



Shenandoah Asset Management, LLC  
Economic Profitability Analysis  
(June 2009)

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**E**conomic Margin (EM) is a measure of a economic profitability that can be compared across time, companies, sectors and industries.

$$\text{Economic Margin} = \frac{\text{Operating Cash Flow less Capital Charge}}{\text{Inflation Adjusted Invested Capital}}$$

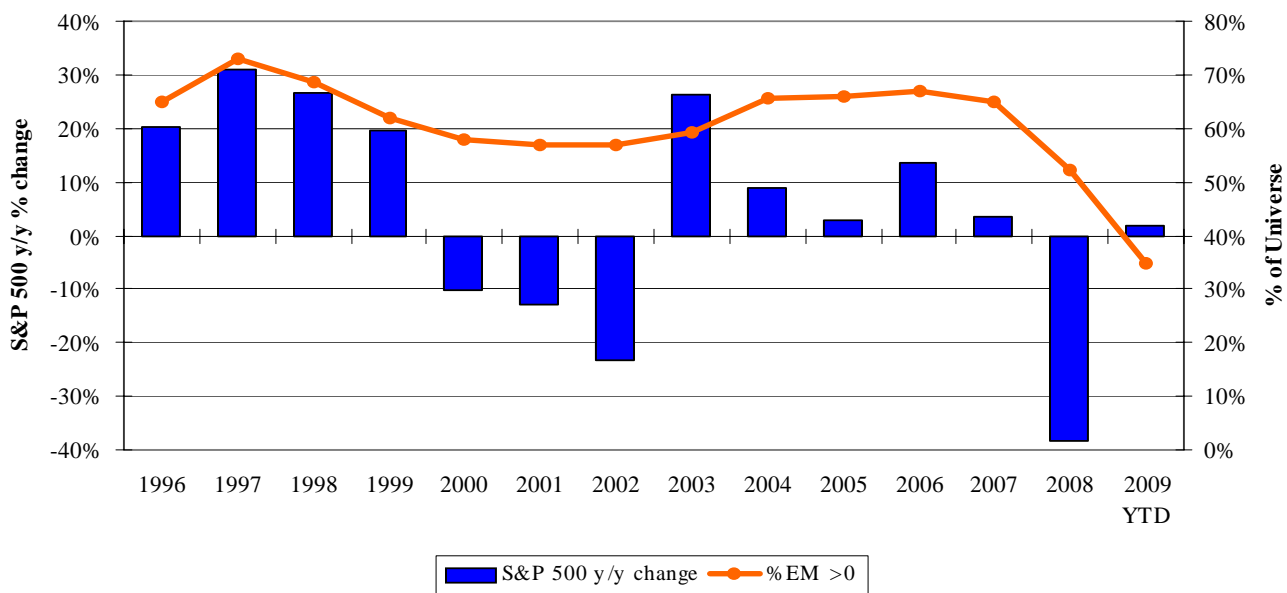
*Positive Economic Margins create wealth for the shareholder*

