1. Trade and pro-competitive effect (50%)

Read carefully the joint paper "Together at last: Trade Costs, Demand Structure and Welfare", by Mrazova and Neary (AER, P&P 2014), from the beginning to the end of page 4.

This paper presents an elegant generalization of Krugman (1979) and Krugman (1980) trade models. It aims to show the necessary conditions to obtain pro-competitive (or anti-competitive) effects in models of trade with monopolistic competition.

- a. Recall what a "pro-competitive effect of trade" is.
- b. Present briefly the structure of Krugman (1980) trade model, derive the mark-up and the demand functions (if possible, use Mrazova and Neary's notations).
- c. Exercises: retrieve the results obtained by Mrazova and Neary for the specific case of Krugman (1980) hypotheses:
 - a. Provide the proof of footnote 3 in Mrazova and Neary's paper.
 - b. Prove the results enounced in the four first lines of the second column of page 4; i.e. that, in Krugman (1980), "the MR=MC locus reduces to $x^* = \tau^{-\sigma} x$ while the zero profit locus simplifies to $x+k\tau x^* = (\sigma-1)f/cL$ ".
- d. Based on your understanding of Mrazova and Neary (2014), enounce a sufficient condition to obtain a pro-competitive effect in a monopolistic competition trade model.
- e. Mrazova and Neary (2014) discuss thoroughly the implication of the assumptions on the demand structure. But they stick to the iceberg transport cost hypothesis.
 - i. Recall what an iceberg transport cost is.
 - ii. (BONUS QUESTION) Mrazova and Neary (2014) show that, with superconvexity, the price charged on the export markets is lower than the home price. Show that this result also holds with a CES demand but additive transport cost.

2. Answer to one of the 3 following question (40%)

- a. Present briefly the "trade in tasks" model (Grossman and Rossi-Hansberg, AER 2008).
- b. Present the main mechanisms and the main results of the New Economic Geography model (Krugman, 1991).
- c. Present in details the HOV model.

3. Answer to one of the following question about the presentations in class (Important: (1) It is forbidden to choose a question on the article you had to present (2) the answer must be very short: less than ½ page). (10%)

a. What are the aim and the main results of Romalis (2004) "Factor Proportions and the Structure of Comodity Trade, *American Economic Review*. (Not for Alexandra).

b. What are the aim and the main results of Khandelwal (201), The Long and Short (of) Quality Ladders" *Review of Economic Studies* (not for Romain).

c. What are the aim and the main results of Costinot, Donaldson and Komunjer (2012) "What do countries trade? A quantitative exploration of Ricardo's idea", Review of Economic Studies. (not for Goran).