



Earnings Models in the Post-Internet Bubble Period *(December 31, 2004 Update)*

In a study published in January, 2004, we documented the perverse earnings model performance from September, 2000, through mid-2003 and offered various opinions as to the causes of this anomaly. We now provide you with an update of that strategy as of 12/31/2004 along with good news: **Earnings are back!**

Due to copyright restrictions, we are unable to post the detailed summary on our website. A copy of the full study, including an analysis of various earnings models from other sources, is available upon request.

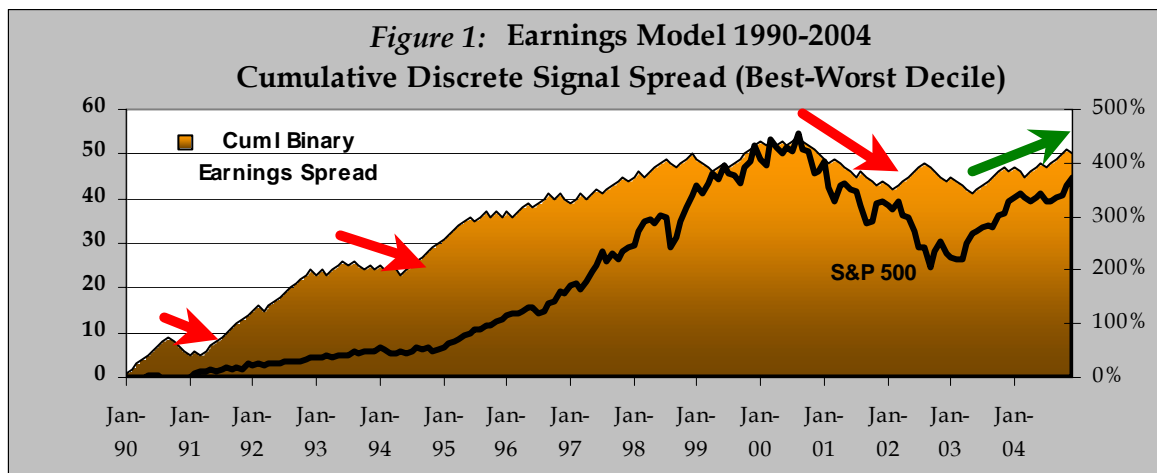
SUMMARY POINTS:

- Earnings models (estimate revision and earnings surprise) worked very well during the raging bull market of the 1990s with only minor periods of perverse performance in 1991 (recession) and 1994 (near recession).
- Earnings-driven strategies performed extremely poorly beginning in September, 2000; this coincides with the peak of the S&P 500 performance and subsequent bear market. Stocks with the most unattractive revision and surprise profiles actually out-performed the S&P 500 by approximately 6600 basis points (an average of +43% vs. -23% for the S&P) from September, 2000, through December, 2003! We believe this perverse performance was caused by three factors:
 - When the internet bubble burst in 2000, investors quickly retreated to the safety of deep value stocks (selling growth stocks).
 - Investors exhibited a lack of faith in Wall Street research given the endless stream of SEC investigations and allegations of fraud.
 - As the economy and market began to recover in late 2002 (and throughout 2003), investors favored low-quality stocks; they chose to buy beta rather than fundamentals as they speculated on the timing and duration of the market recovery.
- Returns for various earnings models from 9/2000 through 12/2004 were, as stated previously, very bad:
 - Estimate Revision models generated cumulative return spreads (return of the highest ranked decile minus the return of the lowest ranked decile) of approximately -50% over the period.
 - Earnings Surprise models were even worse, generating cumulative return spreads (return of the highest ranked decile minus the return of the lowest ranked decile) of approximately -65% over the period.
 - For the period from 9/2000 through 12/2001, the earnings models we studied (from multiple sources) generated perverse returns in fourteen of the sixteen months!
- The extraordinarily perverse performance of earnings models in the wake of the internet bubble can actually be attributed to this period from 9/2000 through 12/2001. Since early 2002, earnings models have actually generated flat-to-positive performance, including a strong year in 2004, with the notable exception of very bad performance in April, 2004, when interest rate worries led investors to shun all interest-sensitive stocks, regardless of fundamentals.
- **By including an analysis of the trading of corporate insiders (the Shenandoah Opt E/I model is the optimal combination of our Earnings and Insider models), we were able to minimize the damage over this difficult period and actually generate positive alpha!**

Earnings Models in the Post- Internet Bubble Period

Earnings-driven strategies generally performed poorly in the wake of the internet bubble meltdown, and our Earnings model was no exception. The chart in Figure 1 depicts a simple binary analysis of the performance of the Shenandoah Asset Management (SAM) Earnings model from 1/1/1990 through 12/31/2004.

