ECONOMICS 101: Applied Microeconomics

ASSIGNMENT 2

Answers to this assignment are due back by Wednesday, September 23, 2015. Please feel free to work on the answers in groups of not more than three, and to hand in joint work.

1. Using Demand and Supply

Use basic demand and supply diagrams to aid your explanation of each of the following. [The purpose of this question is to get practice with shifting and interpreting demand and supply curves.]

a. Why is the price of tomatoes higher in February than in August?
   b. Why does the price of toys fall after Christmas?
   c. Why is the price of computers falling over time? [Aside: Moore’s law: the power of computers doubles every 18 months.]
   d. Why does an increase in the Boston property tax not increase the price of land? [Difficult, but give it a try. Hint: What does the supply curve for land in Boston look like?]
   e. Why is the price of oil lower now than a year ago?

2. House Prices

Is housing affordable? This is an important issue, and may be addressed with the help of some data. We have the following information on median household incomes for the four main regions of the U.S.:

- For 2009 and 2013, find the median sales price of new privately owned one-family houses for the US and for the four major regions and for the US overall. Here is a link: https://www.census.gov/construction/nrs/historical_data/index.html
- For 2009 and 2013, find the median size, in square feet, of new privately owned one-family houses, for the regions and the US. Here is a link: https://www.census.gov/construction/chars/completed.html

For each year and each region (plus the US), find

1. the price of a new house as a fraction of income;
2. the price per 1,000 square feet of new house;
3. the price per 1,000 square feet of new house as a fraction of income.

Present your results in a clear tabular form. Has housing become more or less affordable since 2005? Are there wide differences in housing affordability across regions? Explain how you reached these conclusions. What information would you like to know in order to answer this question better?

3. Analyzing commodities

Pick a commodity; there are dozens of possibilities, such as petroleum, copper, uranium, coffee, tin, pepper, gold, diamonds, wheat, and so on. Write a paragraph that sets out what you think will happen to the price of your commodity over the year ahead. Justify your answer, and use the concepts of supply and demand in your discussion.