

# Problem set 4

Filip Rozsypal

December 4, 2011

## Question 1

Consider the problem of a firm in the efficiency wages model. Let's define the effective units of labour  $E = e(w)L$ . The firm produces using production function  $Y = F(E)$ .

- (i) what are the *choice variables* of the firm in the efficiency wage model? What that implies about the nature of the labour market or the nature of the jobs on offer?
- (ii) Derive and interpret the optimality condition of the firm's hiring decision.
- (iii) Consider effect on a earthquake which destroys big part of the national stock of capital. What would be response in the labour market? Contrast the effects in Solow model and in Efficiency wages model
- (iv) Can you think of some other effects which might affect the effort function either up or down? What will be the effect on unemployment and wages?

## Question 2

Suppose that you are suppose to advise the government on how to tackle the unemployment problem. The list of possible policies is following:

- increase number of job centres,
- increase funding to re-training programmes,
- reduce minimum wage,
- increase unemployment benefits.

Discuss what is the effect of each policy on *different types* of unemployment. Try to relate your answers to the models covered in the lectures.