FIXED INCOME

THE STATE OF ACADEMIC RESEARCH

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PRI Principles for Responsible Investment

How to measure risk?

- Risk is commonly understood as ‘probability of negative events’
- However, current finance practice defines it commonly as ‘probability of deviation from expectation, downwards and upwards’ (i.e. standard deviation, tracking error)
- Firms with more ESG conscious business practices have a lower probability of ESG related negative events but are not necessarily harmed in any positive events
- Hence: measuring risk accurately as ‘probability of negative events’ is essential to highlight ESG’s competitive advantage in terms of risk adjusted materiality (i.e. semi-standard deviation instead of standard deviation)

ESG, Risk Reduction, and fixed income

“ Companies with high ESG scores are found to have less company specific risk ”

(Bouslah et al., 2012; Boutin-Dufresne and Savaria, 2004; Lee and Faff, 2009; Bauer, Derwall and Hann, 2009; Oikonomou et al., 2012)

“ Corporations with better ESG ratings are found to have lower cost of debt and higher credit ratings ”

(Bauer et al., 2009; Bauer and Hann, 2011; Oikonomou et al. 2011)

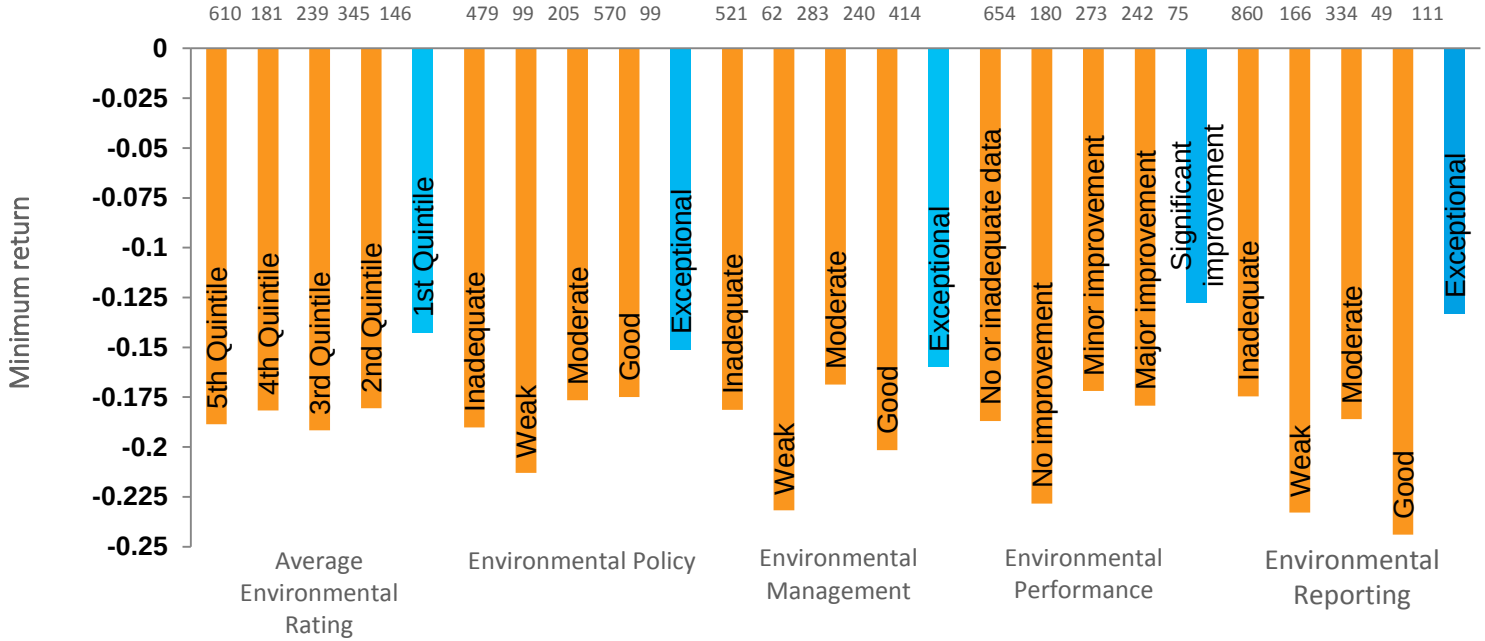
“ ESG criteria are found to provide an insurance like protection for firms in legitimacy crisis ”

