Economics 314 Spring 2013

Project #10 Assignment Due: 9am, Thursday, May 2

Partner assignments

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Problems

- **Romer's Problem 9.6.** Your answer to each part should include a phase diagram, a verbal description of what is happening, and time paths for q and the capital stock.

- **Variant of Romer's Problem 10.1.**
  a. Suppose that $b = 1$ in Romer's equation (10.13). In this case, how does x relate to the expected earnings of someone who loses a job? Why does this make sense in equation (10.12)? Explain the logic of the paragraph following these equations in terms of this interpretation.
  b. Work part (a) of Problem 10.1.
  c. Determine (if possible) the signs of the effects of each parameter (β, b, f, and μ) on the unemployment rate and explain the intuition of these effects.
     i. How do the effects of the union parameters f and μ ($\partial u / \partial f$ and $\partial u / \partial \mu$) depend on the values of b and β?
     ii. Explain why a change in b might affect how sensitive equilibrium unemployment is to unionization.
     iii. Explain why a change in β might affect how sensitive equilibrium unemployment is to unionization.
  d. Suppose that (as in Romer's part (b-i)), $\beta = 0.06$ and $b = 1$.
     i. What would the unemployment rate be if there were no unions ($f = \mu = 0$)?
     ii. What would the unemployment rate be if, as Romer posits in part (b), $f = \mu = 0.15$?
  e. Suppose that (as in Romer's part (b-ii)), $\beta = 0.03$ and $b = 0.5$.
     i. What would the unemployment rate be if there were no unions ($f = \mu = 0$)?
     ii. What would the unemployment rate be if, as Romer posits in part (b), $f = \mu = 0.15$?
  f. Explain how the results of parts d and e illustrate the results of part c.

- **Romer's Problem 10.9.** Be sure to explain the intuition of your results.