Predicting Istanbul Stock Exchange Relationship With Seven Other International Index

Between 2009-2011

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How Did Istanbul Stock Exchange Relationship With Seven Other International Index?

DATA:

HTTPS://ARCHİVE.İCS.UCİ.EDU/ML/DATASETS/ISTANBUL+STOCK+EXCHANGE#

Methodology

- Linear Regression
- OLS
- Ridge

Features

- SP500 : American Stock Market Index Based on The Market Capitalizations of 500 Large Companies
- DAX : Blue Chip Stock Market Index Consisting of The 30 Major German Companies
- FTSE : Index of The 100 Companies Listed on The London Stock Exchange With The Highest Market Capitalization
- NIKKEI : A Stock Market Index For The Tokyo Stock Exchange
- BOVESPA : Index of About 50 Stocks That Are Traded on The Sao Paulo Stock, Mercantile & Futures Exchange in Brazil
- MSCE_EU : Morgan Stanley Capital International European Index
- MSCI_EM : Morgan Stanley Capital International Emerging Markets

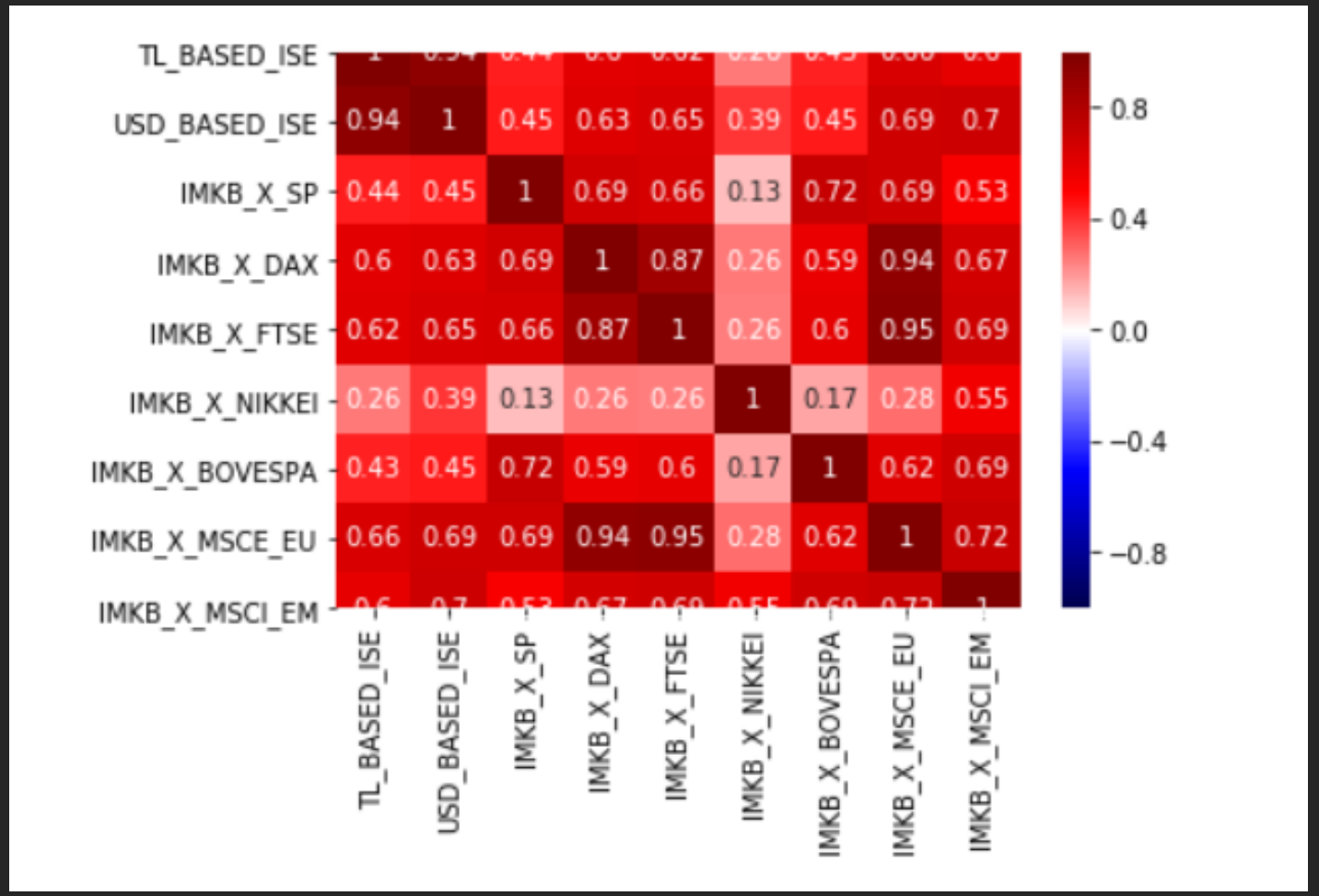
Target

ISE : Istanbul Stock Exchange National 100 Index(ISE100 / BIST100)

