Stock Characters
As Two Economists Debate Markets, The Tide Shifts

Belief in Efficient Valuation Yields Ground to Role Of Irrational Investors
Mr. Thaler Takes On Mr. Fama

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For forty years, economist Eugene Fama argued that financial markets were highly efficient in reflecting the underlying value of stocks. His long-time intellectual nemesis, Richard Thaler, a member of the "behaviorist" school of economic thought, contended that markets can veer off course when individuals make stupid decisions.

In May, 116 eminent economists and business executives gathered at the University of Chicago Graduate School of Business for a conference in Mr. Fama's honor. There, Mr. Fama surprised some in the audience. A paper he presented, co-authored with a colleague, made the case that poorly informed investors could theoretically lead the market astray. Stock prices, the paper said, could become "somewhat irrational."

Coming from the 65-year-old Mr. Fama, the intellectual father of the theory known as the "efficient-market hypothesis," it struck some as an unexpected concession. For years, efficient market theories were dominant, but here was a suggestion that the behaviorists' ideas had become mainstream.

"I guess we're all behaviorists now," Mr. Thaler, 59, recalls saying after he heard Mr. Fama's presentation.

Roger Ibbotson, a Yale University professor and founder of Ibbotson Associates Inc., an investment advisory firm, says his reaction was that Mr. Fama had "changed his thinking on the subject" and adds: "There is a shift that is taking place. People are recognizing that markets are less efficient than we thought." Mr. Fama says he has been consistent.

The shift in this long-running argument has big implications for real-life problems, ranging from the privatization of Social Security to the regulation of financial markets to the way corporate boards are run. Mr. Fama's ideas helped foster the free-market theories of the 1980s and spawned the $1 trillion index-fund industry. Mr. Thaler's theory suggests policy makers have an important role to play in guiding markets and individuals where they're prone to fail.

Take, for example, the debate about Social Security. Amid a tight election battle, President Bush has set a goal of partially privatizing Social Security by allowing

younger workers to put some of their payroll taxes into private savings accounts for their retirements.

In a study of Sweden's efforts to privatize its retirement system, Mr. Thaler found that Swedish investors tended to pile into risky technology stocks and invested too heavily in domestic stocks. Investors had too many options, which limited their ability to make good decisions, Mr. Thaler concluded. He thinks U.S. reform, if it happens, should be less flexible. "If you give people 456 mutual funds to choose from, they're not going to make great choices," he says.

If markets are sometimes inefficient, and stock prices a flawed measure of value, corporate boards and management teams would have to rethink the way they compensate executives and judge their performance. Michael Jensen, a retired Harvard economist who worked on efficient-market theory earlier in his career, notes a big lesson from the 1990s was that overpriced stocks could lead executives into bad decisions, such as massive overinvestment in telecommunications during the technology boom.

Even in an efficient market, bad investments occur. But in an inefficient market where prices can be driven way out of whack, the problem is acute. The solution, Mr. Jensen says, is "a major shift in the belief systems" of corporate boards and changes in compensation that would make executives less focused on stock price movements.

Few think the swing toward the behaviorist camp will reverse the global emphasis on open economies and free markets, despite the increasing academic focus on market breakdowns. Moreover, while Mr. Fama seems to have softened his thinking over time, he says his essential views haven't changed.

A product of Milton Friedman's Chicago School of thought, which stresses the virtues of unfettered markets, Mr. Fama rose to prominence at the University of Chicago's Graduate School of Business. He's an avid tennis player, known for his disciplined style of play. Mr. Thaler, a Chicago professor whose office is on the same floor as Mr. Fama's, also plays tennis but takes riskier shots that sometimes land him in trouble. The two men have stakes in investment funds that run according to their rival economic theories.

Highbrow Insults

Neither shies from tossing about highbrow insults. Mr. Fama says behavioral economists like Mr. Thaler "haven't really established anything" in more than 20 years of research. Mr. Thaler says Mr. Fama "is the only guy on earth who doesn't think there was a bubble in Nasdaq in 2000."

In its purest form, efficient-market theory holds that markets distill new information with lightning speed and provide the best possible estimate of the underlying value of listed companies. As a result, trying to beat the market, even in the long term, is an exercise in futility because it adjusts so quickly to new information.

Behavioral economists argue that markets are imperfect because people often stray from rational decisions. They believe this behavior creates market breakdowns and also buying opportunities for savvy investors. Mr. Thaler, for example, says stocks can under-react to good news because investors are wedded to old views about struggling companies.

For Messrs. Thaler and Fama, this is more than just an academic debate. Mr. Fama's research helped to spawn the idea of passive money management and index funds. He's a director at Dimensional Fund Advisers, a private investment management company with $56 billion in assets under management. Assuming the market can't be beaten, it invests in broad areas rather than picking individual stocks. Average annual returns over the past decade for its biggest fund – one that invests in small, undervalued stocks – have been about 16%, four percentage points better than the S&P 500, according to Morningstar Inc., a mutual-fund research company.

Mr. Thaler, meanwhile, is a principal at Fuller & Thaler, a fund management company with $2.4 billion under management. Its asset managers spend their time trying to pick stocks and outfox the market. The company's main growth fund, which invests in stocks that are expected to produce strong earnings growth, has delivered average annual returns of 6% since its inception in 1997, three percentage points better than the S&P 500.

Mr. Fama came to his views as an undergraduate student in the late 1950s at Tufts University when a professor hired him to work on a market-forecasting newsletter. There, he discovered that strategies designed to beat the market didn't work well in practice. By the time he enrolled at Chicago in 1960, economists were viewing individuals as rational, calculating machines whose behavior could be predicted with mathematical models. Markets distilled these differing views with unique precision, they argued.

