

CPI, for corporate performance index, is a summary score of financial excellence that rates a company against its industry peers on a percentile scale. It tends to confirm a company's TSR rank when the rank is right, challenges TSR when it is wrong, and explains the factors that are determining TSR in any case.

Free CPI reports on 20,000 global tickers are available at <http://pub.evadimensions.com/cpiexpress>

In this first issue of CPI Insights, we explain the logic behind the CPI score and illustrate it with an application to U.S. restaurants. In future issues, which we plan to release every week or two, we will apply CPI to companies and sectors of note and report observations from our data file of 20,000 global tickers.

Total shareholder return, or TSR has become an important board-room metric, with over half the firms in the S&P500 using it to determine incentive pay, up from fewer than one in five a decade ago. Yet **TSR is a deeply flawed statistic:**

1. It overrates weak companies that merely recovered from depressed valuations
2. It unfairly demotes elite firms that have slipped, even slightly, or that failed to live up to exuberant expectations.
3. It's distorted by leverage. Even if two firms perform the same, the one with more debt and less equity produces a higher TSR on the upside and lower one on the downside. The more leveraged TSR is riskier, less predictable, not as sustainable, and cannot be fairly compared with TSRs of less leveraged firms.
4. TSR is typically computed as the return earned by a shareholder who held the stock throughout a period, ignoring the returns earned by those who entered or exited the stock during the period. It is the return for a shareholder, but not for the shareholders, plural. But management should take care of all.
5. TSR is a point-to-point indicator. It's based on stock price changes over a given interval, which is a little like judging climate change by taking the temperature on two days separated by three years.
6. TSR is silent about how managers can make better decisions. It is a way to keep score, not a formula to help managers win the game.

Enter CPI, for the Corporate Performance Index. It is a four-pronged test that accurately sums up the totality of corporate performance from a shareholder point of view in a composite percentile score.

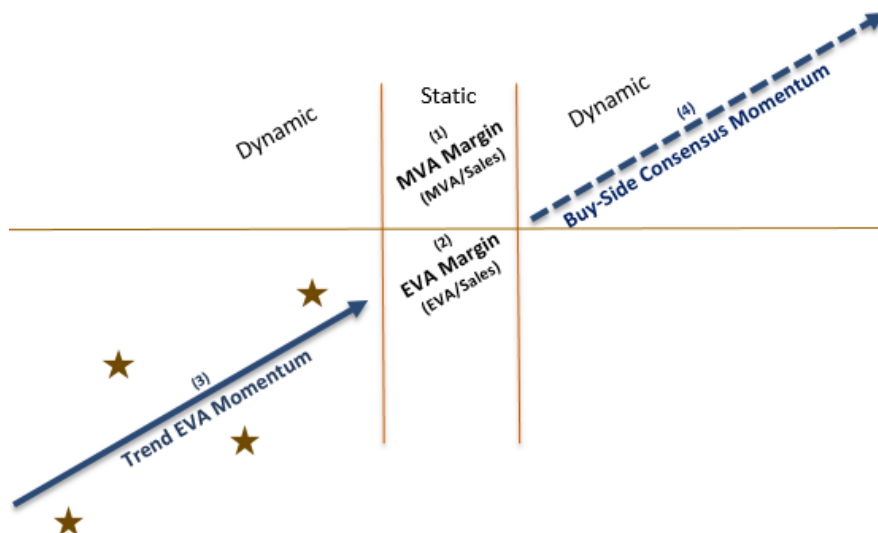
- CPI is strongly correlated to TSR rankings for about 60% of public companies. In the main it tends to add weight and credibility to the TSR rating while revealing the performance factors that are determining it.
- 40% of the time, though, CPI provides a different and usually far more accurate verdict of how well a company is doing.

That's because **CPI does things TSR doesn't.**

1. It considers a company's accumulated track record and general standing among its peers. It's not just a transient point-to-point measure.
2. CPI also follows how well the business is performing. It looks though debt/equity blends to examine how effectively managers are allocating and managing all the capital placed at their disposal.
3. It is balanced, considering an array of indicators concerning corporate performance and investor confidence.
4. It is informative, revealing the underlying factors that determine TSR, and which are for the most part much more directly under management's control, even by line of business.