*Negative Economic Margins destroy wealth for the shareholder*

*Zero Economic Margins neither create nor destroy wealth for the shareholder*

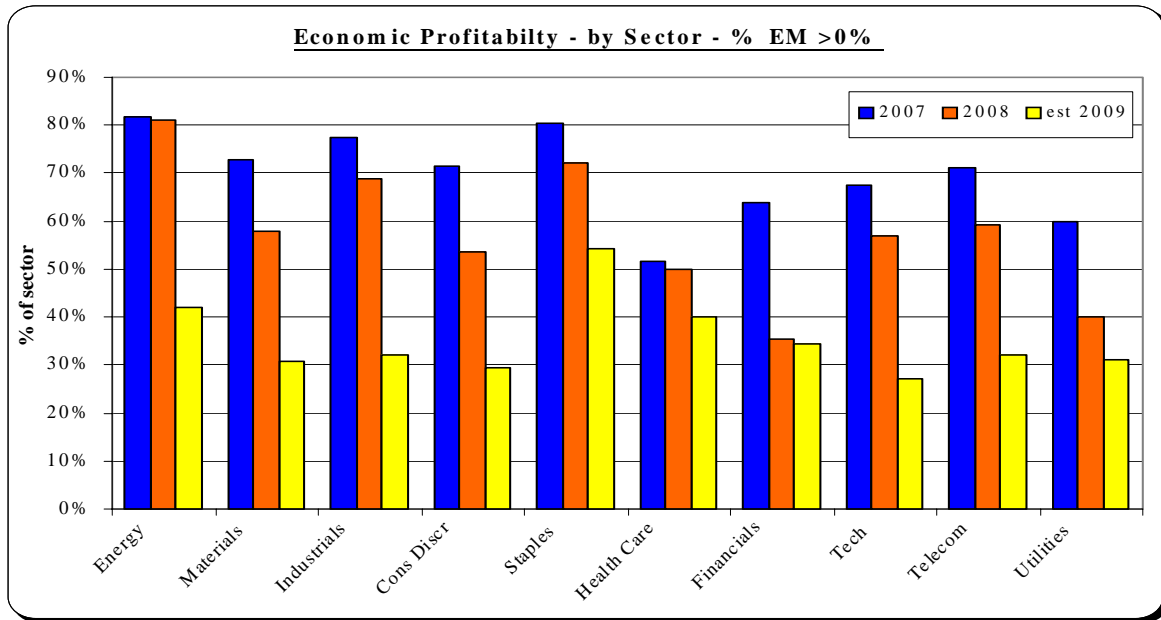
**E**conomic profitability (measured as the percentage of companies in our broad universe with an economic margin greater than zero) **peaked in 1997 (72%)** 3 to 4 years ahead of the bursting of the “technology bubble” and moved steadily lower until it **bottomed in 2000 (57%)** where it stayed through 2002. Equity performance was negative during this three year period as companies struggled to adapt their operations to the less robust economic environment. Due to improving economic conditions and leaner corporate operations, economic profitability began to move higher in 2003 and continued to do so through **2006** when it reached a **level of 67%**. However, by 2007, while earnings continued to move higher, economic profitability and equity market performance both began to show signs of fatigue. As they say, “the rest is history.”

