



## Carpenter Analytical Services Market Models & Metrics

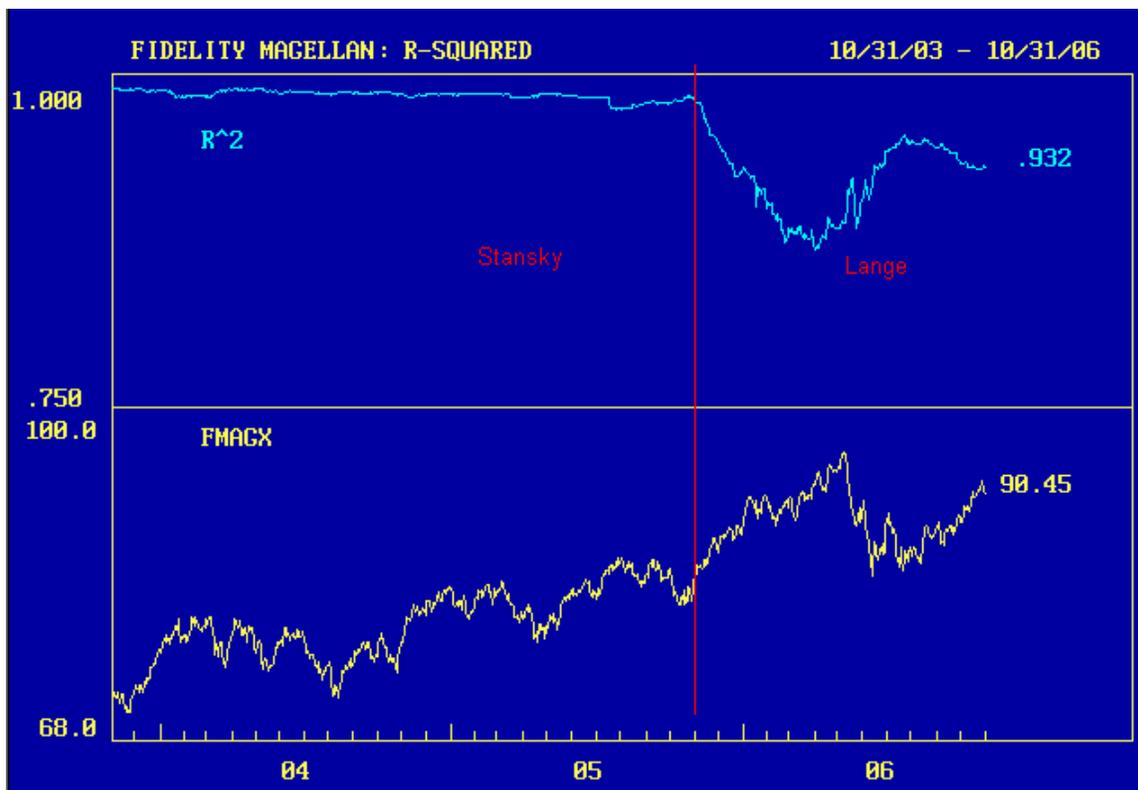
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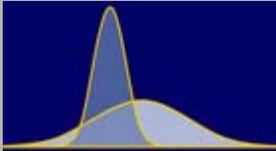
### *The Trouble With Harry*

#### Lange's Anniversary at Magellan

One year ago, October 31, 2005, Harry Lange took over at Magellan Fund. His mission: Undo the closet indexing of predecessor Robert Stansky, and restore the performance that had propelled the fund to prominence over decades.

One key measure of closet indexing is a fund's "R-squared" ( $R^2$ ), which is the percent of returns variation driven just by the overall market fluctuation. Before Harry Lange took over, Stansky's  $R^2$  was running steady at 98%-99%. Lange wasted no time de-indexing, and within 6 months he had  $R^2$  down to about 87%; that's a bit higher than the average fund, but it's active management for such a huge fund. Now the  $R^2$  varies, and at one-year anniversary stands at 93%.





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## The Trouble With Harry

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October 31, 2006

**Large Cap/Small Cap.** Part of the portfolio change involved a shift from giant companies to smaller ones. In a mammoth fund like Magellan, it can be difficult to trade smaller stocks, and Stansky had stuck pretty closely to the mega-cap end of the spectrum.

Harry Lange shifted rapidly away from the mega-cap dominance. The two beta paths in the graph below show the fund's relative sensitivity to large-cap stocks and smaller-cap stocks.