Other Features

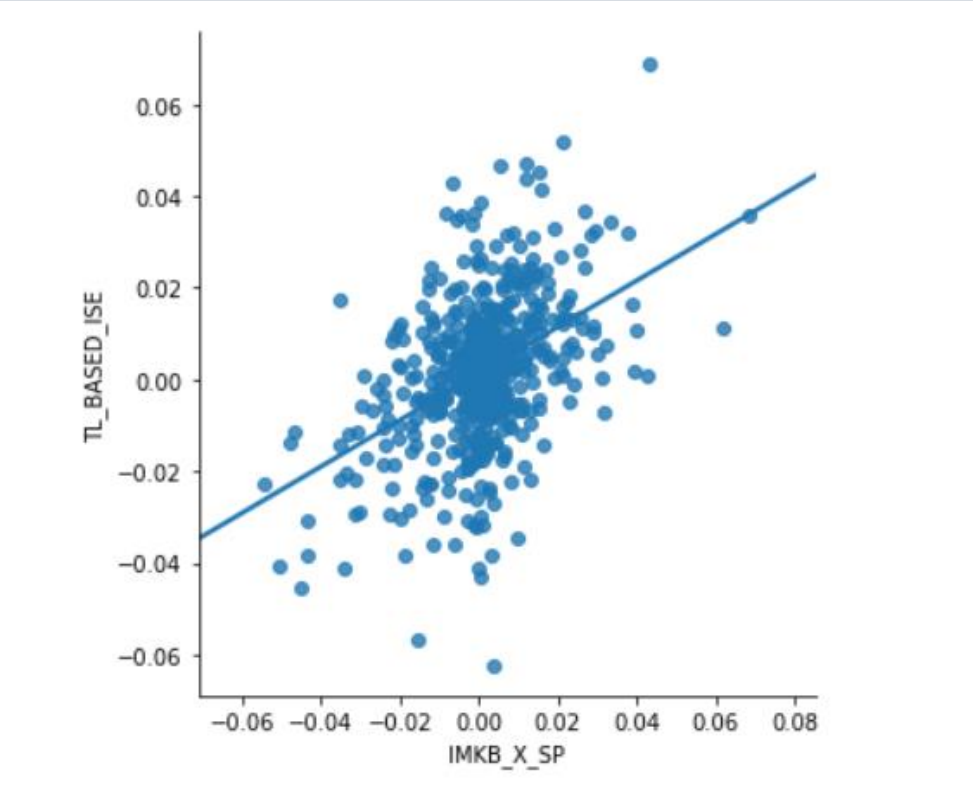
USD_BASED_ISE

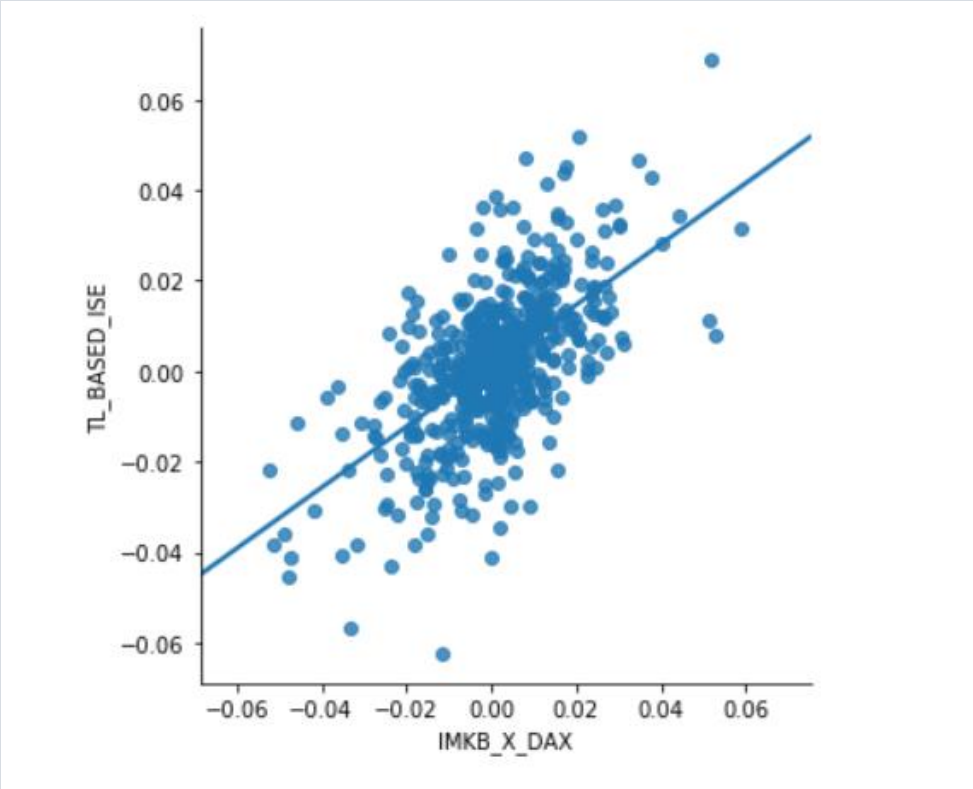
