Do Sustainability-Linked Bonds Pay Lower Interest Rates?

Alfons Oude Lansink1\*, and Magdalena Kapelko2

1 Business Economics Group, Wageningen University, Wageningen, The Netherlands.

2 Department of Logistics. Wroclaw University of Economics and Business, Wroclaw, Poland.

\* Corresponding author: [alfons.oudelansink@wur.nl](mailto:alfons.oudelansink@wur.nl)

**MATHEMATICAL MODEL**

**Directional distance function to estimate the discount:**

(1)

s.t. (2)

(3)

(4)

Where is the discount (inefficiency) of the interest rate relative to frontier of highest yielding bonds; is the directional vector for output and is the weight of bond *j*.