BANK OF KOREA ACADEMY

INTERNATIONAL TRADE AND MACROECONOMICS

Syllabus

June 10-14, 2019

Lectures: June 10-13: 10:00am-12:00pm and 2:00-4:30pm June 14: 10:00am-12:00pm and 2:00-4:00pm Location TBA

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Office Hours: June 10-13, 5:00-5:30pm, and by appointment

Objectives and Description

This mini-course focuses on the intersection of international trade and macroeconomics. Its purpose is to expose students to recent developments in this research area, to develop understanding of the interaction of micro and macro dynamics in international interdependence, and to stimulate ideas for research.

The course studies how international macroeconomic models with trade microfoundations can shed new light on long-standing and novel questions in international macroeconomics. We will confront theories with empirical evidence and pay special attention to the roles of producer entry and exit in domestic and export markets, and firm heterogeneity, in shaping aggregate fluctuations and economic policy outcomes. Topics we will cover include: international trade and macroeconomic dynamics with producer entry, exit, and heterogeneity; FDI, offshoring, and international business cycles; labor market frictions and the consequences of trade integration; financial frictions, banks, and trade; monetary policy and trade; and the macroeconomic effects of protectionism.

Lectures will be based on journal articles and working papers. They will cover a subset of the papers listed below. The papers on which we will spend most of the time are highlighted by asterisks: two for the papers I plan to cover in detail, one for those I plan to talk about more briefly. How much of the plan we will actually accomplish will also depend on our conversations in class. You should feel free to ask questions at any point: Lively class discussion is very valuable.

Topics and Readings

1. International Trade and Macroeconomic Interdependence with Producer Dynamics

* Alessandria, G., and H. Choi (2007): "Do Sunk Costs of Exporting Matter for Net Export Dynamics?" *Quarterly Journal of Economics* 122: 289-336.

Alessandria, G., and H. Choi (2014): "Establishment Heterogeneity, Exporter Dynamics, and the Effects of Trade Liberalization," *Journal of International Economics* 94: 207-223.

Alessandria, G., H. Choi, J. P. Kaboski, and V. Midrigan (2015): "Microeconomic Uncertainty, International Trade, and Aggregate Fluctuations," *Journal of Monetary Economics* 69: 20-38.

Bergin, P. R., and R. Glick (2007): "Tradability, Productivity, and International Economic Integration," *Journal of International Economics* 73: 128-151.

** Bergin, P. R., and R. Glick (2009): "Endogenous Tradability and Some Macroeconomic Implications," *Journal of Monetary Economics* 56: 1086-1095.

Bergin, P. R., R. Glick, and A. M. Taylor (2006): "Productivity, Tradability, and the Long-Run Price Puzzle," *Journal of Monetary Economics* 53: 2041-2066.

Comin, D., N. Loayza, F. Pasha, and L. Serven (2014): "Medium Term Business Cycles in Developing Countries," *American Economic Journal: Macroeconomics* 6: 209-245.

Corsetti, G., P. Martin, and P. Pesenti (2007): "Productivity Spillovers, Terms of Trade, and the 'Home Market Effect'," *Journal of International Economics* 73: 99-127.

Corsetti, G., P. Martin, and P. Pesenti (2013): "Varieties and the Transfer Problem," *Journal of International Economics* 89: 1-12.

Devereux, M. B., and V. Hnatkovska (2012): "The Extensive Margin, Sectoral Shares and International Business Cycles," *Canadian Journal of Economics* 45: 509-534.

Eaton, J., S. S. Kortum, and S. Sotelo (2012): "International Trade: Linking Micro and Macro," NBER WP 17864.

Fattal Jaef, R. N., and J. I. Lopez (2014): "Entry, Trade Costs, and International Business Cycles," *Journal of International Economics* 94: 224-238.

Gibson, M. J., and T. A. Graciano (2011): "The Decision to Import," *American Journal of Agricultural Economics* 93: 444-449.

** Ghironi, F., and M. J. Melitz (2005): "International Trade and Macroeconomic Dynamics with Heterogeneous Firms," *Quarterly Journal of Economics* 120: 865-915.

* Ghironi, F., and M. J. Melitz (2007): "Trade Flow Dynamics with Heterogeneous Firms," *American Economic Review (Papers and Proceedings)* 97: 356-361.

* Gopinath, G., and B. Neiman (2014): "Trade Adjustment and Productivity in Large Crises," *American Economic Review* 104: 793-831.

