


# Earnings Quality Matters More than You Might Think

By John Del Vecchio

Accounting is the language of business and the analysis of financial statements are an important tool in determining the quality and sustainability of reported results. We have developed a model that has successfully identified financial issues or aggressive accounting practices that eventually come to light in the form of revenue or earnings shortfalls that affect Wall Street analysts' recommendations. Because we know that investors react to analysts' recommendations, among other things, a stock's price will move positively or negatively based on earnings driven events.

The top 100 companies have earned returns in excess of 15% compounded annually over the last 13 years while the bottom stocks have generated losses in excess of 3% annually over the same period. The model was developed based on real-world experience providing in-depth analysis on short selling investment ideas.

We organize the red flags with respect to where they reside on the income statement. While Wall St. is very focused on “the bottom line”, earnings are the least important line item that a company reports. Imagine for a moment that a company’s revenue were fictitious. Then its entire financial model would be smoke and mirrors and the reported earnings wouldn’t matter, would they?

Income Statement		MOST CRITICAL
METRIC	CONCERN	
<u>REVENUE</u>	Aggressive Revenue Recognition	
<u>COST OF GOODS SOLD</u>	Inventory Issues	
<u>GROSS PROFIT</u>	Reserve Concerns	
<u>OPERATING EXPENSES</u> Research & Development Sales, General & Administrative	Large Changes	
<u>OPERATING INCOME</u>	Large Changes	
<u>TAXES</u>	Tax Issues	
<u>NET INCOME</u>		

If management is engaging in chicanery with the revenue line, it directly relates to the demand for a company’s products. It doesn’t matter if the company sells widgets, software,

sneakers, or burritos. As you move down the income statement, there's numerous levers management can pull to derive whatever net income they desire to meet expectations.

Need another penny to top Wall St. estimates? No problem, just reverse a reserve. Need to boost your gross margin? Just sell inventory that you wrote off in a prior period. Want to build "cookie jar" reserves to boost future earnings? Make a big acquisition and bundle normal operating expenses into the goodwill.

This is how massive multi-national corporations hit their targets quarter after quarter. Such a string of successes of "making the number" should force you to dig further and determine the quality and sustainability of reported earnings.

The first line of a cash flow statement is net income. Thus, if net income has been manipulated, cash flow quality is suspect. And, as well as know, cash is king. There are also numerous balance sheet accounts that management can use to pull the wool over investors' eyes. The combination of all three financial statements used together creates a picture as to the quality of reported results.

Many of these techniques were covered in my book *What's Behind the Numbers? A Guide to Exposing Financial Chicanery and Avoiding Huge Losses in Your Portfolio* (McGraw-Hill, 2012). In the final chapter, we discussed a basic model that distilled these concepts into a quantitative model.

For our own use in investing, we use a more comprehensive model that includes a few bells and whistles not discussed elsewhere. We break the earnings quality equation down to six major components as follows:

**Revenue Recognition:** Again if management is playing games with the top-line, demand is likely softening. We assess the propensity that management has juiced the top-line and assign a score A-F, like a report card grade.

**Cash Flow Quality:** You cannot spend earnings, only cash coming into the company's coffers. If the net income is of low quality, cash flow is also suspect. An analysis of cash flow quality can often spot trouble before negative earnings surprises rear their ugly head.

**Earnings Quality:** To what extent is the management team using the balance sheet or pulling levers on the income statement to derive net income? Analyzing the impact of changes in those accounts results in a score that determines sustainability of profits.

**Expectations:** We also look at the impact on the share price that positive or negative earnings surprises have and weight companies with better earnings quality and lower expectations higher. Why? Companies with high expectations are under intense pressure to continue to exceed those expectations. Every company has a bump in the road on their path to prosperity. Is management open and honest about it, or do they use the leeway in GAAP accounting to mask deterioration? If expectations are high and a company misses, the stock price is likely to falter significantly.

**Valuation:** Valuation still matters. If you can buy high quality earnings cheap, the returns are higher both in testing and in real-time.

