

Proposal

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1. Project description

Cross currency basis swap is a floating/floating swap through which two counterparties exchange different currencies. The EURUSD basis has been negative and more volatile since 2008. This project tries to predict the changes of 2y EURUSD basis by determining effective features.

2. Features

- **Changes of basis during period $t-1$** which denotes momentum
- **US Dollar Index** published by Bloomberg which indicates the dollar strength in the spot FX market
- **Reverse Yankee issuance** which is the Euro debt issued by US companies
- **USD LIBOR/OIS spread** which indicates credit risk and liquidity in US Dollar market
- **3m Euribor-3m EONIA** which indicates credit risk and liquidity in Euro market
- **CME global volatility index (VIX)** which indicates global risk
- **Ted spread (3m US libor-3m treasury yield)** which indicates credit risk and liquidity in US Dollar market
- **3m Euribor-3m Generic Germany bond yield** which indicates credit risk and liquidity in Euro market
- **BAML GFSI Solvency Component** which indicates global solvency risk

3. Methods

Try KNN/logistic/SVM/RandomForest/bagging/AdaBoost to choose a better model.