CPI considers four key ratios in developing a single summary score, which are:

CPI is a Balanced Scorecard of Key Financial Indicators



1. **MVA Margin, a measure of wealth creation:** this is the firm's total market value premium to its book capital, stated per unit of sales (we call the valuation premium MVA, for market value added). The bigger the ratio, the more wealth and franchise value have been created for the size of the company.
2. **EVA Margin, a measure of profitability:** this is the firm's economic profit, or EVA, expressed as a profit margin ratio to sales (standing for economic value added, EVA is the profit remaining after deducting a full weighted-average cost-of-capital interest charge on the firm's debt and equity capital, and after repairing accounting distortions that run counter to business logic¹). EVA Margin consolidates price power, operating efficiency, and the quality of asset management into a net score of business model productivity.
3. **Trend EVA Momentum, a measure of the rate of profitable growth:** computed by dividing the slope of a regression line run through the past four years of EVA by the average of sales in the first three years. It is a reading of true profit progress over the full cost of capital.
4. **Buy-Side Consensus Momentum, a measure of strategic position:** this is the long-run trend EVA growth rate that investors have factored into the firm's share price.

There's an important linkage among the four CPI metrics.

¹ For example, with EVA, R&D and advertising spending are written off over time, generally over 3-5 years, and the cost of capital is applied as a charge to the unamortized balance. EVA thus does not look better if management cuts the spending to make a near term earnings goal, and nor does it suffer if management steps up the spending for strategic opportunities. Managers are given the time needed to make investments in innovation and customer connections pay off. Impairment charges are added back, so that they have no effect on EVA. Restructuring charges, too, are added back to earnings and to capital. EVA thus rewards companies that restructure promptly and efficiently. EVA also is measured assuming excess cash is paid out, that leased assets are owned, that taxes are smoothed at a normal rate, and that the true pension cost is the service cost, for example. The result is a better, steadier and more comparable measure of true economic profit.

- MVA measures the owner’s wealth. It’s the difference between the money put into a business and the value coming out of it. Said another way, MVA is franchise value. It’s the value of the business above the resources put into it.
- TSR comes from increasing MVA. It is simply the rate of wealth creation, per unit of value.
- MVA, in turn, comes from EVA. It is mathematically equal to the present value of the EVA profits the market forecasts a firm will earn. A firm with no EVA prospects will trade at or close to book, and one with positive EVA prospects will trade at an increasing premium depending on the forecast growth rate in EVA.
- This means that increasing EVA is the real key to creating wealth and driving TSR, which makes it an ideal tool to manage a business and make better decisions. It is also an ideal compensation metric.

CPI distills EVA and MVA into an index of financial excellence. It assigns the highest scores to firms that, compared to peers, have achieved the best records of profitable growth, that are presiding over the most valuable and profitable business franchises, and that investors believe are strategically best positioned to continue robust growth above the cost of capital for years to come.

Firms like those are truly excellent, no matter what their recent TSR may be, and firms with low or declining CPI scores are really in trouble, even if TSR happens to look good. Let’s look at the Sonic Corporation as a case study.

The top chart plots:

- ✓ Sonic’s overall market value, or enterprise value, net of excess cash, as the gray bar
- ✓ The total capital tied up in its business assets, again net of excess cash, and net of trade funding, as the blue bar.

It’s the spread the counts. That’s MVA, the market value added to the firm’s capital, a measure of aggregate owner wealth and franchise value.

It is plotted as the blue bar on the lower chart. It plunged in 2007, but starting in 2012 it registered a sharp rebound before levelling off and cooling to a current \$1.3 billion value.

