

“PERFORMANCE TREND” AND “PERFORMANCE CURRENT” RATINGS BY ECONOMIC VALUE ADDED (EVA)

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ABSTRACT

The Economic Value Added (EVA) is an index of “durable development.” It was proposed by the Stern-Stewart Office and represents the true economic profit of companies. A company reports economic profit only if the reported accounting profit is higher than the opportunity cost of equity. The authors of the EVA model (Stern-Stewart) have also proposed the ways of restating the financial statements to get a “fair image” of the results, thus eliminating the “accounting distortions.”

Based on the performance indexes calculated based on EVA and second-generation indexes relating to EVA, we calculated two types of rating: Rating Performance Current and Rating Performance Trend. The rating is calculated by means of the percentiles technique and the results are split into 22 rating classes. The used database is Russell 3000.

KEY WORDS: *Economic Value Added (EVA), rating, EVA Margin, EVA Momentum, Profitable Growth.*

INTRODUCTION

The Economic Value Added is a “total” financial performance index, much better than Net Income. It was proposed by the Stern-Stewart Consulting Office and is a trademark thereof. As a performance index which can be calculated using specialized companies, EVA requires a certain “cost implementation in a company.” The benefits brought by EVA have long-term advantages in the durable development of companies, making more and more companies to implement it as an index of “true management” performance.

“What is EVA?”

EVA, or the economic value added is a special way to measure profit which is better than all the others. It provides the measurement of the “economic profit” and not the accounting profit. It is measured after deducting the full cost of “opportunity” for the entire capital invested in the assets of a company. It does not measure profit except at the time when all investors, shareholders included, have obtained a minimum return for risk-bearing.

Also, EVA is usually measured after the correction of other accounting anomalies. EVA encourages managers to make better decisions more balanced and efficient ones instead of letting the accounting rules affect their business judgment. EVA is also superior analytically as it provides more reliable and insightful perspectives than any other financial analysis framework due to a recent discovery by EVA Dimensions.”¹

“Bennett Stewart describes the shortcomings in the conventional financial reports - difficulties which need to be understood by each director. He intelligently explains all the connecting elements of EVA and how the board members can use it to assess their business plans, set targets, to judge and achieve performance sourcing and even to appreciate their procurement candidates based on their true financial worth. It is a recommended study to read!”²

The word “ratings” can be translated by words like “grade” or “evaluation” and its origin is Anglo-Saxon. Rating agencies first emerged after the financial crisis in 1837, as a necessity for forecasting and assessing the performance and financial risks of companies. They have won the “market” over time as a service specialized in risk

calculation and as a necessity of shareholders’ “protection”. A rating awarded to a company based on accurate criteria and calculations and is less “harmful” to a company compared to one given incorrectly, which can lead to serious consequences for the company, market, and investors. The EVA-based rating awarded to a company based on accurate calculations is “superior” and more correct than the Net Income-based” one as Net Income can be manipulated through “accounting procedures.”

STUDY OF CASE

The utilized data series

To achieve the rating, we used a database of 3,000 companies for which we excluded profit as the financial performance index (because it can be distorted by accounting techniques), but we used the Economic Added Value (as it represents the true economic profit). The Economic Value Added represents the actual and adjusted performance of companies and is achieved by taking into account the cost of equity as well as by restating the financial statements.

The database used to derive the rating refers to the list of companies in the Russell 3000 index but it is filtered, which means that the companies and businesses with sale prices below \$5 or with incomes below 100 million in the years 2012, 2011, and 2007 for the companies in the oil and gas field are excluded from the list of companies in the Russell 3000 index.

Based on the above data and using percentiles technique, we achieved a rating which we have named “Performance” where we included only the performance indexes for years 2007, 2011, and 2012.

The “Performance” ratings presented in this paper are: “Performance Current” (2012) and “Performance Trend” which captures the analyzed period 2,007-2,012 (the trend). The remaining database includes 1501 companies listed with the NYSE in 44 industries, for which we collected data for years 2007, 2011 and 2012. The data source is platform www.evadimensions.com for the EVA-related data (it is the platform which presents the EVA calculated by the authors of the model) as well as platforms, www.gurufocus.com, www.reuters.com, <http://quicktake.morningstar.com/StockNet/Diagnostics.aspx>, www.nyse.com, etc..

The Economic Value Added (EVA) is an index of “durable development” and the data used to calculate the rating refers to the following indexes: EVA Momentum Rank, 5-Year EVA Momentum Rank, EVA Margin, EVA Momentum Current; EVA/ Trailing Sales, Delta EVA Margin, EVA Margin (EVA/Sales) Current TFQ, EVA Margin 4 Qtrs Back TFQ, Profitable Growth, Sales Growth TFQ, EVA Momentum 5-Year Average, 5-year Delta EVA Margin, EVA Margin 20 Qtrs Back, ROE, EVA/Equity, Equity, Net income, Sales Current TFQ, Sales 4 Qtrs Back TFQ, Sales 20 Qtrs Back TFQ, EVA 2012, EVA 2011, EVA 2007, Stock Price 6/30/12, Stock Price 6/30/11, Stock Price 6/30/07, Altman Z Score, F Score.

Glossary of Terms

EVA = is the economic profit is after deducting the full cost of capital in the net business assets of the company (and after correcting the accounting distortions). A company does not begin to report profit before the shareholders have earned a minimum efficiency depending on the assumed risk. It measures all the ways of performance which can result in the improvement and make of wealth. EVA growth is the real key to create wealth.

EVA 4 Qtrs Back TFQ = EVA 4 quarters ago / Turnover 4 quarters ago;

EVA 20 Qtrs Back TFQ = EVA 20 quarters ago / Turnover 20 quarters ago;

Sales current = Current Turnover (Current Sales);

Sales 4 Qtrs Back TFQ = Turnover 4 quarters ago;

Sales 20 Qtrs Back TFQ = Turnover 20 quarters ago;

EVA Momentum Rank: Is the rank company over the last four quarters of the non-financial companies in the Russell 3000 Index, excluding companies and businesses with sale prices below \$5 or income lower than 100 million dollars in 2012, 2011 or 2007 in the oil and gas field;

EVA Margin Current: (EVA/Sales) Current (economic value added for the current year / current year sales);

EVA Momentum Current = Δ EVA/ Trailing Sales;

EVA Momentum is an index developed by Bennett Stewart (co-founder of EVA Economic Value Added) and is calculated as follows: EVA Momentum = (Current year EVA - previous year EVA) / Turnover of last year. (see <http://evadimensions.com/>).

EVA Momentum indicates economic profit growth rate, scaled to sales. It represents the only financial report where the “higher” result means “better” because EVA growth from year to year shows that management has taken steps with economic meaning. It shows the effective management of assets and the “profitable growth”, which

is a product of the company's sales rate. EVA Momentum is a worthy successor of the ROI (return on investment) but it is better than ROI, as it captures the value of profitable growth.

EVA Momentum is an index that helps in measuring the economic performance of a company, defined as the change in the economic profit over time. As a result, it helps investors to determine if the company creates value for its shareholders.

