

# Lecture 1: What is Econometrics

Zheng Tian

# Outline

## 1 What is Econometrics

# Definition of Econometrics

Stock and Watson (2015) define Econometrics as

*At a broad level, econometrics is the science and art of using economic theory and statistical techniques to analyze economic data.*

Econometrics is a science because it essentially complies with the principle of **falsifiability** of scientific research, as Karl Popper defined.

# The reasoning cycle of scientific research

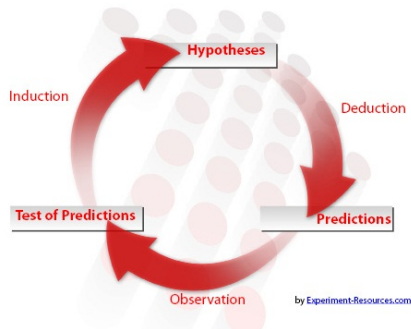


Figure: A reasoning cycle of scientific research