Written exam for the B.Sc. or M. Sc. in Economics summer 2014

International Economics

Final Exam

June 17, 2014

3-hour closed book exam

All problems must be answered.

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by "eksamen på dansk" in brackets, you must write your exam paper in Danish.

This exam question consists of three pages in total including this page.

PROBLEM 1

Determine if the following statements are true or false. Provide a short explanation.

1.1 The mobile factor in the specific factors model gains from trade liberalization.

1.2 External economies of scale leads to an imperfectly competitive market structure.

1.3 Trade in a reciprocal dumping model may be harmful for the home country if the foreign market is relatively small.

1.4 The "most favored nation" principle states that no country will pay tariffs higher than that of the nation paying the lowest tariff.

1.5 According to the model of horizontal foreign direct investment, globalization (interpreted as lower trade costs) reduces the number of multinational firms.

PROBLEM 2

Welfare effects of trade policy. Home is a large importing country with import demand for toys $M = 10 - P$, where P is the internal price of toys in Home. Foreign's export supply of toys is $X^* = 2 + P^*$, where P^* is the world price.

2.1 Consider first the case of free trade, i.e., the price is $P_F = P = P^*$. Find P_F and the quantity of toys imported in Home.

Home now introduces a tariff, $t = 2$, such that $P = P^* + 2$.

2.2 Illustrate graphically the impact of the tariff on prices and the volume of trade. Find the prices, P and P^*, and the quantity imported in Home.

The import demand function in Home is defined by the difference between supply and demand for toys in Home. The demand is $D = 12 - \frac{1}{2}P$ and the supply is $S = 2 + \frac{1}{2}P$. The tariff changes Home's welfare due to efficiency losses and a terms of trade gain.

2.3 Use the demand and supply curves to illustrate and explain the efficiency losses and the terms of trade gain in a figure. Find the values of the efficiency losses, the terms of trade gain and the change in total welfare.

The Home government is uncertain whether the tariff, $t = 2$, maximizes welfare. Consider instead a general tariff of t, such that $P = P^* + t$.

2.4 State the sum of the efficiency losses and the terms of trade gain (i.e., the change in total welfare in Home) as a function of the tariff, t, and find the optimum tariff that maximizes total welfare in Home (Hint: Find first prices, P and P^*, and quantities supplied and demanded as a function of t).

The Home government considers whether it should introduce an import quota of $\overline{Q} = 3$ instead of the tariff. The license to import the restricted quantity of toys is given to a domestic firm.

2.5 Find the prices, P and P^*, and the change in welfare relative to the case of free trade. Is welfare with the quota higher than welfare with the tariff, $t = 2$? Is it possible to define a quota that yields higher welfare than $\overline{Q} = 3$?