Applied Data Analytics

Statistics — Basics & location

Stocks vs. flows, levels vs. changes

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Stocks

Refer to a point in time

- 1 January 2025 at 12:00 midnight

- Units are always "absolute", e.g., €, kg, persons

Flows

Refer to a period of time

- 1 January 2025
- Week 1 of 2025
- January of 2025
- The year 2025
- The 2020s

Units are always per unit of time, e.g., €/year, kg/week, persons/month

Levels

Can refer to a stock or a flow

- Wealth level on 1 January 2025

- Labour earnings during the year 2025

Always refer to a point in time (stock) or a period of time (flow)

Changes

Can refer to a stock or a flow

- Wealth on 1 January 2025 compared to 1 January 2024

- Labour earnings during the year 2025 compared to the year 2024

Always refer to a difference between two points in time (stock) or two periods of time (flow)

Changes in stocks are flows

- Price level on 1 January 2025

  = Price level on 1 January 2024 + Inflation during the year 2024

- Wealth level on 1 January 2025

  = Wealth level on 1 January 2024 + Savings during the year 2024
  (+ asset price inflation / asset deprecation)