INTERNATIONAL ECONOMICS HOMEWORK 4 29/11/2013

Question 1

Consider a two-sector economy that trades with the rest of the world.

- a. Suppose this is a "small" country. Analyze how an import tariff affects different groups inside the country. Does the country as a whole benefit or lose from the import tariff?
- b. Assume now that we are dealing with a "large" country. Show how this country can gain by introducing the tariff. Characterize the optimal tariff. Describe what happens as the tariff increases beyond its optimal level.
- c. Demonstrate in a the PPF diagram how the large country potentially increases its welfare by means of this import tariff.
- d. On the export side, analyze the effects of an export subsidy for a small country. If instead the country is large, do you see the possibility of an optimal export subsidy?

Question 2

Consider a tariff game between two large countries, as in the work of Bagwell and Staiger. Let the welfare of each country be given by $W_i(t_i,t_{-i}) = 0.125 + 0.25(t_i-t_{-i}) - t_i(t_{-i}+t_i)$ Find the optimal tariffs as a best response to the tariff set by the other country. Determine the Nash equilibrium in tariffs, as well as the globally optimal tariff regime(s).

Question 3

The Grubel–Lloyd index measures intra-industry trade of a particular product and it is given by the expression: $GL_i = \frac{(X_i + M_i) - |X_i - M_i|}{X_i + M_i} = 1 - \frac{|X_i - M_i|}{X_i + M_i}$, where $0 \le GL_i \le 1$.

 X_i denotes Exports and M_i denotes imports of good i. Using the data provided on page 61of the document provided in the link below, use the index above for the Fische und Fischereierzeugnisse, Maschinen, Bekleidung, Energieversorgung for the year 2012. What are your comments on the degree of intra and inter trade in these products. $\frac{\text{https://www.destatis.de/DE/Publikationen/Thematisch/Aussenhandel/Gesamtentwicklung/Zusamm}{\text{enfassendeUebersichtenJvorlaeufig2070100128004.pdf?} blob=publicationFile}$