

MF Global Holdings, Ltd. (MF)

Dangerous Risk/Reward Rating

Trust

We deliver the whole truth by incorporating critical data from the Financial Footnotes and MD&A that other firms miss.

Performance

The value and success of our ratings are unrivaled. Click here for proof.

More Reports

Click here and enter a ticker to buy more of our reports.



- MF has an Overall Risk/Reward Rating of Dangerous because the stock offers more downside risk than upside potential.
- Figure 1 summarizes the five factors that drive our Overall Risk/Reward Rating for MF. Each factor offers insights into the profitability and valuation of MF.
- Neutral EE means that economic EPS are negative but moving in the same direction as GAAP EPS.
- The biggest adjustment that lowers economic EPS and is not captured in Reported EPS is Reported Net Assets.
- The combination of Neutral economic EPS with a rich stock valuation drives a Risk/Reward Rating of Dangerous for MF.
- 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 MF. Appendices highlight Red Flags and explain our Risk/Reward Rating system.

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 EE	3rd Quintile	-1%<3%	1.6 < 2.4	10 < 20
Attractive	Positive EE	2nd Quintile	3%<10%	1.1 < 1.6	3 < 10
Very Attractive	Rising EE	Top Quintile	>10%	0 < 1.1	0 < 3
Actual Values	(\$1.23) vs. (\$1.00)	0.1%	(36.6%)	(0.51)	15 years
S&P 500	Positive EE	18.4%	2.1%	2.0	22 years
Russell 2000	Neutral EE	8.7%	-1.2%	4.2	53 years

Source: New Constructs, LLC.

New Constructs rectifies accounting distortions in GAAP financial statements.

Economic vs Reported Earnings

Why Economic Earnings Matter

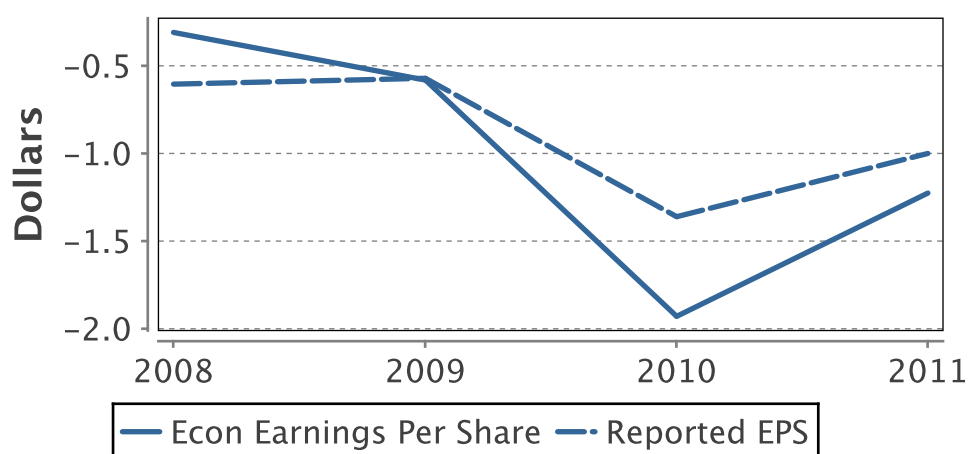
Economic earnings are almost always meaningfully different than GAAP earnings. We believe economic earnings provide a truer measure of profitability and shareholder value creation than offered by GAAP earnings. Investors should beware investing in companies that report profits meaningfully different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

Figure 2 highlights the differences between the reported and economic earnings for MF. Note the Neutral EP score is caused by the company reporting negative GAAP profits and generating negative economic profits.

During the last Fiscal Year, the biggest driver of the difference between reported and economic EPS is Reported Net Assets.