Delta EVA Margin= EVA Margin current - previous EVA Margin;

EVA Margin 4 Qtrs Back TFQ= (previous year EVA / previous year Sales) (economic value added of the previous year / sales of the previous year);

Profitable Growth = The profitable increase is calculated by multiplying the rate of sales growth of EVA Concluding Margin (current year's EVA margin - previous year's EVA margin). Mathematically, EVA Momentum is equal to the amount of Delta EVA and profitable growth. EVA Momentum dividing into these two basic components isolates the impact of changes in efficiency of the company's business model and the impact of higher or lower sales at a positive or negative EVA margin;

Sales Growth = (Annualized net sales during the current period - Annualized net sales during the previous period annualized) / annualized net sales for the previous period;

EVA Momentum 5-Year Average = EVA Momentum average of 5 years. It is the EVA change of the company over the last five years (e.g. from 2,007 to 2,012) divided by the sales of the initial period (e.g. 2,007). This number is then divided by five to express EVA Momentum as an average of five years;

5-year Delta EVA Margin = 5 years delta EVA Margin (EVA Margin Current - EVA Margin 5 years ago)/EVA Margin 5 years ago;

EVA Margin 20 Qtrs Back = EVA 5 years ago / Turnover 5 years ago;

5 Year Profitable Growth = 5 years of profitable growth. It is the increase in the percentage of sales of over five years multiplied by the sales of the year prior to the five-year period. It is the profitable absolute growth and is not divided by five. The formula is: 5-year Sales Growth x EVA Margin Current;

5-year Sales Growth = 5 years of sales growth (current year turnover - turnover 5 years ago) / turnover 5 years ago;

Description of the utilized database

The database used for the study refers to the companies in Russell 3000 index, but it is filtered, which means that the listed companies in the field of oil and gas, with turnover below 100 million and companies with sale prices below 5\$ are excluded. Of the 3,000 initial companies, we used the data from the 1501 companies left. Data source is www.evadimensions.com (cofounders of the EVA model).

The data refers to EVA Margin, EVA Momentum Current; EVA/Trailing Sales, "Delta EVA Margin", EVA Margin (EVA/Sales) Current TFQ, EVA Margin 4 Qtrs Back TFQ, "Profitable Growth, Sales Growth TFQ, EVA Momentum 5-Year Average, 5-year Delta EVA Margin, EVA Margin 20 Qtrs Back, Sales Current TFQ \$MM, Sales 4 Qtrs Back TFQ \$MM, Sales 20 Qtrs Back TFQ \$MM, EVA 2012, EVA 2011, EVA 2007. The data includes the companies listed with NYSE and are from 45 fields of activity (see table below).

Industry	Number of companies	% of total number of companies	% of cumulative companies
Aerospace & Defense	34	2.27%	2.27%
Airlines	11	0.73%	3.00%
Auto & Suppliers	28	1.87%	4.86%
Biotechnology	13	0.87%	5.73%
Chemicals	56	3.73%	9.46%
Commercial Services & Supplies	61	4.06%	13.52%
Communications Equipment	30	2.00%	15.52%
Computers & Peripherals	23	1.53%	17.06%
Conglomerates & Machinery	94	6.26%	23.32%
Construction	43	2.86%	26.18%
Diversified Consumer Services	19	1.27%	27.45%

Diversified Telecommunication Services	17	1.13%	28.58%
Electric Utilities	32	2.13%	30.71%
Electrical Equipment	24	1.60%	32.31%
Electronics and Office Equipment	57	3.80%	36.11%
Energy Equipment & Services	43	2.86%	38.97%
Food & Beverage	49	3.26%	42.24%
Food & Staples Retailing	21	1.40%	43.64%
Freight Transportation	39	2.60%	46.24%
Gas Utilities	14	0.93%	47.17%
Health Care Equipment & Supplies	44	2.93%	50.10%
Health Care Providers & Services	57	3.80%	53.90%
Homebuilders	11	0.73%	54.63%
Hotels Resorts & Cruise lines	33	2.20%	56.83%
Household & Personal Products	22	1.47%	58.29%
Household Durables	19	1.27%	59.56%
Internet & Catalog Retail	10	0.67%	60.23%
Internet Software & Services	22	1.47%	61.69%
IT Services	47	3.13%	64.82%
Leisure Equipment & Products	13	0.87%	65.69%
Life Sciences Tools & Services	15	1.00%	66.69%
Media	49	3.26%	69.95%
Metals & Mining	31	2.07%	72.02%
Paper & Packaging	27	1.80%	73.82%
Pharmaceuticals	19	1.27%	75.08%
Professional Services	31	2.07%	77.15%
Restaurants	32	2.13%	79.28%
Semiconductors & Semiconductor Equipment	69	4.60%	83.88%
Software	55	3.66%	87.54%
Specialty Retail	89	5.93%	93.47%
Textiles Apparel & Luxury Goods	27	1.80%	95.27%
Tobacco	5	0.33%	95.60%
Trading Companies & Distributors	26	1.73%	97.34%
Utilities - Other	31	2.07%	99.40%
Wireless Telecommunication Services	9	0.60%	100.00%
Total, companies and percentage	1501		100.00%

Table 1 The number of companies, percentages and fields of activity used in the database for "Performance Trend" and "Current Performance" ratings.

The "Performance" Trend rating model

This rating model is based on the following variables:

- EVA Momentum Current
- 5-Year EVA Momentum
- EVA Margin (EVA/Sales) Current

- Delta EVA Margin
- EVA Margin 4 Qtrs
- Profitable Growth
- Sales Growth TFQ
- 5-year Delta EVA Margin
- EVA Margin 20 Qtrs Back
- 5 Year Profitable Growth
- 5-year Sales Growth

This rating model is called "Performance Trend" since all the variables used are indexes of performance (EVA-based) and capture the "performance trend". The rating is calculated using the percentiles technique.

Descriptive Analysis

The current sales for 2012 are from \$ 117 million (MARINE PRODUCTS CORP - KPI) to \$ 455,779 million (WAL-MART STORES INC-KPI). The average sales amount for the 1501 companies is \$ 6,230 million and the sales amount is \$ 9,350,697 million. The standard deviation is 1,860,920.9 %.

The sales in 2011 are from \$ 104 million (MARINE PRODUCTS CORP-KPI) to \$ 426,227 million (WAL-MART STORES INC-KPI). The average sales amount for the 1501 companies is \$ 5,679 million and the amount of sales is \$ 8,523,488 million. The standard deviation is 1,718,444.4 %.

The sales in 2007 are from \$ 102 million (ALMOST FAMILY INC-KPI) to \$ 355,353 million (WAL-MART STORES INC-KPI). The average sales amount for the 1501 companies is \$ 4,868 million and the amount of sales is \$ 7,306,582 million. The standard deviation is 1,492,469.9 %.

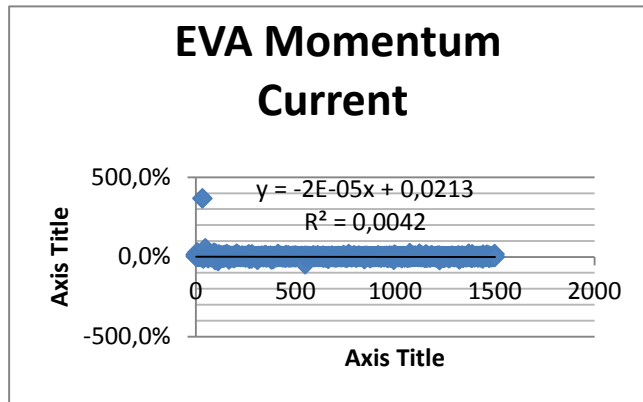
EVA Current (of 2012) has values from \$-6.731 million (JDS UNIPHASE CORP-KPI) to \$ 27,524 million (APPLE INC-KPI). The average EVA for the 1501 companies is \$190 and the EVA amount is \$ 284,542 million. The standard deviation is 113,419.4 %. Of the 1501 companies, 489 have negative EVA, with values from \$-6.731 million (JDS Uniphase Corp-KPI) to \$ -0.299 million (COEUR D' ALENE MINES CORP-KPI), the average of negative EVA being \$-142 million, and the cumulative value of negative EVA (destruction of value) is \$ -69.218 million. The remaining 1,012 companies create value as EVA is positive, with values from \$ 0.0697 million (MATRIX SERVICE CO-KPI) to \$ 27,524 million (APPLE INC-KPI), the average of positive EVA being \$ 350 million and the cumulative value of positive EVA (companies which create added value) was \$ 353,761 million.