- Stocks are deciled monthly by the SAM Earnings model
- Top decile stocks are those with the most positive earnings surprises and analyst estimate revisions. Bottom decile stocks exhibit the most negative earnings surprises and negative estimate revisions.
- In each month when the top decile out-performs the bottom decile, a score of +1 is awarded. When the bottom decile out-performs the top, a score of -1 is awarded.
- The cumulative S&P 500 return is included for reference (right axis).



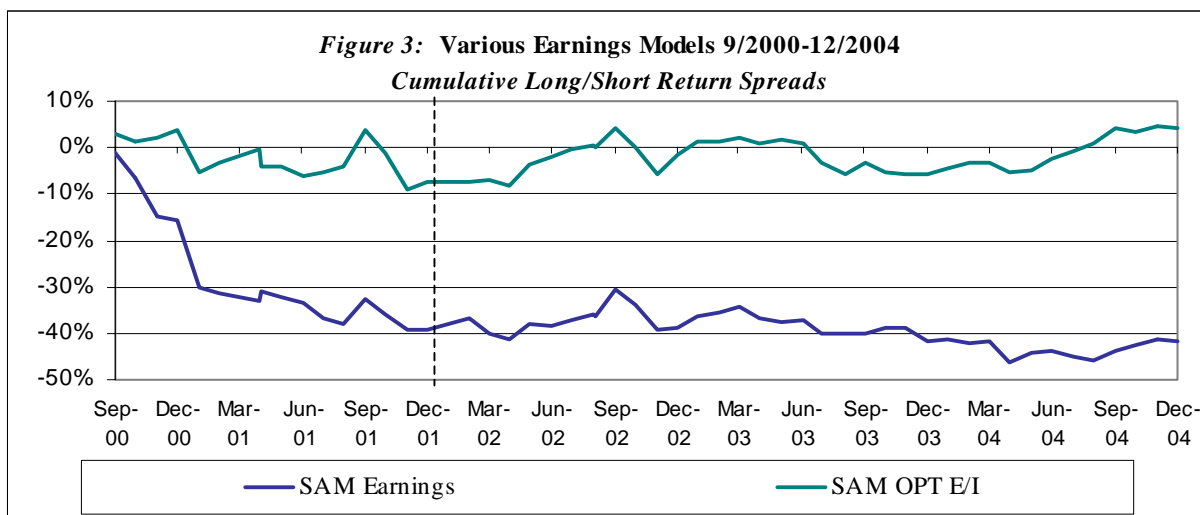
OBSERVATIONS

- The Earnings model worked very well during the raging bull market of the 1990s with only minor periods of perverse performance in 1991 (recession) and 1994 (near recession).
- The model performed extremely poorly beginning in September, 2000; this coincides with the peak of the S&P 500 performance and subsequent recession, bear market and recovery.
 - From 9/2000 to 2/2002, the stocks that exhibited the worst earnings performance (negative earnings surprises and falling analysts' estimates) out-performed the best decile in 15 of the 18 months!
 - The model staged a recovery in the second and third quarters of 2002.
 - The model faltered again during the low-quality (high beta) stock rally that drove the market returns from 10/2002 through mid-2003; beginning in 9/2002, the worst decile again out-performed the best in 8 out of the next 9 months.
 - Factors contributing to the perverse performance, we believe, included the shifting of investor preference from growth in the 1990s to deep value as the market plummeted after the dot-com bubble burst, a lack of faith in Wall Street analysts' estimates due to prominent scandals, and, finally, investors' preference for low-quality (high beta) stocks as the market began to recover in late 2002.
- **The Earnings model returned to favor in September, 2003, as the market rally began to broaden beyond the low-quality (high beta) stocks. Earnings remained in favor for the duration of 2004 with the exception of a huge drawdown (perverse performance) in April, 2004, as interest rate worries drove investors to sell any and all interest-sensitive stocks and industries regardless of fundamentals.**
- In the next segments of this report, we take a look at the performance of the Shenandoah earnings models.