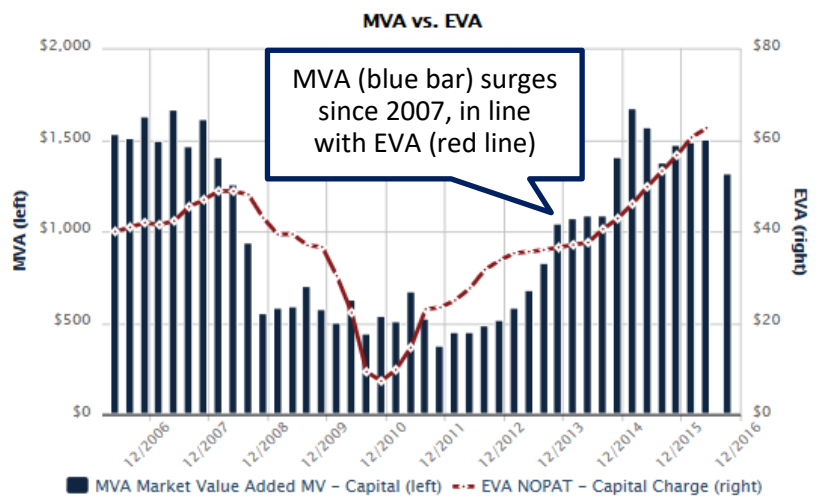
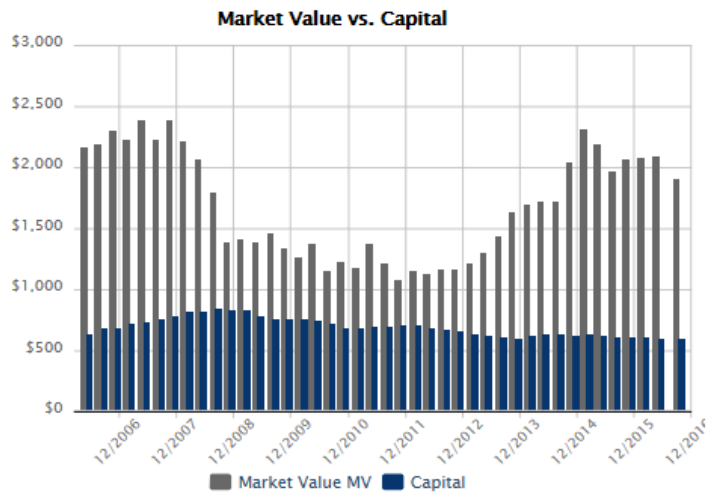
The EVA profits, net of the cost of capital, are plotted as the red line on the right scale.

- ✓ Note that MVA has generally danced to the EVA music. Since MVA is the present value of expected EVA, *changes* in EVA tend to be mirrored as *changes* in MVA.
- ✓ The rebound in MVA over the past five years, for example, can be traced to the surge in EVA to what is now Sonic’s highest level ever, over \$60 million in economic profits.

Sonic’s CPI – from weighting the percentile scores for the four-key metrics-- is currently 70 on a 100-point scale compared to all 48 public US restaurant chains with at least 3 years of data.