DATE

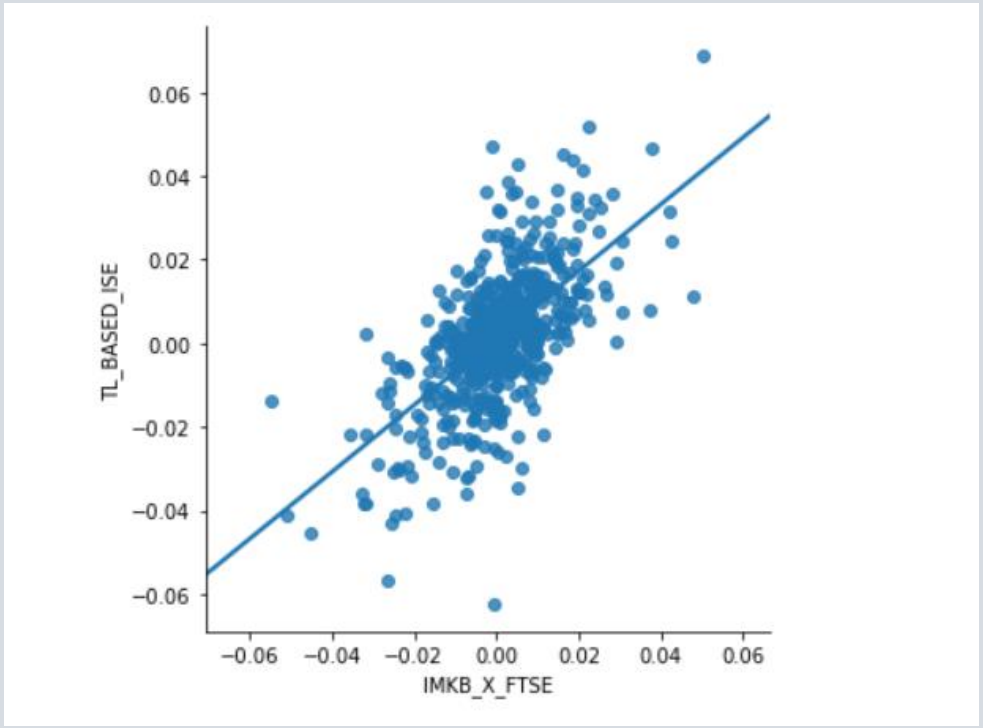


How does correlation between each other?

