Macroeconomics, Module 6: Markets, Prices, Supply, and Demand

Homework Assignment: Actuarial Labor

(The attached PDF file has better formatting.)

[The following homework assignment reviews the microeconomics of the labor market.]

The labor market for actuaries is in equilibrium in 20X1. In 20X2, insurance regulators require all insurers to provide an enterprise risk management report signed by a Fellow of the SOA or CAS evaluating the risks facing the insurer.

A. In the *short run*, does the supply curve for actuaries change?
B. Does the demand curve for actuaries change?
C. What happens to the real wage rate for actuaries?
D. What happens to the market quantity of actuarial labor?
E. Actuaries are a small part of the total labor force. In future years, as college graduates decide on careers, how does the supply curve for actuaries change?

Part A asks about the supply curve, not the quantity supplied. If an actuary works overtime, or an actuary comes out of retirement to do an ERM report, the quantity supplied changes, not the supply curve. Both Landsburg and Barro distinguish the supply curve from the quantity supplied.

Part B asks: At a given price for actuarial labor, does the number of jobs increase, decrease, or stay the same? Even if the supply curve for actuaries does not change, insurers need more actuaries to satisfy the new regulations.

Upon reviewing your completed homework assignment, you notice that

1. More actuaries are working (or working more hours) in 20X2 than in 20X1.
2. Actuaries are earning higher wages in 20X2 than in 20X1.
3. Wages reflect the marginal product of labor.

You might infer an *increasing* marginal product of labor for actuaries, since the greater quantity supplied of actuarial labor has a higher marginal product. Is this conclusion correct? Why or why not?