Chapter 02

Tools of Positive Analysis

**Multiple Choice Questions**

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| 1. | Positive economics      |  |  | | --- | --- | | A. | does not depend on market interactions. |  |  |  | | --- | --- | | B. | only looks at the best parts of the economy. |  |  |  | | --- | --- | | C. | examines how the economy actually works (as opposed to how it should work). |  |  |  | | --- | --- | | D. | is very subjective. | |

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| 2. | The slope of a regression line is calculated by dividing      |  |  | | --- | --- | | A. | the intercept by the change in horizontal distance. |  |  |  | | --- | --- | | B. | the change in horizontal distance by the change in vertical distance. |  |  |  | | --- | --- | | C. | the change in horizontal distance by the intercept term. |  |  |  | | --- | --- | | D. | the change in vertical distance by the change in horizontal distance. |  |  |  | | --- | --- | | E. | none of these answer options are correct. | |

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| 3. | Unobserved influences on a regression are captured in the      |  |  | | --- | --- | | A. | error term. |  |  |  | | --- | --- | | B. | parameters. |  |  |  | | --- | --- | | C. | regression line. |  |  |  | | --- | --- | | D. | regression coefficient. | |

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| 4. | The following can be analyzed using econometrics:      |  |  | | --- | --- | | A. | labor supply. |  |  |  | | --- | --- | | B. | market demand. |  |  |  | | --- | --- | | C. | tax-setting behavior. |  |  |  | | --- | --- | | D. | poverty. |  |  |  | | --- | --- | | E. | all of these answer options are correct. | |

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| 5. | The substitution effect      |  |  | | --- | --- | | A. | is when individuals consume more of one good and less of another. |  |  |  | | --- | --- | | B. | is associated with changes in relative prices. |  |  |  | | --- | --- | | C. | will have no effect if goods are unrelated. |  |  |  | | --- | --- | | D. | all of these answer options are correct. | |

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| 6. | Panel data requires      |  |  | | --- | --- | | A. | data on individual entities. |  |  |  | | --- | --- | | B. | time. |  |  |  | | --- | --- | | C. | neither data on individual entities nor time. |  |  |  | | --- | --- | | D. | both data on individual entities and time. | |

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| 7. | A counterfactual is      |  |  | | --- | --- | | A. | what happens when there are no facts. |  |  |  | | --- | --- | | B. | what would have happened if the treatment group had not received the treatment. |  |  |  | | --- | --- | | C. | a legal term describing the process of proving that a negative is the actual truth. |  |  |  | | --- | --- | | D. | none of these answer options are correct. | |

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| 8. | Empirical analysis generally deals with theory and little data.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 9. | Economists attempt, with moderate success, to perform controlled experiments making policy analysis helpful.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 10. | Regression coefficients are indicators of the impact of independent variables on dependent variables.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 11. | Multiple regression analysis typically requires several computers.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 12. | Econometrics is the statistical analysis of economic data.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 13. | Instrumental variables requires that the variable not be correlated with the outcome variable.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 14. | A model is a simplified description of some aspect of the economy.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 15. | Causation and Correlation are generally the same thing.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| 16. | An experimental study is one which individuals are randomly assigned to the treatment and control groups.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

**Essay Questions**

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| 17. | "Since the social sciences are not like the natural sciences, experiments are a waste of time." Comment on the above statement. |

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| 18. | Discuss the concept in econometrics that states, "garbage in . . . garbage out." |

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| 19. | It is possible that two different economists can examine the same situation, such as school funding, and reach entirely different conclusions. Why is this so? |

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| 20. | It has been suggested in the text that raising taxes on beer will reduce teen fatalities. Comment on this. |

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| 21. | Why might the consequences of imposing a tax on harmful fast foods not adhere to theory? |

Chapter 02 Tools of Positive Analysis Answer Key

**Multiple Choice Questions**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | Positive economics      |  |  | | --- | --- | | A. | does not depend on market interactions. |  |  |  | | --- | --- | | B. | only looks at the best parts of the economy. |  |  |  | | --- | --- | | **C.** | examines how the economy actually works (as opposed to how it should work). |  |  |  | | --- | --- | | D. | is very subjective. | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: The Role of Theory* |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. | The slope of a regression line is calculated by dividing      |  |  | | --- | --- | | A. | the intercept by the change in horizontal distance. |  |  |  | | --- | --- | | B. | the change in horizontal distance by the change in vertical distance. |  |  |  | | --- | --- | | C. | the change in horizontal distance by the intercept term. |  |  |  | | --- | --- | | **D.** | the change in vertical distance by the change in horizontal distance. |  |  |  | | --- | --- | | E. | none of these answer options are correct. | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Observational Studies* |