One By One Relationship with ISE



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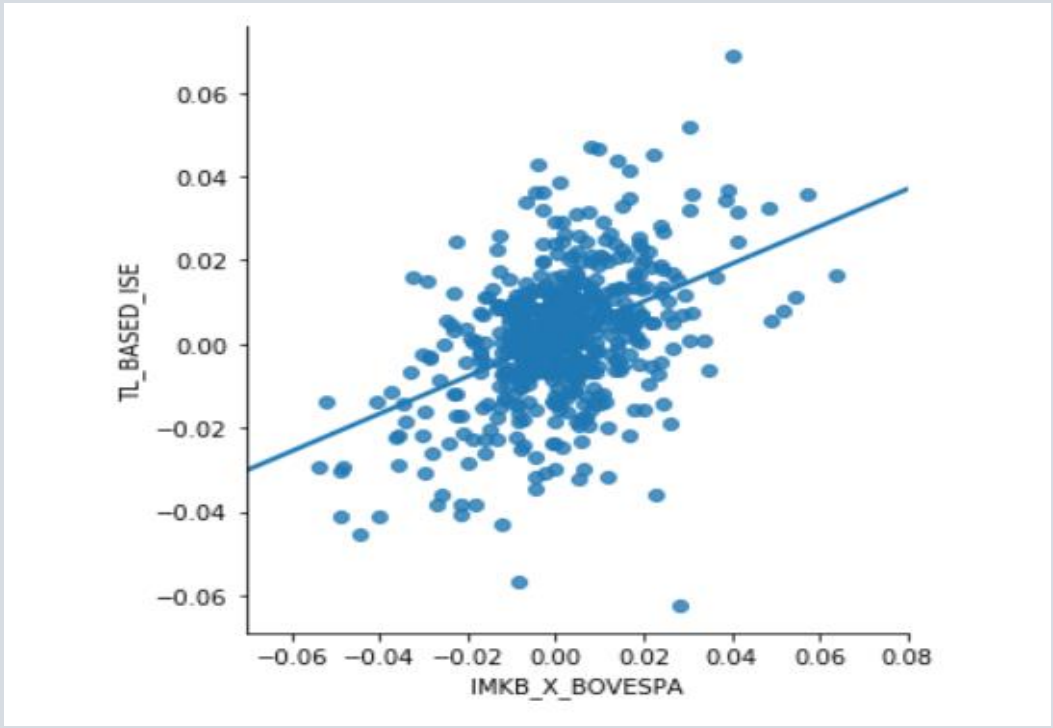
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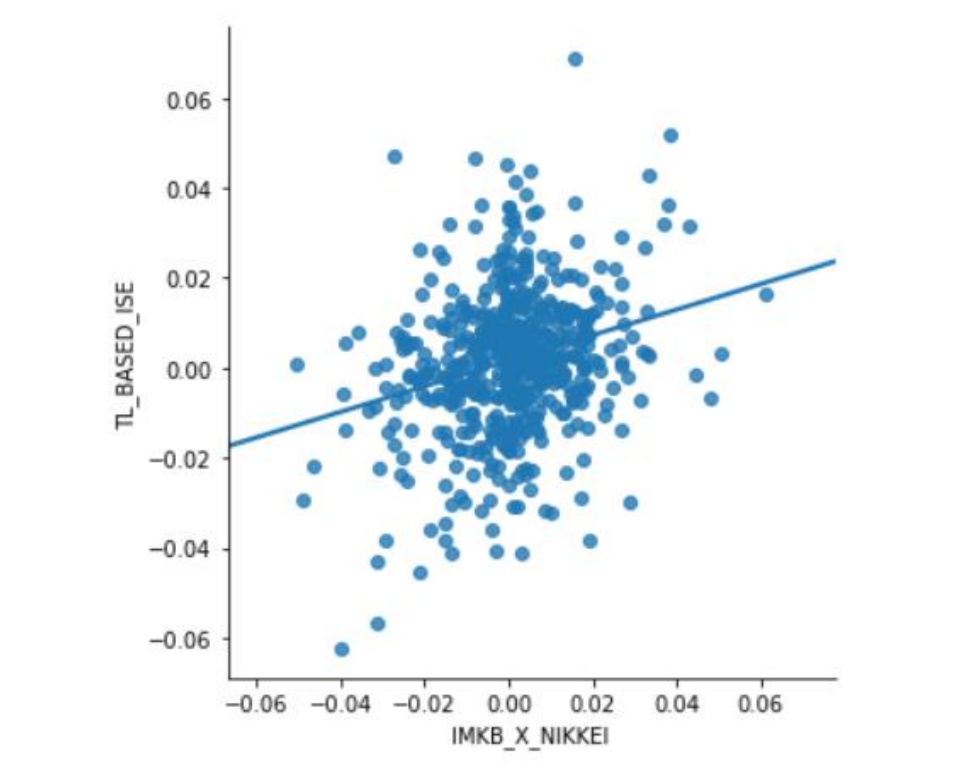
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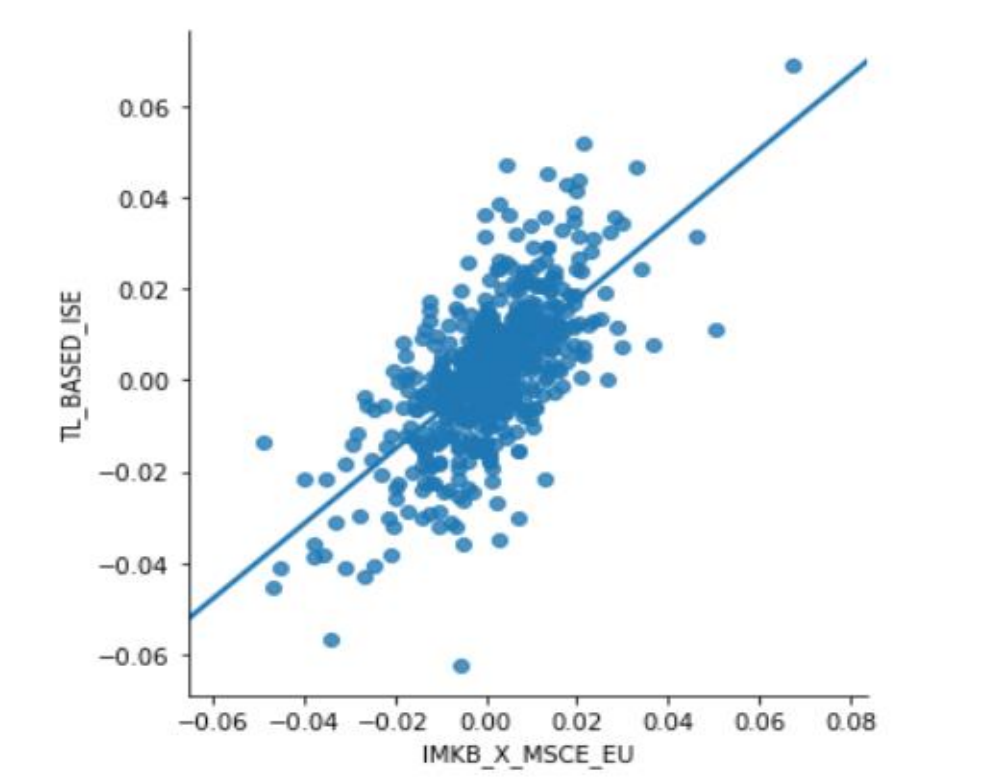
