

The exercise asks you to do some calculations with data on imports into the U.S. of women's leather shoes from various countries for 2005. To begin this assignment, click on the link below and save the Excel worksheet with the data on your local hard drive. Then open up the worksheet in Excel.

Column B of the worksheet reports the total dollar value of imports from each country. Column C reports the number of pairs of shoes coming from each country. Column D reports gross national income per capita for each country.

In column E of your worksheet, in the cells marked in yellow, divide the value of imports (column B) by the quantity of imports (column C) to get average price per pair by country. (Note this is the average price of the pair of shoes at the port where it enters the U.S. As the shoes go through the wholesale distribution system in the U.S. and end up in stores, the prices get higher as the wholesale and retail margins get added in.)

1.1. For which country is the average import price per pair the highest?

- A. Italy
- B. Mexico
- C. Portugal
- D. Poland

1.2. Higher quality goods tend to have higher prices, so we can use the average import price as a proxy of quality. There is an interesting relationship between product quality and per capita income of a country. In short, richer countries tend to produce higher quality goods. To see this relationship, you will use Excel to plot the data.

For Excel 2003:

- Step 1. Select the numbers in columns D and E.
- Step 2. Click on the "Graph" icon.
- Step 3. Select "XY (Scatter)"
- Step 4. Select "Finish"

For Excel 2007

- Step 1. Select the numbers in columns D and E.
- Step 2. Click on "Insert"
- Step 3. Click on the "Scatter" icon.
- Step 4. Click on the graph form where the points are not connected by any lines.

Now you can see a plot with country income on the horizontal axis and average price on the vertical axis. You should be able to see the pattern that richer countries tend to sell shoes with higher prices.

Your job is to add a regression line to the graph. This is the straight line that "best fits" the points. To add the regression line, do the following steps.

Excel 2003

Step 5. Click on "Chart" at the top menu and then click on "Add Trendline"

Step 6. Make sure "linear" is selected.

Step 7. Click on the tab "Options" and then click the box that says "display equation on chart"

Step 8. Click OK

Excel 2007:

Step 6: Click on "Layout", then "Trendline," then "More Trendline Options."

Step 7: Click on the buttons for "Linear" and "display Equation on chart."

You should be able to see the equation for the regression line in your figure. The slope of the line is how much higher the dollar price of a pair of shoes is at the port for every additional \$1,000 in per capita income of the exporting country.

Now answer this question:

The slope of the regression line (rounded to two decimal places) equals (in \$ per \$1,000 of per capita income)

A. .72

B. .54

C. -.11

D. .32

E. .11

**Discussion of the results:**

a) do you think it is reasonable to proxy quality by price in this context?

b) what economic forces would lead rich, highly educated countries to specialize in high quality goods and poorer countries to specialize in low quality variants of the same good?

c) can you think of other examples where high quality (high priced) goods are produced by high income, better educated people?

d) can you think of any counter-examples?