UNIVERSITY OF CALIFORNIA AT BERKELEY

Department of Economics

International Economics Field Exam January 2021

GENERAL INSTRUCTIONS:

This is a 3-hour (180 min) field exam. There are 3 questions in total. You need to answer all 3 questions. Question 1 corresponds to course 280A, question 2 corresponds to course 280D and question 3 corresponds to course 270C. Each question is worth 30 points for a total of 90 points.

Please send your answers by email to Janene C. Martinez (jcarolm@berkeley.edu) by 12 pm PST. Typed answers in PDF or MS Word would be the easiest. (You can also write answers by hand as long as you scan/convert them into digital format to be sent by email to Janene.)

The exam is open-book, but no communication with anyone can take place during the exam. Based on the Berkeley Honor Code, you have given us your word on this.

Question 1 (280A)

Part 1 (Andres) (15 points)

(i) (5 points) In the Krugman model we know that $\hat{W}_j = \hat{\lambda}_{jj}^{-1/(\sigma-1)}$. Why is this no longer a valid expression for welfare as we move from the Krugman to the Melitz model?

(ii) (5 points) How does this expression for welfare change in the Melitz model under the conditions assumed in the ACR paper?

(iii) (5 points) Imagine that these conditions are not satisfied but that we have firm-level data. In particular, we know that there is a set of firms whose productivity does not change with the trade shock and we observe the hat change in the share of domestic expenditure λ_{jj} that is devoted to these firms, $\hat{\pi}_{jj}^{c}$. Derive an expression for welfare using both $\hat{\pi}_{jj}^{c}$ and $\hat{\lambda}_{jj}$.

Part 2 (Ben) (15 points)

Answer the following three questions in reference to Atkin, Faber and Gonzalez-Navarro (2018) "Retail Globalization and Household Welfare":

(i) (5 points) Describe the welfare measure and its components that the paper uses to quantify the household gains from foreign supermarket entry.

(ii) (5 points) How do they estimate the "Direct Price Index Effect" of foreign retail entry?

(iii) (5 points) Discuss two different theoretical channels that could give rise to what the authors refer to as the "pro-competitive price index effect".

Question 2 (Cecile – 280D)

Answer the following questions with as much formalism as you can.

Part 1 (20 points)

Firms are measured to be more productive in large cities. Agglomeration economies are one possible explanation for this fact. Describe *other* possible explanations for this stylized fact. For each of them:

a. cite the related literature and summarize their findings
b. write down a sketch of a model that can capture these effects

Part 2 (10 points)

The sorting of high-skilled into high-wage, dense cities has increased in the past few decades. What could be the causes of that increased sorting? What ingredients would you put in a spatial model that aims to speak to this fact and disentangle its causes? Explain.

Question 3 (270C)

Part 1 (Andres) (15 points)

Consider the Hsieh-Klenow (2009) setup but to simplify ignore capital, so $y_i = a_i l_i$, $y_i = D p_i^{-\varepsilon}$, and there are wedges so that a firm's effective revenue is $(1 - \tau_i)\, p_i y_i$. If we observe firm-level employment and revenue in the data, how do we back out firm-level TFPQ and TFPR?

Part 2 (Ben) (15 points)

Answer the following questions in reference to Egger et al. (2019) "General Equilibrium (GE) Effects of Cash Transfers: Experimental Evidence from Kenya":

(i) (5 points) What features of the design allow the authors to estimate GE effects and at which spatial scale?

(ii) (5 points) Explain how they arrive at their point estimate for the local fiscal multiplier of cash transfers.

(iii) (5 points) List and explain in theory one example of potential GE effects that the current design and data collection would not be able to evaluate.