EVA in 2011 is from \$ -6,945 million (JDS Uniphase Corp-KPI) to \$ 16,679 million (MICROSOFT CORP-KPI). The average EVA for the 1501 companies is \$ 144 million and the EVA amount is \$ 215,968 million. The standard deviation is 89805.4 %. Of the 1501 companies, 528 have negative EVA, with values from \$ -6,945 million (JDS Uniphase Corp-KPI) to \$ -0.286 million (AEP INDUSTRIES INC-KPI), the average of negative EVA being \$-149 million and the cumulative value of negative EVA (destruction of value) is \$ -78,751 million. The remaining 973 companies create value as EVA is positive, with values from \$ 0.0911 million (ACCURAY INC-KPI) to \$ 16,679 million (MICROSOFT CORP-KPI), the average of positive EVA is \$ 303 million and the cumulative value of positive EVA (companies that create added value) is \$ 294,719 million.

EVA in 2007 is from \$ -9.036 million (FORD MOTOR CO-KPI) to \$ 12,048 million (GENERAL ELECTRIC CO-KPI). The average EVA for the 1501 companies is \$ 83 million and the amount of EVA is \$ 124,291 million. The standard deviation is 76,999.9 %. Of the 1501 companies, 531 have negative EVA, with values from \$ -9.036 million (FORD MOTOR CO - KPI) to \$ -0.023 million (ULTIMATE SOFTWARE GROUP INC - KPI), the average of negative EVA being \$ -171 million, and the cumulative value of negative EVA (destruction of value) is \$ -90,767 million. The remaining 970 companies create value as EVA is positive, with values from \$ 0.1028 million (Delta TIMBER CORP - KPI) to \$ 12,048 million (GENERAL ELECTRIC CO - KPI), the average of positive EVA is \$ 222 million and the cumulative value of positive EVA (companies which create added value) being \$ 215.058 million.

Analyzing sales and EVA for the period 2007-2011-2012 and considering that EVA represents the true economic profit, we can draw the following conclusions (see table below):

Data is in million \$	EVA 2007	EVA 2011	Delta EVA (EVA 2011/EVA 2007)
	\$ 124,921	\$ 215,968	172.88%
	EVA 2011	EVA 2012	Delta EVA (EVA 2012/EVA 2011)
	\$ 215,968	\$ 284,542	131.75%



EVA 2007	EVA 2012	Delta EVA (EVA 2012/EVA 2007)
\$ 124,921	\$ 284,542	227.78%
Sales 2007	Sales 2011	Delta Sales (Sales 2011/Sales 2007)
\$ 7,306,582	\$ 8,523,488	116.65%
Sales 2011	Sales 2012	Delta Sales (Sales 2012/Sales 2011)
\$ 8,523,488	\$ 9,350,697	109.71%
Sales 2012	Sales 2007	Delta EVA (EVA 2012/EVA 2007)
\$ 7,306,582	\$ 9,350,697	127.98%

Table 2 Comparison between sales and EVA for all the companies for years 2007, 2011, and 2012.

From the table above we note the following general information:

- turnover increases in 2011 compared to 2007 by 16.65% in percents and in absolute value by \$ 1,216,906 million;
- EVA increases in 2011 over 2007 by 72.88 % in percents and in absolute value by \$ 91,047 million;
- turnover increases in 2012 compared to 2011 by 9.71% in percents and in absolute value by \$ 827,209 million;
- EVA increases in 2012 compared to 2011 by 31.75% in percents and in absolute value by \$ 68,574 million;
- turnover increases in 2012 compared to 2007 by 27.98% in percents and in absolute value by \$ 2,044,115 million;
- EVA increases in 2012 compared to 2007 by 127.78% in percents and in absolute value by \$ 159,621million;

The conclusion which we can be drawn easily here is the following: **US companies quit the crisis in a strengthened condition** (turnover increased by 27.98% between 2007-2012 and EVA increased by 127.78% over the same period). Basically, EVA (which shows the creation of wealth) increased by 127.78% in 5 years. It is also observed that in 2012 -compared to 2011- EVA increased by 31.75% compared to a lower increase in turnover of 9.71%, the tendency being to accumulate wealth.

EVA Momentum Current ($= \Delta \text{EVA} / \text{Trailing Sales}$) has values from -47.88% (ATLANTIC POWER CORP-KPI) to 365.2% (VERTEX PHARMACEUTICALS INC- KPI). Average EVA Momentum Current for the 1501 companies is 1% and the amount of EVA Momentum Current is 1,465.6%. The standard deviation is 10.3%. Of the 1501 companies, 503 have negative EVA Momentum current, with values ranging from -47.88% (ATLANTIC POWER CORP - KPI) to -0.01% (SANMINA -SCI CORP - KPI), the negative EVA Momentum being -2.4% and

the cumulative value of negative EVA Momentum current is -1220.6% . The remaining 998 companies have positive EVA Momentum current, with values ranging from 0% (PEPSICO INC - KPI) to 365.2% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive EVA Momentum current being 2.7%, and the cumulative value of positive EVA Momentum current is 2,686.2% .

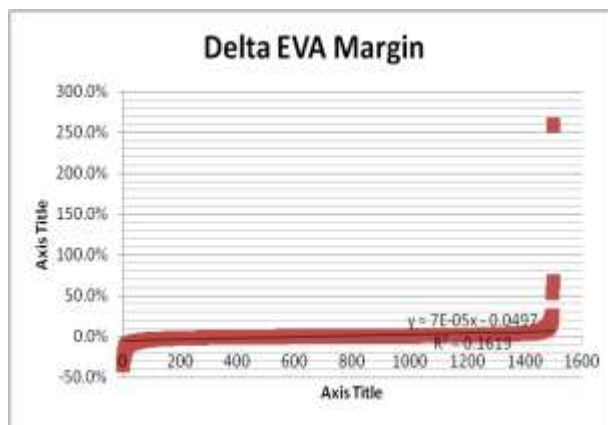
Delta EVA Margin (= EVA Margin current - previous EVA Margin) has values from -34.3% (SIGMA DESIGNS INC - KPI) to 260.2% (VERTEX PHARMACEUTICALS INC - KPI). Average Delta EVA Margin for the 1501 companies is 0.6% and the amount of Delta EVA Margin is 890.4%. The standard deviation is 7.9%. Of the 1,501 companies, 573 have negative Delta EVA Margin , with values ranging from -34.3% (SIGMA DESIGNS INC - KPI) to -0.00009% (PRICESMART INC - KPI), the average of negative Delta EVA margin being -2.2% and the cumulative value of negative Delta EVA Margin is -1,279.6%. The remaining 998 companies have positive Delta EVA Margin current, with values ranging from 0% (PEPSICO INC - KPI) to 365.2% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive Delta EVA margin being 2.7% and the cumulative value of positive Delta EVA Margin current is 2,686.2%.

EVA Margin Current: (EVA/Sales) Current (economic value added for the current year /current year sales) has values from -392.5% (JDS Uniphase Corp - KPI) to 73.2% (NL INDUSTRIES - KPI). EVA Margin Current average for the 1,501 companies is 0.8% and the amount of EVA Margin Current is 1,166.4%. The standard deviation is 16.2%. Of the 1501 companies, 489 have negative EVA Margin Current, with values from -392.5% (JDS Uniphase Corp - KPI) to -0.03% (COEUR D' ALENE MINES CORP - KPI), the average of negative EVA Margin Current being -7.9% and the cumulative value of negative EVA Margin Current is -3,845.1%. The remaining 1,012 companies have positive EVA Margin Current, with values ranging from 0.01% (Avnet INC - KPI) to 73.2% (NL INDUSTRIES - KPI), the average of the positive EVA Margin Current is 5% and the cumulative value of positive EVA Margin Current is 5,011.5%.

