

Midterm Exam

Gurgen Aslanyan and Dragana Stanišić

This is a closed book exam, please remove all books or notes. Your answers must be short and to the point. Maximum number of points on this exam is 70. Please write legibly, all ambiguous answers will be considered wrong. Raise your hand if you have questions. Any breach of academic honesty will result in a failing grade for the course. *Good luck!*

1. (5 points) What are the four main functions of prices in market economy?
2. German Re-Unification:
 - (a) (5 points) In which year did East Germany and West Germany reunite?
 - (b) (5 points) Why did industrial sector shrink in East Germany after reunification?
3. (5 points) Name countries that you know had/have planned economy in Europe (at least 3), in the Former Soviet Union (at least 3), in Asia (at least 2).
4. Basing on the neoclassical growth theory, the Solow model, comment on the following statements:
 - (a) (5 points) Since Slovakia and Czech Republic used to be the same country, it is puzzling why now Slovakia grows faster than the Czech Republic.
 - (b) (5 points) Over time the new accession countries in the European Union, *e.g.* Bulgaria, will definitely reach the level of welfare in Germany or France.

5. Suppose your favorite coffee shop has two employees, BeanOne and BeanTwo. They make only two types of coffee, Latte and Cappuccino. In one hour BeanOne can make either 12 cappuccinos or 5 lattes. BeanTwo's productivity is 8 cappuccinos per hour, and 4 lattes per hour.
- (5 points) Who has comparative advantage in making cappuccinos?
 - (5 points) Who has comparative advantage in making lattes?
 - (5 points) Suppose each of them works 8 hours a day and they decide to join forces and to specialize. Calculate how many cappuccinos and lattes will be produced in 8 hours if BeanOne and BeanTwo specialize?
 - (5 points) Now suppose that the shop-owner wants the employees to make 96 cappuccinos and 32 lattes. Furthermore, he wants them to do half of the job each. Thus, BeanOne and BeanTwo need to make 48 cappuccinos and 16 lattes each. How many hours in total will they work to accomplish the task?
 - (5 points) Based on your calculations above comment on the productivity of the systems in 5c) and 5d). Which is more productive, why?
6. The per capita GDP in Estonia is EUR 18,000 while it is EUR 15,000 in Slovakia.
- (5 points) Using also the information presented in Table 1 identify the larger economy (in absolute terms), the economy with more efficient labour force, and the economy with wealthier population. Explain!

Table 1: Age distribution in percents and total population in millions.

	up to 15	15 to 65	over 65	total pop
Estonia	15	68	17	1.3
Slovakia	16	72	12	5.5

- (5 points) How does your answers to 6a change when you have the information that the unemployment rate in Estonia is 20 per cent and it is 13 per cent in Slovakia.
- (5 points) In how many years will Slovakia overtake Estonia in per capita GDP if the average growth rate in Estonia is 3 per cent while it is 4 per cent in Slovakia?