SEMINAR EXERCISES ECON 4715

Seminar 14.09.2010

Problems marked with *S* means that you should *show* something using the model. Problems marked with *D* means that you should *discuss* the topic in light of the model.

The neo-classical model of labour supply

- 1. S/D: Discuss and show (using figures) the implications of *redistributive taxes* for labor supply and dead-weight loss from taxation. Distinguish between flat and progressive taxes. Use the framework of Røed and Strøm (2002): Progressive taxes and the labour market: Is the trade-off between equality and efficiency inevitable?, in Journal of Economic Surveys, Vol. 16, No.1.
- 2. D: What is the additional worker effect?

Job-search theory

- 3. S: Show that the optimal reservation wage in the basic job-search model (equation 6, CZ page 113) is the one that maximizes V_u .
- 4. S: Calculate the expressions of the comparative statics of the basic model that are discussed on CZ p. 113 and discuss the signs.
- 5. S: Consider the following equation:

$$(1 + rdt)V_e(w) = wdt + qdtV_u$$

$$+(1-qdt)\left[\lambda_e dt \int_w^\infty V_e(\xi) dH(\xi) + \lambda_e dt V_e(w) H(w) + (1-\lambda_e dt) V_e(w)\right]$$

- (a) Interpret this expression
- (b) Show how you arrive at equation 16 on CZ page 121.
- 6. D: What is the effect of social assistance benefits, disability benefits and sick leave benefits on the reservation wage in the job search model?
- 7. S/D: If search effort is endogenous, what is the impact of a change in business cycle conditions or in unemployment benefits?
- 8. D: Is the reservation wage dependent on unemployment duration? Should it be? Why and how?
- 9. D: What is meant by discouraged workers?

Additional problem (discussed on the seminar only if time allows it, but good exercise for those that is interested)

10. S: Show that the expected duration of unemployment equals $1/\lambda[1-H(x)]$. What is the underlying assumption?,