**Breadth of Economic Profitability vs. Y/Y % change in the S&P 500 (price only)**

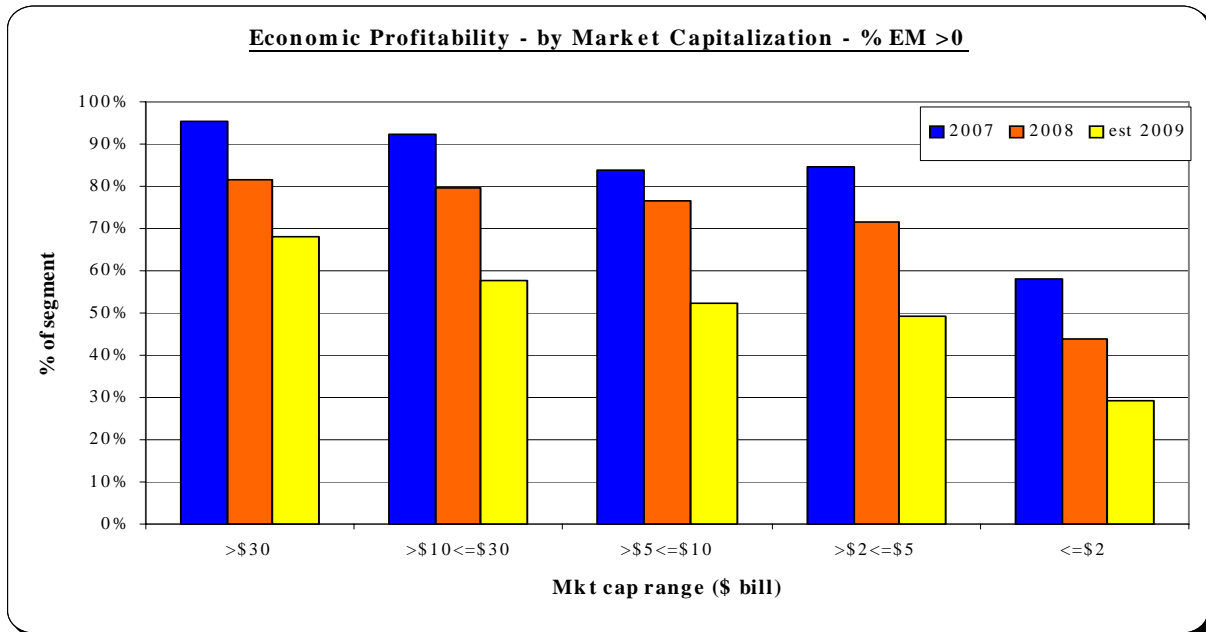


**B**ased on current forecasts, only 35% of the companies that comprise our broad universe will achieve economic profitability in 2009, down from 51% in 2008, 64% in 2007 and 67% in 2006 (peak in the most recent profitability cycle). It is not surprising that the most recent financial and economic weakness has resulted in a significant reduction of profitability. However, the severity of the drop in profitability is indicative of the swiftness that the twin disasters impacted companies. With little time for preemptive cost cutting or asset reductions, 2008 corporate profitability fell well below the 2000—2002 levels and is expected to fall considerably lower in 2009. Some improvement in profitability is forecast for 2010 (42% of companies), however; it will remain well below the historical average. The current low level of economic profitability is an indication that there is a considerable amount of “deadwood” still to be removed from corporate income statement and balance sheets. The extent of improvement in corporate profitability will be aided/hindered by the speed of the global economic recovery.

**The Financial sector took the hardest hit to economic profitability in 2008.** However, as we have noticed in our Earnings Momentum research, the non-financial sectors are now playing catch-up to the Financial sector. With that in mind, it is not surprising to see that the year/year deterioration in corporate profitability for non-financial companies is forecast to accelerate in 2009. While showing some sign of stabilizing, a recovery in Financial sector profitability is not expected to occur this year

