

## EXERCISE 1

# ECONOMIC ACTIVITY

September 18, 2018

1. An individual, tired of the frenetic modern life, decides to move to the mountains and live ascetic. However, despite the simplicity of the life he chose, he soon realises that to get 4 mushrooms, his only source of food, he must give up 10 minutes of his most valuable asset, “the silence.” Assuming this individual sleeps eight hours a day:
  - (a) Please draw the Production Possibilities Frontier (PPF) for one day in the life of the ascetic.
  - (b) Are there opportunity costs related to the practice of an ascetic life? What are they?
  - (c) If after a time living in the mountains, this person learns to gather mushrooms faster, how does the PPF change? (Suppose, for example, he is now able to find six mushrooms in 10 minutes)
  - (d) What is the meaning of a movement along the curve?
  - (e) How do you interpret a situation in which the ascetic chose an interior point of the curve?
  - (f) Is it possible to shift the entire curve? What would it mean?
2. An economy that has 10 units of one production factor, has a level of technology that allows it to produce the following amounts of two goods, wheat and wine.

Factor Units	Liters of Wine	Kilos of Wheat
0	0	0
2	2	1
4	4	2
6	6	4
8	8	7
10	10	11

- (a) Please draw the PPF of this economy.
- (b) Argue from an economic standpoint the reason of its shape.
- (c) What is the opportunity cost to producing wine.

3. The following table summarises the production possibilities of an economy that produces two goods:

	A	B	C	D	E
Computers	0	1	2	3	4
Cars	10	8	6	3	0

- What is the production possibilities frontier of an economy?
  - Make a graph of the production possibilities frontier of this economy.
  - Explain what opportunity costs are and find the opportunity cost when the economy moves from point C to point D.
  - What means an increase of productive factors and how would this be reflected in the graph?
4. Suppose Econoland produces haircuts and shirts only with of labour. They have 1000 hours of labour. A haircut requires  $\frac{1}{2}$  hour of labour and a shirt, 5 hours.
- How many haircuts does Econoland produces if all labour used to produce haircuts?
  - How many shirts would Econoland produce if all labour would be used to produce shirts?
  - Plot and describe the Production Possibility Frontier (PPF).
  - What is the slope of the PPF?
  - What is the opportunity cost of an increase in haircuts from 100 to 200?
5. The following table lists the working hours necessary to produce food and wardrobe by the economies of country A and country B.

	Food	Clothes
Country A	2	10
Country B	3	12

- Discuss the following statement: “The people of country A have no incentive to trade with those of country B, because they are more efficient in producing both food and clothing.”
- What is the opportunity cost of producing one unit of clothes in country A? And in country B?
- Indicate the pattern of trade that you expect to find between the two economies. In other words, what would be the imported and the exported goods for both countries?