

Discussion of:

Does Shareholder Composition Affect Stock Returns?  
Evidence from Corporate Earnings Announcements

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# Motivation

- Casual evidence suggests that some institutional investors trade “too strongly” in response to short term performance measures (such as quarterly earnings).
- This might cause managers to take actions which enhance short-term profitability, at the expense of long-term performance.
- Thus it is important to understand how shareholder makeup influences price reactions to new information.

## Question:

- Do different shareholder types respond differently to the same information?
- HS address this question by looking at the relationship between:
  1. The types of *institutional holdings* of firms, and
  2. Stock price response to earnings surprises, or the *Earnings Response Coefficients* (ERC) for these firms.

## Basic Findings

HS find that there is “considerable heterogeneity in institutional investors’ response to new information.”

1. More specifically, HS find that the ERC’s tend to be larger when a larger fraction of a firm’s institutional holders (13(f)) are (1) momentum investors, (2) aggressive-growth investors, (3) high-turnover investors, or (4) investment advisors.
2. In contrast, the ERC’s tend to be lower when the firm has a higher fraction of value investors (and for negative surprises)
3. Abnormal returns around earnings surprises are positively related to the buying of momentum/aggressive-growth/high-turnover investors, and negatively related to the buying of value investors.
4. Trading volume and return volatility around earnings announcements is positively related to the fractional of institutional holders that are momentum/aggressive-growth/high-turnover investors.
5. Finally, momentum and high-turnover investors are more likely to also be Growth and Aggressive Growth managers.

## Interpretation of the Results

- HS interpret their evidence as giving an answer of *Yes* to the question in the title:

*Does Shareholder Composition Affect Stock Returns?*

- They note in the introduction that:

Anecdotally, there are numerous instances where a small shortfall in reported versus expected earnings leads to a substantial price decline, and institutional investors are often blamed for "overreacting" to earnings news. (p. 2)

- While they conclude that there is no evidence of "overreaction" to earnings news, they do say that the data is consistent with the hypothesis that:

ownership concentration of firms affects the market reaction to the releases of earnings information.

- I will present a slightly different interpretation of these results.
- I think that their evidence is strongly consistent with a *Yes* answer to the question:

*Do Stock Returns Affect Shareholder Composition?*

but not the reverse.

## What determines ERC's

- In a standard Rational Expectations (RE) model:

$$P_- = E \left[ \sum_{t=0}^{\infty} \frac{\widetilde{CF}_t}{(1+r)^t} \middle| \Omega_- \right]$$
$$P_+ = E \left[ \sum_{t=0}^{\infty} \frac{\widetilde{CF}_t}{(1+r)^t} \middle| \Omega_- \cup e_0 \right]$$

- If the earnings surprise ( $e_0 - E_-[e_0]$ ) is zero, the announcement return will be zero by iterated expectations.
- If  $e_0$  differs from  $E_-[e_0]$ , this will result in a revision in the expected cash-flows, and consequently a non-zero announcement return.
- The magnitude of the price revision will clearly depend on a number of factors, and will vary cross-sectionally
  - Cross-sectional variation in the earnings response is fully consistent with this rational-expectations model.
  - Note that this also implies that the announcement date return variance will be higher for high growth firms, consistent with the findings here.

## How should ERC's Vary Across Firms?

- Firms have a *liquidation* or *abandonment* option,
  - they can close down any ongoing projects and sell off the firm's assets for their liquidation value.
- The firm's share price as a function of the expected future cash-flows from its future projects, therefore looks like this:
  - Thus, growth firms should be far more sensitive, and value firms far less sensitive, to news about future project cash flows
    - Hayn (1995, *JAE*) presents evidence that this is a major determinant of ERC's.
- Interestingly, HS control for book-to-market, and dividend yield, but find that institutional investor makeup still has ability to explain price responses.
  - suggests that investor makeup is a superior proxy for this.

## Changes in Makeup of Institutional Investors

- Thus, the standard rational model explains why the ERC for growth stocks should be far higher than for value.
- However, HS also show that there is a strong relationship between the price response and the amount of buying/selling by growth and value investors *in the surrounding quarter*.
  - Price declines are larger when selling by growth/momentum investors (relative to other institutions) is larger.
  - However, note that it is also the case that price declines are smaller when value investors sell.
- An alternative interpretation of the causality again seems reasonable here:
  - Following a big stock price decline, growth investors sell – and value investors buy
  - Why? Following a big stock price decline, a growth stock becomes a value stock (or even more of a value stock).

## Should Momentum investors invest in growth stocks?

- Finally, HS evidence suggests that growth and aggressive growth managers are also momentum/high-turnover investors
- (Rational) momentum investors should invest in higher momentum stocks.
- This is consistent with evidence that (return) momentum is strong only for growth stocks:
  - From Daniel & Titman (*FAJ*, 1999), the Returns of Book-to-Market and Momentum Sorted Portfolios are:

<b>Raw Returns, All Size Quintiles, 1963:07-1997:12</b>							
	<i>Low</i>		<b>BM</b>		<i>High</i>	<i>H – L</i>	T-stat
<i>Low</i>	0.454	0.713	1.067	1.166	1.389	0.935	(5.286)
	0.728	0.980	1.137	1.288	1.455	0.727	(4.748)
<b>M-m</b>	0.922	1.058	1.174	1.298	1.369	0.447	(2.730)
	1.043	1.141	1.162	1.364	1.400	0.357	(1.930)
<i>High</i>	1.206	1.418	1.369	1.511	1.494	0.288	(1.449)
<i>H – L</i>	0.752	0.705	0.302	0.345	0.105	HH-LL	
T-stat	(3.838)	(4.027)	(1.866)	(2.180)	(0.587)	1.0398	(5.656)

- This table for return momentum, be different for earnings-related momentum.