Dennis Novy University of Warwick December 2017 Kiel Advanced Studies Program

International Trade: Monopolistic Competition and Gravity

The objective of this course is to introduce some of the latest developments in the international trade literature. The course focuses on two main topics: models of monopolistic competition and the gravity model. The course discusses both theoretical and empirical research, with a number of practical applications. The course mainly builds on published articles and working papers. The below list contains some key references (however, it is not an exhaustive list).

** required

* recommended

1) Monopolistic Competition and International Trade

Behrens, K., Murata, Y., 2012. Trade, Competition, and Efficiency. *Journal of International Economics* 87, pp. 1-17.

Dixit, A., Stiglitz, J., 1977. Monopolistic Competition and Optimum Product Diversity. *American Economic Review* 67, pp. 297-308.

Feenstra, R., 2003. A Homothetic Utility Function for Monopolistic Competition Models, without Constant Price Elasticity. *Economics Letters* 78, pp. 79-86.

Hottman, C., Redding, S., Weinstein, D., 2017. Quantifying the Sources of Firm Heterogeneity. *Quarterly Journal of Economics* 131, pp. 1291-1364.

**Krugman, P., 1979. Increasing Returns, Monopolistic Competition, and International Trade. *Journal of International Economics* 9, pp. 469-479.

**Krugman, P., 1980. Scale Economies, Product Differentiation, and the Pattern of Trade. *American Economic Review* 70, pp. 950-959.

**Krugman, P., 1991. Increasing Returns and Economic Geography. *Journal of Political Economy* 99, pp. 483-499.

Matsuyama, K., Ushchev, P., 2017. Beyond CES: Three Alternative Classes of Flexible Homothetic Demand Systems. Centre for Economic Policy Research Discussion Paper 12210. **Melitz, M., 2003. The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica* 71, pp. 1695-1725.

**Melitz, M., Ottaviano, G., 2008. Market Size, Trade, and Productivity. *Review* of *Economic Studies* 75, pp. 295-316.

*Melitz, M., Redding, S., 2014. Heterogeneous Firms and Trade. Chapter 1 in Gopinath, G., Helpman, E., Rogoff, K. (eds), Vol. 4 of the Handbook of International Economics, Elsevier, pp. 1-54.

Zhelobodko, E., Kokovin, S., Parenti, M., Thisse, J., 2012. Monopolistic Competition: Beyond the Constant Elasticity of Substitution. *Econometrica* 80, pp. 2765-2784.

2) Gravity

Allen, T., Arkolakis, C., 2014. Trade and the Topography of the Spatial Economy. *Quarterly Journal of Economics* 129, pp. 1085-1140.

Allen, T., Arkolakis, C., Takahashi, Y., 2014. Universal Gravity. National Bureau of Economic Research Working Paper 20787.

Anderson, J., 1979. A Theoretical Foundation for the Gravity Equation. *American Economic Review* 69, pp. 106-116.

*Anderson, J., 2011. The Gravity Model. Annual Review of Economics 3, pp. 133-160.

**Anderson, J., van Wincoop, E., 2003. Gravity with Gravitas: A Solution to the Border Puzzle. *American Economic Review* 93, pp. 170-192.

*Anderson, J., van Wincoop, E., 2004. Trade Costs. *Journal of Economic Literature* 42, pp. 691-751.

Baier, S., Bergstrand, J., 2001. The Growth of World Trade: Tariffs, Transport Costs and Income Similarity. *Journal of International Economics* 53, pp. 1-27.

Bergstrand, J., 1985. The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence. *Review of Economics and Statistics* 67, pp. 474-481.

Bergstrand, J., 1989. The Generalized Gravity Equation, Monopolistic Competition, and the Factor-Proportions Theory in International Trade. *Review of Economics and Statistics* 71, pp. 143-153.

*Chaney, T., 2008. Distorted Gravity: The Intensive and Extensive Margins of International Trade. *American Economic Review* 98, pp. 1707-1721.

Chen, N., Novy, D., 2011. Gravity, Trade Integration, and Heterogeneity across Industries. *Journal of International Economics* 85, pp. 206-221.

*Eaton, J., Kortum, S., 2002. Technology, Geography and Trade. *Econometrica* 70, pp. 1741-1779.

Evenett, S., Keller, W., 2002. On Theories Explaining the Success of the Gravity Equation. *Journal of Political Economy* 110, pp. 281-316.

Feenstra, R., Markusen, J., Rose, A., 2001. Using the Gravity Equation to Differentiate Among Alternative Theories of Trade. *Canadian Journal of Economics* 34, pp. 430-447.

*Head, K., Mayer, T., 2014. Gravity Equations: Workhorse, Toolkit, and Cookbook. Chapter 3 in Gopinath, G., Helpman, E., Rogoff, K. (eds), Vol. 4 of the Handbook of International Economics, Elsevier, pp. 131-195.

Helpman, E., Melitz, M., Rubinstein, Y., 2008. Estimating Trade Flows: Trading Partners and Trading Volumes. *Quarterly Journal of Economics* 123, pp. 441-487.

Hummels, D., 2007. Transportation Costs and International Trade in the Second Era of Globalization. *Journal of Economic Perspectives* 21, pp. 131-154.

Jacks, D., Meissner, C., Novy, D., 2008. Trade Costs, 1870-2000. *American Economic Review* 98, pp. 529-534.

Jacks, D., Meissner, C., Novy, D., 2011. Trade Booms, Trade Busts, and Trade Costs. *Journal of International Economics* 83, pp. 185-201.

McCallum, J., 1995. National Borders Matter: Canada-U.S. Regional Trade Patterns. *American Economic Review* 85, pp. 615-623.

**Novy, D., 2013. Gravity Redux: Measuring International Trade Costs with Panel Data. *Economic Inquiry* 51, pp. 101-121.

**Novy, D., 2013. International Trade without CES: Estimating Translog Gravity. *Journal of International Economics* 89, pp. 271-282.

*Santos Silva, J., Tenreyro, S., 2006. The Log of Gravity. *Review of Economics and Statistics* 88, pp. 641-658.

Textbook

Also consider the textbook by Feenstra, R., 2016. Advanced International Trade: Theory and Evidence (2nd edition). Princeton University Press. Chapters 5 and 6 on "Monopolistic Competition and the Gravity Equation" are particularly relevant. Exercises (both theoretical and empirical) are provided at the end of those chapters.