EVA 4 Qtrs Back TFQ = = EVA 4 quarters ago/Turnover 4 quarters ago, is from -402.92% (JDS Uniphase Corp - KPI) to 60.7% (LIBERTY MEDIA CORP - KPI). Average EVA 4 Qtrs Back TFQ for the 1,501 companies is 0.2% and the amount of EVA 4 Qtrs Back TFQ is of 275.3%. The standard deviation is 18.4%. Of the 1,501 companies, 525 have negative EVA 4 Qtrs Back TFQ, with values ranging from -402.92% (JDS Uniphase Corp - KPI) and -0.01% (CACI INTL INC -CL A - KPI), the average of negative EVA 4 Qtrs Back TFQ being -8.7% and the cumulative value of negative EVA 4 Qtrs Back TFQ is -4,551.0%. The remaining 976 companies have positive EVA 4 Qtrs Back TFQ, with values ranging from 0.00 % (SAFEGWAY INC - KPI) to 60.7% (LIBERTY MEDIA CORP - KPI), the average of positive EVA 4 Qtrs Back TFQ being 4.9% and the cumulative value of positive EVA4 Qtrs Back TFQ is 4,826.3%.

Profitable Growth = The profitable increase is calculated by multiplying the rate of sales growth of EVA Concluding Margin (current year's EVA margin - previous year's EVA margin) has values from -28.6% (ALKERMES PLC - KPI) to 105% (VERTEX PHARMACEUTICALS INC - KPI). Average Profitable Growth for the 1,501 companies is 0.4% and the amount of Profitable Growth is 571.5 %. The standard deviation is 3.6%. Of the 1501 companies, 477 have negative Profitable Growth, with values ranging from -28.6% (ALKERMES PLC - KPI) to -0.00056% (CONN 'S INC - KPI), the average of negative Profitable Growth being of -0.9 % and the cumulative value of negative Profitable Growth is -408.6 %. The rest of 1,024 companies have positive Profitable Growth with values from 0.00% (COVENTRY HEALTH CARE INC - KPI) to 105% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive Profitable Growth is 1% and the cumulative value of positive Profitable Growth being of 979.8%.

Sales Growth = (Annualized net sales during the current period - Annualized net sales during the previous period annualized) / annualized net sales for the previous period have values from -75.8% (ITT CORP - KPI) to 812.5% (VERTEX PHARMACEUTICALS INC - KPI). Average Sales Growth for 1501 the companies is 12.5% and the amount of Sales Growth is 18,712.4%. The standard deviation is 27.5%. Of the 1,501 companies, 236 have negative Sales Growth, with values ranging from -75.8% (ITT CORP - KPI) to -0.01% (SAGA COMMUNICATIONS -CL A - KPI), the average of negative Sales Growth being -7.9% and the cumulative value of negative Sales Growth is -1845.0%. The remaining 1,265 companies have positive Sales Growth, with values ranging from 0.07% (CONN 'S INC - KPI) to 812.5 % (VERTEX PHARMACEUTICALS INC - KPI), the average of positive Sales Growth being 16.3% and the cumulative value of positive Sales Growth is 20,566.3%.



EVA Momentum 5-Year Average = average of EVA Momentum for the 5 years. It is the company’s EVA change in the in the last five years (e.g. from 2007 to 2012) divided by the sales of the initial period (e.g. 2007). This number is then divided by five to express EVA Momentum as an average of five years. EVA Momentum 5 -Year Average has values ranging from -16.7 % (RAMBUS INC - KPI) to 33.2% (VERTEX PHARMACEUTICALS INC - KPI). The average of EVA Momentum 5 -Year for the 1501 companies is 0.6 % and the amount of EVA Momentum 5 -Year Average is 858.2%. The standard deviation is 2.5%. Of the 1,501 companies, 540 have negative EVA Momentum 5 -Year Average, with values ranging from -16.7% (RAMBUS INC - KPI) to -0.01% (American Railcar INDS INC - KPI), the average of negative EVA Momentum 5 -Year is -1.1% and the cumulative value of negative EVA Momentum 5-Year Average is -600.8% . The remaining 961 companies, have positive EVA Momentum 5 -Year Average, with values ranging from 0.0% (LIFEPPOINT HOSPITALS INC - KPI) to 33.2% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive EVA Momentum 5-Year being 1.5%, and the cumulative value of positive EVA Momentum 5-Year Average is 1,459.0%.

5-year Delta EVA Margin = Margin = 5 years delta EVA Margin (EVA Margin Current - EVA Margin 5 years ago) / EVA Margin 5 years ago has values from -65.1% (FORMFACTOR INC - KPI) to 161 2% (JDS UNIPHASE Corp - KPI). The average of 5-year Delta EVA Margin for the 1501companies is 0.9% and the amount of the 5-year Delta EVA Margin is 1,366.0%. The standard deviation is 8.6%. Of the 1,501 companies, 662 have negative 5-year Delta EVA margin, with values ranging from -65.1 % (FORMFACTOR INC - KPI) to -0.01% (ELECTRONICS FOR IMAGING INC - KPI), the average of five -year Delta EVA Margin being -4.4% and the cumulative value of negative 5-year Delta EVA Margin is -2,892.1 % . The remaining 839 companies, have positive 5-year Delta EVA Margin, with values ranging from 0.0% (COMPUWARE CORP - KPI) to 161.2% (JDS Uniphase Corp - KPI), the average of positive 5-year Delta EVA Margin being 5.1%, and the cumulative value of positive 5-year Delta EVA Margin is 4258.1%.

EVA Margin 20 Qtrs Back = EVA 5 years ago / Turnover 5 years ago has values from -553.7% (JDS Uniphase Corp - KPI) to 33.7% (LINEAR TECHNOLOGY CORP - KPI). The average of EVA Margin 20 Qtrs Back for the 1,501 companies is -0.1% and the amount of EVA Margin 20 Qtrs Back is -199.6%. The standard deviation is 18.1%. Of the 1,501 companies, 529 have negative EVA Margin 20 Qtrs Back with values from -553.7% (JDS Uniphase Corp - KPI) to -0.01% (THOMSON - REUTERS CORP - KPI), the average of negative EVA Margin 20 Qtrs Back being -9.0 %, and the cumulative value of negative EVA Margin 20 Qtrs Back is -4,773.9%. The remaining 972 companies have positive EVA Margin 20 Qtrs Back, with values ranging from 0.01% (CORE MARK HOLDING CO INC - KPI) to 33.7% (LINEAR TECHNOLOGY CORP - KPI), the average of positive EVA Margin 20 Qtrs Back being 4.7% and the cumulative value of positive EVA Margin 20 Qtrs Back is 4,574.3%.

5 Year Profitable Growth = 5 years of profitable growth. It is the increase in the percentage of sales of over five years multiplied by the sales of the year prior to the five-year period. It is the profitable absolute growth and is not divided by five. The formula is: 5-year Sales Growth x EVA Margin Current. The 5 Year Profitable Growth has values from -100.8% (JDS Uniphase Corp - KPI) to 108.2% (APPLE INC - KPI). The average of the 5 Year Profitable Growth for the 1,501 companies is 1.9% and the amount relating to the 5 Year Profitable Growth is 2,912.1%. The standard deviation is 9.3%. Of the 1,501 companies, 452 have negative 5 Year Profitable Growth with values from -100.8 % (JDS Uniphase Corp - KPI) to -0.00002% (BOB EVANS FARMS - KPI). The average of the 5 Year Profitable Growth being negative - 3.3 % and the cumulative value of the negative 5 year Profitable Growth is -1,513.9%. The remaining 972 companies have positive 5 Year Profitable Growth, with values ranging from 0.0% (COVENTRY HEALTH CARE INC - KPI) to 108.2% (APPLE INC - KPI), the average of the positive 5 year Profitable Growth being 4.2%, and the cumulative value of the positive 5 year Profitable Growth is 4,423.7%.