### Large & Small-Cap Betas



For two years (and before) under Stansky, the fund returns were entirely identified with large-cap fluctuation. The large-cap red line above tracks closely at about 1.00x S&P (1.10 is the upper boundary of the frame), and the small-cap blue line stays essentially at zero.

Within days of Lange's appointment (October 31, 2005), the red line started falling relentlessly, with the blue line rising. By mid-year 2006, Magellan's large cap sensitivity was about 35% of what it had been. Small-cap sensitivity was up to 1.00, where only large cap had been before.

Today the changeover has stabilized (or perhaps even swung back toward larger stocks to a small degree).



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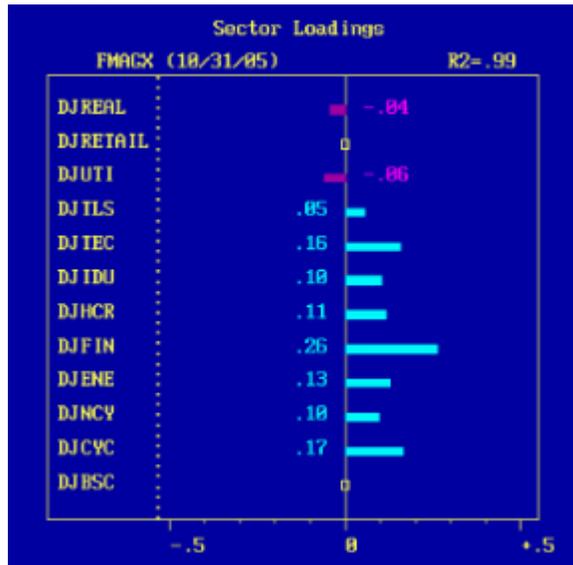
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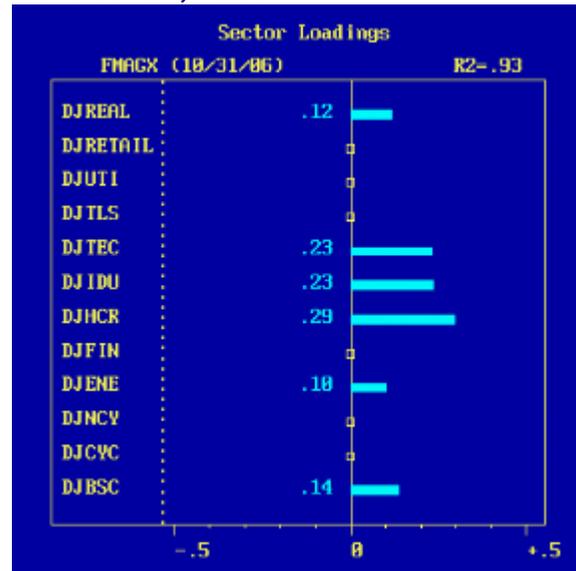
October 31, 2006

**Sector Loadings.** It's not just the size of portfolio stocks that's changed. The relative weights of market sectors has also changed notably. In the bar charts here (as with the line charts on other pages), the values indicate the net effects in the returns streams, not actual proportions booked in the portfolio. This net-market-effect model (eliciting info from returns) is what allows analysis almost in real time; i.e., without weeks or months of reporting delay.

October 31 2005



October 31, 2006



The left-side (year ago) chart shows significant positive loadings spread over eight market sectors, with an average value of +.135. The strongest factor is in financial stocks (FIN, +.26). Spreading exposure in many sectors is index-like.

The right-side (current) chart shows the Magellan portfolio is now notably more concentrated. Significant positive loadings appear in six market sectors, with average value of +.185. The previously dominant loading on financials has disappeared, as have the two previously significant factors on consumer stocks (CYC and NCY). Basic Materials (BSC) presence is new, and Health Care (HCR) is now the dominant sector in returns fluctuation.

**Notes.** Sector factors above are based on daily returns over last two months to evaluation date. Non-significant values are suppressed. Values shown are indicative of net portfolio effect (including quantity, volatility, and covariance), as well as choice of candidate sectors provided in the model. Loadings reflect returns generated "as if" positions existed, not actual holdings.



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## The Trouble With Harry

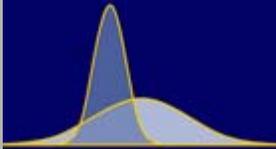
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October 31, 2006

**Increased Risk.** One of the bottom line effects of all the changes is that Magellan is substantially more volatile today than it was a year ago. The index-like practices under Stansky had maintained a fund beta (labeled below as Equity Exposure) undulating near 1.00 (i.e., about average market sensitivity). The range of beta variation was about 0.92 to 1.08 up until October 31, 2005.



