

## Exam SØK2006 – Spring 2022

Professor: Gonzalo Dona

For each of the questions in this exam you should keep in mind always:

- Models, graphs, and theory are ALWAYS necessary and good. Even better when explicit.
- Short and clear answers are encouraged.
- Keep your mind open to ideas from every side.
- Note: I can only give points to non-blank answers

1. (15pts) Norwegians are more efficient in producing lamb and bread than the Finish, therefore there would never be any trade of these products between these two countries unless Norway is forced. Discuss solving a model learned in the class (choose the right model).
2. (35pts) Take an economy with three factors (labor, land, and capital) and producing two goods (A and B). Good A is produced using labor and land, and Good B is produced using labor and capital. Given the supply of labor we know that this economy's production can be described as follows:

Labor input	Labor output A	Labor output B
0	0	0
10	25	110
20	44	200
30	57.5	275
40	67.5	340
50	75	395
60	82	440
70	88	470
80	93	490
90	97	496
100	100	500

- a) Graph the production possibilities frontier (PPF) for this economy and explain the reason behind its shape.
- b) Determine wages and labor allocations if the price of good A relative to good B is 4. ( $P_A/P_B=4$ )

Labor employed	MPL good A	MPL good B
10	1.90	9.00
20	1.35	7.50
30	1.00	6.50
40	0.75	5.50
50	0.70	4.50

60	0.60	3.00
70	0.50	2.00
80	0.40	0.60
90	0.30	0.40
100	0.20	0.20

- c) Suppose the price of good A relative to good B falls to 2. Explain what happens with the labor allocation and with the income of each specific factor? (you can answer this correctly even without answering b)
- d) Suppose this country opens up to trade with another country, relatively rich in land. Show -or explain succinctly- how this affects the owners of each factor and local consumers.
3. (10pts) According to the Heckscher-Ohlin model goods may be produced with different combinations of labor and capital (according to their relative prices). Then, we may conclude that trade has no distributional effects, as owners of the factors (capital and labor) need only to shift their supply to the production of the more attractive good. Show -or explain succinctly- how this statement is wrong.
4. (40pts) You are an advisor to a top Norwegian politician. Your boss asked you to write an essay clearly explaining the pros and cons of taking a strong stance against Russia in response to the war in Ukraine. What welfare effects may follow if Norway breaks all commercial ties with Russia? And if it does nothing? Do the effects depend on what the rest of Europe does? Should Norway attempt to influence the EU somehow?

Note: your boss couldn't care less about your morals, ethics, or politics; keep that in mind.  
 Recommendation: stick to the two scenarios proposed (doing nothing or severing all ties) and remember what we learned.