

Things you always wanted to know (or you should know) but were afraid to ask until you enrolled in Econ 481

1. In July 2002, there were 142.39 million people in the civilian labor force and the unemployment rate was 5.9%. How many people must have been employed in July 2002?
2. A study shows that labor supply for a certain group of workers is determined according to $h = 1,460 - 0.75\frac{I}{W}$, where h represents annual desired hours of work, I is annual non-labor income, and W is the hourly wage. Wilma faces a wage of \$6.00/hr and receives \$2,400/yr in non-labor income. If Wilma were offered a wage increase of \$1.50/hr, how much of the change in her desired hours of work would arise from the substitution effect?
3. A study shows that labor supply for a certain group of workers is determined according to $\Delta h = 33.5\Delta W - 0.035(h_0 \Delta W + \Delta I)$, where Δh is the change in annual desired hours of work, ΔW is the change in the hourly wage, h_0 is the initial annual hours of work, and ΔI is the change in annual non-labor income. Wilbur works 2,000 hrs/yr in a subminimum wage job at \$4.00/hr and has no other source of income. He is given the opportunity to enroll in a public assistance program that will guarantee him \$4,800/yr, has an income tax rate of 0.5, and income exemption level of 0. What will be the change in Wilbur's desired hours of work under the public assistance program?
4. Earnings determination among a group of urban male workers was found to be described by the following empirical model: $\ln(y) = 6.2 + 0.11S + 0.08t - 0.0012t^2$, where y represents annual labor earnings, S is years of schooling completed, and t is years of work experience. For a guy who plans to work 42 years after leaving school, faces an internal rate of return to on-the-job training (OJT) of 0.147, what fraction of his earnings capacity should he be devoting to OJT when his earnings capacity is at a peak?

5. Hourly wage rates for a group of employees are determined according to separate formulas for men and women:
 $W_m = 2.40 + 0.35S + 0.08T + 0.40E$ and
 $W_f = 3.01 + 0.25S + 0.03T + 0.35E$, where W_m is the hourly wage of male employees, S is years of schooling completed, T is years of work experience with previous employers, E is years of seniority with the current employer, and W_f is the hourly wage of female employees. On average men have 12 years of schooling, 10 years of prior experience, and 4 years of seniority. The average female employee has 13 years of schooling, 8 years of prior experience, and 2 years of seniority. How much of the average wage gap between men and women in this job could be attributed to gender inequity?