

# Empirical Models of Firm Entry and Growth in Export Markets

This three-lecture course is intended to introduce students to empirical models of firm-entry in export markets using microeconomic estimation techniques. It will proceed in three parts:

1. The Decision to Export
2. Exporting and Firm Growth
3. Heterogeneity Across Firms and Space

The first topic reviews basic entry models distinguishing what types of questions can be answered in a reduced-form context and what types of questions cannot. The second topic builds on the first to address export entry models in a context where (i) firms are heterogeneous, (ii) forward-looking, (iii) future growth affects current decisions, and (iv) the researcher wishes to recover ‘structural’ model parameters. The third topic introduces issues and approaches intended to address response heterogeneity or high-dimensional problems. A reading list for each topic is included below. Papers noted with an asterisk will be covered in detail. Lecture slides and practice problems will be circulated separately.

## Reading List

### The Decision to Export & Firm Performance

Bernard, Andrew B., Jonathan Eaton, J. Bradford Jensen, and Samuel Kortum. 2003. “Plants and Productivity in International Trade,” *American Economic Review*, 93(4): 1268-1290.

Bernard, Andrew and J. Bradford Jensen. 1999. “Exceptional Exporter Performance: Cause, Effect, or Both?” *Journal of International Economics*, 47(1): 1-25.

Bernard, Andrew and J. Bradford Jensen. 2004. “Why Some Firms Export,” *The Review of Economics and Statistics*, 86(2): 561-569.

\*Clerides, Sofronis K., Saul Lach and James R. Tybout. 1998. “Is Learning-by-Exporting Important? Micro-Dynamic Evidence from Colombia, Mexico, and Morocco,” *Quarterly Journal of Economics*, 113(3): 903-947.

Fernandes, Ana P. and Heiwai Tang. 2014. “Learning to export from neighbors,” *Journal of International Economics*, 94: 67-84.

Garcia-Marin, Alvaro and Nico Voigtlander. 2019. “Exporting and Plant-Level Efficiency Gains: It’s in the Measure,” *Journal of Political Economy*, 127(4): 1777-1825.

Kaiser, Ulrich and H.C. Kongsted. 2004. "True versus spurious state dependence in firm performance: The case of West German exports," *Empirical Economics*, 35: 207-228.

Munch, Jakob and Georg Schaur. 2018. "The Effect of Export Promotion on Firm-Level Performance," *American Economic Journal: Economic Policy*, 10(1): 357-387.

Pavcnik, Nina. 2003. "Trade liberalization, exit, and productivity improvements: Evidence from Chilean plants," *The Review of Economic Studies*, 69(1): 245-276.

\*Roberts, Mark and James R. Tybout. 1997. "The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs," *American Economic Review*, 87(4): 545-564.

Trefler, Daniel. 2004. "The Long and Short of the Canada-U. S. Free Trade Agreement," *American Economic Review*, 94(4): 870-895.

### **Structural Models of Firm Entry & Growth**

Alessandria, George, Costas Arkolakis and Kim Ruhl. 2021. "Firm Dynamics and Trade," *Annual Review of Economics*, 13(1): 253-280.

Arkolakis, Costas. 2010. "Market Penetration Costs and the New Consumers Margin in International Trade," *Journal of Political Economy*, 118(6): 1151-1199.

\*Aw, Bee, Mark Roberts and Daniel Yi Xu. 2011. "R&D Investment, Exporting and Productivity Dynamics," *American Economic Review*, 101(4): 1312-1344.

\*Das, Sanghamitra, Mark J. Roberts and James R. Tybout. 2007. "Market Entry Costs, Producer Heterogeneity, and Export Dynamics," *Econometrica*, 75(3): 837-873.

Demidova, Svetlana, Hiau Looi Kee and Kala Krishna. 2012. "Do Trade Policy Differences Induce Sorting? Theory and Evidence from Bangladeshi Apparel Exporters," *Journal of International Economics*, 87(2): 247-261.

Fitzgerald, Doireann, Stefanie Haller and Yaniv Yedid-Levi. 2022. "How Exporters Grow," *Review of Economic Studies*, forthcoming.

Grieco, Paul L. E., Shengyu Li, and Hongsong Zhang. 2022. "Input Prices, Productivity, and Trade Dynamics: Long-run Effects of Liberalization on Chinese Paint Manufacturers," *RAND Journal of Economics*, forthcoming.

Wei, Shang-jin, Ziru Wei, and Jianhuan Xu. 2021. "On the market failure of "missing pioneers," *Journal of Development Economics*, 152: 102705.

Piveteau, Paul. 2021. "An Empirical Dynamic Model of Trade with Consumer Accumulation," *American Economic Journal: Microeconomics*, 13(4): 23-63.

Rho, Youngwoo and Joel Rodrigue. 2016. "Export and Investment Dynamics," *International Economic Review*, 57(1): 271-304.

Roberts, Mark J., Daniel Yi Xu, Xiaoyan Fan and Shengxing Zhang. 2018. "The Role of Firm Factors in Demand, Cost, and Export Market Selection for Chinese Footwear Producers," *Review of Economic Studies*, 85: 2429-2461.

Rodrigue, Joel and Omolola Soumonni. 2014. "Deforestation, Foreign Demand and Export Dynamics in Indonesia." *Journal of International Economics*, 93(2): 316-338.

Rodrigue, Joel and Yong Tan. 2019. "Price, Product Quality and Exporter Dynamics: Evidence from China," *International Economic Review*, 60(4): 1911-1955.

Ruhl, Kim and Jonathan Willis. 2019. "New Exporter Dynamics," *International Economic Review*, 58(3): 703-725.

## **Heterogeneity & Higher Dimensions**

Antras, Pol, Teresa Fort and Felix Tintelnot. 2017. "The Margins of Global Sourcing: Theory and Evidence from U.S. Firms," *American Economic Review*, 107(9): 2514-64.

Eaton, Jonathan, David Jenkins, James R. Tybout, and Daniel Yi Xu. 2022. "Two-Sided Search in International Markets," NBER Working Paper 29684.

Hoang, Trang. 2022. "The Dynamics of Global Sourcing," International Finance Discussion Papers 1337.

Huynh, Kim, Robert Petrunia, Joel Rodrigue and Walter Steingress. 2022. “Exporting and Investment Under Credit Constraints,” Bank of Canada Working Paper.

\*Lileeva, Alla and Daniel Trefler. 2010. “Improved Access to Foreign Markets Raises Plant-Level Production... For Some Plants,” *Quarterly Journal of Economics*, 125(3): 1051-1099.

\*Morales, Eduardo, Gloria Sheu, and Andrés Zahler. 2019. “Extended Gravity,” *Review of Economic Studies*, 86(6): 2668-2712.