Hamano, M. (2013): "The Consumption-Real Exchange Rate Anomaly with Extensive Margins," *Journal of International Money and Finance* 36: 26-46.

Hamano, M. (2014): "The Harrod-Balassa-Samuelson Effect and Endogenous Extensive Margins," *Journal of the Japanese and International Economies* 31: 98-113.

Impullitti, G., A. A. Irarrazabal, and L. D. Opromolla (2013): "A Theory of Entry Into and Exit From Export Markets," *Journal of International Economics* 90: 75-90.

Kehoe, T. J., and K. J. Ruhl (2013): "How Important is the New Goods Margin in International Trade?" *Journal of Political Economy* 121: 358-392.

** Kim, D. (2018): "Economies of Scale and International Business Cycles," *mimeo*, University of Washington.

Méjean, I. (2008): "Can Firms' Location Decisions Counteract the Balassa-Samuelson Effect?" *Journal of International Economics* 76: 139-154.

Pappada', F. (2010): "Real Adjustment of Current Account Imbalances with Firms' Heterogeneity," *IMF Economic Review* 59: 431-454.

2. Trade, Granularity, and Business Cycles

di Giovanni, J., and A. A. Levchenko (2009): "Trade Openness and Volatility," *Review of Economics and Statistics* 91: 558-585.

** di Giovanni, J., and A. A. Levchenko (2012): "Country Size, International Trade, and Aggregate Fluctuations in Granular Economies," *Journal of Political Economy* 120: 1083-1132.

di Giovanni, J., A. A. Levchenko, and I. Méjean (2014): "Firms, Destinations, and Aggregate Fluctuations," *Econometrica* 82: 1303-1340.

di Giovanni, J., A. A. Levchenko, and I. Méjean (2018): "The Micro Origins of International Business Cycle Comovement," *American Economic Review* 108: 82-108.

* Kim, J., and F. Ghironi (2019): "Structural Reforms in Granular Economies," *mimeo*, University of Washington.

3. Trade, International Relative Prices, and the Exchange Rate

* Atkeson, A., and A. T. Burstein (2008): "Pricing to Market, Trade Costs, and International Relative Prices," *American Economic Review* 98: 1998-2031.

Auer, R., and R. Schoenle (2016): "Market Structure and Exchange Rate Pass-Through," *Journal of International Economics* 98: 60-77.

de Blas, B., and K. N. Russ (2015): "Understanding Markups in the Open Economy," *American Economic Journal: Macroeconomics* 7: 157-180.

Johnson, R. C. (2012): "Trade and Prices with Heterogeneous Firms," *Journal of International Economics* 86: 43-56.

* Patureau, L., and C. Poilly (2018): "Reforms and the Real Exchange Rate: The Role of Pricing to Market," *mimeo*, Université Paris-Dauphine and Université Aix-Marseille.

** Rodriguez-Lopez, J. A. (2011): "Prices and Exchange Rates: A Theory of Disconnect," *Review of Economic Studies* 78: 1135-1177.

4. FDI, Vertical Linkages, and Global Value Chains

Auer, R. A., A. A. Levchenko, P. Sauré (2016): "International Inflation Spillovers through Input Linkages," *mimeo*, Bank for International Settlements, University of Michigan, and Swiss National Bank.

Bergin, P. R., R. Feenstra, and G. Hanson (2009): "Offshoring and Volatility: Evidence from Mexico's Maquiladora Industry," *American Economic Review* 99: 1664-1671.

Burstein, A., C. Kurz, and L. Tesar (2008): "Trade, Production Sharing, and the International Transmission of Business Cycles," *Journal of Monetary Economics* 55: 775-795.

Cavallari, L. (2007): "A Macroeconomic Model of Entry with Exporters and Multinationals," *The B.E. Journal of Macroeconomics (Contributions)* 7: Article 32.

Cavallari, L. (2008): "Macroeconomic Interdependence with Trade and Multinational Activities," *Review of International Economics* 16.

Contessi, S. (2006): "International Macroeconomic Dynamics, Endogenous Tradedness and FDI with Heterogeneous Firms," *mimeo*, Federal Reserve Bank of St. Louis.

Contessi, S. (2015): "Multinational Firms' Entry and Productivity: Some Aggregate Implications of Firm Level Heterogeneity, *Journal of Economic Dynamics and Control* 61: 61-80.

