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## **Economics Nobel Laureates Hardly the Odd Couple Presented in the Press**

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Oscar Madison and Felix Unger may have been the original Odd Couple, but it looks like newly-minted Nobel economists Robert Shiller and Eugene Fama have taken their place in the minds of many economic observers. This portrayal overstates their differences and ignores the common understanding forged by their research.

Fama is the father of “informationally-efficient markets,” while Shiller is best known for documenting how the market can fall prey to “irrational exuberance.” If these polar opposites could both be deserving of the Nobel, many reason, then the award tells more about the scientific vacuity of academic finance than the achievements of either man.

While this interpretation seems reasonable on the surface, a fair reading of Fama and Shiller’s careers suggests that these men are, in fact, two sides of the same academic coin. Both demonstrated that rather than being completely random, asset returns are predictable. Fama showed that some stocks earn predictably higher returns than other stocks based on specific firm characteristics. Shiller found that returns on the stock market as a whole vary through time, with returns predictably higher in certain periods than others. The practical significance of these findings for real-world investment decisions is immense.

In 1973, Fama (with James MacBeth) developed an econometric methodology to predict *future* stock returns based on their *past* correlation with the overall stock market or other risk factors. Are you concerned about the impact of market illiquidity or sudden oil price increases on the prices of assets in your portfolio? Fama showed investors how to measure whether returns vary predictably in response to the identified risk and how much compensation each asset provides per unit of risk.

In the 1990s, Fama (with Kenneth French) synthesized decades of prior research and found that stocks with low valuations (low prices relative to book values) tended to outperform stocks with high valuations by 5% per year. The origin of this “value premium” is hotly debated, but the documentation of its existence should give pause to investors tempted to overpay for growth without concern for the valuation or state of the business cycle.

Shiller’s first major contribution was demonstrating that stock prices vary more than could be explained by fundamentals, such as dividends or earnings. But he did not stop there. In future work (largely with John Campbell), he proved that this excess volatility must be due to

predictable variation in returns. Shiller reasoned that if valuation ratios like the price-to-earnings ratio on the S&P 500 have a long-run average, then changes in those ratios must predict future cash flows, future stock returns, or both. Building on this intuition, Shiller developed methods to allow investors to decompose changes in ratios and reliably forecast returns on the stock market over the medium term.

This technique not only allowed Shiller to correctly predict the stock market crash of 2000-2002, but also the housing market collapse of 2007-2011. Just as stock valuation ratios rose well above historic averages in the late-1990s, by 2005 U.S. house prices rose to extreme levels relative to equivalent rents. Unless one believed rents were likely to suddenly shoot upward despite the large increase in housing units, a large correction in house prices was inevitable. When it comes time to explain why returns are predictable, Shiller and Fama have very different answers. The aforementioned value premium, for instance, could be rational compensation for the business risk typically associated with companies with low market-to-book ratios, or it could reflect cognitive biases like overconfidence that lead investors to systematically overvalue growth. Similarly, valuation ratios could reach levels difficult to reconcile with expected future cash flows because of "irrational exuberance," frictions like borrowing constraints that limit traders' ability to correct mispricing, or a rational belief that this "time is different" and the old laws no longer apply.

Those who misinterpret the award as reflecting the Nobel Committee's inability to decide who is "right" in these debates trivialize the 40 years of empirical research that brought us to this point. After all, one could not debate why returns are predictable without first documenting that they are. Even Oscar and Felix would agree on that.