

MOMENTUM

Sheridan Titman

Outline

- A brief overview of recent theory that explains the return patterns
 - Momentum is generated by informed but overconfident professionals
 - Retail “noise” traders generate shorter-term reversals that at least partially offset the momentum effect
- Recent supporting empirical evidence
 - Differences in the return patterns of Chinese A and B shares
 - The changing nature of Japanese stock return patterns?
 - Are overnight returns different than returns during the day?

Theory

- Luo, Jiang, Avanidhar Subrahmanyam, and Sheridan Titman (2021), “Momentum and reversals when overconfident investors underestimate their competition,” *Review of Financial Studies*, vol. 34, 351–393.
- Narasimhan Jegadeesh, Jiang Luo, Avanidhar Subrahmanyam and Sheridan Titman, “Momentum and Short-Term Reversals: Theory and Evidence,” Working Paper

Key model ingredients

Two types of investors

- retail noise traders -- as a group, they trade completely randomly
- Active fundamental traders – they have private information, but they tend to be overconfident

Two types of information

- Public disclosures – e.g., firm disclosures, analyst reports and macro news
- Private information indirectly revealed through trading

Retail noise traders generate reversals

Create reversals for two reasons:

1. Their order flow is negatively serially correlated
 - If they buy, they eventually must sell
2. They move prices away from fundamentals
 - Prices naturally revert towards fundamentals

Overconfident active investors create momentum

- Overconfidence can be exhibited in a number of ways
 - They are skeptical about the quality of public information
 - They believe that they are likely to receive information first
 - If they are not informed, they believe their counterparts are either uninformed or have received low precision information
 - They over-estimate the *freshness* of their information
 - They over-estimate the precision of their information
- The trades of these active investors generate momentum in a couple of ways
 - When they are not informed, they provide too much liquidity to those investors who are informed
 - They may cause delayed over reaction when they trade on stale information

Key insight

The composition of the pool of investors influences return patterns

- Markets with overconfident active fundamental traders exhibit stronger momentum
 - Their presence cause markets to under react to fresh information and perhaps over react to stale information
- Markets with more retail noise traders exhibit stronger reversals
 - Noise traders push prices away from fundamentals
 - The presence of noise traders tend to offset the effect of overconfident active investors

Recent research

- A comparison of Chinese A and B shares
- Foreign institutions and the evolution of momentum in Japan
- Return patterns overnight and during trading hours

Momentum in China

Chui, Andy, Avanidhar Subrahmanyam, and Sheridan Titman (2022), “Momentum, reversals, and investor clienteles,” *Review of Finance*

The Chinese A and B markets provide an ideal experiment for studying how investor composition affects return patterns

- The A market is dominated by unsophisticated retail traders
- The B market attracts more institutions and more sophisticated retail investors
- The A and B shares receive identical cash flows and have identical control rights
- Returns in the A market exhibit significant short-term reversals but no momentum
- Returns in the B market exhibit no reversals but significant momentum

Momentum in Japan

Jiang, Hao, Sheridan Titman and Takeshi Yamada and Terry Zhang, “Foreign institutions and momentum in Japan,” Work in progress

- Japan was the only major market to *not* exhibit momentum in pre-2000 studies
- Japan deregulated its financial markets and greatly increased participation by foreign institutions in the late 1990s
- The Japanese stock market does exhibit momentum after 2000
- Stocks with greater foreign ownership (e.g., larger growth stocks) exhibit greater momentum
- There was a “momentum crash” in 2009, that mirrored the experience in the U.S.
- The correlation between the Japanese and U.S. momentum portfolios seem to be increasing over time

Overnight versus daytime returns

Barardehi, Bogouslavsky and Muravyev (2022) “What Drives Momentum and Reversal? Evidence from Day and Night Signals,” this conference

- Overnight returns tend to be driven by public announcements
- Informed and noise trades tend to generate returns during the day

The evidence supports the hypothesis that most of the momentum returns are due to under reaction to information generated by the trading process