(Godfrey, Merrill and Hansen, 2009)

ESG: Reducing Worst Case Risk

[Sample: FTSE All World 2005-2010]

Average number of firms for each portfolio

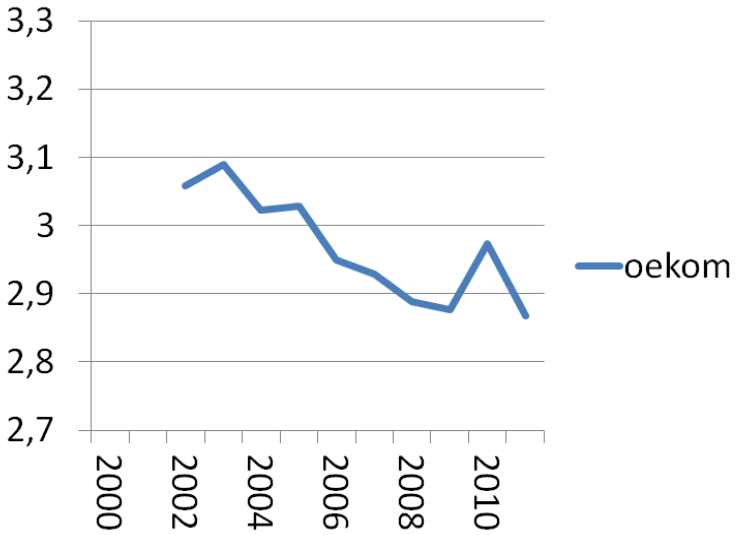


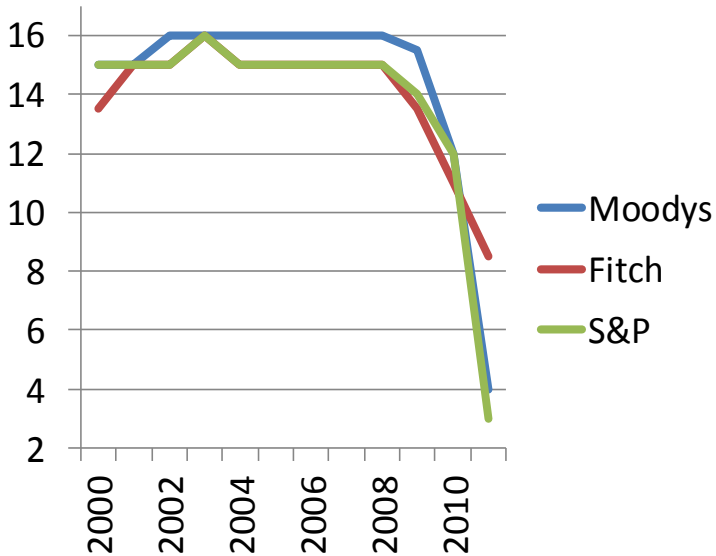
- Portfolios rated most responsible (shown in blue) have over 100 basis points lower worst case risk than less responsible portfolios (shown in orange).

[Based on a research project with M. Rezec and S. Siegl]

