

Recent topics in international trade

Examples of topics for the master's thesis

19 décembre 2013

1 New Trade models

1.1 A multi-sector model of trade under perfect competition

Based on the Eaton and Kortum model studied during the course, study the determinants of sectoral and aggregate trade patterns when both the mean level and the variance of productivities variance across sectors.

References : Eaton and Kortum, 2002

1.2 Non homothetic preferences and the income elasticity

Caron, Fally & Markusen (2012) present a theoretical framework that incorporates the possibility that demand is non-homothetic into a perfect competition framework *à la* Eaton and Kortum (2002). Based on this article, discuss the impact of such non-homotheticities for the response of trade to macro shocks. The treatment of this general question can be theoretical, in which case you need to take an angle that is different from Caron et al, or empirical, you could for instance apply their empirical strategy to study the impact of the recent financial crisis on European countries.

References : Caron, Fally & Markusen, 2012, "Skill Premium and Trade Puzzles : A Solution Linking Production and Preferences", CEPR DP 8999

1.3 The gravity equation under a non-Paretian distribution of firms

Chaney (2008) uses a variation of the Melitz' model studied during the course to derive a "gravity" equation that can be estimated structurally. This variation crucially relies on the assumption that the distribution of firms' productivity is Pareto. Discuss the sensitivity of those theoretical predictions to the Pareto assumption.

References : T. Chaney, 2008. “Distorted Gravity : The Intensive and Extensive Margins of International Trade,” *American Economic Review*, 98(4) :1707-21.

1.4 Multi-product firms and the elasticity of trade

Mayer, Melitz and Ottaviano (2014) develop a model of trade under imperfect competition in which the firms endogenously decide how many products they want to produce and export abroad. Study the implications of this model for the response of individual firms to exogenous shocks and the aggregate impact of such firm-level adjustments.

References : Mayer, Melitz and Ottaviano, 2014, “Market Size, Competition, and the Product Mix of Exporters” forthcoming in the *American Economic Review*, 104(2).

1.5 Additive trade costs

Most of the literature assumes transportation costs are multiplicative in CIF prices. Discuss how the predictions of the Melitz model are changed whenever transportation costs are additive, i.e. whenever the firm sells abroad at a FOB price p but the consumers pay $p + \tau$ (instead of $p\tau$ with iceberg trade costs).

References : Melitz, 2003

A. Irarrazabal, A. Moxnes and L. D. Opmolla, The Tip of the Iceberg : A Quantitative Framework for Estimating Trade Costs, (2012), available on Andreas Moxnes’ website.

2 Welfare gains

2.1 Theoretical welfare gains

Based on your reading of Arkolakis et al. (2012) explain what happens if the elasticity of the demand of imports is not constant, as is the case for instance with translog preferences?

References : C. Arkolakis, A. Costinot, A. Rodriguez-Clare, 2012. “New Trade Models, Same Old Gains ?,” *American Economic Review*, 102(1) :94-130.

2.2 Theoretical welfare gains

Based on your reading of Arkolakis et al. (2012) and Melitz and Redding (2013), explain what are the sources of welfare gains in the model of trade under imperfect competition. What are the sources of discrepancies between those two papers? In what circumstances should we rely on the results presented by Arkolakis et al? By Melitz and Redding?

References :

C. Arkolakis, A. Costinot, A. Rodriguez-Clare, 2012. “New Trade Models, Same Old Gains ?,” *American Economic Review*, 102(1) :94-130.

Melitz, Marc, and Stephen Redding. 2013. Firm Heterogeneity and Aggregate Welfare.

2.3 Non-constant price elasticities

Novy (2013) discusses the determinants of trade elasticities when preferences are translog and the elasticity is thus non-constant. Discuss the implications of such framework for welfare gains (thesis can be mostly theoretical or empirical depending on your own tastes).

References : Dennis Novy, 2013. "International Trade without CES : Estimating Translog Gravity," *Journal of International Economics* 89(2), March 2013, pp. 271-282

3 Topics in International Trade

3.1 Trade and Quality

3.1.1 Quality Ladders

Estimation of quality at the country-product level using the Khandelwal (2010) methodology for European countries, and critical discussion of that methodology. Applications to one of the following questions :

- Where do European countries stand on the quality ladder ?
- Has the integration of European markets affected those specialization patterns ?
- Specialization in quality and European trade imbalances

References :

Amit Khandelwal, 2010. "The Long and Short (of) Quality Ladders," *Review of Economic Studies*, 77(4) :1450-1476.

Ito, T. and Okubo, T., 2012, "New Aspects of Intra-industry Trade in EU Countries". *World Economy*, 35 :1126-1138

3.1.2 Export Quality and Growth

Some researchers have suggested that a country's income per capita is positively correlated with the income per capita of countries exporting similar products (Hausmann, Hwang and Rodrik 2007) as well as a measure of the diversity and complexity of that country's export bundle (Hausmann et al. 2011).

Suggest some theoretical mechanisms that could explain these relationships. Compare these measures to the quality ladder measures. Estimate their impact in cross-country growth regressions.

References :

R. Hausmann, J. Hwang and D. Rodrik (2007), What You Export Matters, *Journal of Economic Growth*, 12 :1-25.

R. Hausmann et al. (2011), The Atlas of Economic Complexity, and data available at <http://atlas.media.mit.edu>

3.2 Vertical Fragmentation

3.2.1 Upstreamness

Use IO tables to apply the upstreamness measure presented in class. Possible questions include :

- European integration and vertical fragmentation
- Cross-country comparison of sectors' upstreamness
- Distance to final demand and upstreamness

References : Pol Antras, Davin Chor, Thibault Fally and Russell Hillberry "Measuring the Upstreamness of Production and Trade Flows," *American Economic Review Papers and Proceedings*, Vol. 102, No. 3, May 2012, pp. 412-416.

3.2.2 Intrafirm Trade

Using Nunn and Trefler's US data on intra-firm trade at the sector level, relate intra-firm trade to sector determinants (upstreamness, factor intensity) or country determinants (factor abundance, language, trade costs, public governance).

References : Nathan Nunn and Daniel Trefler, "Incomplete Contracts and the Boundaries of the Multinational Firm," *Journal of Economic Behavior & Organization*, forthcoming.

3.3 Trade and Inequality

Relate differences in factor content of imports to wage inequality. Compute skilled and unskilled labor contents of trade using World Input/Output Tables and discuss how accounting for vertical fragmentation affects these calculations.

References :

D. Trefler and S.C. Zhu, The structure of factor content predictions, *Journal of International Economics* 82 :195-207

Stone, S., R. Cavazos Cepeda and A. Jankowska (2011), "The Role of Factor Content in Trade : Have Changes in Factor Endowments Been Reflected in Trade Patterns and on Relative Wages?," *OECD Trade Policy Papers*, No. 109, OECD Publishing.

3.4 Trade in Services

Using a new World Bank database on Services Trade Restrictions, study how trade in services is affected by these restrictions, and whether costs of trading goods affect services trade and vice-versa.

Ingo Borchert, Batshur Gootiiz, Aaditya Mattoo (2012), "Policy Barriers to International Trade in Services : Evidence from a New Database", The World Bank