

# Hierarchical Forecasting

## 1 Introduction

- What is hierarchical time series
- Importance of coherent forecasts (discuss with an example)

## 2 Coherent point forecasts

- Definition of coherent point forecasts
- Discussion of traditional methods
  - \* Bottom-up
  - \* Top-down
  - \* Middle-out

## 3 Point forecast reconciliation

- Definition of point forecast reconciliation
- Existing point forecast reconciliation methods
  - \* OLS
  - \* MinT
  - \* GTOP

## 4 Probabilistic forecast reconciliation

- Importance
- Definitions
- Existing studies

## 5 Empirical example