

BlackRock Sustainability

Predictive ESG Classification

Meet The Team

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GitHub | Linkedin | Email



Overview

01

Audience.

BlackRock, the world's largest asset manager, wants to include climate risk in its investment decisions.

02

Business Context.

They want to scout new public companies to invest in.

03

Deliverables.

- 1. Insights
- 2. Predictive model
- Second-Order recommendations

How Are Companies Rated?



Morgan Stanley Capital International





ESG

1. Environmental

2. Social

3. Governance

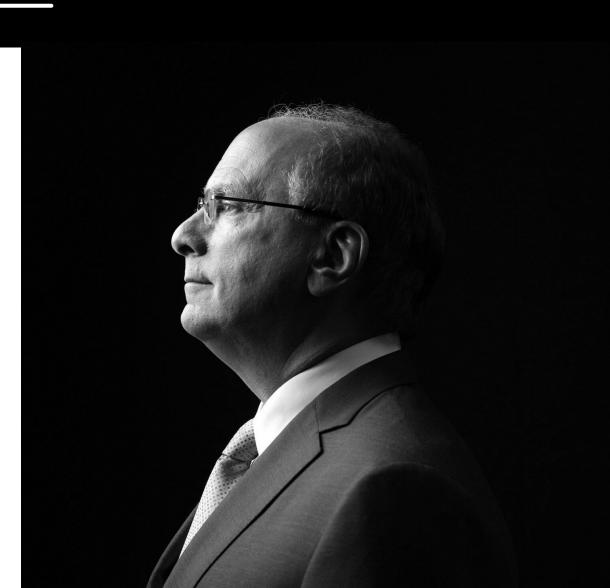
Data

ESG Rating Data:

Kaggle Dataset - 2022 MSCI ESG Rating/Score Data

Public Company Information:

Kaggle Dataset - 2021 Fortune 1k Company metrics



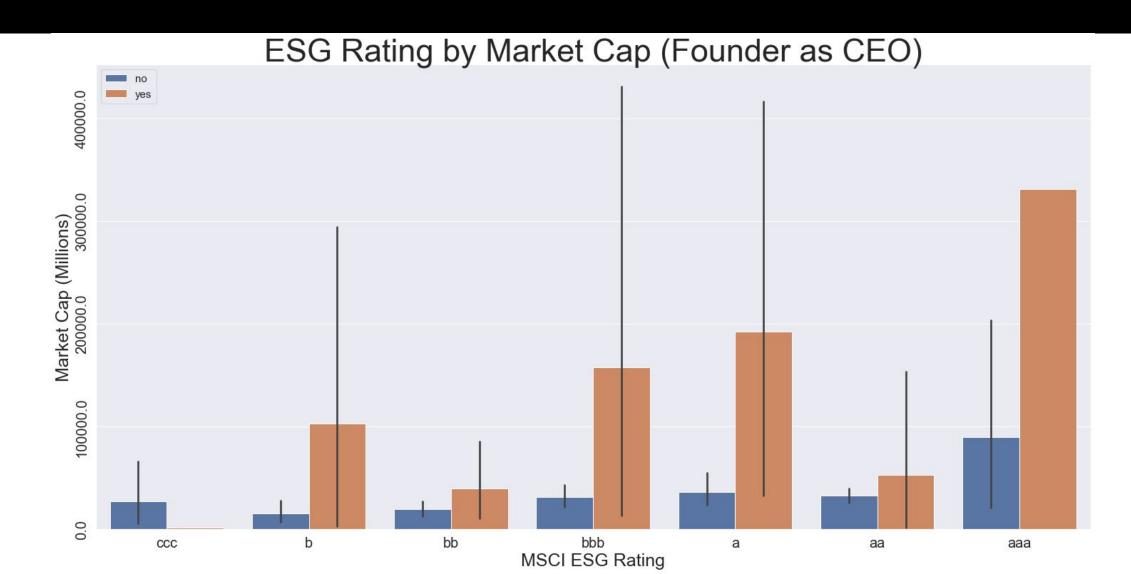
How Does ESG Impact Value?





How Does ESG Impact Value?





How should we Classify?



Simple:

LAGGARD

AVERAGE

LEADER

• Accuracy: 76%

• precision: 75%

Complex - 6 Classes:

CCC B BB BBB A AAA

Accuracy: 44%

precision: 44%

Simplicity vs complexity

- Less Categories leads to better accuracy
- 2. Complex Predictions need more data
- 3. Look into classifying for E, S, and G separately

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Conclusion



Modelling.

- Models work better for the different targets
- Access to ESG data is valuable
- 3. Existing features best on Env.

02

Recommendations.

- Partner with Rating company
 (MSCI)
- 2. Invest on Financials, then on leadership stats

03

Next Steps.

- 1. More data
- Compare against another Rating company standard
- Value over time for ESG Corps



Thank you!

Do you have any questions?