TAICHUNG COMMERCIAL BANK – LOAN APPROVAL ANALYSIS

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GOALS

- Determine the financial features most important in the underwriting process
- Create suggestions to improve/streamline the process

DATA & METHODS
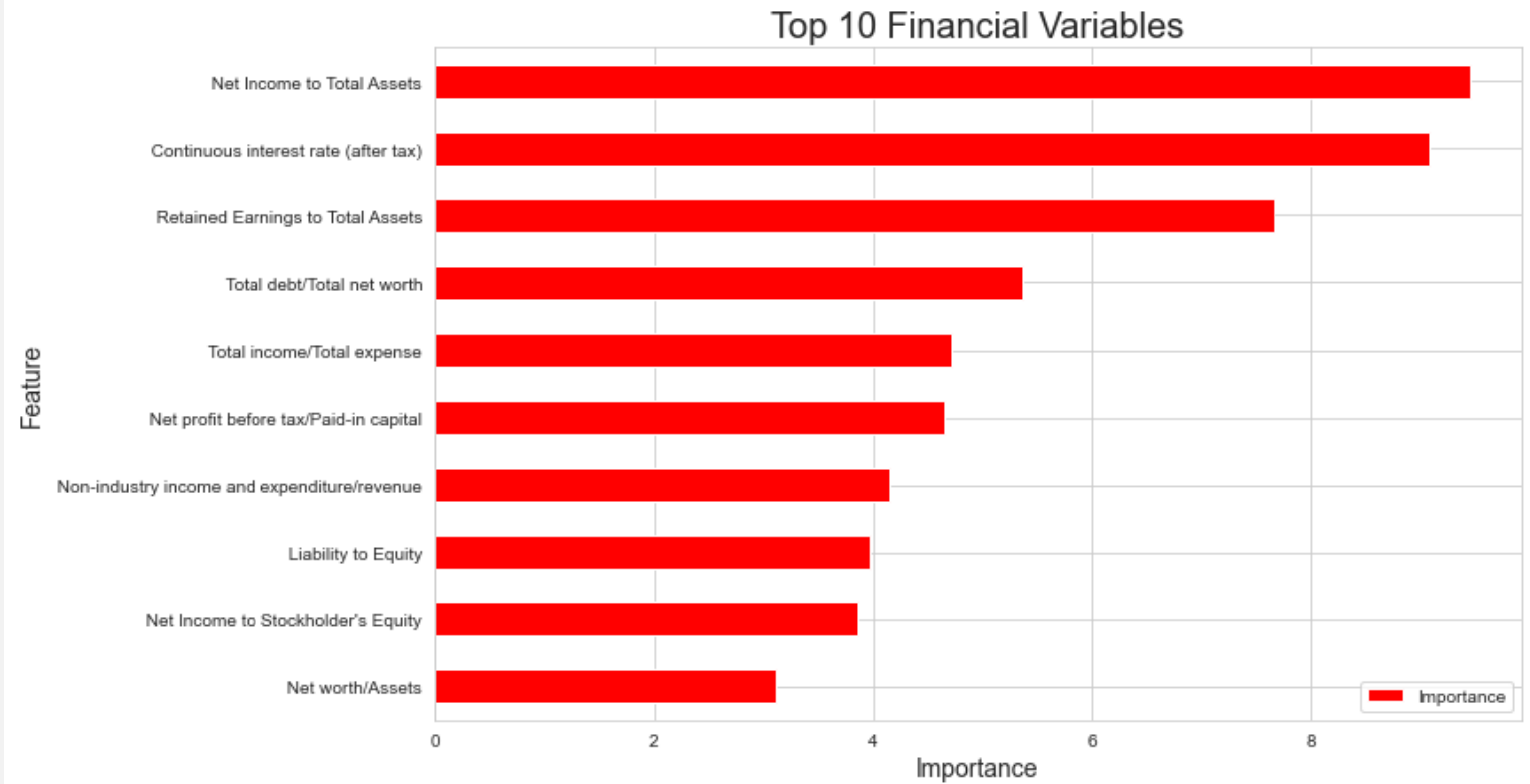
- Bankruptcy data from the Taiwan Economic Journal

- EDA

  - Features with a high correlation were dropped

  - Sample Minority Oversampling Technique ("SMOTE") applied to class imbalance

- Finding a good model

  - 5 different algorithms ran

- Understanding the model

MODELING RESULTS

- Random Forest Classifier
- F1-Score = 43.8%

TOP 10 VARIABLES
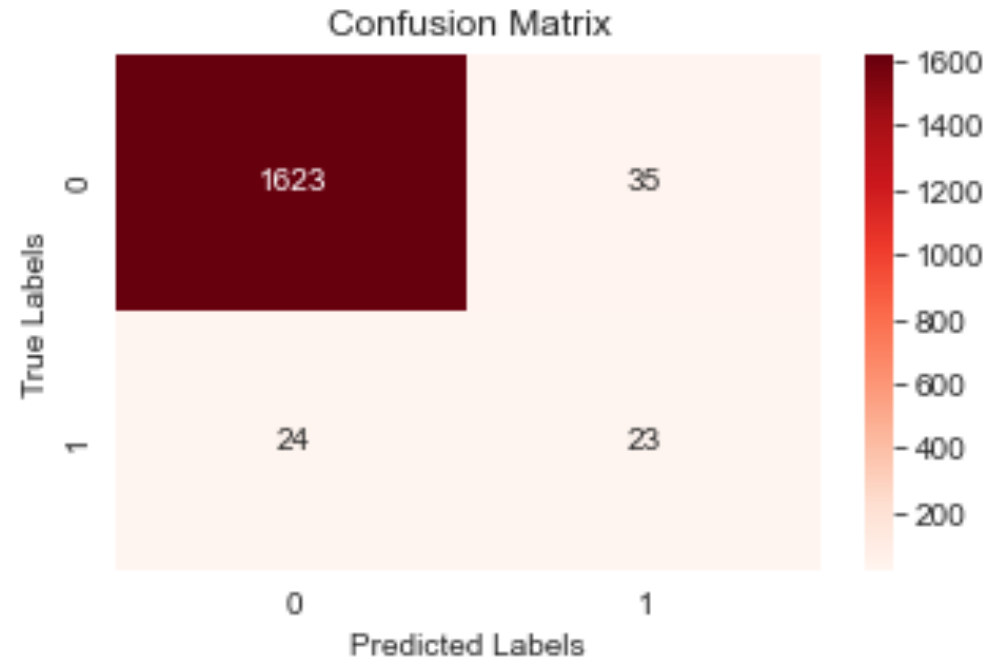
Top 10 Financial Variables

SUGGESTIONS

Put clients into Red, Amber and Green buckets.

Check client history