

Task2 Analysis of the Great Coach Effect



Data Preparation



Data Preparation: Athlete–Sport–Country Aggregation

- ✓ Aggregate medal counts by NOC–Sport–Year
- ✓ Construct a complete time series (fill missing years with zeros)



Method I: Change Point Detection

Identify the years with structural breaks in medal counts



Method II: Cross-National Mobility Analysis

Identify paired patterns of Country A ↓ and Country B ↑



Method III: DID Effect Quantification

treatment group vs. control group
Difference-in-differences before–after comparison



Validation



Case Validation

- ✓ Lang Ping Effect (China–USA Volleyball)
- ✓ Karolyi Effect (Romania–USA Gymnastics)



Application

Application: Investment Recommendations



Brazil



United Kingdom



India