Stock price reactions to ESG news: the role of ESG ratings and disagreement

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Research Question

- Whether ESG ratings predict future ESG news and the associated market reactions.

Why interesting and important?

- A newer set of performance evaluations: ESG ratings
  - sourced by investment manager, with trillions of dollars in assets under management
  - influencing portfolio construction and trading
- rating multidimensionality—>rating disagreement
  - difficult to observing the outcomes associated with ESG performance
  - less clear how one can or should judge their quality
- ratings'usefulness?

Contributions

- Literature on examines the properties of ESG ratings
    - Prior: greater ESG disclosure exacerbates disagreement across ESG ratings(Christensen et al.,2022)
    - This study: ESG ratings can be useful in predicting future news.
- Literature on market reactions to ESG event, news, or ratings disagreement
    - Prior: negative market reaction to ESG news(Krueger, 2015)
    - This study: how ESG ratings create investor expectations about future news
- Literature on why investors react to ESG news
    - Prior: nonpecuniary reasons (Jones et al. 2000)
    - This study: financial rather than a nonpecuniary motive.

Hypotheses

- There is a positive relationship between ESG ratings and more positive future ESG news.
    - ESG ratings appropriately reflect a management's efforts.
- More positive ESG news will be associated with more positive stock price reactions to the news.
    - better ESG performance translates into value because of operating efficiencies
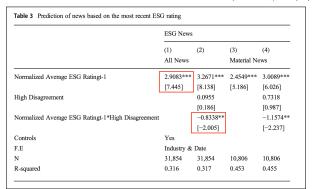
Data

- ESG news(TruValue Labs Pulse data)
    - above 50 indicate positive sentiment
    - below 50 reflect negative sentiment.
- ESG Rating
    - MSCI ESG Ratings,
    - ustainalytics
    - Thomson Reuters Asset 4.

H1: whether ESG ratings predict future ESG news

- predictive ability of ESG rating diminishes only for firms with large disagreements.

$$ESG\ News_{i,t} = \beta_0 + \beta_1 Normalized\ Average\ ESG\ Rating_{i,t-1}$$

$$+ Control\ Variables + Date\ FE + Industry\ FE + \varepsilon_{i,t} \quad (1a)$$

Table 3 Prediction of news based on the most recent ESG rating

	ESG News			
	(1) All News	(2)	(3) Material News	(4)
Normalized Average ESG Rating t-1	2.9083***	3.2671***	2.4549***	3.0089***
	[7.445]	[8.138]	[5.186]	[6.026]
High Disagreement		0.0955		0.7318
		[0.186]		[0.987]
Normalized Average ESG Rating t-1*High Disagreement		−0.8338**		−1.1574**
		[−2.005]		[−2.237]
Controls	Yes			
F.E	Industry & Date			
N	31,854	31,854	10,806	10,806
R-squared	0.316	0.317	0.453	0.455

H2: Market reaction to ESG news

- positive (negative) ESG news is associated with positive (negative) stock price reaction.
- stock price reaction to positive ESG news is more positive than the reaction to negative news

Table 5 Market reaction to ESG news conditional on the average ESG rating

Panel A. Univariate Analysis – All News	High Average ESG Rating		Low Average ESG Rating	
	N	*Industry Adj Return −1, +1*	*N*	*Industry Adj Return −1, +1*
Positive News	4,006	0.0738%	2,365	0.4159%
Negative News	2,379	−0.1890%	3,991	−0.2184%
Panel B. Univariate Analysis – Material News	High Average ESG Rating		Low Average ESG Rating	
	N	*Industry Adj Return −1, +1*	*N*	*Industry Adj Return −1, +1*
Positive News	1,340	0.0371%	821	1.0580%
Negative News	798	−0.3430%	1,363	−0.4588%

Predicting futures stock returns

- generate significant excess returns
- market has not fully reflected the information contained in the ESG rating disagreements.

$$R_{i,t} = \alpha + \beta_{MKT}MKT_{i,t} + \beta_{SMB}SMB_{i,t} + \beta_{HML}HML_{i,t} + \beta_{RMW}RMW_{i,t}$$
$$+ \beta_{CMA}CMA_{i,t} + \varepsilon_{i,t} \tag{4}$$

Panel C. Predicting Future Stock Returns Using Disagreements in ESG Ratings

	Equal-Weighted (1) Long/Short		Value-Weighted (2) Long/Short	
Parameter	*Estimate*	*t*	*Estimate*	*t*
Intercept	0.0035	2.46	0.0033	2.35
Market	−0.1334	−3.13	−0.1319	−3.10
SMB	0.0807	1.03	0.0833	1.09
HML	−0.0942	−1.10	−0.0963	−1.15

Conclusion and Question

- Positive market reaction to positive ESG news and a negative market reaction to negative news
- ESG news reflects sentiment, but may not provide accurate corporate ESG information.
- The issue is not how ESG news responds to ESG, but rather the media's misvaluation of ESG news.