UNIVERSITÀ
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CREDIT RISK ANALYSIS

Course: Financial Data Science
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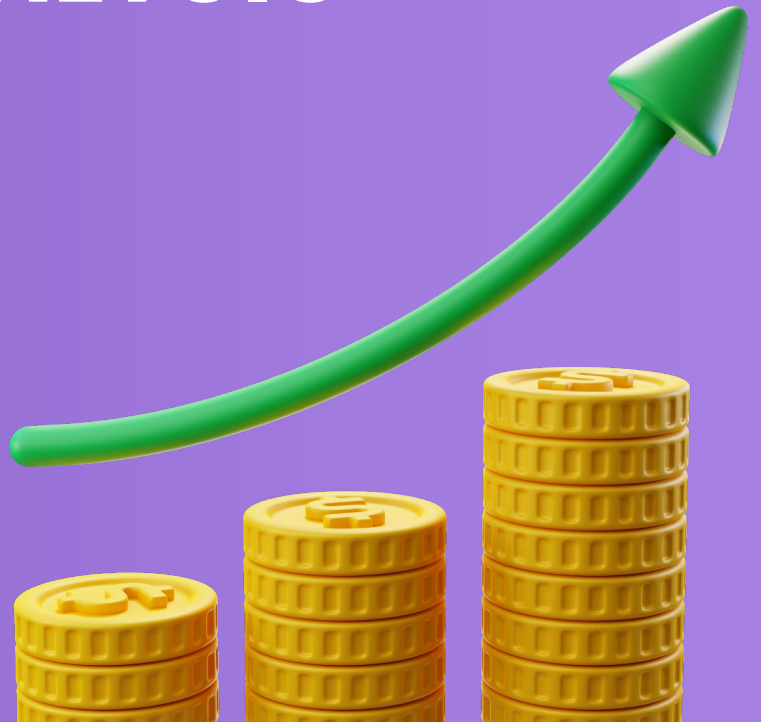
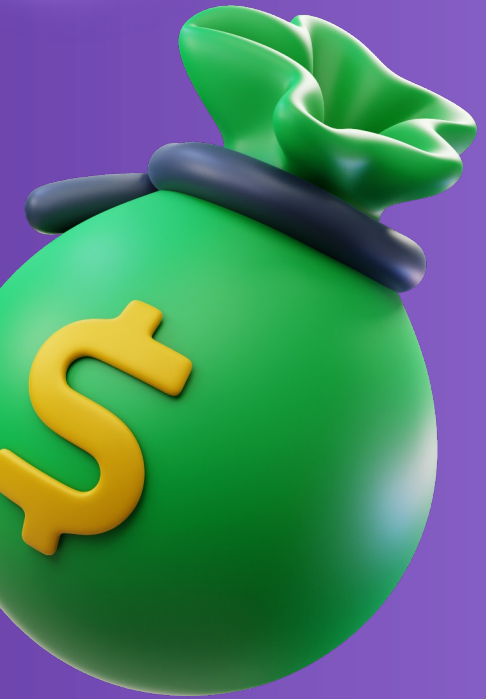


ABSTRACT

Understand which are the key factors
for a high level credit risk to occur.

Compare the performance of different ML models
capable to predict this credit risk level for a company
in an year - given past years data

Keywords
Financial Data Science • Credit Risk Analysis • Machine Learning



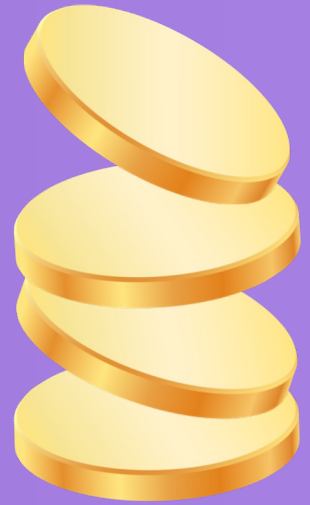
GITHUB REPOSITORY

https://github.com/Amatofrancesco99/credit-risk-analysis

TABLE OF CONTENTS

01

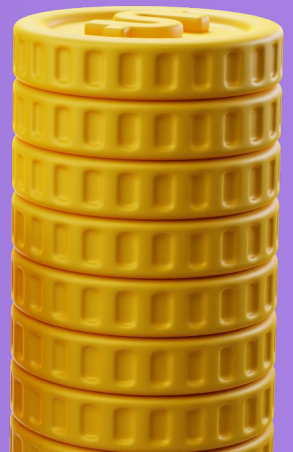
INTRODUCTION



WHAT IS CREDIT RISK ANALYSIS

Credit risk analysis extends is the process that achieves a lender's goals by weighting the costs and benefits of taking on credit risk

