

Values in millions except per share amounts

	2005	2006	2007	2008	2009	Current
Economic Book Value (EBV)						
Economic Book Value (EBV) Per Share	\$6.59	(\$2.72)	\$9.78	\$11.01	\$7.01	\$5.52
Stock Price (closing)	\$17.01	\$13.77	\$20.46	\$13.13	\$25.47	\$26.66
Economic Book Value (EBV)	\$189.88	(\$79.53)	\$326.65	\$377.92	\$242.18	\$229.12
PEBV (Price to Economic Book Value) per Share	2.58	(5.06)	2.09	1.19	3.63	4.83
Price to Accounting Book Value	1.77	1.39	2.12	1.35	2.18	2.28
Price to Unlevered NOPAT per Share	46.74	37.19	19.65	13.86	26.40	33.22
P/E (Price/Earnings Multiple)	71.58	(35.48)	26.80	147.88	50.60	52.97
Components of Economic Book Value						
NOPAT (Net Operating Profit After Tax)	\$10.49	\$10.82	\$34.77	\$32.53	\$33.33	\$33.33
WACC (Weighted Average Cost of Capital)	7.59%	6.78%	7.16%	6.91%	6.54%	6.70%
Excess Cash	100.7	39.7	76.6	13.2	56.7	56.7
Adjusted Net Assets from Discontinued Operations	0.0	0.0	0.0	0.0	0.0	0.0
Unconsolidated Subsidiary Assets (non-operating)	0.0	0.0	0.0	0.0	0.0	0.0
Adjusted Total Debt	\$12.23	\$257.57	\$209.08	\$97.19	\$312.12	\$312.10
Preferred Capital	0.0	0.0	0.0	0.0	0.0	0.0
Minority Interests	0.0	0.0	0.0	0.0	0.0	0.0
Pensions Net Funded Status	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Value of Outstanding ESO After Tax	36.8	21.4	26.7	8.7	11.8	12.6

	2005	2006	2007	2008	2009
Return on Invested Capital (ROIC)					
<i>ROIC derived from prime components (NOPAT Margins * Invested Capital Turns)</i>					
NOPAT Margin	4.9%	3.9%	9.3%	8.3%	8.6%
Invested Capital Turns	0.98	0.50	0.74	0.83	0.55
ROIC (Return On Invested Capital)	4.8%	2.0%	6.9%	6.9%	4.7%
WACC (Weighted Average Cost of Capital)	7.59%	6.78%	7.16%	6.91%	6.54%
Change in ROIC	5.0%	(2.8%)	4.9%	0.1%	(2.2%)
Incremental Return on Capital	52.7%	(7.6%)	7.2%	4.8%	(2.1%)
Return on Equity	2.5%	(3.9%)	7.9%	0.9%	4.3%

	2005	2006	2007	2008	2009
Economic Profit (EP) and Free Cash Flow (FCF)					
Economic Earnings Margin (ROIC - WACC)	(2.8%)	(4.8%)	(0.3%)	0.0%	(1.8%)
Economic Earnings	(6.2)	(26.6)	(1.5)	0.2	(12.8)
GAAP Net Income	\$6.96	(\$11.34)	\$26.52	\$3.12	\$17.75
Change in Economic Earnings	\$11.08	(\$20.47)	\$25.16	\$1.64	(\$12.93)
Net Income Change	\$4.95	(\$18.30)	\$37.87	(\$23.40)	\$14.62
Economic Earnings per Share	(\$0.21)	(\$0.91)	(\$0.04)	\$0.00	(\$0.37)
Economic Earnings per Share Growth	(63.9%)	325.6%	(95.1%)	(110.1%)	(8,208.0%)
FCF (Free Cash Flow)	\$14.84	(\$322.74)	\$81.20	\$70.76	(\$202.96)
FCF as a % of Invested Capital	6.8%	(58.4%)	16.0%	15.1%	(28.8%)
FCF as a % of Total Revenue	6.9%	(116.3%)	21.7%	18.1%	(52.6%)
Diluted GAAP EPS	\$0.24	(\$0.39)	\$0.76	\$0.09	\$0.50
Diluted GAAP EPS Growth	248.9%	(263.3%)	(296.7%)	(88.4%)	466.9%
Basic EPS	\$0.24	(\$0.39)	\$0.79	\$0.09	\$0.51
Basic EPS Growth	249.4%	(260.7%)	(304.7%)	(88.5%)	458.3%
Unlevered NOPAT Per Share	\$0.36	\$0.37	\$1.04	\$0.95	\$0.95
Unlevered NOPAT Per Share Growth	(2,608.9%)	1.7%	181.2%	(9.0%)	0.7%

Appendix 8: DCF Forecast Drivers Summary

Values in millions except per share amounts

2005	Historical					DCF Forecast Drivers									
	2006	2007	2008	2009	EY 1	EY 2	EY 3	EY 4	EY 6	EY 11	EY 16	EY 21	EY 26	EY 51	
Total Operating Revenue Growth															
(0.5%)	28.6%	34.6%	4.5%	(1.2%)	60.3%	7.8%	7.0%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.0%	
NOPBT Margin															
6.8%	6.2%	14.4%	14.2%	13.7%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	
Cash Tax Rate															
28.3%	36.7%	35.5%	41.5%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	37.1%	
Net Working Capital Delta as % of Revenue Delta															
(930.0%)	(22.1%)	(6.7%)	123.4%	5,958.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Fixed Adjusted Assets Delta as % of Revenue Delta															
1,344.1%	563.2%	(41.6%)	(351.6%)	744.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

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