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| 3. | Unobserved influences on a regression are captured in the      |  |  | | --- | --- | | **A.** | error term. |  |  |  | | --- | --- | | B. | parameters. |  |  |  | | --- | --- | | C. | regression line. |  |  |  | | --- | --- | | D. | regression coefficient. | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Difficulty: 2 Medium Topic: Observational Studies* |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. | The following can be analyzed using econometrics:      |  |  | | --- | --- | | A. | labor supply. |  |  |  | | --- | --- | | B. | market demand. |  |  |  | | --- | --- | | C. | tax-setting behavior. |  |  |  | | --- | --- | | D. | poverty. |  |  |  | | --- | --- | | **E.** | all of these answer options are correct. | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Understand Difficulty: 2 Medium Topic: Observational Studies* |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. | The substitution effect      |  |  | | --- | --- | | A. | is when individuals consume more of one good and less of another. |  |  |  | | --- | --- | | B. | is associated with changes in relative prices. |  |  |  | | --- | --- | | C. | will have no effect if goods are unrelated. |  |  |  | | --- | --- | | **D.** | all of these answer options are correct. | |

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| 6. | Panel data requires      |  |  | | --- | --- | | A. | data on individual entities. |  |  |  | | --- | --- | | B. | time. |  |  |  | | --- | --- | | C. | neither data on individual entities nor time. |  |  |  | | --- | --- | | **D.** | both data on individual entities and time. | |

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| 7. | A counterfactual is      |  |  | | --- | --- | | A. | what happens when there are no facts. |  |  |  | | --- | --- | | **B.** | what would have happened if the treatment group had not received the treatment. |  |  |  | | --- | --- | | C. | a legal term describing the process of proving that a negative is the actual truth. |  |  |  | | --- | --- | | D. | none of these answer options are correct. | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Experimental Studies* |

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| 8. | Empirical analysis generally deals with theory and little data.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | **B.** | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: The Role of Theory* |

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| 9. | Economists attempt, with moderate success, to perform controlled experiments making policy analysis helpful.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Experimental Studies* |

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| 10. | Regression coefficients are indicators of the impact of independent variables on dependent variables.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Observational Studies* |

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| 11. | Multiple regression analysis typically requires several computers.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | **C.** | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Observational Studies* |

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| 12. | Econometrics is the statistical analysis of economic data.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Observational Studies* |

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| 13. | Instrumental variables requires that the variable not be correlated with the outcome variable.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Quasi-Experimental Studies* |

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| 14. | A model is a simplified description of some aspect of the economy.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: The Role of Theory* |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 15. | Causation and Correlation are generally the same thing.      |  |  | | --- | --- | | A. | True |  |  |  | | --- | --- | | **B.** | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Causation versus Correlation* |

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| 16. | An experimental study is one which individuals are randomly assigned to the treatment and control groups.      |  |  | | --- | --- | | **A.** | True |  |  |  | | --- | --- | | B. | False |  |  |  | | --- | --- | | C. | Uncertain | |

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| *AACSB: Reflective Thinking Accessibility: Keyboard Navigation Blooms: Remember Difficulty: 1 Easy Topic: Experimental Studies* |

**Essay Questions**

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| 17. | "Since the social sciences are not like the natural sciences, experiments are a waste of time." Comment on the above statement.     It is true that social sciences are not the same as natural sciences. Experiments have been used successfully to tell us more about the world we live in. There are limits that social scientists should be aware of, but to dismiss the use of experimental analysis entirely would be incorrect. |

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| 18. | Discuss the concept in econometrics that states, "garbage in . . . garbage out."     When the data used in an econometric analysis are not carefully screened for errors, there can be faulty and misleading results that occur. There has been some time expended to ensure that the data have been "cleaned" properly. |

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| 19. | It is possible that two different economists can examine the same situation, such as school funding, and reach entirely different conclusions. Why is this so?     Reasoning resulting in differing results includes the time period under examination, the data sources and proxies used, the econometric tools employed, and many other reasons. This is not to say that because different researchers come to different conclusions the analysis is confused. It just means further investigation is needed. |

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| 20. | It has been suggested in the text that raising taxes on beer will reduce teen fatalities. Comment on this.     As the text suggests, this is perfect use of experimental data for testing. Using certain states as "controls" would allow us to examine the difference in fatalities between those states that did not change the tax. Of course, we need to control for other differences that might affect outcomes. |

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| 21. | Why might the consequences of imposing a tax on harmful fast foods not adhere to theory?     Preferences of people with different desires could be altered in unintended ways. All variables could not be controlled for. |

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