5-Year Sales Growth = 5 years of sales growth (current year turnover - turnover 5 years ago) / turnover 5 years ago. The 5-year Sales Growth is from -84.5% (KB HOME - KPI) to 1,331.7% (FIRST SOLAR INC - KPI). The average of the 5-year Sales Growth for the 1,501companies is 51.4% and the amount of the 5-year Sales Growth is 77,223.8%. The standard deviation is 79.3%. Of the 1,501 companies, 305 have negative 5-year Sales Growth, with values ranging from -84.5% (KB HOME - KPI) to -0,002 % (BOB EVANS FARMS - KPI), the average of the negative 5-year Sales Growth being -21.2%, and the cumulative value of negative 5-year Sales Growth is -6,645.6%. The remaining 972 companies, have positive 5-year Sales Growth, with values ranging from 0.024% (HEIDRICK & STRUGGLES INTL - KPI) to 1,331.7% (FIRST SOLAR INC - KPI), the average of the positive 5-year Sales Growth is 70,0%, and the cumulative value of the positive 5-year Sales Growth is 83,680.3%.

Percentiles from the Russell 3000 database filtered for the "Performance" Trend rating

For the Russell 3000 filtered database used for calculating the "Performance" Trend rating, the percentiles are the following:

Percentile	0.25	0.5	0.75
EVA Momentum Current = ΔEVA/ Trailing Sales	-0.47%	0.57%	1.99%

5-Year EVA Momentum	-0.30%	0.28%	1.05%
EVA Margin (EVA/Sales) Current	-0.96%	1.68%	4.63%
Delta EVA Margin	-0.64%	0.30%	1.47%
EVA Margin 4 Qtrs	-1.38%	1.38%	4.35%
Profitable Growth	-0.05%	0.13%	0.60%
Sales Growth TFQ	2.99%	9.27%	17.28%
5-year Delta EVA Margin	-1.97%	0.41%	2.97%
EVA Margin 20 Qtrs Back	-1.11%	1.26%	4.14%
5 Year Profitable Growth	-0.07%	0.50%	2.36%
5-year Sales Growth	5.32%	30.74%	73.40%

Table 3. Authors' calculations. Variables and percentiles used, according to the filtered Russell 3000 database for the achievement of the "Performance" Trend rating.

The "Performance" Current rating model 2012

This rating is based on the following variables:

- EVA Momentum Current
- EVA Margin (EVA/Sales) Current
- Profitable Growth
- Sales Growth TFQ

This rating model is called "Performance" Current, because all the used variables are performance indexes (based on EVA) and capture "the current performance of 2012." The rating is calculated using the same percentiles technique, similar to the PRVit model (see www.evadimensions.com).

For the filtered Russell 3000 database (used in calculating the "Performance" Current rating) the percentiles are as follows:

Percentile	0.25	0.5	0.75
EVA Momentum Current = $\Delta\text{EVA} / \text{Trailing Sales}$	-0.47%	0.57%	1.99%
EVA Margin (EVA/Sales) Current	-0.96%	1.68%	4.63%
Profitable Growth	-0.05%	0.13%	0.60%
Sales Growth TFQ	2.99%	9.27%	17.28%

Table 4 Percentiles for the "Performance" Current rating

Sales current = Current Turnover (current sales);

EVA Margin Current: (EVA/Sales) Current (economic value added for the current year / current year sales) ;

EVA Momentum is an index developed by Bennett Stewart (co-founder of EVA Economic Value Added) and is calculated as follows: $\text{EVA Momentum} = (\text{Current year EVA} - \text{previous year EVA}) / \text{Turnover of last year}$. (see <http://evadimensions.com/>).

EVA Momentum indicates economic profit growth rate, scaled to sales. It represents the only financial report where the "higher" result means "better" because EVA growth from year to year shows that management has taken steps with economic meaning. It shows the effective management of assets and the "profitable growth", which is a product of the company's sales rate. EVA Momentum is a worthy successor of the ROI (return on investment) but it is better than ROI, as it captures the value of profitable growth.

EVA Momentum is an index that helps in measuring the economic performance of a company, defined as the change in the economic profit over time. As a result, it helps investors to determine if the company creates value for its shareholders.

Profitable Growth = the profitable increase is calculated by multiplying the rate of sales growth of EVA Concluding Margin (current year's EVA margin - previous year's EVA margin). Mathematically, EVA Momentum is equal to the amount of Delta EVA and profitable growth. EVA Momentum dividing into these two basic components isolates the impact of changes in efficiency of the company's business model and the impact of higher or lower sales at a positive or negative EVA margin;

Sales Growth = (Annualized net sales during the current period - Annualized net sales during the previous period annualized) / annualized net sales for the previous period.

Descriptive analysis

The current sales for 2012 are from \$ 117 million (MARINE PRODUCTS CORP - KPI) to \$ 455,779 million (WAL-MART STORES INC-KPI). The average sales amount for the 1501 companies is \$ 6,230 million and the sales amount is \$ 9,350,697 million. The standard deviation is 1,860,920.9 %.

The sales in 2011 are from \$ 104 million (MARINE PRODUCTS CORP-KPI) to \$ 426,227 million (WAL-MART STORES INC-KPI). The average sales amount for the 1501 companies is \$ 5,679 million and the amount of sales is \$ 8,523,488 million. The standard deviation is 1,718,444.4 %.

EVA Current (of 2012) has values from \$-6.731 million (JDS UNIPHASE CORP-KPI) to \$ 27,524 million (APPLE INC-KPI). The average EVA for the 1501 companies is \$190 and the EVA amount is \$ 284,542 million. The standard deviation is 113,419.4 %. Of the 1501 companies, 489 have negative EVA, with values from \$-6.731 million (JDS Uniphase Corp-KPI) to \$ -0.299 million (COEUR D' ALENE MINES CORP-KPI), the average of negative EVA being \$-142 million, and the cumulative value of negative EVA (destruction of value) is \$ -69.218 million. The remaining 1,012 companies create value as EVA is positive, with values from \$ 0.0697 million (MATRIX SERVICE CO-KPI) to \$ 27,524 million (APPLE INC-KPI), the average of positive EVA being \$ 350 million and the cumulative value of positive EVA (companies which create added value) was \$ 353,761 million.

EVA in 2011 is from \$ -6,945 million (JDS Uniphase Corp-KPI) to \$ 16,679 million (MICROSOFT CORP-KPI). The average EVA for the 1501 companies is \$ 144 million and the EVA amount is \$ 215,968 million. The standard deviation is 89805.4 %. Of the 1501 companies, 528 have negative EVA, with values from \$ -6,945 million (JDS Uniphase Corp-KPI) to \$ -0.286 million (AEP INDUSTRIES INC-KPI), the average of negative EVA being \$-149 million and the cumulative value of negative EVA (destruction of value) is \$ -78,751 million. The remaining 973 companies create value as EVA is positive, with values from \$ 0.0911 million (ACCURAY INC-KPI) to \$ 16,679 million (MICROSOFT CORP-KPI), the average of positive EVA is \$ 303 million and the cumulative value of positive EVA (companies that create added value) is \$ 294,719 million.

Analyzing sales and EVA for the period 2011-2012 we notice a significant increase thereof (see table below):

Data is in million \$	Sales 2011	Sales 2012	Delta Sales (Sales 2012/Sales 2011)
	\$ 8,523,488	\$ 9,350,697	109.71%
	EVA 2011	EVA 2012	Delta EVA (EVA 2012/EVA 2011)
	\$ 215,968	\$ 284,542	131.75%

Table 1. Comparisons between EVA and Sales

From the table above we note the following general information:

- turnover increases in 2,012 compared to 2,011 by 9.71% in percents and in absolute value by \$ 827,209 million;
- EVA increases in 2,012 compared to 2,011 by 31.75% in percents and in absolute value by \$ 68,574 million;
- The conclusion which can be drawn easily here is the following: **US companies quit the crisis in a strengthened condition** (turnover increased by 27.98% from 2,007 to 2,012 and EVA increased by 127.78% over the same period). Basically, EVA (which shows the creation of wealth) increased by 127.78% in 5 years. It is also observed that in 2,012 -compared to 2,011- EVA increased by 31.75% compared to a lower increase in turnover of 9.71%, the tendency being to accumulate wealth.
- **EVA Momentum Current** has values from -47.88% (ATLANTIC POWER CORP-KPI) to 365.2% (VERTEX PHARMACEUTICALS INC- KPI). Average EVA Momentum Current for the 1,501 companies is 1% and the amount of EVA Momentum Current is 1,465.6%. The standard deviation is 10.3%. Of the 1,501 companies, 503 have negative EVA Momentum current, with values ranging from -47.88% (ATLANTIC POWER CORP - KPI) to -0.01% (SANMINA -SCI CORP - KPI), the negative EVA Momentum being -2.4% and the cumulative value of negative EVA Momentum current is -1,220.6 % . The remaining 998 companies have positive EVA Momentum current, with values ranging from 0% (PEPSICO INC - KPI) to 365.2% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive EVA Momentum current being 2.7%, and the cumulative value of positive EVA Momentum current is 2,686.2%.