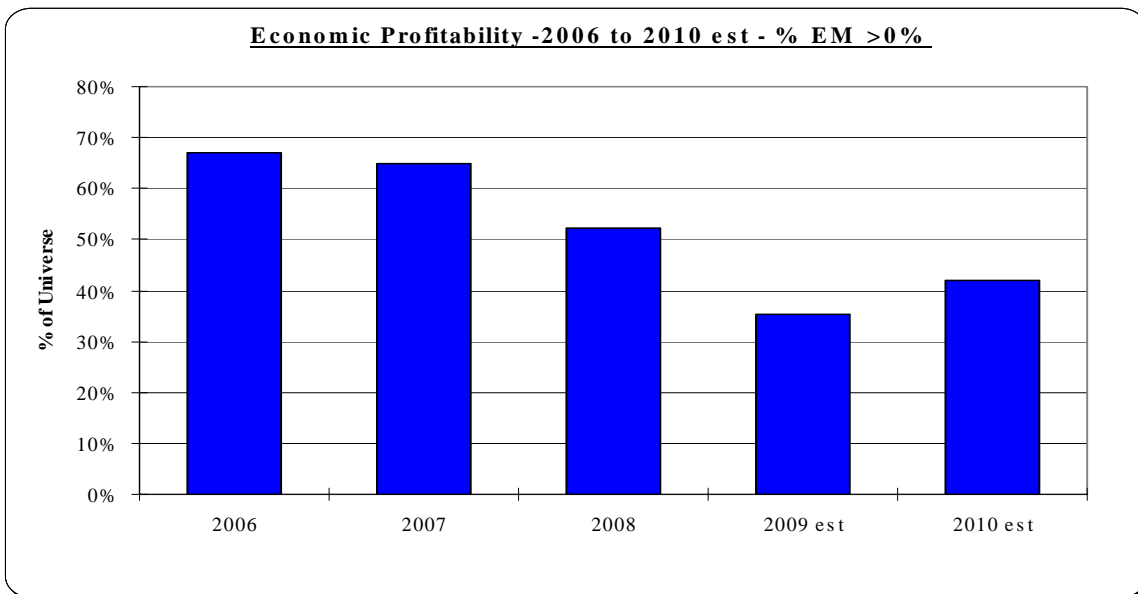


**A greater percentage of larger-cap companies vs. mid and smaller-cap companies have managed to operate profitably during the economic and financial meltdowns.** However, there has been a considerable decrease in the economic profitability of companies across all capitalization ranges from 2007 levels. As indicated in the accompanying chart, the larger cap segment of the universe contains a greater percentage of economically profitable companies vs. mid and small cap company segments. Also larger cap companies, while still considerable, have seen a less dramatic decrease in profitability, down 30% compared to 2007 levels vs. a 50% drop from 2007 levels for companies under \$2 billion.

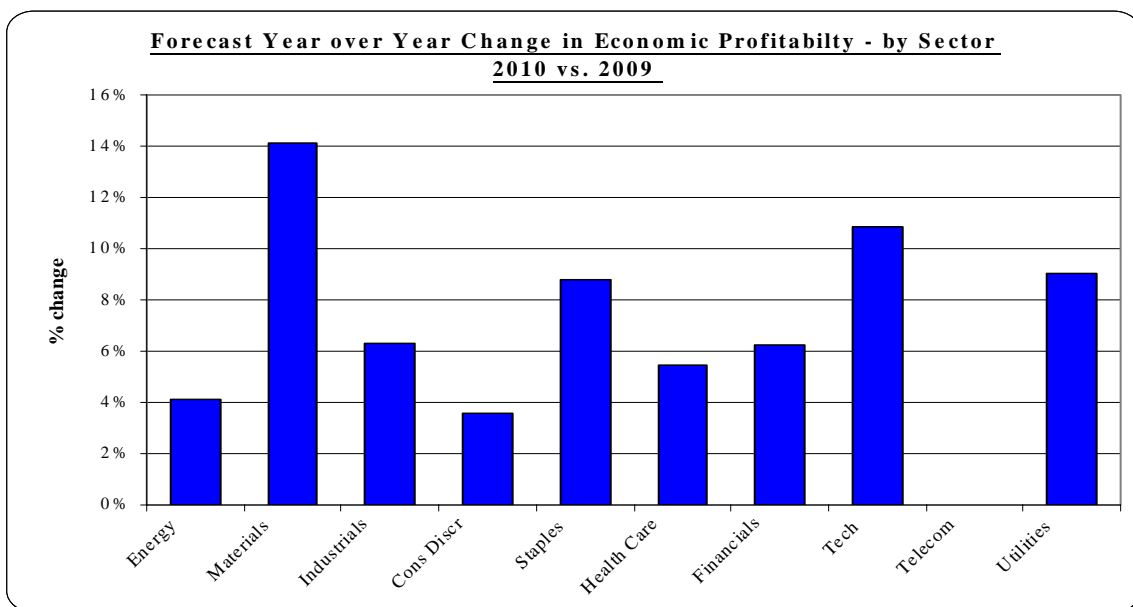


**W**hile current earnings estimates forecast above average year/year growth later this year and into 2010, the lack of significant improvement in near-term economic profitability may dampen broader equity market increases.

**B**ased on current forecasts, 2009 is expected to mark the trough in economic profitability for this cycle. Recent announcements regarding, cost cutting, restructuring or resizing of operations, mergers and acquisitions and of course bankruptcies are all examples of actions being taken by companies to increase economic profitability and/or to reduce the drag of unprofitable operations. That said, even with the considerable adjustments being made to increase corporate operating efficiency and capital utilization, the near-term improvement in corporate profitability is only expected to be moderate (not unlike what occurred in 2003). Only 42% of the companies that comprise our broad universe are forecast to record economic margins >0% in 2010, up only modestly from 35% in 2009.



**A**t the sector level, only the Materials and Technology sectors are forecast to see a double digit year/year increase in the percentage of companies that will be economically profitable in 2010 vs. 2009, albeit off a relatively low base. Average year/year improvement in the remaining sectors is forecast to be in the low to mid single digits.



Source: Economic Margin data is provided by Applied Finance Group (AFG).  
Universe size: 3,000 to 5,000 companies