PRI Principles for Responsible Investment

ESG & Sovereigns: Seeing Greece coming

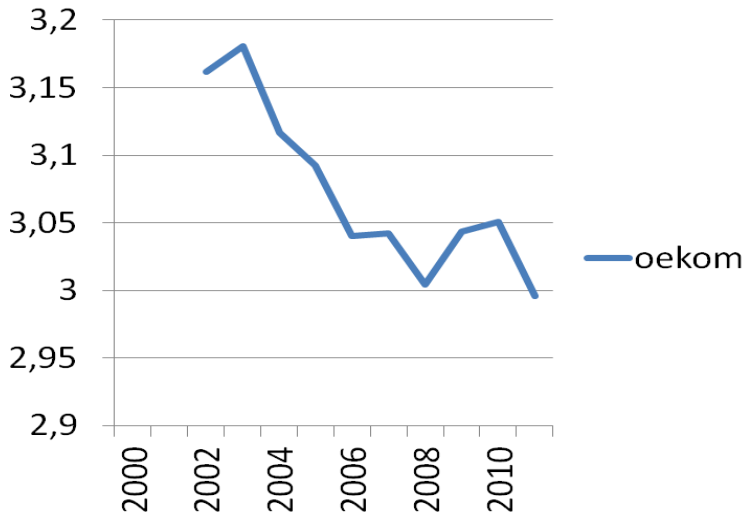


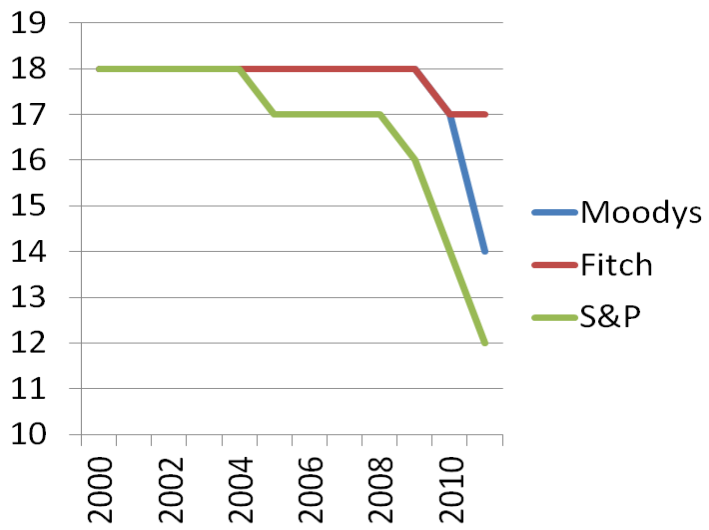


- Oekom's environmental, social and governance (ESG) sovereign rating sensed deterioration in Greece as sovereign much earlier than the Big 3

[Based on a research project with K.B.H. Bouslah, J.M. Linares-Zegarra and A.L. Neher]

ESG: Protection against Portugal





- ESG sovereign ratings also much earlier warning signals than Moodys and Fitch re Portugal
- Similar results for Ireland, Italy and Spain

[Based on a research project with K.B.H. Bouslah, J.M. Linares-Zegarra and A.L. Neher]

ESG & Sovereigns:

statistical results for short term sovereign debt

CONTROL VARIABLES	(4) 3M, WITH COUNTRY & YEAR DUMMIES	(5) 6M, WITH COUNTRY & YEAR DUMMIES	(6) 12M, WITH COUNTRY & YEAR DUMMIES
oekom totalrating	-0.0203*	-0.0132*	-0.6935*
GDP p.c. (%)	-0.0009**	-0.0009*	-0.0048
Inflation rate (%)	-0.00001	0	-0.0028
Current Account Balance Rate (%)	-0.0006	-0005	-0.0169*
External Debt (%)	0.0001	0	-0.0231
Trade Rate (%)	-0.0002	-0.0001	-0.0051
S&P long term, orthogonalised (%)	-0.0043*	-0.0030**	-0.1496*
Constant	0.1112**	0.0836***	3.1819*
No. observations	267	267	267
R-squared	0.808	0.778	0.564

- Significant relationship between short-, and medium-term government bond rates and ESG-rating
- Stronger relationship in case of 12M-matuarity than 3M-, and 6M-matuarity

[Based on a research project with K.B.H. Bouslah, J.M. Linares-Zegarra and A.L. Neher]

ESG & Sovereigns:

statistical results for longer term sovereign debt

CONTROL VARIABLES	(7) 3YR, WITH COUNTRY & YEAR DUMMIES	(8) 5YR, WITH COUNTRY & YEAR DUMMIES	(9) 10YR, WITH COUNTRY & YEAR DUMMIES
oekom totalrating	-0.1951**	-0.0934***	-0.0788***
GDP p.c. (%)	-0.0015	-0.0013	-0.0015***
Inflation rate (%)	-0.0002	0.0004	-0.0002
Current Account Balance Rate (%)	-0.0038	-0.0020**	-0.0012
External Debt (%)	-0.0038	-0.002	-0.0026
Trade Rate (%)	-0.0011	-0.0003	-0.0004*
S&P long term, orthogonalised (%)	-0.0416**	-0.0196***	-0.0165***
Constant	0.9236**	0.4515***	0.3889***
No. observations	267	216	266
R-squared	0.691	0.852	0.804

- Highly significant relationship between long-term government bond rates and ESG-rating
- Strongest relationship in case of long-term government bond yields

[Based on a research project with K.B.H. Bouslah, J.M. Linares-Zegarra and A.L. Neher]

Thank you for your attention

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