

Final Exam

There are three equally weighted questions. Please read them carefully, and answer each of them. If you have questions please do ask us by phone. Email your answers back to us (one readable pdf file) by 3 PM. *Good luck !*

Problem 1: Ricardo–DFS–Eaton/Kortum.

- a) How do Dornbusch-Fischer-Samuelson generalize the 2-country Ricardo model. Describe in particular how they model productivity differences and rank sectors according to relative productivity differences. What is the reason why this approach cannot be extended to more than two countries?
- b) How do Eaton/Kortum extend the 2-country DFS model to more than two countries — provide sufficient detail on assumptions and results.
- c) What is your interpretation of random productivity differences? Using the original Ricardo example (textile/wine in England/Portugal), explain what Eaton/Kortum have to say about these four unit input coefficients.

Problem 2: Gravity Model.

- a) Describe the original gravity model and why it has gained prominence in explaining international trade flows.
- b) Explain the reasoning behind the introduction of the multilateral resistance terms by Andersen/Van Wincoop. Use Denmark and New Zealand (equally sized) to explain the relevance of those terms.
- c) Consider the paper by Thomas Chaney — what are the distortions he finds relative to the gravity model, and what is driving them?

Problem 3: Modern Trade.

- a) Using German trade data available at <https://www.destatis.de/DE/Themen/Wirtschaft/Aussenhandel/Tabellen/aussenhandel-detaildaten.html>, find the 2-digit sectors with the highest/lowest Grubel-Lloyd index of intra-industry trade.
- b) Explain in detail how Melitz (Econometrica 2003) generalizes the model of Krugman. Is there any aspect of his model that is less general than Krugman JIE 79?
- c) Discuss the causal relationship between productivity (of the firm and general) and export behavior in the Melitz model. Is there cause for criticism?