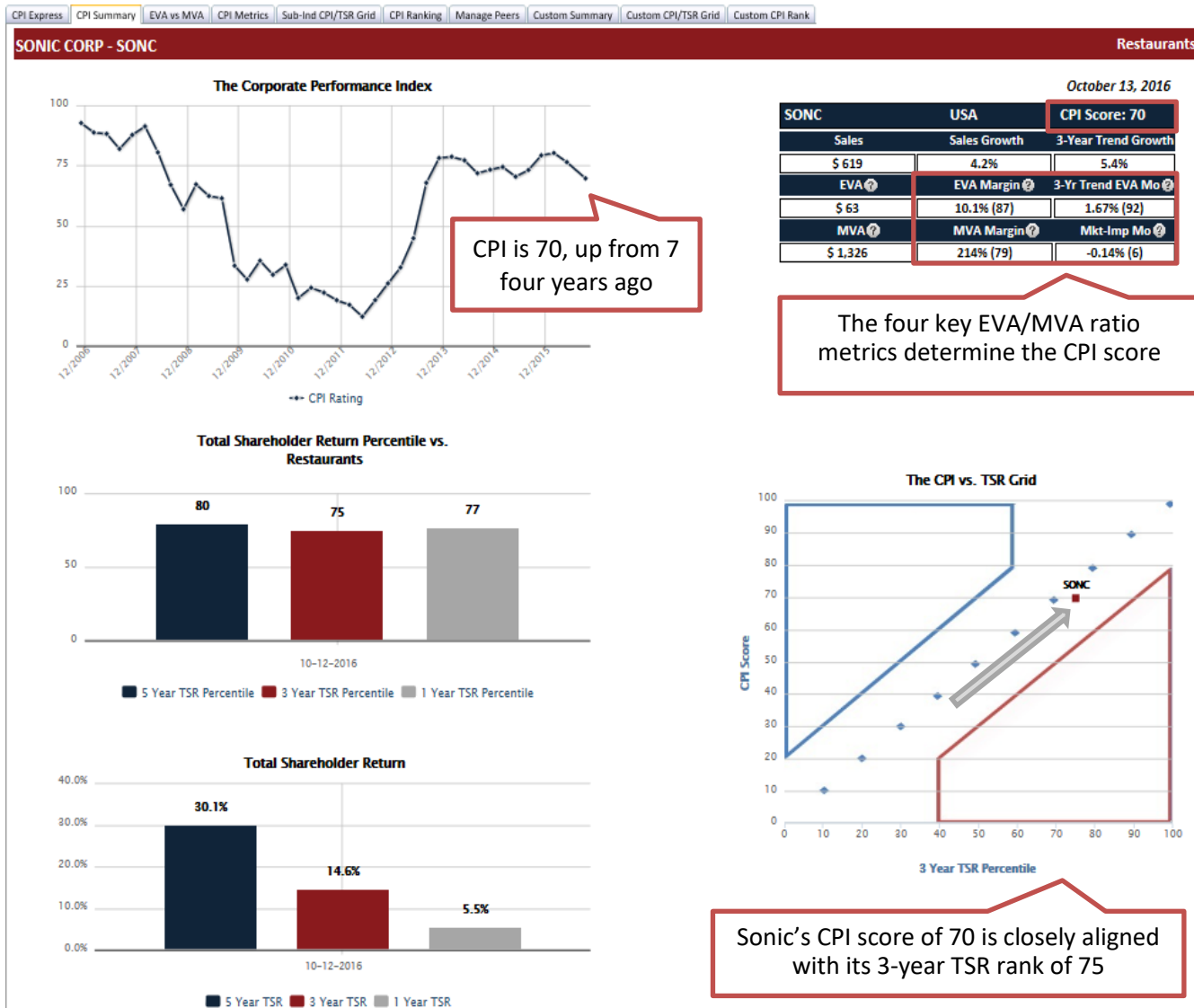
SONIC CORP - SONC

The Key EVA MVA Charts



As is shown in the upper-right summary table below, Sonic's CPI score is function of the four key ratios:

1. **EVA Margin** is a whopping 10.1%, 87th percentile vs. its restaurant peers (for reference, the S&P500 median EVA Margin is typically 2.5%, the 75th percentile is 6%, and the 90th percentile is 12%)
2. **MVA** is \$2.14 per each \$1 of sales, a 79th percentile wealth premium vs. peers
3. **Trend EVA Momentum** of 1.67%, i.e., Sonic's EVA increased at the average rate of 1.67% of sales per year over the past three years, a 92nd percentile accomplishment (S&P500 norms are 0.4% Momentum a year for the median firm, 1.5% for the 75th, and 3-4% or the 90th)
4. The **long-run EVA growth implied by the company's current stock price** is the one blemish. Investors are projecting that Sonics' EVA will *deteriorate* at the rate of .14% of sales per year, or just 6th percentile; Put another way, 94% of restaurant stocks are believed to have brighter growth prospects.

