

**Chapter 1**  
**Economic Questions and Data**

*Multiple Choice*

- 1) Analyzing the behavior of unemployment rates across U.S. states in March of 2006 is an example of using
- a. time series data.
  - b. panel data.
  - c. cross-sectional data.
  - d. experimental data.

Answer: c

- 2) Studying inflation in the United States from 1970 to 2006 is an example of using
- a. randomized controlled experiments.
  - b. time series data.
  - c. panel data.
  - d. cross-sectional data.

Answer: b

- 3) Analyzing the effect of minimum wage changes on teenage employment across the 48 contiguous U.S. states from 1980 to 2004 is an example of using
- a. time series data.
  - b. panel data.
  - c. having a treatment group vs. a control group, since only teenagers receive minimum wages.
  - d. cross-sectional data.

Answer: b

- 4) Panel data
- a. is also called longitudinal data.
  - b. is the same as time series data.
  - c. studies a group of people at a point in time.
  - d. typically uses control and treatment groups.

Answer: a

- 5) Econometrics can be defined as follows with the exception of
- the science of testing economic theory.
  - fitting mathematical economic models to real-world data.
  - a set of tools used for forecasting future values of economic variables.
  - measuring the height of economists.

Answer: d

- 6) To provide quantitative answers to policy questions
- it is typically sufficient to use common sense.
  - you should interview the policy makers involved.
  - you should examine empirical evidence.
  - is typically impossible since policy questions are not quantifiable.

Answer: c

- 7) An example of a randomized controlled experiment is when
- households receive a tax rebate in one year but not the other.
  - one U.S. state increases minimum wages and an adjacent state does not, and employment differences are observed.
  - random variables are controlled for by holding constant other factors.
  - some 5<sup>th</sup> graders in a specific elementary school are allowed to use computers at school while others are not, and their end-of-year performance is compared holding constant other factors.

Answer: d

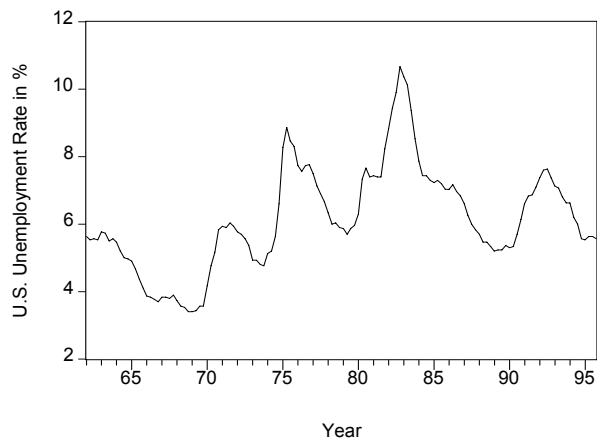
- 8) Ideal randomized controlled experiments in economics are
- often performed in practice.
  - often used by the Federal Reserve to study the effects of monetary policy.
  - useful because they give a definition of a causal effect.
  - sometimes used by universities to determine who graduates in four years rather than five.

Answer: c

- 9) Most economic data are obtained
- a. through randomized controlled experiments.
  - b. by calibration methods.
  - c. through textbook examples typically involving ten observation points.
  - d. by observing real-world behavior.

Answer: d

- 10) The accompanying graph



is an example of

- a. experimental data.
- b. cross-sectional data.
- c. a time series.
- d. longitudinal data.

Answer: c

*Essays and Longer Questions*

- 1) Give at least three examples from economics where each of the following type of data can be used: cross-sectional data, time series data, and panel data.

Answer: Answers will vary by student. At this level of economics, students most likely have heard of the following use of cross-sectional data: earnings functions, growth equations, the effect of class size reduction on student performance (in this chapter), demand functions (in this chapter: cigarette consumption); time series: the Phillips curve (in this chapter), consumption functions, Okuns' law; panel data: various U.S. state panel studies on road fatalities (in this book), unemployment rate and unemployment benefits variations, growth regressions (across states and countries), and crime and abortion (Freakonomics).