**Shareholder Yield:** Shareholder yield is a large source of historical return. We take into account not only dividends and buybacks, but analyze the sources of shareholder yield and management's ability to increase it in the future.

Below are the top 25 and bottom 25 rated stocks currently in the database:

Aggregate Rank	Ticker	Stock Name	Sector	Price	Market Cap	Earnings					Shareholder
						Revenue Multifactor	Cash Flow Multifactor	Quality Multifactor	Expectations Multifactor	Valuation Multifactor	Yield Multifactor
1	ACM	Aecom Technology	Industrials	\$ 32.04	3.230B	A	A	A	A	A	A
2	PMC	Pharmacia Corpor	Health Care	\$ 13.38	398.3M	A	A	B	A	A	F
3	UFS	Domtar Corporatio	Materials	\$ 80.68	2.655B	A	A	A	A	A	A
4	BTH	Blyth, Inc. New C	Consumer Discretionary	\$ 14.50	232.2M	A	A	A	A	A	A
5	CMTL	Comtech Telecommu	Information Technology	\$ 24.44	400.9M	A	B	A	A	A	A
6	CLMS	Calamos Asset Man	Financials	\$ 9.87	202.6M	A	A	C	A	A	A
7	SKYW	SkyWest, Inc.	Industrials	\$ 14.56	757.3M	A	A	B	A	A	C
8	CBEY	Ceyond, Inc.	Telecommunication Services	\$ 6.46	197.6M	A	A	B	A	A	F
9	SCSC	ScanSource, Inc.	Information Technology	\$ 35.43	994.5M	A	A	A	A	A	C
10	COCO	Corinthian Colleg	Consumer Discretionary	\$ 2.15	185.8M	B	A	A	A	A	C
11	BGG	Briggs & Stratton	Industrials	\$ 20.37	974.8M	A	A	A	A	A	A
12	NSIT	Insight Enterpris	Information Technology	\$ 18.97	803.0M	A	B	A	A	A	C
13	CGX	Consolidated Grap	Industrials	\$ 57.47	556.7M	A	A	B	A	A	B
14	OUTR	Outerwall Inc.	Consumer Discretionary	\$ 51.25	1.403B	C	A	C	A	A	B
15	KND	Kindred Healthcar	Health Care	\$ 14.29	773.9M	A	A	A	A	A	D
16	GES	Guess?, Inc. Comm	Consumer Discretionary	\$ 30.42	2.582B	A	A	A	A	A	A
17	STRA	Strayer Education	Consumer Discretionary	\$ 41.94	432.4M	A	A	B	A	A	A
18	LHCG	LHC Group	Health Care	\$ 23.56	414.5M	A	A	B	A	A	B
19	PTEN	Patterson-UTI Ene	Energy	\$ 22.40	3.266B	A	A	C	C	A	B
20	BHE	Benchmark Electro	Information Technology	\$ 22.81	1.239B	B	A	A	A	A	B
21	USMO	USA Mobility, Inc	Telecommunication Services	\$ 14.18	306.9M	A	A	A	C	A	A
22	CSH	Cash America Inte	Financials	\$ 46.00	1.295B	C	A	C	A	A	C
23	RRD	R.R. Donnelley &	Industrials	\$ 16.09	2.924B	A	A	A	A	A	A
24	HHS	Harte-Hanks, Inc.	Consumer Discretionary	\$ 8.52	532.8M	B	A	A	A	A	A
25	APOL	Apollo Group, Inc	Consumer Discretionary	\$ 20.99	2.368B	A	A	C	A	A	B

*Exhibit: Top 25 stocks in the October, 2013 Parabolix Model*

The bottom 25 are:

Aggregate Rank	Ticker	Stock Name	Sector	Price	Market Cap	Earnings					Shareholder
						Revenue Multifactor	Cash Flow Multifactor	Quality Multifactor	Expectations Multifactor	Valuation Multifactor	Yield Multifactor
976	DORM	Dorman Products,	Consumer Discretionary	\$ 50.99	1.854B	F	F	F	F	F	C
977	EXAR	Exar Corporation	Information Technology	\$ 13.41	636.7M	F	F	A	F	F	F
978	MDCO	The Medicines Com	Health Care	\$ 33.53	1.863B	F	F	D	D	F	F
979	BCPC	Balchem Corporati	Materials	\$ 51.31	1.533B	F	D	F	F	F	D
980	LKQ	LKQ Corporation	Consumer Discretionary	\$ 32.73	9.823B	F	F	F	F	F	F
981	CNQR	Concur Technologi	Information Technology	\$ 112.48	6.302B	F	F	B	F	F	F
982	ACIW	ACI Worldwide, In	Information Technology	\$ 55.08	2.178B	D	F	D	F	F	F
983	VRTU	Virtusa Corporati	Information Technology	\$ 28.71	752.5M	F	F	F	F	F	F
984	PKT	Procera Networks,	Information Technology	\$ 14.61	296.8M	F	F	F	D	F	F
985	GEOS	Geospace Technolo	Energy	\$ 85.14	1.099B	F	F	F	F	D	F
986	TNGO	Tangoe, Inc.	Information Technology	\$ 24.17	907.3M	F	F	F	F	F	B
987	BNNY	Annie's, Inc. Com	Consumer Discretionary	\$ 49.07	828.7M	F	F	F	F	F	A
988	WAGE	WageWorks, Inc. C	Industrials	\$ 50.23	1.699B	F	D	C	F	F	F
989	CAMP	CalAmp Corp.	Information Technology	\$ 18.86	651.9M	F	F	F	F	F	F
990	HAIN	The Hain Celestia	Consumer Staples	\$ 78.77	3.757B	F	F	F	F	F	F
991	UA	Under Armour, Inc	Consumer Discretionary	\$ 82.36	8.688B	F	F	F	F	F	F
992	FNGN	Financial Engines	Financials	\$ 56.28	2.796B	F	D	F	F	F	F
993	GWR	Genesee & Wyoming	Industrials	\$ 93.25	4.980B	F	F	F	F	F	F
994	GPOR	Gulfport Energy C	Energy	\$ 65.00	5.041B	F	F	F	D	F	F
995	MDSO	Medidata Solution	Health Care	\$ 99.69	2.559B	F	F	F	F	F	F
996	FTK	Flotek Industries	Materials	\$ 23.49	1.203B	F	F	F	F	F	F
997	FIRE	Sourcefire, Inc.	Information Technology	\$ 75.96	2.390B	F	F	C	F	F	F
998	AKRX	Akorn, Inc.	Health Care	\$ 20.29	1.952B	F	F	F	F	F	F
999	EXP	Eagle Materials I	Materials	\$ 73.90	3.663B	F	D	F	F	F	F
1000	DDD	3D Systems Corpor	Information Technology	\$ 55.26	5.615B	F	F	F	F	F	F

*Exhibit: Bottom 25 stocks in the October, 2013 Parabolix Model*

Below is a brief write-up of 3D Systems (DDD), which is the lowest rated stock in the database as of this writing.

# 3D Systems Corporation (DDD)

**Rank: #1,000 of 1,000**

## Business Description:

3D Systems Corporation, through its subsidiaries, develops, manufactures and markets 3D printers, print materials, on-demand custom parts services, and 3D authoring solutions for professionals and consumers. The company's primary print engines comprise stereo lithography, selective laser sintering, multi-jet modeling, film transfer imaging, selective laser melting, and plastic jet printers, as well as ZPrinters. Its 3D printers convert data input from computer aided design (CAD) software or 3D scanning and sculpting devices to produce physical objects from engineered plastic, metal, and composite print materials.

## Revenue Multifactor: F

While DDD posted revenue of \$120.8 MM handily beating sell-side estimates of \$114.8 MM, sales growth was accompanied by a sharp increase in accounts receivables. Days sales outstanding rose from 70 to 84 in the quarter. The 14-day increase indicates that sales were generated in the latter part of the quarter, increasing risk that incentives were offered to book the orders. While the company stated in its SEC filing that credit terms were standard, a disproportionate amount occurred in the third month of the quarter.