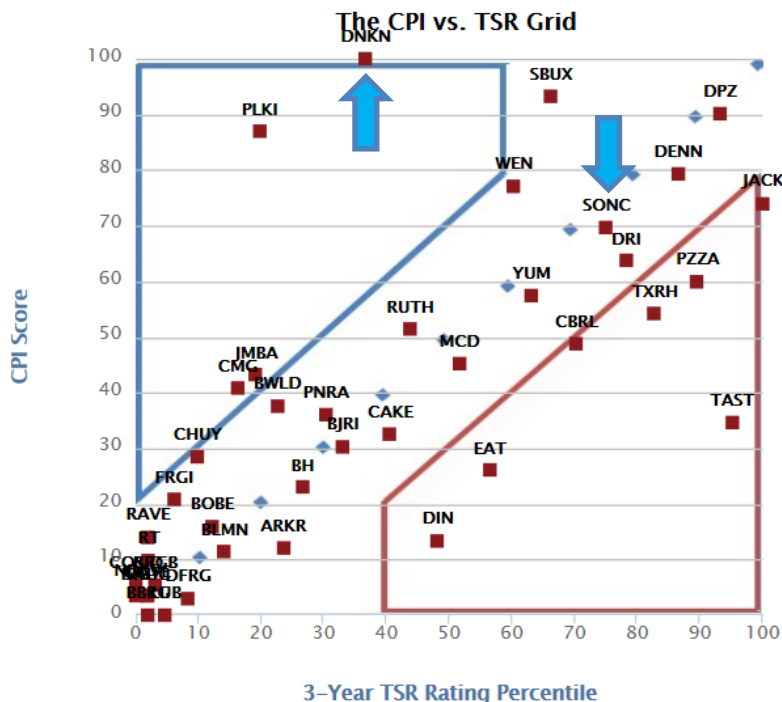


The lower-left report section presents Sonic's 1, 3, and 5 year TSR and the corresponding percentile rank versus peers. Sonic's 3-year TSR averaged 14.6% a year, a 75th percentile rank. The lower-right chart plots the 3-year TSR rank left-to-right and the current CPI score north-south. Sonic plots right along the diagonal. Its EVA/CPI score confirms its relative TSR rank among industry peers, and as important, explains it. Sonic's upper quartile TSR is unsurprising in light of the firm's outstanding profitability, impressive growth trend, and the massive amount of shareholder wealth and franchise value it has created.

The CPI analysis also pinpoints the one notable weak spot, the worrisome fact that investors believe that Sonic’s EVA has peaked, and will soon come under intense competitive pressure. Only 9 of 48 restaurants are priced for a deterioration in EVA, and only 2 of those are judged to have worse prospects than Sonic. That statistic should keep the board awake at night despite the firm’s favorable TSR and CPI rating.

The chart at right plots the US restaurant peer group on the CPI vs. TSR grid. It is evident that CPI and TSR are generally quite strongly aligned in the sector—37 of 48 firms, or 77%, fall within lower-left to upper-right band where the two are in general agreement. As was said, CPI does tend to confirm TSR. Boards indeed can reward managers for increasing EVA with confidence that will end up aligning pay with performance.

The grid also reveals outliers where CPI and TSR disagree. The one noted is Dunkin’ Brands Group (DNKN), which plots along the top rail, deep in the blue zone, which is the territory containing the stocks which CPI rates much more favorably than TSR. DNKN is the highest CPI-rated company in the industry, and yet its 3-year TSR rank is just 37, not terrible, but not at all good and certainly misrepresentative of just how outstanding Dunkin’ is. Compare Dunkin’s vital EVA statistics on the left with Sonic’s on the right:

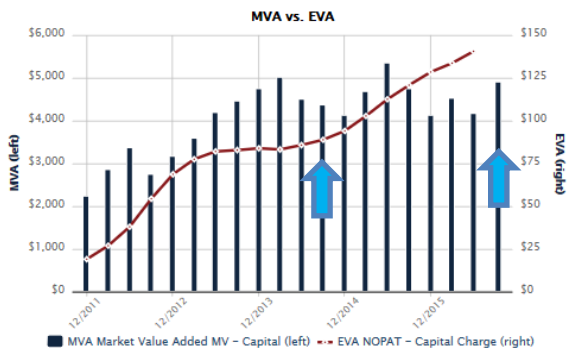


A Tale of Two Chains

DNKN	USA	CPI Score: 100
Sales	Sales Growth	3-Year Trend Growth
\$ 820	4.7%	6.5%
EVA	EVA Margin	3-Yr Trend EVA Mo
\$ 140	17.1% (100)	2.76% (97)
MVA	MVA Margin	Mkt-Imp Mo
\$ 4,906	599% (98)	0.93% (87)

SONC	USA	CPI Score: 70
Sales	Sales Growth	3-Year Trend Growth
\$ 619	4.2%	5.4%
EVA	EVA Margin	3-Yr Trend EVA Mo
\$ 63	10.1% (87)	1.67% (92)
MVA	MVA Margin	Mkt-Imp Mo
\$ 1,326	214% (79)	-0.14% (6)

DNKN has established a much more profitable and valuable business franchise, generated a considerably greater growth trend in economic profits, and is projected to continue to grow EVA much more rapidly in years to come. It wins, and by a long shot, in every category. Yet its 3-year TSR has been considerably lower, 6.6% vs. 14.6%.