** de Soyres, F. (2018): "Value Added and Productivity Linkages across Countries," *mimeo*, The World Bank.

di Giovanni, J., and A. A. Levchenko (2010): "Putting the Parts Together: Trade, Vertical Linkages, and Business Cycle Comovement," *American Economic Journal: Macroeconomics* 2: 95-124.

di Giovanni, J., A. A. Levchenko, and I. Méjean (2016): "The Micro-Origins of International Business Cycle Comovement," NBER WP 21885.

Fillat, J. L., and S. Garetto (2015): "Risk, Returns, and Multinational Production," *Quarterly Journal of Economics* 130: 2027-2073.

Fillat, J. L., S. Garetto, and L. Oldenski (2015): "Diversification, Cost Structure, and the Risk Premium of Multinational Corporations," *Journal of International Economics* 96: 37-54.

Foley, C. F., and K. Manova (2015): "International Trade, Multinational Activity, and Corporate Finance," *Annual Review of Economics* 7: 119-146.

Irarrazabal, A., A. Moxnes, and L. D. Opromolla (2013): "The Margins of Multinational Production and the Role of Intrafirm Trade," *Journal of Political Economy* 121: 74-126.

Johnson, R. C. (2014a): "Trade in Intermediate Inputs and Business Cycle Comovement," *American Economic Journal: Macroeconomics* 6: 39-83.

Johnson, R. C. (2014b): "Five Facts about Value Added-Exports and Implications for Macroeconomics and Trade Research," *Journal of Economic Perspectives* 28: 119-142.

Johnson, R. C., and G. Noguera (2012): "Accounting for Intermediates: Production Sharing and Trade in Value Added," *Journal of International Economics* 86: 224-236.

Liao, W., and A. M. Santacreu (2015): "The Trade Comovement Puzzle and the Margins of International Trade," *Journal of International Economics* 96: 266-288.

Ramondo, N., and V. Rappoport (2010): "The Role of Multinational Production in a Risky Environment," *Journal of International Economics* 81: 240-252.

Ramondo, N., V. Rappoport, and K. J. Ruhl (2013): "The Proximity-Concentration Tradeoff under Uncertainty," *Review of Economic Studies* 80: 1582-1621.

Rodriguez-Lopez, J. A. (2014): "What Drives Offshoring Decisions? Selection and Escape-Competition Mechanisms," *mimeo*, University of California, Irvine.

Wong, C.Y., and Y.-K. Eng (2013): "International Business Cycle Co-movement and Vertical Specialization Reconsidered in Multistage Bayesian DSGE Model," *International Review of Economics & Finance* 26: 109-124.

** Zlate, A. (2016): "Offshore Production and Business Cycle Dynamics with Heterogeneous Firms," *Journal of International Economics* 100: 34-49.

5. FDI and the Exchange Rate

Lubik, T. A., and K. N. Russ (2012): "Exchange Rate Volatility in a Simple Model of Firm Entry and FDI," *Economic Quarterly* 98: 51-76.

* Russ, K N. (2007): "The Endogeneity of the Exchange Rate as a Determinant of FDI: A Model of Entry and Multinational Firms," *Journal of International Economics* 71: 344-372.

Russ, K. N. (20012): "Exchange Rate Volatility and First-Time Entry by Multinational Firms," *Review of World Economics* 148: 269-295.

6. Extensive-Margin Risk and International Portfolios

** Hamano, M. (2015): "International Equity and Bond Positions in a DSGE Model with Variety Risk in Consumption," *Journal of International Economics*: 96: 212-226.

7. International Trade and Labor Market Frictions

** Cacciatore, M. (2014): "International Trade and Macroeconomic Dynamics with Labor Market Frictions," *Journal of International Economics* 93: 17-30.

Coşar, A. K., N. Guner, and J. Tybout (2016): "Firm Dynamics, Job Turnover, and Wage Distributions in an Open Economy," *American Economic Review* 106: 625-663.

Helpman, E., and O. Itskhoki (2010): "Labour Market Rigidities, Trade and Unemployment," *Review of Economic Studies* 77: 1100-1137.

Helpman, E., O. Itskhoki, and S. Redding (2013): "Trade and Labor Market Outcomes" *Advances in Economics and Econometrics*, Tenth World Congress, Volume II, Applied Economics, pp. 459-504.

Mandelman, F. S. (2016): "Labor Market Polarization and International Macroeconomic Dynamics," *Journal of Monetary Economics* 79: 1-16.

