

Economic Data Analysis Using R

- Introduction to R
- Getting Started - Using Rstudio IDE
- Economic Data
- **Data Visualization – Using Graphs**
- Data Analysis I
- Data Analysis II

Data Visualization – Using Graphs

- Simple Graphs
 - Scatter, Line, Bar, and Box Plots
 - Histogram and Distribution
- Using ggplot2 Package
 - Grammar of Graphics ([Part1](#), [Part2](#))
 - [Data Visualization](#)
 - [Tutorial Example](#)

R Package ggplot2: qplot

- `qplot(data, x, y, ..., geom(...)) + ...`
 - Data Frame
 - Aesthetics: `x`, `y`, `alpha`, `color`, `size`, `shape`, `fill`, ...
 - Geometry: `point`, `line`, `bar`, `jitter`, `boxplot`, `histogram`, `density`, `smooth`, ...
- Adding facets
 - `facet_grid`

R Package ggplot2: ggplot

- `ggplot(data, aes(x,y,...), geom_...) + ...`
 - Data
 - Aesthetics
 - Geometry
 - Stats, Facets
 - Scales, Colors, Coordinates
 - Labels, Legends
 - Themes