After Harry Lange took over at end of October, the previous beta boundary was broken by end of year. In January '06 we tracked the effective beta as high as 1.27x market. After several months of exposure retreat as the market advanced in the spring, exposure vaulted again during the summer market correction...at its high, reaching nearly to 1.50x market.



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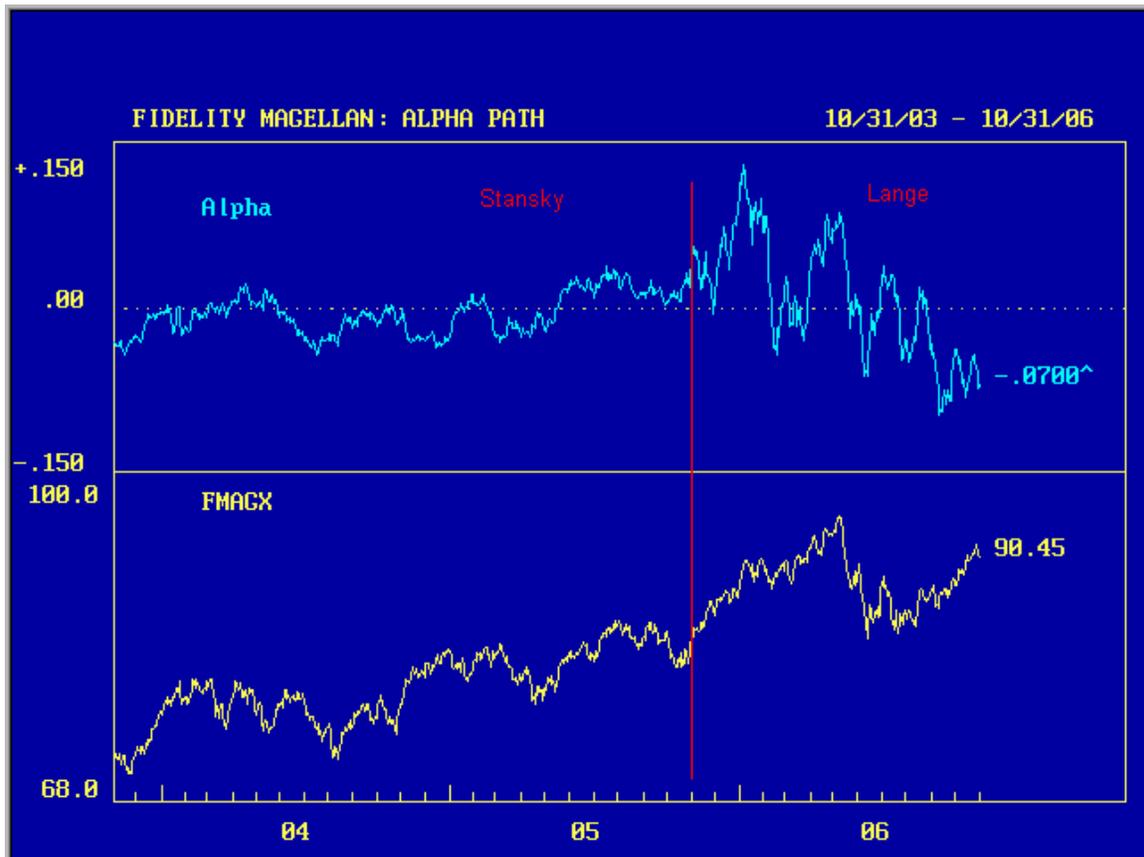
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**Alpha Trouble.** Alpha measures the component of returns after *removing* the market sensitivity (beta) portion. Alpha is the “earned” component of returns. Like the other Magellan parameters, alpha behavior changed almost immediately when Harry Lange took over; more variable, and (at first) more positive.

While Stansky’s alpha had been running  $\pm 3\%$  max, by year-end Lange’s had posted +8.8%. In January it was as high as 13%. It also was more volatile, however, varying as much as 4x the prior range. The change is unmistakable.



But in recent months, alpha is on-balance negative. Currently at  $-7\%$ , it has been negative and falling through most of the autumn rally. Last year’s hopeful new start is in grave doubt. For Lange’s first year overall, mere variability looks like the enduring aspect of Magellan’s new alpha. It won’t stay alive, and it won’t stay dead. And that is the trouble with Harry.