Figure 2: Economic Earnings Per Share vs Reported EPS

MF – 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 and Red Flags. 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 Red Flag 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 and Red Flags that Distort GAAP

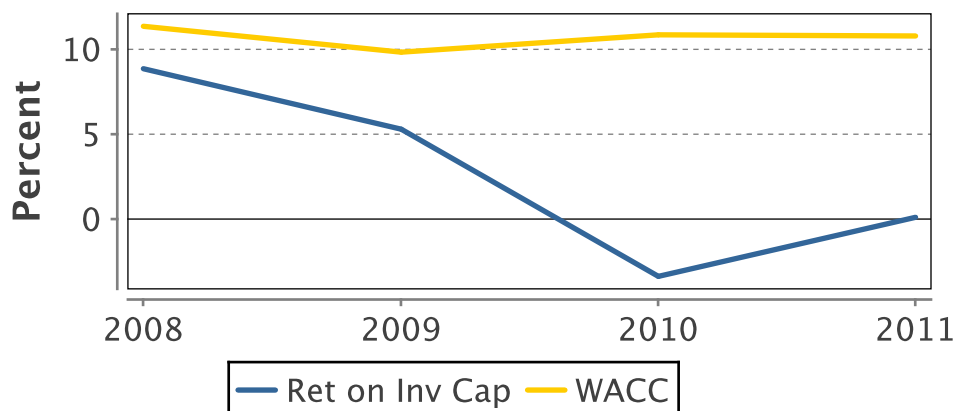
- Employee Stock Options
- Pension Over/Under Funding
- Excess Cash
- Restructuring charges
- Pooling Goodwill
- Minority Interests
- Off-Balance-Sheet Financing
- LIFO Reserve
- Unrealized Gains/Losses
- Goodwill Amortization
- Unconsolidated Subsidiaries
- Capitalized Expenses

Source: New Constructs, LLC.

Figure 4 compares MF'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

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



Source: New Constructs, LLC. Note: If average invested capital is negative, ROIC is not calculated.

How We Measure Economic Earnings

The metrics we use to measure the economic performance of companies are Economic Earnings Margin and Economic Earnings. The Economic Earnings 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 Earnings Margin multiplied by its average 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.

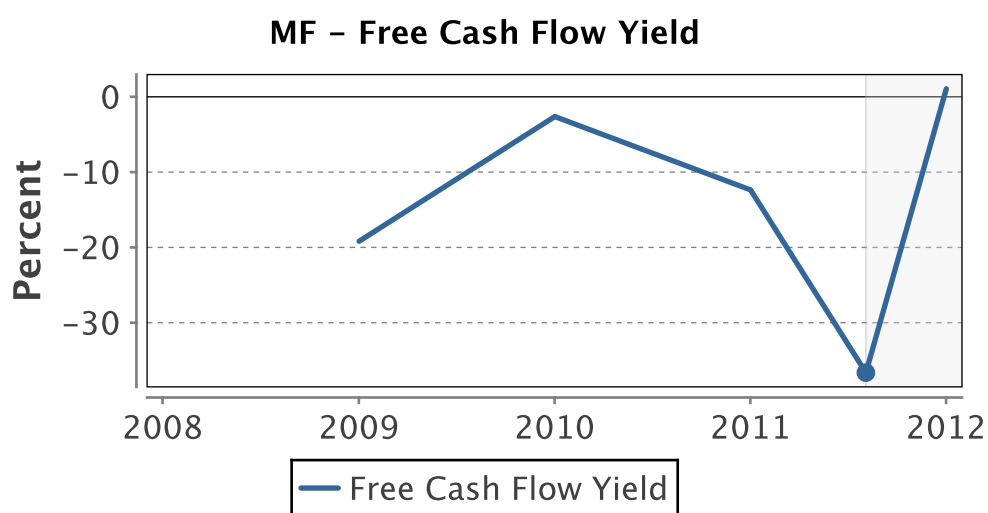
Appendix 3 provides a line item by line item reconciliation of Net Income to Economic Earnings.

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 MF's FCF Yield over the past several years. MF's current FCF Yield is (36.6%).

