Course Outline

Econ G6306: Industrial Development Eric Verhoogen Spring 2021

The starred (*) readings are required. The non-starred are recommended but not required. Later I will assign students to present empirical papers, which may include some of the currently non-starred readings; if a reading is assigned for a student presentation, it will become required.

The readings that are available online are indicated below. The links should work if you are on a computer in the Columbia domain. If you are not on a computer in the Columbia domain and a link does not work, you should go to the Columbia libraries site, search for the journal or book, and click through; you will be prompted for your UNI and password. If there are any broken links, please let me know.

0 Background/General References

* Bardhan, P. and Udry, C. (1999). *Development Microeconomics*. Oxford University Press, Oxford. (<u>link</u>) A clear and concise graduate-level introduction to micro-economic theories in development. We will be reading several chapters.

Wooldridge, J. (2002). Econometric Analysis of Cross Section and Panel Data. MIT Press, Cambridge, MA. (link) My own favorite econometrics reference.

Angrist, J. D. and Pischke, J. (2009). Mostly Harmless Econometrics: An Empiricist's Companion. Princeton University Press. Another useful, practical econometrics reference. (<u>link</u>)

1 Introduction

* Krugman, P. (1995). The Fall and Rise of Development Economics. In *Development, Geography and Economic Theory*, chapter 1. Cambridge: MIT Press. (<u>link</u>)

Sutton, J. (2001). Rich Trades, Scarce Capabilities: Industrial Development Revisited. STICERD Discussion Paper, London School of Economics. (<u>link</u>)

Mookherjee, D. (1999). Contractual Constraints on Firm Performance in Developing Countries. Unpub. Paper, Boston University. (link)

Verhoogen, E. (2020). Firm-Level Upgrading in Developing Countries. CDEP-CGEG working paper no. 83, Columbia University (<u>link</u>)

2 Empirical Methods and Methodological Debates

- * Angrist, J. D. and Krueger, A. B. (1999). Empirical Strategies in Labor Economics. In Ashenfelter, O. C. and Card, D., editors, *Handbook of Labor Economics*, volume 3A. Elsevier Science. (<u>link</u>)
- * Imbens, G. W. and Wooldridge, J. M. (2009). Recent Developments in the Econometrics of Program Evaluation. *Journal of Economic Literature*, 47(1):5–86. (<u>link</u>)

Freedman, D. A. (1991). Statistical Models and Shoe Leather. Sociological Methodology, 21:291–313. (link)

Duflo, E., Glennerster, R., and Kremer, M. (2008). Using Randomization in Development Economics Research: A Toolkit. In Schultz, T. P. and Strauss, J. A., editors, *Handbook of Development Economics*, volume 4, pages 3895–3962. Elsevier. (<u>link</u>)

Athey, S. and Imbens, G. W. (2017). The State of Applied Econometrics: Causality and Policy Evaluation. *Journal of Economic Perspectives*, 31(2):3–32. (<u>link</u>)

Banerjee, A. V. and Duflo, E. (2009). The Experimental Approach to Development Economics. *Annual Review of Economics*, 1(1):151–178. (<u>link</u>)

Deaton, A. (2010). Instruments, Randomization, and Learning about Development. *Journal of Economic Literature*, 48(2):424-455. (link)

Imbens, G. W. (2010). Better LATE Than Nothing: Some Comments on Deaton (2009) and Heckman and Urzua (2009). *Journal of Economic Literature*, 48(2):399–423. (link)

3 Credit Constraints

- * Bardhan, P. and Udry, C. (1999). *Development Microeconomics*. Oxford University Press, Oxford. Chapter 7. (link)
- * de Mel, S., McKenzie, D. J., and Woodruff, C. (2008). Returns to Capital in Microenterprises: Evidence from a Field Experiment. *Quarterly Journal of Economics*, 123(4):pp. 1329–1372. (link)
- * Karlan, D. and Zinman, J. (2009). Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment. *Econometrica*, 77(6):1993–2008. (link)
- * Banerjee, A. and Duflo, E. (2014). Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program. Review of Economic Studies, 81:572–607. (link)

Visaria, S. (2009). Legal Reform and Loan Repayment: The Microeconomic Impact of Debt Recovery Tribunals in India. American Economic Journal: Applied Economics, 1(3):59 – 81. (link)

Ponticelli, J. and Alencar, S. L. (2016). Court Enforcement, Bank Loans and Firm Investment: Evidence from a Bankruptcy Reform in Brazil. *Quarterly Journal of Economics*, 131(3):1365–1413. (link)

