Do ETFs affect the processing of Earnings Information?
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Summary

**Objective:** this paper investigates whether ETFs facilitate or inhibit information transfer across firms.

**Design:**
- they use constituent firms’ earnings announcements as an identifiable and significant source of information.
- they examine the effect of different types of ETFs on the flow of information among constituents.

**Sample:**
- 2002 to 2015
- 487 ETFs

**Findings:**
- sector ETFs facilitate information transfer around earnings announcements.
- non-sector ETFs are ineffective or somewhat detrimental in facilitating information transfer.
Discussion: literature

1) ETFs *reduce* their constituents’ information efficiency
   • ETFs contribute to equity return comovement (e.g., Barberis, Shleifer, and Wurgler, 2004; Greenwood and Sosner, 2007; Staer, 2012; Da and Shive, 2016; Israeli, Lee, and Sridharan, 2017)
   • ETFs contribute to higher trading costs, a decline in “future earnings response coefficients”, and a decline in the number of financial analysts (e.g., Israeli, Lee, and Sridharan, 2017)

2) ETFs *enhance* their constituents’ information efficiency
   • ETFs increase the timely incorporation of systematic earnings information for stocks with weak information environments and for stocks with imperfectly competitive equity markets (e.g., Glosten, Nallareddy, and Zou, 2017)
   • ETFs improves stock liquidity (e.g., Boehmer and Boehmer, 2003; Hamm, 2011)
Discussion: literature - continued

Contribution:

1) We need to understand the underlying reasons of the above contradicting evidence

2) This paper divide ETFs into the two groups: sector ETFs and non-sector ETFs

3) Indeed they document different results between sector ETF and non-sector ETFs
Discussion: sector ETFs vs. non-sector ETFs

**Sector ETFs:**
- Sector ETFs target various industries and sectors in U.S. and international equity markets.
- The most popular sectors are “health care”, “consumer products”, “real estate”, and “technology”.

**Non-sector ETFs:**
- The rest of ETFs are defined as non-sector ETFs.
- What are included in non-sector ETFs?
  - Market index such as Vanguard Total Stock Market ETF
  - Large-cap vs small-cap such as iShares Russell 1000 vs. iShares Russell 2000
  - Growth vs value such as iShares Russell 1000 Growth vs. iShares Russell 1000 Value
Discussion: sector ETFs vs. non-sector ETFs - continued

1) So far the credit is given to sector ETFs

- What is the fundamental difference between sector ETFs and non-sector ETFs?
- It seems that sector ETFs can help facilitate the transfer of industry-level information. One could also argue that market-index ETFs can help facilitate the transfer of market-level information.

2) The paper introduces style heterogeneity into the informational impact of ETFs

- One quick thought is to compare market vs non-market ETFs, large-cap vs. small-cap ETFs, or growth vs. value ETFs
Discussion: channels

- The leader’s earnings announcement returns
- Followers’ stock returns
- ETFs’ basket trading
- ETF’s impact on information intermediaries
- ETF’s impact on other types of traders such as hedge funds

It is probably interesting to study the channels
Discussion: identification

To pin down the relation between the leader’s earnings announcement return and followers’ returns, the paper conducts falsification tests using the period before sector ETFs were created.

One could argue that the weak result during the pre-ETF period is driven by other contaminating events.

- What about introduce the DiD analysis into this test? For example, we can create the control group that has never been the constituents of ETFs.
- What about we randomly select a year over the sample as the introduction year of ETFs?
Discussion: leader’s negative vs positive announcement returns

The main finding is that follower returns are positively associated with leader return around the leader’s earnings announcements.

Information transfer between the leader and followers may vary according to the leader’s negative vs positive announcement returns.

Given that ETFs focus on the long position on a stock, we would expect that information transfer is more pronounced for the leader’s positive announcement returns.

- Certainly one could also argue that ETFs provide short sellers an opportunity to borrow shares (e.g., Hirshleifer, Teoh, and Yu, 2011). For example, iShares made $397 million in securities lending fees in 2011.
- This test may also help us understand the channels through which ETFs affect information transfer.
Discussion: the leader’s pre-announcement returns

Informed trading is pervasive prior to earnings announcements (e.g., Krinsky and Lee, 1996; Kim and Verrecchia, 1997; Vega, 2006; Bamber, Barron, and Stevens, 2011; Brennan, Huh, and Subrahmanyam, 2016; Back, Crotty, and Li, 2017).

One attempt is to study how the leader’s pre-announcement return affect followers’ returns.

This test could also help us understand the mechanism of information transfer among ETFs’ constituents.
Conclusion

- This paper provides the contribution to the ETF literature.
- The research design is quite interesting.
- The authors may want to explore additional tests to understand channels and further pin down the informational effect of ETF.