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

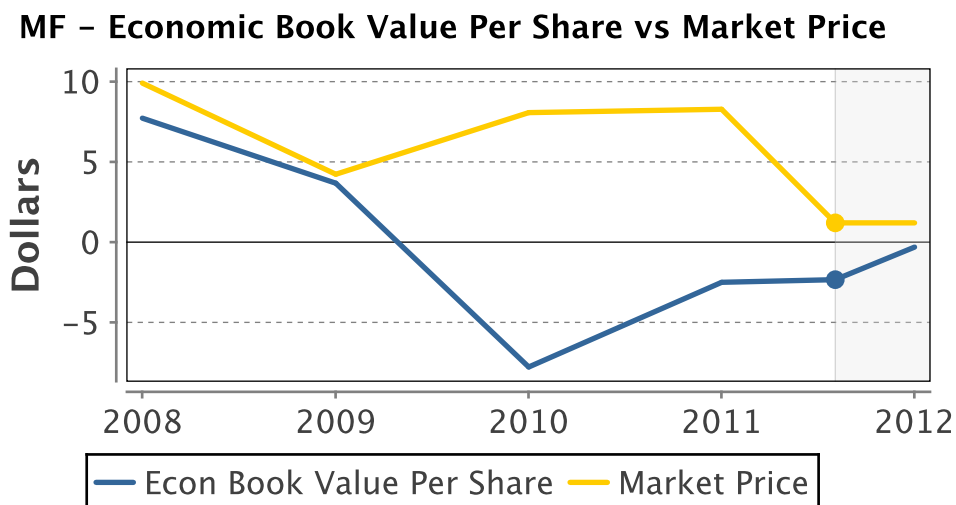
Figure 6 shows the differences between the stock market price and Economic Book Value (EBV) per share of MF. These differences reflect the portion of the stock price that is entirely dependent on future cash flow growth.

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

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

Quantifying Market Expectations

We believe this stock has a 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.

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 \$1.20, MF must grow revenues at 8.3% and maintain a (5.4%) Economic Earnings Margin for 15 years.

Figure 7: Future Performance Required to Justify Valuation

Performance Hurdles	Historical Performance			Market Expectations
	5 Yr	3Yr	Last FY	Default <small>based on current price</small>
Stock Price	-	\$4.23	\$8.28	\$1.20
Revenue CAGR	-	(13.4%)	5.3%	8.3%
Avg Economic Earnings Margin	-	(9.8%)	(10.7%)	(5.4%)
Growth Appreciation Period	-	-	-	15 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, MF has generated a Revenue CAGR of -, (13.4%), and 5.3% and Economic Earnings Margins of -, (9.8%), and (10.7%) over the past 5, 3 and 1 year(s).

The market expects MF to achieve a Revenue CAGR of 8.3% and Economic Earnings Margins of (5.4%) for 15 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 earnings for the finite period over which it can maintain a competitive advantage.

See Appendix 4 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. MF has a GAP of 15 years, which is less than the indices. Based on this criterion, MF has a greater chance of seeing price appreciation versus the indices.

However, our Overall Rating is Dangerous. Other criteria (per pages above) in our rating system do not indicate MF is an Attractive investment.

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

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 4 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 Earnings 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 Earnings 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 earnings 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 EE	Neutral = Negative Economic and Reported Earnings
Positive EE	Attractive = Economic Earnings are positive
Rising EE	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: Red Flag and Economic Adjustments Summary

Values in millions except per share amounts

	-	2008	2009	2010	2011
<i>NOPAT Adjustments - Impact Analysis</i>					
GAAP Net Income	-	(\$69.54)	(\$69.24)	(\$167.68)	(\$154.41)
Net Non-Operating Items Pre-Tax	-	\$215.11	\$128.92	\$89.96	\$58.88
Change in Total Reserves	-	-	\$0.00	\$0.00	\$0.00
Goodwill Amortization	-	\$0.00	\$0.00	\$0.00	\$0.00
ESO Expense (Employee Stock Options)	-	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Implied Interest for PV of Operating Leases	-	\$12.39	\$10.13	\$12.25	\$17.25
Non-Operating Tax Adjustment	-	(\$36.65)	(\$25.37)	(\$23.34)	\$4.52
Net After-Tax Non-Operating Items	-	\$4.87	\$37.76	\$32.40	\$75.60
NOPAT (Net Operating Profit After Tax)	-	\$126.18	\$82.20	(\$56.40)	\$1.83
<i>Invested Capital Adjustments - Impact Analysis</i>					
Reported Net Assets	-	\$1,259.86	\$1,441.77	\$1,365.60	\$1,504.34
Excess Cash	-	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Total Reserves	-	\$0.00	\$0.00	\$0.00	\$0.00
Deferred Tax Liability	-	\$0.00	\$0.00	\$0.00	\$0.00
Unconsolidated Subsidiary Assets (non-operating)	-	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Net Assets from Discontinued Operations	-	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)
Off-Balance-Sheet Operating Leases	-	\$170.69	\$154.49	\$178.11	\$255.91
Accumulated Unrecorded Goodwill	-	\$0.00	\$0.00	\$0.00	\$0.00
Accumulated Goodwill Amortization	-	\$0.00	\$0.00	\$0.00	\$0.00
Accumulated Asset Write-Downs After-Tax	-	\$0.00	\$59.69	\$111.09	\$126.30
Accumulated OCI (Other Comprehensive Income)	-	(\$6.08)	\$24.02	\$5.75	(\$3.90)
Invested Capital	-	\$1,424.46	\$1,679.97	\$1,660.55	\$1,882.65
<i>Net Non-Operating Items Pre-tax - Detail</i>					
Non-Operating Items Hidden in Operating Items	-	(\$0.34)	\$38.10	\$6.40	\$11.60
Asset Write-Downs Hidden in Operating Items	-	\$0.00	\$0.00	\$27.50	\$0.55
Income from Recurring Net Periodic Benefit Costs	-	\$0.00	\$0.00	\$0.00	\$0.00
Non-Recurring Net Periodic Benefit Costs in Operating Items	-	\$0.00	\$0.00	\$0.00	\$0.00
Other Net Non-Operating Items	-	\$215.45	\$90.82	\$56.06	\$46.72
Net Non-Operating Items Pre-Tax	-	\$215.11	\$128.92	\$89.96	\$58.88