Karlan, D., Osei, R., Osei-Akoto, I., and Udry, C. (2014). Agricultural Decisions after Relaxing Credit and Risk Constraints. *Quarterly Journal of Economics*, 129(2):597–652 (<u>link</u>)

Antrás, P. and Foley, C. F. (2015). Poultry in Motion: A Study of International Trade Finance Practices. Journal of Political Economy, 123(4):853–901 (<u>link</u>)

Fisman, R., Paravisini, D., and Vig, V. (2017). Cultural Proximity and Loan Outcomes. *American Economic Review*, 107(2):457–92 (<u>link</u>)

Ghosh, P., Mookherjee, D., and Ray, D. (2000). Credit Rationing in Developing Countries: An Overview of the Theory. In Mookherjee, D. and Ray, D., editors, *Readings in the Theory of Economic Development*, pages 383–401. London: Blackwell. (link)

Banerjee, A. (2003). Contracting Constraints, Credit Markets and Economic Development. In Mathias Dewatripont, L. P. H. and Turnovsky, S. J., editors, *Advances in Economics and Econometrics: Theory and Applications*. *Eighth World Congress*, pages 1–46. Cambridge Press, New York. (<u>link</u>)

4 More on Contracting: Reputations, Networks, Control Rights

- * Shapiro, C. (1983). Premiums for High Quality Products as Returns on Reputation. *Quarterly Journal of Economics*, 98:659–680. (<u>link</u>)
- * Tirole, J. (1996). A Theory of Collective Reputations (with Applications to the Persistence of Corruption and to Firm Quality). Review of Economic Studies, 63(1):1–22. (link)
- * McMillan, J. and Woodruff, C. (1999). Interfirm Relationships and Informal Credit in Vietnam. *Quarterly Journal of Economics*, 114(4):1285–1320. (<u>link</u>)
- * Banerjee, A. and Duflo, E. (2000). Reputation Effects and the Limits of Contracting: A Study of the Indian Software Industry. *Quarterly Journal of Economics*, 115:989–1017. (link)
- * Banerjee, A. and Munshi, K. (2004). How Efficiently is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur. Review of Economics Studies, 71:19–42. (<u>link</u>)

* Burchardi, K. B., Gulesci, S., Lerva, B., and Sulaiman, M. (2019). Moral Hazard: Experimental Evidence from Tenancy Contracts. *Quarterly Journal of Economics*, 134(1):281–347 (link)

Goldstein, M. and Udry, C. (2008). The Profits of Power: Land Rights and Agricultural Investment in Ghana. *Journal of Political Economy*, 116(6):pp. 981–1022. (<u>link</u>)

Macchiavello, R. and Morjaria, A. (2015). The Value of Relationships: Evidence from a Supply Shock to Kenyan Rose Exports. *American Economic Review*, 105(9):2911–45. (<u>link</u>)

Bai, J. (2018). Melons as Lemons: Asymmetric Information, Consumer Learning and Seller Reputation. Unpub. paper, Harvard Kennedy School. (link)

Bai, J., Gazze, L., and Wang, Y. (forthcoming). Collective Reputation in Trade: Evidence from the Chinese Dairy Industry. *Review of Economics and Statistics* (<u>link</u>)

Banerjee, A., Gertler, P., and Ghatak, M. (2002). Empowerment and Efficiency: Tenancy Reform in West Bengal. *Journal of Political Economy*, 110:239–280. (link)

Bardhan, P. and Mookherjee, D. (2011). Subsidized Farm Input Programs and Agricultural Performance: A Farm-level Analysis of West Bengal's Green Revolution, 1982-1995. *American Economic Journal: Applied Economics*, 3(4):186–214. (link)

Blouin, A. and Macchiavello, R. (2019). Strategic Default in the International Coffee Market. Quarterly Journal of Economics, 134(2):895–951 (link)

Macchiavello, R. (2010). Development Uncorked: Reputation Acquisition in the New Market for Chilean Wines in the UK. Unpub. paper, University of Warwick. (<u>link</u>)

Greif, A. (1993). Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition. American Economic Review, 83(3):525–48. (link)

Bai, J., Chen, M. X., Liu, J., and Yi Xu, D. (2020). Search and Information Frictions on Global E-Commerce Platforms: Evidence from AliExpress. NBER Working Paper no. 28100 (link)

5 Labor Markets

- * Bardhan, P. and Udry, C. (1999). *Development Microeconomics*. Oxford University Press, Oxford. Chapters 4, 5. (<u>link</u>)
- * Shapiro, C. and Stiglitz, J. (1984). Equilibrium Unemployment as a Worker Discipline Device. *American Economic Review*, 74(3):433–44. (<u>link</u>)
- * Kremer, M. (1993). The O-Ring Theory of Economic Development. Quarterly Journal of Economics, 108(3):551–575. (link)