By balancing the costs and benefits of granting credit, lenders measure, analyze and manage risks their business is willing to accept



DATASETS

The main dataset contains the following features (from 2015 to 2020), regarding European companies:

- **Name**: name of the company
- **Turnover**: how quickly a business conducts its operations
- **EBIT**: indicator of a company's profitability
- **PLTax**: company tax based on their cumulative income over their lifetime up until the filing date
- **MScore**: credit risk level - the higher the M-score of a company, the more likely the company is to engage in accounting frauds
- **Country**: worldwide country of the company

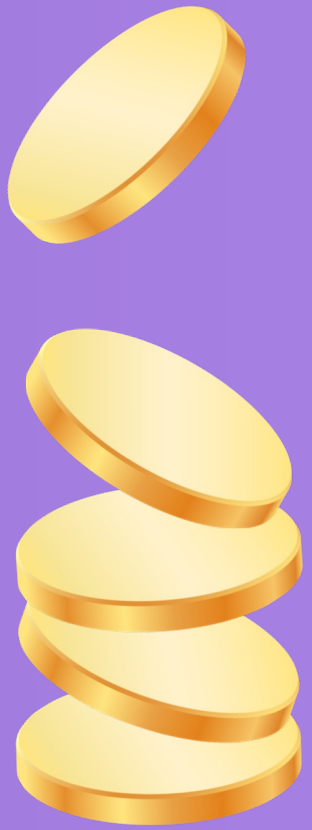
DATASETS

- **NACE code**: European statistical classification of economic activities
- **Sector 1**: detailed description of the company's business activities
- **Sector 2**: general sector
- **Leverage:** the use of debt to amplify returns from an investment or project
- **ROE:** measure of a company's annual return
- **TAsset**: assets owned by the company

Other accessories datasets have been downloaded from Kaggle to extract other useful information, to gain more effective insights.

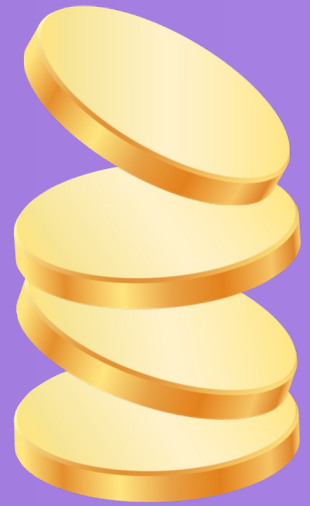
02

DATA CLEANSING



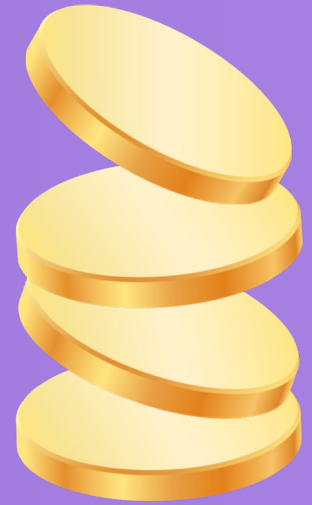
03

EXPLORATORY ANALYSIS



04

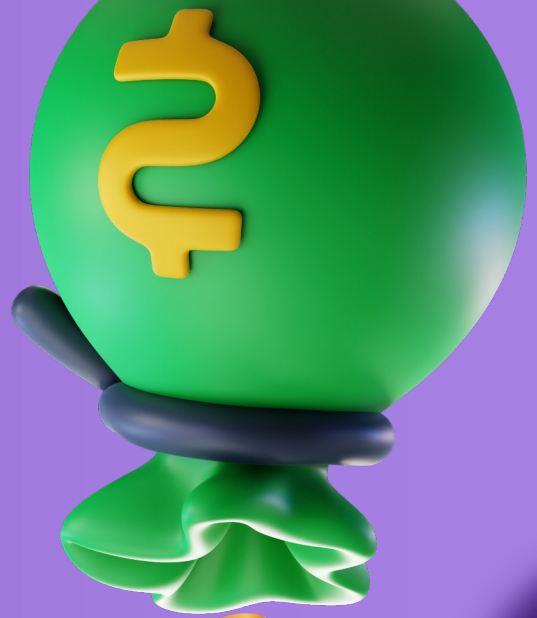
ML MODELS



THANKS!

QUESTIONS?

Author's GitHub profile



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