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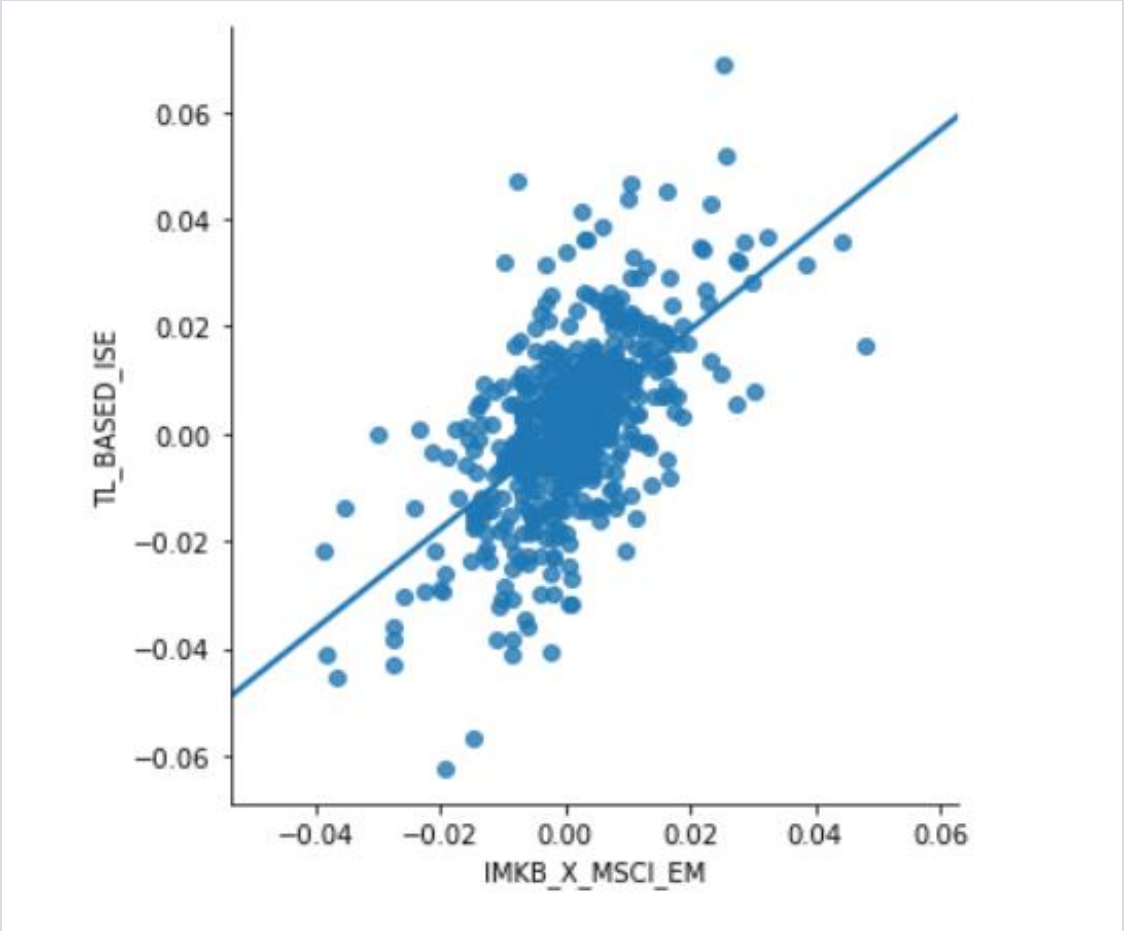
Feature Engineering

- Baseline Linear Regression model 1 with eight features (R2 of 0.58)
- Ridge
- OLS



RESULTS

OLS R2 : 0.47
CV_LinearRegression R2 : 0.58
Ridge R2 : 0.58

ISE was the most affected from Morgan Stanley Capital International European Index.

With the effect of the crisis experienced in European countries in 2010, European stock markets remained well below the pre-crisis values, while records were broken on the return of the index on the ISE index

Future Work

ISE RELATIONSHIP WITH BY YEAR

THANK YOU