

**Labor Markets and Transition Economies I***Questions on both sides! You have 2 hours!**!!!! Write legibly – text I will not be able to read will not be graded !!!!*

**Question # 1 (15%, 30 minutes): Answer any SIX of the following questions as *True, False or Uncertain* and briefly explain your reasoning:**

- a) If all learning on the job is firm-specific, wage rates should not rise with job tenure.
- b) The wage differential between hazardous and safe jobs is a good estimate of the compensating wage differential required to get workers on safe jobs to accept the extra hazard on hazardous jobs.
- c) If education plays only a signaling role, workers with more schooling earn more not because education increases productivity, but because education signals a worker's innate ability. If this is so, educational expenditures are wasteful from worker's and social point of view.
- d) As a result of increased costs of migration, the observe skills of average Brazilian migrant working in Sweden will increase.
- e) If a few workers enjoy working in jobs that have a high probability of injury and if these types of jobs demand relatively few workers, riskier jobs will pay lower wages than safe jobs. This is contrary to the predictions of simple models of compensating wage differentials.
- f) Simple Gronau's model of household production implies that exogenous increase in the market wage rate will increase the hours worked on the market at the expense of the hours worked at home while the leisure time is not affected.
- g) General training is valuable in all firms. Specific training is valuable only in the firm that provides the training. Therefore: i) workers pay for and collect the returns from general training, ii) firms pay for the costs of specific training and collect all returns.
- h) A person enters the labor market when the market wage rate exceeds the reservation wage. An exogenous increase in the wage rate raises the probability that a person works. However, exogenous increase in non-labor income does not have an impact on the reservation wage and therefore has no impact on the probability that the person enters the labor market.
- i) Since labor force participation rates are more sensitive to wage changes for women than for men, the substitution effect must be greater for women.

**Question #2 (10%, 20 minutes):** Consider simple case of international migration as in the paper by Borjas presented in the course. Show under which simple conditions so called refugee sorting type of migration appears and explain what it means. Feel free to use graphical or mathematical tools.

*!!!! Continued on the next page !!!*

**Question # 3 (20%, 40 minutes):** Assume a worker working 8 hours a day, being at his optimum number of hours supplied (interior solution). He has standard continuous utility  $u(l,c)$  such that  $M_u/M_l > 0$ ,  $M_u/M_c > 0$  (l-leisure, c-composite good consumption).

a) Construct a table showing how the variables in column **A** would change (increase-  $\uparrow$ , decrease -  $\downarrow$ , no change-0, indeterminate-?) would variable in column **B** slightly increase. Consider all 12 pairs:

<b>A</b>	<b>B</b>
Work time at home	Job related commuting time
Leisure time	Money costs of job commuting
Consumption of X	Tax imposed on overtime work earnings
	Proportional income tax rate

b) Consider impact of each change in column B on the likelihood (*increase, decrease, no change, indeterminate*) that individual who was working before the change would stop working on the market after as the consequence of the change.

**Question #4 (15%, 30 minutes):** Consider simple earning equation  $\log(w_i) = a + b'X_i$ , where **a, b** parameters (gender specific) and **X** is a vector of observable personal characteristics.

- a) State i) 3 common problems when estimating earnings (Mincerian) equations by OLS, ii) consequences (impact on estimated parameters), and iii) possible ways to overcome these problems.
- b) Write or find the Oaxaca's expression decomposing logarithmic gender wage gap  $\log(W_{\text{male}}) - \log(W_{\text{female}})$ . Mark the wage differential due to discrimination and due to difference in skills.
- c) Draw simple graph (where **X** is represented by a single variable) and mark components of the wage gap from your formula in b).
- d) Propose alternative decompositions and underlying assumptions.

**END**