

Missing persons found

Jenson coined beta and alpha but Tito cashed out.



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BY JOHN ILKIW

As promised in my Summer 2006 column, I am reporting the results of my quest to find the person or persons who first used the Greek letters beta (β) and alpha (α) to represent the returns earned from systematic risk and active management risk, respectively. With a very high degree of confidence, I have concluded that one person introduced both terms: Michael C. Jensen, currently of Harvard University. Beta and alpha made their first public appearance in May 1968 in Jensen's "The Performance of Mutual Funds in the Period 1945-1964," published in *The Journal of Finance*.

Jensen purposely selected α and β to distinguish the formulation of his testable model from the A and B used by William F. Sharpe in his Nobel Prize-winning 1964 paper, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk." In Jensen's paper, manager skill was for the first time represented by a statistical parameter, and in Jensen's words: "... if the portfolio manager has an ability to forecast security prices, the intercept, α_j , ... will be positive." What did Jensen's empirical analysis of 115 mutual funds reveal? The now very familiar result that mutual funds on average showed no evidence of being able to predict security prices, and little evidence that any individual fund was able to do significantly better than what one would expect from random chance.

JENSEN VS. SHARPE

The term alpha is so identified with Michael Jensen that it is referred to as "Jensen's Alpha" within the investment community. While Jensen also first used beta to represent market risk, ownership of the concept firmly resides with William F. Sharpe and at times is referenced as Sharpe's beta.

The commercialization of beta and alpha by the investment community was surprisingly quick and the individu-

als who pioneered their application have surprising origins, and some have become industry legends. By the middle of 1970, just two years after beta and alpha made their academic debut, a Los Angeles-based brokerage firm was selling monthly "beta books" covering some 1,700 stocks for \$1,000 in soft dollars per copy. The cost to calculate the monthly beta updates was only about \$500.

Dennis Tito and John O'Brien founded the beta book business within the LA brokerage firm. Both had originally worked in the aerospace industry with Dennis Tito coming from the famous Jet Propulsion Laboratory, home of the Mars Viking Missions. This is the same Dennis Tito of Wilshire Associates who paid \$20 million to visit the International Space Station in 1991 using a Russian rocket ship; and it is the same John O'Brien who developed portfolio insurance and managed over \$5 billion in the strategy from 1984 to 1987.

Dennis Tito hired former JPL colleague Lou Kingsland to work part-time to estimate monthly betas, running ordinary least squares regressions using the Compustat data. "By mid-1971, I was making more money in a few hours per week off my beta book work than I was from my full-time job as a senior engineering manager at JPL." Lou Kingsland now lives in North Carolina and is a special advisor to Strategic Investment Solutions, Inc. of San Francisco, a boutique investment consulting firm.

Tito, O'Brien and Kingsland were the original "rocket scientists" that turned their mathematical skills to solving investment problems. Other now well-known individuals also joined Tito and O'Brien, including Richard Ennis, Gil Beebower and Gifford Fong. Through their collective commercial success, the two Greek letters selected by Michael Jensen in 1968 to represent market and active management returns have become an indelible and ubiquitous part of the investment management landscape. ■

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