International Trade: Theory and Policy 5EN455
Final Examination – June 10, 2014

This is the final (and the only) examination. It will take 60 minutes.

In order to pass successfully the exam, read the following instructions carefully:

- write legibly, unintelligible handwriting will not be corrected and will receive zero points
- make answers short and to the point – irrelevant material may be penalized
- the exam has 4 pages (including one extra page for notes), make sure you have all pages
- negative points are awarded for wrong answers (only) in part I
- if you have a question, you must ask it publicly and I will answer publicly
- any violation of academic honesty will be punished to the fullest extent possible

I. Multiple choice questions (circle the correct answer) – more than one answer can be correct, points are subtracted for incorrect answers (30 points total, -30 points minimum)

1. (6 points) Given constant returns to scale, perfect competition and equality of the number of factors to the number of products a rise in the relative price of a good will lead to
   a. an rise or decrease in the return to the factor used in production of a good depending to the intensity of use in the production of that good
   b. a rise in the return to that factor which is used most intensively in the production of the good
   c. a decrease in the return to that factor which is used most intensively in the production of the good
   d. none of the above is correct

2. (6 points) Technological differences among countries
   a. are reasons why there is an international trade
   b. give rise to differences in wages
   c. lead to specialization among countries.
   d. none of the above is correct

3. (6 points) If GLi = 1
   a. there is only inter-industry trade, no intra-industry trade.
   b. there is only intra-industry trade, no inter-industry trade.
   c. intra-industry trade is equal to inter-industry trade.
   d. none of the above is correct.

4. (6 points) Compute optimal tariff for a good M in a big country A if you know foreign excess demand elasticity 3.0.
   a. 50 %
   b. 40 %
   c. 33 %
   d. none of the above is correct
5. **(6 points)** Think about a model of reciprocal dumping. With the increase of transportation costs
   a. the net welfare is always smaller as opposed to the situation with no transportation costs.
   b. the international trade will eventually disappear
   c. price is the same as in the monopoly situation
   d. none of the above is true.

II. True, False or Uncertain? Explain in space provided! (30 points total, 0 points minimum)

1. **(6 points)** An influx of immigration from former Soviet Union member states to Israel lead to increase in Israeli exports in goods which production is intensive in capital.

2. **(6 points)** $\text{BI}_j^A = 1$, country $A$ is said to have a revealed comparative advantage in industry $j$, since this industry is more important for country $A$’s exports than for the exports of the reference countries. (BI stands for Balassa index)

3. **(6 points)** According to Linder hypothesis poor countries should trade primarily with rich countries.
4. **(6 points)** The following picture shows that England and Netherlands became the most efficient countries in agriculture in Europe in 18th century. At the same time the cereal acreage went down in Britain and Britain started to specialize in industrial production.  

![Graph showing agricultural efficiency in Europe](image)

The graph and development that is described above is consistent with the predictions of the comparative advantage theory.

5. **(6 points)** Britain’s term of trade are shown in the following graph.  

![Graph showing Britain's term of trade](image)

It suggests that British exports got more expensive over the time, i.e. that Britain need to export less to import same amount of goods. This development is based on its first comer advantage during the first Industrial revolution.
III. Write a detailed answer (40 points total, 0 points minimum)

1. (20 points) C and A both produce fireworks. Demand and supply structure in both economies is given by the Dixit-Stiglitz model. There is a love-of variety effect for all consumers. Fireworks market in C is much larger than in A. Marginal labour input requirement is one and fixed labour input is 2.5. C employment in firework industry is 10 million people. A employment in firework industry is 10 thousand people.

a) How many varieties will be supplied to the A and C markets in the autarky equilibrium.

b) How many varieties will be supplied to the A and C markets in the free trade equilibrium.

c) What is the domestic market share of A’s producers if international trade is allowed.

2. (20 points) Table below gives the units of labor needed to produce one ship, one bicycle and one aeroplane in Russia and the EU.

<table>
<thead>
<tr>
<th></th>
<th>Ship</th>
<th>Bicycle</th>
<th>Aeroplane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>200</td>
<td>50</td>
<td>500</td>
</tr>
<tr>
<td>EU</td>
<td>100</td>
<td>30</td>
<td>200</td>
</tr>
</tbody>
</table>

a) Which country has an absolute advantage in the production of ships, bicycles and aeroplanes?

b) What is the EU’s comparative advantage if we look only at ships and bicycles?

c) What is the EU’s comparative advantage if we look only at aeroplanes and bicycles?

d) Can you infer from your calculations in b) and c) which product the EU will export for sure and which product will it surely not export?