

TOPICS IN INTERNATIONAL TRADE: ECON 507B

October 26, 2006
Midterm Exam

Prof. Tybout

Please write your student ID at the top of each page you turn in and number each page. For example, if you use 6 pages, number them 1 of 6, 2 of 6, and so on. Do not write your name anywhere on the exam.

All questions will be weighted in proportion to their allotted time.

- 1) **(20 minutes)** Adopting the assumptions of the Melitz and Ottaviano (2005) model, explain *how* and *why* the short run effects of unilateral reductions in trade costs are likely to differ from the long run effects of trade liberalization. (Interpret short run to be a time horizon sufficiently brief that firm entry and exit are not possible.) Does empirical evidence support your explanation? In discussing the empirical literature, comment on its methodological weaknesses.
- 2) **(20 minutes)** There are two countries in the world—A and B. Each is endowed with labor and capital. Each produces food using constant returns technologies, and each produces manufactured goods using headquarter services and final good production facilities. Country A is more labor abundant than country B.

For some exogenous reason, a significant fraction of the labor force migrates from A to B. (Country A remains the more labor-abundant country, however.) How will this trade flows and the location of headquarter services and production facilities? Answer this question first using the HK Chapter 12 model, then using the Markusen/Venables model. (For the former use an Edgeworth box; for the latter, simply describe qualitatively what you would expect to happen and why.)

- 3) **(10 minutes)** Explain why it is inappropriate to estimate gravity equations using ordinary least squares, and ignoring those countries with zero bilateral trade flows. More precisely, explain what kinds of biases are likely to result if one fits the following equation to data on country pairs (i and j) for which imports by i from j (M_{ij}) are strictly positive:

$$\ln M_{ij} = \beta_0 + \lambda_i + \zeta_j + \gamma d_{ij} + \varepsilon_{ij}$$

(Here d_{ij} is a measure of the trade frictions separating countries i and j , including distance; λ_i and ζ_j represent country fixed effects, captured using dummy variables.)

- 4) **(25 minutes)** Indicate whether each of the following is true, false, or uncertain and provide a brief explanation for your answer.
 - a) Export promotion policies that subsidize export revenues on a per dollar basis are more effective at generating total export sales than export promotion policies that subsidize entry into foreign markets by non-exporting firms.
 - b) The sources of gains from trade that Melitz (2003) emphasizes are empirically important.
 - c) Vertical and horizontal FDI are likely to respond the same way to trade barriers.
 - d) In the Melitz/Ottaviano model, the effects of a proportionate increase in country size for both countries (L and L^*) are qualitatively indistinguishable from the effects of an increase in the upper bound for the support of the cost distribution, c_M .