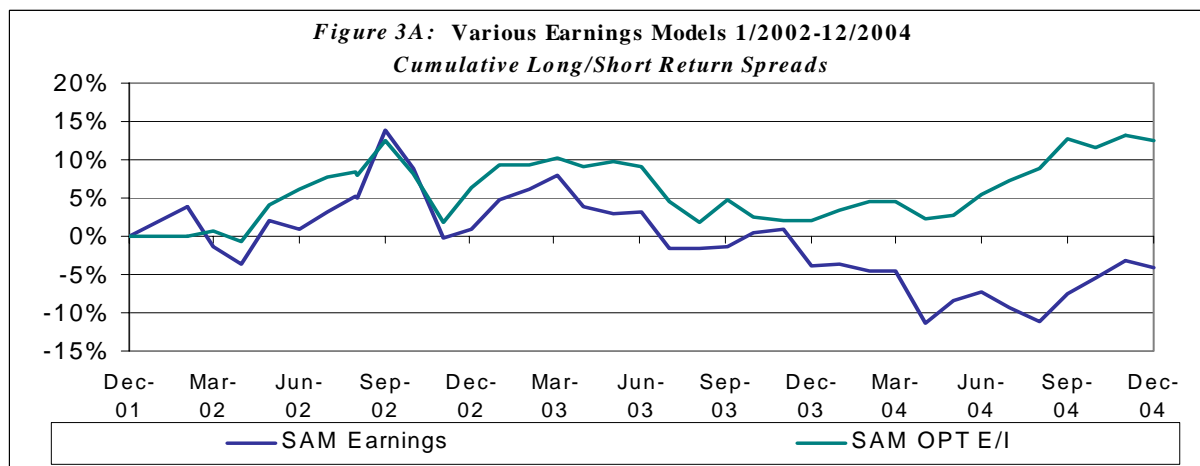
Shenandoah Earnings Models: 9/2000 through 12/2004

The chart in Figure 3 shows the performance of the Shenandoah Earnings and Opt E/I models over the period from 9/2000 to 12/2004. The chart documents the returns that an investor might have achieved if he/she had bought (long) the top (best) decile and sold short the worst decile monthly by each individual model, rebalancing monthly.

- **SAM Earnings Model:** Includes estimate revisions (FY0, FY1 and FY2), earnings surprise and SUE.
- **SAM OPT E/I:** Shenandoah's proprietary earnings expectation model is the optimal combination of our Earnings and Insider Transactions models. The most highly ranked stocks by this model are those with a strong earnings profile AND aggressive buying by corporate insiders; the weakest stocks have a poor earnings profile AND insiders are selling.



Returns for earnings-driven strategies were horrific during the three-year period from 9/2000 to 9/2003, but as we noted previously, the majority of those bad returns occurred prior to year-end 2001. The following chart depicts the relatively flat performance of earnings models since January, 2002 (dotted line above):



- The Shenandoah Earnings model, which contains multiple sub-models including estimate revision (FY0, FY1 and FY2), earnings surprise and Standard Unexpected Earnings (SUE), out-performed other available earnings measures by a wide margin over the longer period (Figure 3), but fell in the middle of the pack since 1/1/2002.
- **By including an analysis of the trading of corporate insiders (the Shenandoah Opt E/I model is the optimal combination of our Earnings and Insider models), Shenandoah was able to add positive alpha over this difficult period.**

Data Sources and Definitions

<i>SAM Earnings</i>	<i>Shenandoah (MPT)</i>	Market Profile Theorems (MPT) variable that includes 6 different points of view including FY0, FY1 and FY2 estimate revisions, quarterly EPS surprises and SUE. H-L Spread = Cumulative monthly return spread between high (most positive Earnings score) and low (most negative Earnings score) deciles.
<i>SAM Insider</i>	<i>Shenandoah (MPT)</i>	Shenandoah's proprietary version of the Market Profile Theorems (MPT) variable which analyzes the trading of corporate officers and directors as they buy/sell their own firm's stock; the model is seasonably adjusted and includes the rank of the insider, s
<i>SAM OPT E/I</i>	<i>Shenandoah</i>	Proprietary combination of Earnings and Insider models. Spread = Cumulative monthly return spread between the highest (strongest Earnings and Insider buying) minus lowest (weakest Earnings and Insider selling) deciles.

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