



# Discussion: ESG Shareholder Engagement and Downside Risk

Andreas G. F. Hoepner  
Ioannis Oikonomou  
Zacharias Sautner  
Laura T. Starks  
Xiaoyan Zhou

Discussant : Guy Kaplanski



# ESG Shareholder Engagement and Downside Risk

- The paper employs unique database of active investor engagements (ESG) to study the impact of this activity on the firm downside risk as reflected in stock returns.
- The main finding is an economically meaningful reduction in downside risk as measured from stock returns.
- The database is unique and the analysis is intriguing. Nevertheless, several questions arise from the paper which can be addressed to further validate the results.



## The Sample

- The paper discusses in detail the descriptive statistic for 1,712 engagements across 573 targeted firms worldwide (this discussion encompasses the first three figures and four tables).
- After filtering utility firms and firms with missing returns the actual number of firms in the analysis drops to 351 target firms.
- Considering this large difference, it seems more suitable to describe the full sample in brief and give a detailed discussion only for the relevant data that is actually used in the analysis.

(To the least, the tables should include separate columns for the restricted, more relevant, data.



## The Sample

- Utilities companies are excluded from the analysis on the ground they "operate in heavily regulated environments in which shareholder activists have lower chances to effect change."
- Did you check this claim? While utilities subject to heavy regulation, according to your records they are, nevertheless, engaged by the investor. So the investor does believe in making a change.
- Why not having also a comprehensive all-included regression in which utilities are separated by a dummy variable for utilities?



## The Sample

- Omitting firms which suffer from missing data on returns might be exposed to a major selection bias. It is plausible that firms with missing data on returns also suffer from higher downside risk (depending on the reasons for missing data). Hence, if missing data of engaged firms is more common in the post engagement period then omitting those firms reduces downside risk of the remaining firms...
- You should check for selection biases when omitting those firms (do the missing data occur randomly or tend to occur before or after engagement). Otherwise, you should at least acknowledge this possibility.



## Downside risk measures

- The paper use two methods to estimate downside risk:
  1. Lower partial moment (LPM)
  2. Value at Risk (VaR) methodology
  
- As this is a critical element in the analysis, it raises several remarks/questions:
  - I. Implementation: While in the first method (LPM) you consider all returns below zero, in the second (monthly VaR at 5%) you look at the lowest return observation. These are substantially different interpretations to downside risk that go beyond the differences in the risk measures (there is inconsistency in regards to where downside starts). Some reasoning would be helpful here.



## Downside risk

II. Additional alternative measure: While VaR is very popular it suffers from being non-additive measure which makes its comparison difficult. Another well-behaved and highly accepted measure is Mean-Shortfall which combines the advances of both LPM and VaR (e.g. Embrechts, Klueppelberg & Mikosch (1997), Artzner et al. (1997, 1999), Basak & Shapiro (2001), Longin (2001) and many others).

IV. Instrumental out-of-sample measure: A possible way to measure downside risk indirectly can be by looking at the premiums of out-of-money put options.



## Downside risk

IV. A 5% mean-shortfall can apply only for periods longer than one month (otherwise there are insufficient daily observations to calculate the average loss). This brings up two major questions which in my view should be further addressed in the paper:

(i) Why measuring downside risk over a short period of one month which makes it very difficult to construct the tail of the distribution?

(ii) Why consider only downside risk?

In other words: if engagement affects only extreme rare (left-tale) events than a one-month period is insufficient to measure downside risk. Alternatively, if engagement affects the entire left-hand side of the distribution than a downside risk measure like VaR is inappropriate.





## Methodology

- To determine the impact on downside risk the paper employs a matched control group based on country, industry and size.
- The paper employs a correction factor in comparing the engaged firms and the control group. This factor accounts for a potential selection bias in the engaged firms toward endogenous variables which are correlated with downside risk.
- The factor considers size, market-to-book ratio, leverage, investment, the profit margin, dividend yield, free float, and the anti-director rights index.



## Methodology

- Based on the literature, I can think of several other variables that should be considered (e.g. ROE, Distress O-Score). In particular market liquidity (Amihud, 2002) known to be associated with market mispricing which may affect the interest of investors. Liquidity (and distress O-Score) should also be included in the main regression as it may affect downside risk as well.
- I would consider also a control variable for a recent release of quarterly accounting reports. The increase in information inflow may be associated with a short-term increase of downside risk, when the information is impounded in prices, and a longer term decrease in downside risk due to better informed investors.



# Methodology

- The time-series analysis of exposure to down-side risk factor employs the five risk factors of Fama and French (2015).
- A similar analysis with Carhart (1997) momentum factor is needed in order to assure that the relation to downside risk factor is not a spurious result due to correlation of engaged firms with momentum.
- This is in particular important as the paper uses the alpha from this regression to conclude that downside risk is reduced without compromising returns.



**Thank You!**

