

FINANCE

Stock market model guides investment manager

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Gary J. Harloff was working in 1970 at a Florida jet engine propulsion company, where he was devising models to see how the engines of supersonic planes would hold up under different conditions. It was there that a colleague once bemoaned, "You can't model the stock market."

Dr. Harloff, who holds a doctorate degree in aerospace engineering from the University of Texas at Austin, took that lament as a challenge.

"I'm still working on it," he said.

The comment sparked a new career for Dr. Harloff, owner of registered investment adviser Harloff Inc. in Westlake. While he doesn't have a finance degree, Dr. Harloff said he believes his "heavy-duty number-crunching" background aids him when it comes to portfolio management. He calls his automated method "constrained, nonlinear optimization."

"That's beyond the grasp of most financial professionals," he said matter-of-factly.

It's likely beyond the grasp of most everyone, financial professional or not. Perhaps a clarification is in order from the man who has worked in computational propulsion aerodynamic research for supersonic planes and hypersonic flight.

"I take a lot of data, massage it, and then use a computer program I developed to manage portfolios," Dr. Harloff said.

In 1970, he began his work in money management. With no real knowledge of economics, he began an exhaustive study of the market. The work has apparently paid off, as he has finished as high as third in a national investing competition.

In the mid-1980s, he developed his first computer program. It took a week to complete its calculations.

"Eventually I realized it wasn't useful because I couldn't get answers in real-time," he said.

He currently has four programs used to help guide his investment advice. However, Dr. Harloff said it took several years before he was confident in investing clients' money based on what a computer said to do.

"I probably did thousands of hours of calculations, but you don't know how good they are until you put money in the market," he said.

Computers are remarkably accurate when it comes to doing market research leg work, said Roger S. Balsler, who started Westlake-based Balsler Wealth Management LLC in January. He utilizes software that helps him determine where a client's investments should be made.

Technology can play an important role, Mr. Balsler said, but in the end, whether an investor sees positive returns depends on her or his human adviser.

Dr. Harloff said his computers foresee a return of the market bulls.

"The earnings growth is there," he said. ■