Mandelman, F. S., and A. Zlate (2013): "Offshoring, Low-Skilled Immigration and Labor Market Polarization," *mimeo*, Federal Reserve Bank of Atlanta and Board of Governors of the Federal Reserve System.

8. Financial Frictions and Banks

Bonfiglioli, A., R. Crinò and G. A. Gancia (2016): "Trade, Finance and Endogenous Firm Heterogeneity," CEPR DP 11175.

Bremus, F., C. M. Buch, K. N. Russ, and M. Schnitzer (2013): "Big Banks and Macroeconomic Outcomes: Theory and Cross-Country Evidence of Granularity," NBER WP 19093.

** Cacciatore, M., F. Ghironi, and V. Stebunovs (2015): "The Domestic and International Effects of Interstate U.S. Banking," *Journal of International Economics* 95: 171-187.

de Blas, B., and K. N. Russ (2013) "All Banks Great, Small, and Global: Loan Pricing and Foreign Competition," *International Review of Economics & Finance* 26: 4-24.

** Manova, K. (2013): "Credit Constraints, Heterogeneous Firms, and International Trade," *Review of Economic Studies* 80: 711-744.

Niepmann, F. (2012): "Banking across Borders," Federal Reserve Bank of New York Staff Report 576.

Niepmann, F. (2013): "Banking across Borders with Heterogeneous Banks," Federal Reserve Bank of New York Staff Report 609.

9. International Trade and Monetary Policy

Auray, S., and A. Eyquem (2011): "Do Changes in Product Variety Matter for Fluctuations and Monetary Policy in Open Economies?" *International Finance* 14: 507-539.

Auray, S., A. Eyquem, and J.-C. Poutineau (2012): "The Effect of a Common Currency on the Volatility of the Extensive Margin of Trade," *Journal of International Money and Finance* 31: 1156-1179.

* Bergin, P. R., and G. Corsetti (2014): "Beyond Competitive Devaluations: The Monetary Dimensions of Comparative Advantage," *mimeo*, University of California, Davis, and University of Cambridge.

Bergin, P. R. and C.-Y. Lin (2009): "Exchange Rate Regimes and the Extensive Margin of Trade," in Frankel, J., and C. Pissarides, eds., *NBER International Seminar on Macroeconomics 2008*, 201-227.

** Cacciatore, M., and F. Ghironi (2012): "Trade, Unemployment, and Monetary Policy," *mimeo*, HEC Montréal and University of Washington.

Cavallari, L. (2013): "Firms' Entry, Monetary Policy and the International Business Cycle," *Journal of International Economics* 91: 263-274.

Naknoi, K. (2015): "Exchange Rate Volatility and Fluctuations in the Extensive Margin of Trade," *Journal of Economic Dynamics and Control* 52: 322-339.

Sbordone, A. M. (2010): "Globalization and Inflation Dynamics: The Impact of Increased Competition," in J. Galí and M. J. Gertler (eds.), *International Dimensions of Monetary Policy*, Chicago: University of Chicago Press.

Shi, K., and J. Xu (2007): "Optimal Monetary Policy with Vertical Production and Trade," *Review of International Economics* 15: 514-537.

Xu, J. (2011): "The Optimal Currency Basket under Vertical Trade," *Journal of International Money and Finance* 30: 1323-1340.

10. The Macroeconomic Effects of Protectionism

* Auray, S., M. B. Devereux, and A. Eyquem (2019): "Endogenous Trade Protection and Exchange Rate Adjustment," NBER WP 25517.

** Barattieri, A., M. Cacciatore, and F. Ghironi (2017): "Protectionism and the Business Cycle," NBER WP 24353.

Barbiero, O., E. Farhi, G. Gopinath, and O. Itskhoki (forthcoming): "The Macroeconomics of Border Taxes," *NBER Macroeconomics Annual*.

* Erceg, C., A. Prestipino, and A. Raffo (2017): "The Macroeconomic Effects of Trade Policy," *mimeo*, Board of Governors of the Federal Reserve System.

Furceri, D., S. A. Hannan, J. D. Ostry, and A. K. Rose (2018): "Macroeconomic Consequences of Tariffs," *mimeo*, International Monetary Fund and University of California, Berkeley.

* Lindé, J., and A. Pescatori (2017): "The Macroeconomic Effects of Trade Tariffs: Revisiting the Lerner Symmetry Result," *mimeo*, Sveriges Riksbank and International Monetary Fund.