The chart of EVA vs. MVA at left explains why. Dunkin’ went public in July 2011, and by year end, MVA was running at \$2.1 billion. Observing the strong acceleration in EVA, investors revalued Dunkin’s MVA to \$4.5-\$5 billion over the next two years, fully expecting EVA growth would continue unabated. In fact, EVA paused, and MVA along with it, and while EVA has since reassumed an impressive growth trajectory, MVA remained relatively flat having already fully discounted the EVA revival, at least up to this point. 3-year TSR, based on the point-to-point change in MVA denoted by the blue arrows, was thus modest.

The key insight is this: TSR has more to do with the timing of when the market forecasts that value will be created than with the actual creation of value, which is factored into the CPI Score.

Key Takeaways

- ✓ **Monitor EVA and MVA**, the generation of economic profits and creation of shareholder wealth, as the two most essential performance measures for any company
- ✓ **Know your score!** What's your CPI, how is it trending, and how does it compare to peers?
- ✓ **What's the connection between CPI and 3-year TSR rank?**
 - Do the two align? Does CPI tend to confirm TSR?
 - Or does CPI provide a contrary signal, an indication of financial strength in the face of relative TSR weakness, serving as a counterpoint that can refute pay critics or unwanted activist overtures?
 - Or does CPI register weakness in the face of an inflated and unsustainable TSR, a red flag that can alert the board and top management to impending troubles?
- ✓ **Center board discussions** and performance benchmarking around the four essential ratio metrics that undergird CPI
 - Keep the conversations simple and focused on a succinct and truly balanced scorecard of financial excellence
- ✓ **CPI suggests – why not tie long-term incentives to the 3-year Trend EVA Momentum?**
 - That will fairly surely align pay to TSR while furnishing management with the incentive to use EVA in allocating capital and making decisions, and by line of business
- ✓ **Company managers should aim to increase EVA, by line of business, as the surest and most practical way to make better decisions and create more value**

Up Next – in the next installment of *CPI Insights*, we examine the 50 companies that plot deepest into the blue-zone – firms like Dunkin' Brands that are suffering from gaps between the positive attributes that CPI detects and the much lower TSRs they've produced in recent years.

Want a fuller explanation of EVA and CPI? Then tune into a 30 minute video-cast conducted by our CEO, Bennett Stewart. Click here: [Using the CPI Corporate Performance Index to Fix TSR Flaws](#)

Want *free* CPI reports and analyses of EVA vs. MVA on the 20,000 global tickers that we track with daily updates? Visit <http://pub.evadimensions.com/cpiexpress>

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Go DNKN

Enter a company name or ticker to access the CPI Snapshot Report and EVA vs. MVA chart

CPI Express | CPI Summary | EVA vs MVA | CPI Metrics | Sub-Ind CPI/TSR Grid | CPI Ranking | Manage Peers | Custom Summary | Custom CPI/TSR Grid | Custom CPI Rank

CPI Express Corporate Performance Index

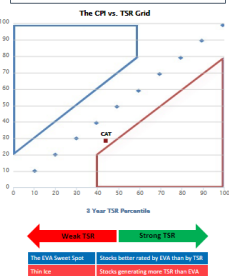
Ranking Company Performance by Economic Value

CATERPILLAR INC. - CAT Construction & Agricultural and Farm Machinery & Heavy Trucks



USA		CPI Score: 29	
Sales	Sales Growth	5-Year Trend Growth	
\$ 39,024	-21.6%	-10.8%	
EVA	EVA Margin	5-Yr Trend EVA Mo	
\$ 2.8	-6.5% (73)	-1.5% (73)	
MVA	MVA Margin	Mkt Imp Mo	
\$ 26,785	89% (73)	0.74% (73)	
Leverage	MVA Margin (3 Yr)	Mkt Imp Mo (3 Yr)	
0.7 (11)	8.9% (73)	0.0 (11)	
100th Percentile	3 Year Avg	3 Year Avg	
0.68 (11)	4.8% (44)	7.2% (8)	

CAT: 44 TSR rank and 29 CPI score agree -- is sub-par on the Financial Times table. Long-term TSR rank, EVA must be up as growth path.