- **EVA Margin Current (EVA/Sales) Current** (economic value added for the current year/current year sales) has values from -392.5% (JDS Uniphase Corp - KPI) to 73.2% (NL INDUSTRIES - KPI). EVA Margin Current average for the 1,501 companies is 0.8% and the amount of EVA Margin Current is 1,166.4%. The standard deviation is 16.2%. Of the 1,501 companies, 489 have negative EVA Margin Current, with values from -392.5% (JDS Uniphase Corp - KPI) to -0.03% (COEUR D' ALENE MINES CORP - KPI), the average of negative EVA Margin Current being -7.9% and the cumulative value of negative EVA Margin Current is -3,845.1%. The remaining 1,012 companies have positive EVA Margin Current, with values ranging from 0.01 % (Avnet INC - KPI) to 73.2% (NL INDUSTRIES - KPI), the average of the positive EVA Margin Current is 5% and the cumulative value of positive EVA Margin Current is 5,011.5%.
- **Profitable Growth** = The profitable increase is calculated by multiplying the rate of sales growth of EVA Concluding Margin (current year's EVA margin - previous year's EVA margin) has values from -28.6% (ALKERMES PLC - KPI) to 105% (VERTEX PHARMACEUTICALS INC - KPI). Average Profitable Growth for the 1501 companies is 0.4% and the amount of Profitable Growth is 571.5%. The standard deviation is 3.6%. Of the 1,501 companies, 477 have negative Profitable Growth, with values ranging from -28.6% (ALKERMES PLC - KPI) to -0.00056% (CONN 'S INC - KPI), the average of negative Profitable Growth being of -0.9% and the cumulative value of negative Profitable Growth is -408.6% . The rest of 1,024 companies have positive Profitable Growth with values from 0.00% (COVENTRY HEALTH CARE INC - KPI) to 105% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive Profitable Growth is 1% and the cumulative value of positive Profitable Growth being of 979.8%.
- **Sales Growth** = (Annualized net sales during the current period - Annualized net sales during the previous period annualized) / annualized net sales for the previous period have values from -75.8% (ITT CORP - KPI) to 812.5% (VERTEX PHARMACEUTICALS INC - KPI). Average Sales Growth for 1,501 the companies is 12.5% and the amount of Sales Growth is 18,712.4%. The standard deviation is 27.5%. Of the 1,501 companies, 236 have negative Sales Growth, with values ranging from -75.8% (ITT CORP - KPI) to -0.01% (SAGA COMMUNICATIONS -CL A - KPI), the average of negative Sales Growth being -7.9% and the cumulative value of negative Sales Growth is -1,845.0%. The remaining 1,265 companies have positive Sales Growth, with values ranging from 0.07% (CONN 'S INC - KPI) to 812.5% (VERTEX PHARMACEUTICALS INC - KPI), the average of positive Sales Growth being 16.3% and the cumulative value of positive Sales Growth is 20,566.3%.

“Performance Trend” and “Performance Current” Ratings for the Ford Company

In Tables 8-11, the Ford performance rating for period 2,007-2,012 is shown. The rating is calculated in two ways: both compared to the automotive industry which includes Ford and to the performances of all companies in the Russell 3,000 database.

Ratings are calculated using the percentiles technical and the financial EVA-based data in two ways: rating for the current year (2,012) and rating for the trend (2,007-2,012).

For the “Performance Trend” rating, compared to the list of companies in the Russell 3,000 index, Ford reports the *B+ rating and it represents is a highly speculative security (Ford's overall performance on a scale of 1 to 100 is 39.77). It is recommended not to invest in this security.

The variables used to calculate this rating were: EVA Momentum Current = $\Delta\text{EVA} / \text{Trailing Sales}$, 5-Year EVA Momentum, EVA Margin (EVA/Sales) Current, Delta EVA Margin, EVA Margin 4 Qtrs, Profitable Growth, Sales Growth TFQ, 5-year Delta EVA Margin, EVA Margin 20 Qtrs Back, 5 Year Profitable Growth and 5-year Sales Growth.

For the “Performance Current” rating compared to the list of companies in the Russell 3,000 index, Ford reports the *B+ rating and is a highly speculative security (Ford's overall performance on a scale of 1 to 100 is 39.44). It is recommended not to invest in this security.

The variables used to calculate this rating were: EVA Momentum Current = $\Delta\text{EVA} / \text{Trailing Sales}$, EVA Margin (EVA/Sales) Current, Profitable Growth and Sales Growth TFQ.

However, for Ford, the “Performance Trend” rating is *BB+, compared to the automotive industry to which it belongs. This automotive rating is better than the *BB rating (which means speculative quality, non-investment) and lower than *BBB rating (which means medium to low; adequate capacity to fulfill the financial commitments; under unfavorable economic conditions it may lead to a weakening of the capacity to repay financial commitments). The proper interpretation of these rating is the following: for the interested automotive investor it is recommended to “keep” this security (on a scale of 1 to 100 among automotive manufacturers, the performance trend value is 53.57).

Analyzing separately the performance indexes for the automotive industry, the best “Performance Trend” rating is that of company DORMAN PRODUCTS INC - KPI, followed by company BORGWARNER INC - KPI.

The lowest “Performance Trend” rating among the automotive companies is that yielded by company FEDERAL-MOGUL CORP - KPI, followed by WINNEBAGO INDUSTRIES - KPI.

Company	Performance Trend	Company	Performance Trend
FEDERAL-MOGUL CORP - KPI	*D	FORD MOTOR CO - KPI	*BB+
WINNEBAGO INDUSTRIES - KPI	*C	JOHNSON CONTROLS INC - KPI	*BBB-
FUEL SYSTEMS SOLUTIONS INC - KPI	*CC	AMERICAN AXLE & MFG HOLDINGS - KPI	*BBB
MODINE MANUFACTURING CO - KPI	*CCC-	TENNECO INC - KPI	*BBB+
GOODYEAR TIRE & RUBBER CO - KPI	*CCC-	THOR INDUSTRIES INC - KPI	*BBB+
STONERIDGE INC - KPI	*CCC	DREW INDUSTRIES INC - KPI	*A-
COOPER TIRE & RUBBER CO - KPI	*CCC+	TRW AUTOMOTIVE HOLDINGS CORP - KPI	*A
DANA HOLDING CORP - KPI	*B-	DELPHI AUTOMOTIVE PLC - KPI	*A+
SUPERIOR INDUSTRIES INTL - KPI	*B	HARLEY-DAVIDSON INC - KPI	*AA-
VISTEON CORP - KPI	*B	AUTOLIV INC - KPI	*AA-
STANDARD MOTOR PRODS - KPI	*B+	WABCO HOLDINGS INC - KPI	*AA
SHILOH INDUSTRIES INC - KPI	*BB-	GENTEX CORP - KPI	*AA+
GENERAL MOTORS CO - KPI	*BB	BORGWARNER INC - KPI	*AAA
LEAR CORP - KPI	*BB+	DORMAN PRODUCTS INC - KPI	*AAA

Table 6. The “Performance Trend” Rating for the automotive industry

The “Performance Current” rating yielded for 2,012 by Ford, compared to the automotive industry, is *B+. The current performance decreases compared to the performance trend from 2,007 to 20,12. On a scale of 1 to 100, Ford’s Performance for 2,012 is 39.29, compared to the industry it belongs to.

