

Are analysts responsible for post earnings announcement drift and other anomalies that suggest that the market generally adjusts inadequately to new information?

Abarbanell & Bernard, "Tests of analysts' overreaction/underreaction to earnings information as an explanation of anomalous stock price behaviour", *Journal of Finance*, July 1992.

1. Background

In *Journal of Accounting Research* 1989 vol 27 pages 1-36 and *Journal of Accounting and Economics* 1990 vol 13 pages 305-340, Bernard & Thomas find that market prices adjust slowly to information about earnings. The objective of the Abarbanell & Bernard (AB) study is to examine whether analysts might be responsible for this characteristic. So they are investigating underreaction.

2. Main test

One of their main tests is to estimate

$$E_t - F_t = \alpha + \beta \cdot (E_{t-1} - E_{t-2}) + u_t$$

where E is reported earnings and F is the analysts' forecast. Here, the forecast error is regressed on the prior year's earnings change. If analysts are efficient predictors then there should be no variable, available to the analyst at the time the forecast is prepared, that explains the mistakes they make.

However, they find that β is positive. This means that when the prior year's earnings are positive (earnings are rising), the forecast is smaller than the actual earnings at time t. The interpretation of this is that analysts are cautious and do not believe that the rising earnings will continue. When their conservatism turns out to be unfounded, the forecast will be systematically smaller than the actual.

There is a similar story for negative prior year's earnings change (falling earnings).

As well as suggesting that analysts are inefficient forecasters, the results say something about how analysts process information. They suggest that analysts underreact to the information that is contained in the prior year's earnings. This is consistent with the Bernard & Thomas findings of sluggish adjustment of prices to earnings information.

3. Underreaction, overreaction or both?

Another part of the paper deals with the problem of how their finding of underreaction can be reconciled with the DeBondt & Thaler finding in "Do security analysts overreact?", American Economic Review, 1990 that analyst overreact to new information.

On the same dataset for which AB find underreaction to the prior year earnings change, AB also estimate the DeBondt & Thaler equation as follows:

$$E_t - E_{t-1} = \gamma + \delta \cdot (F_t - E_{t-1}) + e_t$$

where E = earnings, and
 F = forecast of earnings

They too find that δ is less than 1, indicating that the forecasted change in earnings needs to be scaled down to be consistent with the observed change in earnings. And remember, this is the same dataset which AB found underreaction!

The reconciliation offered by AB is that the description of overreaction or underreaction is, by itself, inadequate. It is also necessary to make explicit to what the market is under or over reacting. AB find that analysts underreact to the prior year's earnings change. The DeBondt & Thaler finding that forecasts are too wild is now called "generalised overreaction", because the information cause is unknown. Certainly, the overreaction is not to earnings.