

PROJET FINANCE QUANTITATIVE



1) “Seeking Signals from ESG Data Input” : (cf attached ...)

Dataset : DataStatic.xls (financial & ESG data of 46 securities, components of the Euro Stoxx 50 index)

2) How to integrate Climate-change risks into a global risk management approach?

The work consists in:

-carrying out a global review of the existing models which provide financial institutions with ESG risk monitoring (origin of data on climate, type of models, cost of the implementation ...)

3) Built a Climate risk or an ESG factor and apply it to Fama French methodology

4) **CARIMA approach extension** : ‘a quantitative tool in order to assess the opportunities of profits and the risks of losses that occur from the transition process’ (transition towards low-carbon economy). A market approach to build a carbon risk factor.

2 steps : **1.** develop a scoring system to determine if a firm is green, neutral or brown **2.** construct a mimicking factor portfolio for carbon risk which has a long exposure to brown firms and a short exposure to green firms.

Dataset : Euro Stoxx 50 index

Scoring concept : tbd

4) Construct a stock picking methodology according to different classification methods.

Output & Delivery



Programs (Note book, R files...)

A PDF providing :

- Methodology (Litterature revue, details about the model and the methodology selected)
- Data (exploration data -with data VIZ and statistical tools for example, cleaning data Results & interpretations



- Fin avril : avancé projet et choix sujet
- 15 May : restitution et soutenances