Company	Performance Current	Company	Performance Current
FEDERAL-MOGUL CORP - KPI	*D	TENNECO INC - KPI	*BB+
SUPERIOR INDUSTRIES INTL - KPI	*C	GENERAL MOTORS CO - KPI	*BBB-
FUEL SYSTEMS SOLUTIONS INC - KPI	*CC	AUTOLIV INC - KPI	*BBB
MODINE MANUFACTURING CO - KPI	*CCC-	LEAR CORP - KPI	*BBB+
VISTEON CORP - KPI	*CCC-	TRW AUTOMOTIVE HOLDINGS CORP - KPI	*BBB+
STANDARD MOTOR PRODS - KPI	*CCC	THOR INDUSTRIES INC - KPI	*A-
GOODYEAR TIRE & RUBBER CO - KPI	*CCC+	AMERICAN AXLE & MFG HOLDINGS - KPI	*A
WINNEBAGO INDUSTRIES - KPI	*B-	DREW INDUSTRIES INC - KPI	*A+
COOPER TIRE & RUBBER CO - KPI	*B	DELPHI AUTOMOTIVE PLC - KPI	*AA-

STONERIDGE INC - KPI	*B	DORMAN PRODUCTS INC - KPI	*AA-
FORD MOTOR CO - KPI	*B+	HARLEY-DAVIDSON INC - KPI	*AA
DANA HOLDING CORP - KPI	*BB-	BORGWARNER INC - KPI	*AA+
SHILOH INDUSTRIES INC - KPI	*BB	WABCO HOLDINGS INC - KPI	*AAA
JOHNSON CONTROLS INC - KPI	*BB+	GENTEX CORP - KPI	*AAA

Table 2. "Performance Current" Rating for the automotive industry

“Performance” Trend Rating 2,007-2,012 Vs 1501 Company

Component Stocks Ticker symbol	Company	GICS Sector	Last Report Period				
F	FORD MOTOR CO - KPI	Auto & Suppliers	DEC 2,012Q1				
Rating Performance							
*B+			The higher, the better				
	Performance Trend (Percentile 39.77%%)						
	39,77%						
			F	0,25	0,5	0,75	%1501 Company
		EVA Momentum Current = $\Delta\text{EVA}/\text{Trailing Sales}$	0,53%	-0,47%	0,57%	1,99%	48,63%
		5-Year EVA Momentum	1,39%	-0,30%	0,28%	1,05%	80,61%
		EVA Margin (EVA/Sales) Current	0,80%	-0,96%	1,68%	4,63%	41,37%
		Delta EVA Margin	0,50%	-0,64%	0,30%	1,47%	55,03%
		EVA Margin 4 Qtrs	0,30%	-1,38%	1,38%	4,35%	38,04%
		Profitable Growth	0,04%	-0,05%	0,13%	0,60%	39,91%
		Sales Growth TFQ	5,13%	2,99%	9,27%	17,28%	32,91%
		5-year Delta EVA Margin	7,04%	-1,97%	0,41%	2,97%	90,01%
		EVA Margin 20 Qtrs Back	-6,24%	-1,11%	1,26%	4,14%	10,39%
		5 Year Profitable Growth	-0,10%	-0,07%	0,50%	2,36%	24,25%
		5-year Sales Growth	-11,9%	5,32%	30,74%	73,40%	11,86%

Table 3. “Performance” Trend Rating 2,007-2,012 Vs 1501 Company

Rating “Performance” current 2,012 Vs 1501 Company

Component Stocks Ticker symbol	Company	GICS Sector	Last Report Period				
F	FORD MOTOR CO - KPI	Auto & Suppliers	DEC 2,012Q1				
Rating Performance							

*B+			The higher, the better				
	Performance Current 2012 (Percentile 39.44%)						
	39.44%						
			F	0.25	0.5	0.75	%1501 Company
		EVA Momentum Current = Δ EVA/ Trailing Sales	0.53%	- 0.47%	0.57 %	1.99%	48.63%
		EVA Margin (EVA/Sales) Current	0.80%	- 0.96%	1.68 %	4.63%	41.37%
		Profitable Growth	0.04%	- 0.05%	0.13 %	0.60%	39.91%
		Sales Growth TFQ	5.13%	2.99%	9.27 %	17.28 %	32.91%

Table 4. “Performance” current Rating 2,012 Vs 1501 Company

Rating “Performance” Trend 2,007-2,012 Vs Industry

Component Stocks Ticker symbol	Company	GICS Sector	Last Report Period				
F	FORD MOTOR CO - KPI	Auto & Suppliers	DEC 2,012Q1				
Rating Performance							
*BB+				The higher, the better			
	Performance Trend (Percentile 53.57%%)						
	53.57%						
			F	0.25	0.5	0.75	% Industry
		EVA Momentum Current = Δ EVA/ Trailing Sales	0.53%	- 0.47%	0.57%	2.01%	64.29%
		5-Year EVA Momentum	1.39%	- 0.31%	0.28%	1.05%	92.86%
		EVA Margin (EVA/Sales) Current	0.80%	- 1.05%	1.68%	4.62%	50.00%

		Delta EVA Margin	0.50%	-	0.65%	0.31%	1.50%	53.57%
		EVA Margin 4 Qtrs	0.30%	-	1.42%	1.33%	4.33%	46.43%
		Profitable Growth	0.04%	-	0.05%	0.13%	0.60%	46.43%
		Sales Growth TFQ	5.13%	2.84%	9.12%	17.35%		10.71%
		5-year Delta EVA Margin	7.04%	-	1.99%	0.40%	2.99%	100.00%
		EVA Margin 20 Qtrs Back	-6.24%	-	1.14%	1.26%	4.14%	3.57%
		5 Year Profitable Growth	-0.10%	-	0.09%	0.48%	2.37%	39.29%
		5-year Sales Growth	-11.9%	5.29%	30.47%	74.24%		25.00%

Table 5. “Performance” Trend Rating 2,007-2,012 Vs Industry

Rating “Performance” current 2,012 Vs Industry

Component Stocks Ticker symbol	Company	GICS Sector	Last Report Period				
F	FORD MOTOR CO - KPI	Auto & Suppliers	DEC 2,012Q 1				
Rating Performance							
*B+				The higher, the better			
	Performance Current 2012 (Percentile 39.26%)						
	39.29%						
			F	0.25	0.5	0.75	% Industry
		EVA Momentum Current = Δ EVA/ Trailing Sales	0.53%	-	0.57%	2.01%	64.29%
		EVA Margin (EVA/Sales) Current	0.80%	-	1.68%	4.62%	50.00%
		Profitable Growth	0.04%	-	0.13%	0.60%	46.43%
		Sales Growth TFQ	5.13%	2.84%	9.12%	17.35%	10.71%

Table 6. “Performance” current Rating 2,012 Vs Industry

Utilized rating classes

Rating	*D	*C	*C	*CC	*CC	*CC	*C+	*B-	*B	*B+	*B-	*B	*BB	*BB	*BB	*BB	*BB	*BB	*A-	*A	*A+	*A	*A	*A	*AA
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Table 7. Utilized rating classes

Class *D = lowest rating (security selling is recommended);

Class *AAA = the best rating (security buying is recommended)

"Performance" Trend and "Performance" Current Ratings, calculated for the companies in the Auto & Suppliers field

In the table below, we present the "Performance Trend" and "Performance Current" ratings for the "Auto & Suppliers" field for the cumulative period 2,007-2,012 (based on EVA performance indexes).