	6/30/13	3/31/13	12/31/12	9/30/12	6/30/12	3/31/12
<b>Days Sales Outstanding (DSO)</b>	84	80	72	70	70	72
% Chng QoQ	5%	12%	2%	1%	-3%	7%
% Chng YoY	21%	12%	7%	4%	0%	-4%
<b>4 qtr average (DSO)</b>	77	73	71	70	69	69

The days sales outstanding has increased year-over-year for four consecutive quarters and has reached a multi-year high of 84 days. Historical DSO's have averaged in the low 70-day range. The concern with a significant rise in DSO outside of historical norms is not related to the collection of receivables but the *recognition* of revenue (however, the amount of delinquent receivables increased nearly 50% sequentially). Given that shares of DDD trade at 10 times trailing revenue, there is intense pressure for management to exceed expectations. A revenue shortfall would likely have a material negative impact on the stock price.

One qualitative impediment to growth is copyright infringement lawsuits hampering 3D printing efforts. HBO recently successfully defended its Game of Thrones franchise from cell phone covers made with 3D printers.

### Cash Flow Multifactor: F

Operating cash flow was \$2 MM in the quarter, down 63% year-over-year. In addition, free cash flow fell 87% over the same period. The build up in receivables was a major driver in poor cash flow performance.

Of more concern, operating cash flow relative to net income resulted in a \$7.3 MM shortfall in the 6/2013 quarter compared with \$2.8 MM in the year ago period, indicating that earnings quality deteriorated in the quarter.

	6/30/13	3/31/13	12/31/12	9/30/12	6/30/12	3/31/12
<b>OCF - Net Income</b>	-\$7.30	\$4.86	-\$1.88	\$9.12	-\$2.77	\$9.64
% Chng QoQ	-250%	-359%	-121%	-429%	-129%	1005%
% Chng YoY	163%	-50%	-315%	71%	-63%	-248%

The company's cash conversion cycle increased 24 days in the 6/2013 quarter to 107 days. While flat sequentially, this is the longest cash conversion cycle in several years. Furthermore, the cash conversion cycle has increased year-over-year for five consecutive periods.

	6/30/13	3/31/13	12/31/12	9/30/12	6/30/12	3/31/12
<b>Cash Conversion Cycle</b>	107	107	90	101	83	76
% Chng QoQ	0%	19%	-11%	22%	9%	16%
% Chng YoY	30%	41%	38%	35%	15%	-13%
4 quarter average	101	95	87	81	75	72
% Chng	6%	9%	8%	9%	4%	-4%

### Earnings Quality Multifactor: F

In the 6/2013 quarter, earnings were driven entirely by accruals. Basic EPS of \$0.10 and accruals of \$0.12 resulted in "cash" EPS of (\$0.02) compared with "cash" EPS of \$0.03 in the year ago period.

	6/30/13	3/31/13	12/31/12	9/30/12	6/30/12	3/31/12
<b>"Cash" EPS</b>	-\$0.02	\$0.05	-\$0.03	\$0.24	\$0.03	\$0.09
% Chng QoQ	-145%	-271%	-111%	831%	-72%	233%
% Chng YoY	-180%	-50%	-198%	274%	-78%	-20%

### Expectations Multifactor: F

While the company topped revenue estimates in the 6/2013 quarter, the stock price is ahead of fundamentals given the deterioration in earnings quality, cash flow quality, and revenue recognition.

Meanwhile, expectations remain high. The company maintained full year guidance. However, gross margin expanded just 40 bps and was down sequentially despite robust revenue growth. Any deceleration in volume growth is likely to result in significant margin contraction and earnings shortfalls.

**Valuation Multifactor: F**

Valuations for DDD remain rich. On a TTM basis, the company trades at 10x revenue, 112x earnings, and 110x operating cash flow, scoring among the most overvalued stocks in our valuation composite.

**Shareholder Yield Multifactor: F**

Shares of DDD do not pay a dividend. During the 6/2013 quarter, new equity issuance reached \$272 MM. Meanwhile, FCF yield dropped to 1% from 2% in the year ago period and 3% sequentially.