Markets Efficiency, Long-Term Returns, and Behavioral Finance

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In studies of long-term stock return anomalies, overreaction to new information is as common as underreaction, and postevent continuation is as frequent as postevent reversal. This finding is consistent with market efficiency. Many of the apparent anomalies disappear when a different model of normal returns or different statistical method is used. Taken together, the studies of return anomalies do not provide reason to reject market efficiency.

A growing body of literature reports anomalies in long-term share returns. These abnormal returns are usually interpreted as evidence of market inefficiency because they seem to indicate that the market overreacts or underreacts to new information.

Fama reviews this literature and finds a roughly even split between studies finding overreaction and studies finding underreaction, which he argues is consistent with efficiency. In an efficient market, the expected value of abnormal returns is zero. Chance generates some apparent anomalies, evenly split between overreaction and underreaction.

Fama also criticizes the studies because they rarely test an alternative return-generating model to the efficiency model. He finds two
studies that present alternative models; both models predict short-
term continuation in share returns and long-term reversal in the
returns. Fama reviews the results from these studies of return
anomalies. He finds a pattern consistent with that predicted by the
two models in terms of long-term return reversals and also returns
to contrarian investment strategies, seasoned equity offerings, new
exchange listings, and acquiring firms in mergers. This pattern is
not the norm because studies of dividend initiations, dividend
omissions, stock splits, proxy contests, and spin-offs show the
opposite pattern—long-term return continuation.

One of the models predicts that the announcement effect of certain
events will be of the same sign as the subsequent abnormal long-
term returns. Fama finds this pattern in studies of seasoned equity
offerings, dividend initiations, dividend omissions, share repur-
chases, stock splits, and spin-offs. He does not find this pattern for
new exchange listings, proxy fights, initial public offerings, and
acquiring firms in mergers. The two models are good at predicting
the effects of some events and not others, and there is no explana-
tion when they will work. A valid model should produce predic-
tions that capture the anomalous effects of events better than
market efficiency could. The existing models fail in this regard.

Fama discusses some of the technical problems of drawing infer-
ences about long-term returns. Studies of abnormal returns require
a model of normal returns. With an increase in the return horizon,
errors from bad-model specification will grow at a faster rate than
the volatility of returns. Bad-model problems thus cause particu-
larly severe problems for long-term return studies.

Fama concludes with a discussion of individual anomaly studies.
He shows that the anomalies reported in these studies disappear or
become marginal if different models of normal returns are used or
different statistical models are used to study the effects.

Taken together, the studies reporting anomalies in long-term
returns do not provide a reason to reject market efficiency.

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ment: equity strategies