Company	TIC	FYE	Last Report Period	Industry	Performance Trend	Performance Current 2012
FORD MOTOR CO - KPI	F	DEC	2012Q1	Auto & Suppliers	*B+	*B+
VISTEON CORP - KPI	VC	DEC	2012Q1	Auto & Suppliers	*B-	*CCC+
GOODYEAR TIRE & RUBBER CO - KPI	GT	DEC	2012Q1	Auto & Suppliers	*CCC-	*B-
DELPHI AUTOMOTIVE PLC - KPI	DLPH	DEC	2012Q1	Auto & Suppliers	*BBB-	*A+
DANA HOLDING CORP - KPI	DAN	DEC	2012Q1	Auto & Suppliers	*CCC+	*B+
COOPER TIRE & RUBBER CO - KPI	CTB	DEC	2012Q1	Auto & Suppliers	*B	*B-
LEAR CORP - KPI	LEA	DEC	2012Q1	Auto & Suppliers	*B+	*BBB-
AMERICAN AXLE & MFG HOLDINGS - KPI	AXL	DEC	2012Q1	Auto & Suppliers	*BB	*BBB
TENNECO INC - KPI	TEN	DEC	2012Q1	Auto & Suppliers	*BB	*BB
SUPERIOR INDUSTRIES INTL - KPI	SUP	DEC	2012Q1	Auto & Suppliers	*B-	*B-
SHILOH INDUSTRIES INC - KPI	SHLO	OCT	2012Q2	Auto & Suppliers	*B	*BB-
STANDARD MOTOR PRODS - KPI	SMP	DEC	2012Q1	Auto & Suppliers	*B-	*CCC+
FUEL SYSTEMS SOLUTIONS INC - KPI	FSYS	DEC	2012Q1	Auto & Suppliers	*CCC	*CCC+
STONERIDGE INC - KPI	SRI	DEC	2012Q1	Auto & Suppliers	*CCC+	*BB-
MODINE MANUFACTURING CO - KPI	MOD	MAR	2011	Auto & Suppliers	*CCC-	*B-
DORMAN PRODUCTS INC - KPI	DORM	DEC	2012Q1	Auto & Suppliers	*AA+	*AA-
DREW INDUSTRIES INC - KPI	DW	DEC	2012Q1	Auto & Suppliers	*BB-	*BBB
BORGWARNER INC - KPI	BWA	DEC	2012Q1	Auto & Suppliers	*AA-	*AA
WINNEBAGO INDUSTRIES - KPI	WGO	AUG	2012Q3	Auto & Suppliers	*CCC-	*B
AUTOLIV INC - KPI	ALV	DEC	2012Q1	Auto & Suppliers	*BBB+	*BBB-
JOHNSON CONTROLS INC - KPI	JCI	SEP	2012Q2	Auto & Suppliers	*BB-	*BB+

Company	TIC	FYE	Last Report Period	Industry	Performance Trend	Performance Current 2012
GENTEX CORP - KPI	GNTX	DEC	2012Q1	Auto & Suppliers	*AA+	*AA+
THOR INDUSTRIES INC - KPI	THO	JUL	2012Q3	Auto & Suppliers	*BB	*BBB

WABCO HOLDINGS INC - KPI	WBC	DE C	2012Q1	Auto & Suppliers	*AA	*AA
TRW AUTOMOTIVE HOLDINGS CORP - KPI	TRW	DE C	2012Q1	Auto & Suppliers	*BB+	*BBB-
FEDERAL-MOGUL CORP - KPI	FDM L	DE C	2012Q1	Auto & Suppliers	*CCC-	*CCC
HARLEY-DAVIDSON INC - KPI	HOG	DE C	2012Q1	Auto & Suppliers	*BBB	*AA
GENERAL MOTORS CO - KPI	GM	DE C	2012Q1	Auto & Suppliers	*B+	*BB+

Table 13. "Performance Trend" and "Performance Current" Rating (authors' calculations)

In the table below is shown the case of the APPLE company operating in the Computers & Peripherals field. The calculated rating for APPLE refers to the period September 2,007 to September 2,012 and is calculated for the following performance indicators: EVA Momentum Current = $\Delta\text{EVA} / \text{Trailing Sales}$, 5-Year EVA Momentum, EVA Margin (EVA/Sales) Current, Delta EVA Margin, EVA Margin 4 Qtrs, Profitable Growth, Sales Growth TFQ, 5-year Delta EVA Margin, EVA Margin 20 Qtrs Back, 5 Year Profitable Growth, 5-year Sales Growth. This type of rating is called Rating Performance (which should be as large as possible).

In the case of APPLE, the calculated rating compared to the 1501 companies is *AAA. The APPLE Company has the highest performance of most of the 1,501 companies. The rating includes the data of 2,012 and the trends of the analyzed performance indexes for 2,007-2,012.

"Performance" Trend Rating calculated for company APPLE versus filtered Russell 3,000

Component Stocks Ticker symbol	Company	GICS Sector	Last Report Period				
AAPL	APPLE INC - KPI	Computers & Peripherals	2,012Q2				
Rating Performance							
*AAA				The higher, the better			
	Performance (Percentile 100%)						
	100,00%						
			AAPL	0.25	0.5	0.75	%1501 Company
		EVA Momentum Current = $\Delta\text{EVA} / \text{Trailing Sales}$	15,69%	- 0.47%	0.57%	1.99%	99,20%
		5-Year EVA Momentum	23,41%	- 0.30%	0.28%	1.05%	99,93%
		EVA Margin (EVA/Sales) Current	19,33%	- 0.97%	1.68%	4.63%	98,40%

	Delta EVA Margin	3,55%	0.64%	0.31%	1.47%	91,81%
	EVA Margin 4 Qtrs	15,78%	1.38%	1.38%	4.35%	97,40%
	Profitable Growth	12,14%	0.05%	0.13%	0.60%	99,67%
	Sales Growth TFQ	62,79%	2.99%	9.27%	17.28%	98,20%
	5-year Delta EVA Margin	8,85%	1.97%	0.41%	2.97%	92,74%
	EVA Margin 20 Qtrs Back	10,48%	1.11%	1.26%	4.14%	92,80%
	5 Year Profitable Growth	108,15%	0.07%	0.50%	2.36%	100,00%
	5-year Sales Growth	559,50%	5.32%	30.74%	73.40%	99,60%

Table 8. “Performance” Rating for company APPLE (authors’ calculations)

CONCLUSIONS

In this paper we presented two types of ratings, calculated by the percentiles technique, based on performance indexes. The ratings were calculated based on the financial data corresponding to years 2007, 2011, and 2012, and the used companies are listed in the filtered Russell 3000 index.

Each rating type was calculated both by comparison to the filtered Russell 3000 database and by comparison to the industry each company belongs to. The final classification of performance was obtained by splitting the results in 22 classes of rating: from *D (the lowest performance) to *AAA (the best performance).

The research results can be interpreted as follows:

- The better the performance rating (tending to *AAA), the better the “true” performance, EVA-based (performance indexes calculated based on EVA);
- The lower the performance rating (tending to *D), the lower the “true” performance - the EVA-based (performance indexes calculated based on EVA);
- if an investor is interested in the financial performance of companies and wishes to invest in a security listed on the stock exchange, it is advisable for that investor to take into account the EVA-based “actual performance”, the “Performance Trend” rating and the “Performance Current” rating;
- If an investor is interested in the EVA-based general rating of companies (performance rating, risk rating, value added marketing rating and general performance-risk-value rating), it is advisable for that investor to invest in securities which have ratings associated to them, with values as good as possible;

Using the percentiles technique, we achieved a rating classification for all companies in the Russell 3000 database. The calculation of the EVA-based rating can also be done for the rest of the companies which are not included in the Russell 3000 list.

The model is valid for all the listed companies which adopt EVA as a performance index instead of Net Income.

The EVA-based rating is useful both for company owners who hold “decision-making on management” and for the capital market investors. This type of rating is a “tool of the durable development of companies” and helps investors in making better decisions on investing or non-investing in various securities.

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