More information and detail on our adjustments is provided in our Company Valuation Models.

Appendix 3: Red Flag Impact: Reconciling Net Income to Economic Earnings

Values in millions except per share amounts

	-	2008	2009	2010	2011
NOPAT = Net Income with Adjustments as per below					
GAAP Net Income	-	(\$69.54)	(\$69.24)	(\$167.68)	(\$154.41)
Net Non-Operating Items Pre-Tax	-	215.1	128.9	90.0	58.9
As a % of Revenue	-	13.1%	9.0%	8.9%	5.5%
Change in Total Reserves	-	-	0.0	0.0	0.0
As a % of Revenue	-	-	0.0%	0.0%	0.0%
Goodwill Amortization	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
ESO Expense (Employee Stock Options)	-	(0.0)	(0.0)	(0.0)	(0.0)
As a % of Revenue	-	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Implied Interest for PV of Operating Leases	-	12.4	10.1	12.3	17.2
As a % of Revenue	-	0.8%	0.7%	1.2%	1.6%
Non-Operating Tax Adjustment	-	(36.7)	(25.4)	(23.3)	4.5
As a % of Revenue	-	(2.2%)	(1.8%)	(2.3%)	0.4%
Net After-Tax Non-Operating Items	-	\$4.87	\$37.76	\$32.40	\$75.60
As a % of Revenue	-	0.3%	2.6%	3.2%	7.1%
NOPAT (Net Operating Profit After Tax)	-	\$126.18	\$82.20	(\$56.40)	\$1.83
Capital Charge = WACC * Average Invested Capital as detailed below					
Capital Charge for Average Reported Net Assets	-	143.1	132.8	152.4	154.8
As a % of Revenue	-	8.7%	9.3%	15.0%	14.5%
Capital Charge for Average Excess Cash	-	(0.0)	(0.0)	(0.0)	(0.0)
As a % of Revenue	-	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Capital Charge for Average Total Reserves	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
Capital Charge for Average Deferred Tax Liability	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
Capital Charge for Average Unconsol Sub Assets (non-operating)	-	(0.0)	(0.0)	(0.0)	(0.0)
As a % of Revenue	-	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Capital Charge for Average Net Assets from Discontinued Operations	-	(0.0)	(0.0)	(0.0)	(0.0)
As a % of Revenue	-	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Capital Charge for Average Off-Balance-Sheet Operating Leases	-	19.4	16.0	18.1	23.4
As a % of Revenue	-	1.2%	1.1%	1.8%	2.2%
Capital Charge for Average Unrecorded Goodwill	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
Capital Charge for Average Accumulated Goodwill Amortization	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
Capital Charge for Average Cumulative Asset Write-Offs After Tax	-	0.0	2.9	9.3	12.8
As a % of Revenue	-	0.0%	0.2%	0.9%	1.2%
Capital Charge for Average Accumulated OCI	-	(0.7)	0.9	1.6	0.1
As a % of Revenue	-	(0.0%)	0.1%	0.2%	0.0%
Mid-Year Acquisition Capital Charge Adjustment	-	0.0	0.0	0.0	0.0
As a % of Revenue	-	0.0%	0.0%	0.0%	0.0%
Capital Charge for Average Invested Capital	-	\$161.79	\$152.65	\$181.33	\$191.12
Economic Earnings = NOPAT minus Capital Charge					
Economic Earnings	-	(\$35.61)	(\$70.46)	(\$237.73)	(\$189.29)
Economic Earnings per Share	-	(\$0.31)	(\$0.58)	(\$1.93)	(\$1.23)
Basic EPS	-	(\$0.60)	(\$0.57)	(\$1.36)	(\$1.00)

