Homework 2
due on Tuesday Nov 30 in class

Problem 1: Consider the new trade Dixit-Stiglitz monopolistic competition model a là Krugman (AER 80).

a) Solve problem 5.2 in the Feenstra book.

b) Solve the model in Krugman AER 80 for the equilibrium number of firms.

c) Analyze how the integration of two equally sized (ie $L = L^*$), formerly autarkic countries affects the number of firms in each country, the total number of products available, and the utility of consumers.

Problem 2: Trade Policy Issues.

a) Derive the optimal tariff in the large country, perfect competition case mathematically, and demonstrate it graphically. Also explain why the optimal tariff for a small country is zero.

b) Show that there are Pareto gains from trade, both using lump sum compensation as well as Dixit-Norman taxation. Briefly discuss the problems of each compensation scheme.

c) Demonstrate the strategic trade policy argument in the imperfect competition case, namely that an import tariff can shift rents in favor of the domestic firm. Explain your view on this when applied to the Airbus-Boeing duopoly (any opinion goes, the reasoning counts).

Problem 3: Consider the 'Protection for Sale' model as introduced by Grossman and Helpman (AER 94).

a) Derive equations (13), (14), (15), and proposition 2 in the original article. In equation (13), please indicate where each term comes from, ie consumer surplus, tariff revenue etc.

b) Whereas the original model is formulated in tariffs, many empirical implementations use non-tariff barrier (NTB) data. However, with NTBs, only a share $\gamma < 1$ of the rent from protection (tariff revenue, if it were a tariff) is actually captured by the government. Modify your calculations in a) to account for this fact.

c) Find the US lobbying contribution data on the internet, pick one sector of your liking, identify the political action committees likely to be linked to the sector you have chosen, and determine their monetary contributions in a given year.