



Stockholm
University

Department of Economics

Course name: International Economics
Course code: EC2301
Type of exam: Main
Examiner: Anders Åkerman
Number of credits: 7.5
Date of exam: June 1, 2020
Examination time: 15.00-18.00
Aids: Calculator, literature and lecture notes.

Write your personal identity number on each answer sheet.

Start each new section on a new answer sheet.

Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked.

The exam consists of 4 questions. Each question is worth 25 points, 100 points in total. Including credits from the assignments, 50 points are required for the grade E, for D 60 points, C 70 points, B 80 points and A 90 points.

Your results will normally be made available on your Ladok account (www.student.ladok.se) within 15 working days from the date of the examination.

Good luck!

1. This question will ask you to analyse economic effects of the Corona virus by applying the *Ricardian model*.

Assume that there are two production goods: tomatoes and paper. In Sweden, it takes 10 hours to produce a kilo of paper, and 3 hours to produce a kilo of tomatoes. Under free trade before the Corona virus occurred, the world relative price of paper in terms of tomatoes was 10.

- a) Under free trade, what good or goods does Sweden produce? What does it export? Explain your answer. (5 points)
- b) Under free trade, draw the production possibility frontier (PPF) and consumption possibility frontier (CPF). Explain your answer. (5 points)
- c) Under free trade, show how much of each good a worker can consume. Explain your answer. (5 points)
- d) Now, assume that the effect of the Corona virus is that Sweden can no longer trade with the rest of the world. What is the consumption possibility frontier (CPF) of Sweden in this case? Explain your answer. (5 points)
- e) Under autarky, how much of each good can a worker consume? Explain your answer. (5 points)

2. Answer whether the following examples of Foreign Direct Investment (FDI) describe *horizontal* or *vertical* FDI. Explain your answers.

- a) Volvo builds a car factory in Austin, Texas, which is similar to Volvo's factory in Gothenburg. The main purpose is to avoid US import tariffs. (5 points)
- b) H&M relocates production of its clothes from Sweden to Bangladesh to reduce wage costs. (5 points)
- c) Microsoft splits up its R&D department so that it no longer only has one in the US but also four new R&D departments in four additional countries. (5 points)
- d) Following Brexit, Honda splits its UK factory, which produces only for the European market, into one which remains in the UK and a new one in Germany. (5 points)
- e) Volkswagen's location of production across countries such that each input in its value chain is produced in the location in the world where its quality-adjusted cost is the lowest. (5 points)

THE EXAM CONTINUES ON THE FOLLOWING PAGE

3. This question will ask you to use the *Specific factor model* to analyse how a change in the relative price of textiles and IT services affects income inequality.

Assume that there are two consumption goods: textiles and IT services. There are three production factors in this economy: unskilled workers, skilled workers and capital. Assume that unskilled workers can only work in the textile sector and skilled workers can only work in the IT services sector, while capital can work in both sectors. Assume furthermore that the country we analyse is small.

- a) Derive and draw the Product Possibility Frontier (PPF) for textiles and IT services in the economy. Explain your answer. (4 points)
- b) How is the optimal allocation of capital between the two sectors determined under autarky? Explain your answer. (4 points)
- c) Assume now that the country opens up to trade. We assume that the global relative price of textiles in terms of IT services is lower than the autarky relative price in the country we analyse. How does this affect the allocation of capital in the country? Explain your answer. (4 points)
- d) What will the pattern of trade be for the country? Explain your answer. (4 points)
- e) Derive and describe the effect of trade on the real wage of unskilled and skilled workers. What is the effect of trade on income inequality? Explain your answer. (5 points)
- f) If you compare the Specific factor model with the Heckscher Ohlin model, which model would you say is best at explaining short term effects and which is best at explaining long term effects? Explain your answer. (4 points)

4. This question will ask you to analyse the effect of trade liberalisation when there are economies of scale in production.

- a) Explain the difference between external and internal economies of scale. (5 points)
- b) Give three examples of phenomena that can generate external economies of scale, and one example of a phenomenon that can generate internal economies of scale. Explain your answers. (5 points)
- c) Can economies of scale cause countries to gain from trading with each other even if the countries are identical in all aspects? If so, explain why. (5 points)
- d) What can we say about how trade affects the location of firms in a sector depending on whether there are external or internal economies of scale? Explain your answer. (5 points)
- e) Explain how external economies of scale can cause a country to be negatively affected by trade liberalisation. (5 points)