Appendix 4: DCF Forecast Drivers Summary

Values in millions except per share amounts

	Historical				DCF Forecast Drivers									
	2008	2009	2010	2011	EY 1	EY 2	EY 3	EY 4	EY 6	EY 11	EY 16	EY 21	EY 26	EY 51
Total Operating Revenue Growth	-	(12.8%)	(28.8%)	5.3%	20.3%	11.9%	10.0%	8.0%	7.0%	6.5%	6.5%	6.5%	6.5%	6.0%
NOPBT Margin	14.0%	10.5%	(8.8%)	0.2%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Cash Tax Rate	45.0%	45.0%	36.9%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%
Net Working Capital Delta as % of Revenue Delta	-	(154.5%)	9.3%	93.3%	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	-	32.8%	(4.6%)	317.6%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

New Constructs® - Profile

How New Constructs Creates Value for Clients

1. **Superior Recommendations** - Our [stock picks](#) consistently outperform. See our track record in our [stock-picking accolades](#) and [Proof Is In Performance](#) reports.
2. **More Accurate Research** - Our [patented Research Platform](#) for [reversing accounting distortions](#) and [discounted cash flow analysis](#) leverages better data to deliver smarter research.
3. **Time Savings** - We check the fine print in thousands of corporate filings so you don't have to. As reported by [Barron's](#), our expertise in analyzing SEC filings delivers [Hidden Gems and Red Flags](#) that drive long-term stock-picking success.
4. **Transparency** - We are proud to share the results of our analysis of over 50,000 10-Ks. See the [Corporate Disclosure Transgressions](#) report we provided to the SEC. Our reports details all data and assumptions. Company Models enable users to change them.
5. **Objectivity** - New Constructs is an independent research firm, not tied to Wall Street or investment banking services. Our models are driven by comprehensive high-quality data not stories. See our [presentation to the Senate Banking Committee](#), the SEC and many others in DC.

Our Philosophy About Research

Accounting data is not designed for equity investors, but for debt investors. [Accounting data must be translated into economic earnings](#) to understand the profitability and valuation relevant to equity investors. Respected investors (e.g. Adam Smith, Warren Buffett and Ben Graham) have repeatedly emphasized that accounting results should not be used to value stocks. [Economic earnings](#) are what matter because they are:

1. Based on the complete set of financial information available.
2. Standard for all companies.
3. A more accurate representation of the true underlying cash flows of the business

Additional Information

Incorporated in July 2002, [New Constructs](#) is an independent publisher of investment research that provides clients with consulting, advisory and research services. We specialize in quality-of-earnings, forensic accounting and discounted cash flow valuation analyses for all U.S. public companies. We translate accounting data from 10Ks into economic financial statements, i.e. [NOPAT](#), [Invested Capital](#), and [WACC](#), to create [economic earnings models](#), which are necessary to understand the true profitability and valuation of companies. Visit the [Free Archive](#) to download samples of our research. New Constructs is a [BBB accredited](#) business and a member of the [Investorside Research Association](#).

DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, 'New Constructs') is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first 15 days after New Constructs issues a report on that security.

New Constructs is affiliated with Novo Capital Management, LLC, the general partner of a hedge fund. At any particular time, New Constructs' research recommendations may not coincide with the hedge fund's holdings. However, in no event will the hedge fund receive any research information or recommendations in advance of the information that New Constructs provides to its other clients.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs.

Copyright New Constructs, LLC 2003 through the present date. All rights reserved.