"In an efficient market at any point in time the actual price of a security will be a good estimate of its intrinsic value," Mr. Fama wrote in a 1965 paper titled "Random Walks in Stock Market Prices." Stock movements were like "random walks" because investors could never predict what new information might arise to change a stock's price. In 1973, Princeton economist Burton Malkiel published a popularized discussion of the hypothesis, "A Random Walk Down Wall Street," which sold more than one million copies.

Mr. Fama's writings underpinned the Chicago School's faith in the functioning of

markets. Its approach, which opposed government intervention in markets, helped reshape the 1980s and 1990s by encouraging policy makers to open their economies to market forces. Ronald Reagan and Margaret Thatcher ushered in an era of deregulation and later Bill Clinton declared an end to big government. After the collapse of Communist central planning in Russia and Eastern Europe, many countries embraced these ideas.

As a young assistant professor in Rochester in the mid-1970s, Mr. Thaler had his doubts about market efficiency. People, he suspected, were not nearly as rational as economists assumed.

Mr. Thaler started collecting evidence to demonstrate his point, which he published in a series of papers. One associate kept playing tennis even though he had a bad elbow because he didn't want to waste $300 on tennis club fees. Another wouldn't part with an expensive bottle of wine even though he wasn't an avid drinker. Mr. Thaler says he caught economists bingeing on cashews in his office and asking for the nuts to be taken away because they couldn't control their own appetites.

Mr. Thaler decided that people had systematic biases that weren't rational, such as a lack of self-control. Most economists dismissed his writings as a collection of quirky anecdotes, so Mr. Thaler decided the best approach was to debunk the most efficient market of them all – the stock market.

Small Anomalies

Even before the late 1990s, Mr. Thaler and a growing legion of behavioral finance experts were finding small anomalies that seemed to fly in the face of efficient-market theory. For example, researchers found that value stocks, companies that appear undervalued relative to their profits or assets, tended to outperform growth stocks, ones that are perceived as likely to increase profits rapidly. If the market was efficient and impossible to beat, why would one asset class outperform another? (Mr. Fama says there's a rational explanation: Value stocks come with hidden risks and investors are rewarded for those risks with higher returns.)

Moreover, in a rational world, share prices should move only when new information hit the market. But with more than one billion shares a day changing hands on the New York Stock Exchange, the market appears overrun with traders making bets all the time.

Robert Shiller, a Yale University economist, has long argued that efficient-market theorists made one huge mistake: Just because markets are unpredictable doesn't mean they are efficient. The leap in logic, he wrote in the 1980s, was one of "the most remarkable errors in the history of economic thought." Mr. Fama says behavioral

economists made the same mistake in reverse: The fact that some individuals might be irrational doesn't mean the market is inefficient.

Shortly after the stock market swooned, Mr. Thaler presented a new paper at the University of Chicago's business school. Shares of handheld-device maker Palm Inc. – which later split into two separate companies – soared after some of its shares were sold in an initial public offering by its parent, 3Com Corp., in 2000, he noted. The market gave Palm a value nearly twice that of its parent even though 3Com still owned 94% of Palm. That in effect assigned a negative value to 3Com's other assets. Mr. Thaler titled the paper, "Can the Market Add and Subtract?" It was an unsubtle shot across Mr. Fama's bow. Mr. Fama dismissed Mr. Thaler's paper, suggesting it was just an isolated anomaly. "Is this the tip of an iceberg, or the whole iceberg?" he asked Mr. Thaler in an open discussion after the presentation, both men recall.

Mr. Thaler's views have seeped into the mainstream through the support of a number of prominent economists who have devised similar theories about how markets operate. In 2001, the American Economics Association awarded its highest honor for young economists – the John Bates Clark Medal – to an economist named Matthew Rabin who devised mathematical models for behavioral theories. In 2002, Daniel Kahneman won a Nobel Prize for pioneering research in the field of behavioral economics. Even Federal Reserve Chairman Alan Greenspan, a firm believer in the benefits of free markets, famously adopted the term "irrational exuberance" in 1996.

Andrew Lo, an economist at the Massachusetts Institute of Technology's Sloan School of Management, says efficient-market theory was the norm when he was a doctoral student at Harvard and MIT in the 1980s. "It was drilled into us that markets are efficient. It took me five to 10 years to change my views." In 1999, he wrote a book titled, "A Non-Random Walk Down Wall Street."

In 1991, Mr. Fama's theories seemed to soften. In a paper called "Efficient Capital Markets: II," he said that market efficiency in its most extreme form – the idea that markets reflect all available information so that not even corporate insiders can beat it – was "surely false." Mr. Fama's more recent paper also tips its hand to what behavioral economists have been arguing for years – that poorly informed investors could distort stock prices.

But Mr. Fama says his views haven't changed. He says he's never believed in the pure form of the efficient-market theory. As for the recent paper, co-authored with longtime collaborator Kenneth French, it "just provides a framework" for thinking about some of the issues raised by behaviorists, he says in an e-mail. "It takes no stance on the empirical importance of these issues."

The 1990s Internet investment craze, Mr. Fama argues, wouldn't have looked so crazy if it had produced just one or two blockbuster companies, which he says was a

reasonable expectation at the time. Moreover, he says, market crashes confirm a central tenet of efficient market theory – that stock-price movements are unpredictable. Findings of other less significant anomalies, he says, have grown out of "shoddy" research.

Defending efficient markets has gotten harder, but it's probably too soon for Mr. Thaler to declare victory. He concedes that most of his retirement assets are held in index funds, the very industry that Mr. Fama's research helped to launch. And despite his research on market inefficiencies, he also concedes that "it is not easy to beat the market, and most people don't."

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