CATERPILLAR INC. - CAT Construction & Agricultural and Farm Machinery & Heavy Trucks

The firm's overall market value, net of excess cash, is plotted as the gray bar, and the capital invested in its net business assets, also net of excess cash, is the blue bar.

It's the spread between the two, or MVA, that counts. If the spread is positive, the firm converted its available funds into more valuable activities, and added to the owners' wealth -- or else it has destroyed it.

Observe the blue bar: how aggressive was the investment in business assets -- in working capital, plant and equipment, investments, and intangible assets -- and did management invest the capital at the right time?

A major acquisition will appear as a one jump in capital. In such cases, did the added value cover the purchase price, or was owner wealth eroded?

The firm's MVA is plotted as the blue bar on the left-hand scale. It measures the owners' wealth, the firm's franchise value and the corporate aggregate MVA.

The firm's EVA profits net of the full cost of capital, and after fixing accounting distortions, is the red line plotted on the right-hand scale.

Look for a tilt. When EVA shows evidence of acceleration, it's a sign to follow in such, and regress it to other measures. The EVA or MVA are grouped. If generally below a long trend in EVA, the MVA and generate an outstanding TSR. With typical above, MVA and EVA tend to move in tandem, albeit with a lag.

For this reason, Fortune magazine dubbed EVA "the real key to creating wealth."

The chart plots the two main EVA drivers -- sales and the EVA/Gross Margin on the sales.

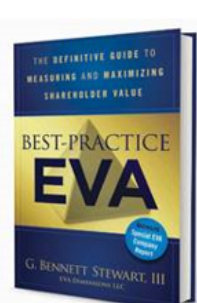
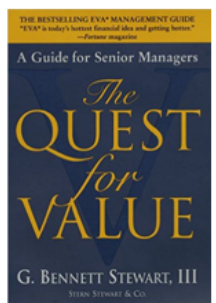
Look first to compare the current EVA Margin with the high points and low points over time. Is there clear upward trend for better or worse?

Next, is the EVA Margin positive, or negative, or generally close to zero (in a band of +/- 1-2%)? To create value, the margin will need to be at least 2%, less than that, and sales growth doesn't really count.

Note volatility. Does the firm's EVA Margin tend to increase when sales are off, and strongly rebound with a sales recovery? If so, that is a sign of fixed cost intensity, and, perhaps, a management team that is unable to transfer capital spending, in good times and its employees or hefty respond to downturns.

EVA Dimensions

- Bennett Stewart launches EVA with 1991 book, *The Quest for Value*
- Fortune magazine editors feature EVA on September, 1993 cover with headline, "EVA – It's the Real key to Creating Wealth"
- Hundreds of companies adopt EVA globally – Coca-Cola, AT&T, Equifax, Eli Lilly & Herman Miller, Monsanto, Halliburton, Brahma Beer (now AB InBev), Kao Brands (Japan), Lafarge, Port of Singapore Authority, Temasek, TATA Group, CEMEX, FEMSA, are a few
- EVA Dimensions spins out in 2006 to convert EVA to a new ratio framework, automate it with software and data, and serve corporations and investors
- Enhanced EVA model presented in the 2013 book, *Best-Practice EVA*
- Early corporate adopters include Dow Chemical, PepsiCo



EVA Dimensions is a financial technology and advisory firm. We help our clients to make better decisions and create more value with the power of EVA.

We license software that companies use to compute, analyze, benchmark and value EVA in reporting, planning and M&A applications, and that investors use to pick stocks and manage portfolios.

We also provide the training and support needed to transition management teams and directors onto EVA.