Alfonsi, L., Bandiera, O., Bassi, V., Burgess, R., Rasul, I., Sulaiman, M., and Vitali, A. (2020). Tackling Youth Unemployment: Evidence from a Labor Market Experiment in Uganda. *Econometrica*, 88(6):2369–2414 (link)

Breza, E., Kaur, S., and Shamdasani, Y. (2018). The Morale Effects of Pay Inequality. *Quarterly Journal of Economics*, 133(2):611–663 (link)

Heath, R. (2018). Why Do Firms Hire Using Referrals? Evidence from Bangladeshi Garment Factories. Journal of Political Economy, 126(4):1691–1746 (link)

Beaman, L. and Magruder, J. (2012). Who Gets the Job Referral? Evidence from a Social Networks Experiment. American Economic Review, 102(7):3574–93 (<u>link</u>)

Foster, A. D. and Rosenzweig, M. R. (1994). A Test for Moral Hazard in the Labor Market: Contractual Arrangements, Effort and Health. *Review of Economics and Statistics*, 76:213–227. (link)

Dasgupta, P. and Ray, D. (1986). Inequality as a Determinant of Malnutrition and Unemployment: Theory. $Economic\ Journal,\ 96(384):1011-1034.\ (\underline{link})$

6 Industry Dynamics and Productivity

- * Olley, G. S. and Pakes, A. (1996). The Dynamics of Productivity in the Telecommunications Industry. *Econometrica*, 64(6):1263–1297. (link)
- * Levinsohn, J. and Petrin, A. (2003). Estimating Production Functions Using Inputs to Control for Unobservables. Review of Economic Studies, 70:317–341. (link)
- * de Roux, N., Eslava, M., Franco, S., and Verhoogen, E. (2020). Estimating Production Functions in Differentiated-Product Industries with Quantity Information and External Instruments. BREAD working paper no. 583 (link)

Jovanovic, B. (1982). Selection and the Evolution of Industry. Econometrica, 50:649–670. (link)

Ackerberg, D. A., Caves, K., and Frazer, G. (2015). Identification Properties of Recent Production Function Estimators. *Econometrica*, 83(6):2411–2451. (link)

Gandhi, A., Navarro, S., and Rivers, D. (forthcoming). On the Identification of Gross Output Production Functions. *Journal of Political Economy* (<u>link</u>)

Foster, L., Haltiwanger, J., and Syverson, C. (2008). Reallocation, Firm Turnover and Efficiency: Selection on Productivity or Profitability? *American Economic Review*, 98(1):394–425. (<u>link</u>)

Katayama, H., Lu, S., and Tybout, J. R. (2009). Firm-level Productivity Studies: Illusions and a Solution. *International Journal of Industrial Organization*, 27(3):403–413. (link)

Syverson, C. (2011). What Determines Productivity? Journal of Economic Literature, 49(2):326-65. (link)

Verhoogen, E. (2020). Firm-Level Upgrading in Developing Countries. CDEP-CGEG working paper no. 83, Columbia University. Section 2. (link)

7 Learning and Technology Adoption

- * Bardhan, P. and Udry, C. (1999). *Development Microeconomics*. Oxford University Press, Oxford. Chapter 12. (link)
- * Manski, C. F. (1993). Identification of Endogenous Social Effects: The Reflection Problem. Review of Economic Studies, 60(3):531–42. (link)
- * Foster, A. D. and Rosenzweig, M. R. (1995). Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture. *Journal of Political Economy*, 103:1176–1209. (<u>link</u>)
- * Conley, T. and Udry, C. (2010). Learning about a New Technology: Pineapple in Ghana. *American Economic Review*, 100(1):pp. 35–69. (link)
- * Cai, J. and Szeidl, A. (2017). Interfirm Relationships and Business Performance. Quarterly Journal of Economics, 133(3):1229–1282 (<u>link</u>)
- * Bloom, N., Eifert, B., Mahajan, A., McKenzie, D., and Roberts, J. (2013). Does Management Matter? Evidence from India. Quarterly Journal of Economics, 128(1):1–51. (<u>link</u>)
- * Atkin, D., Chaudhry, A., Chaudry, S., Khandelwal, A. K., and Verhoogen, E. (2017a). Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan. *Quarterly Journal of Economics*, 132(3):1101–1164 (link)
 - Duflo, E., Kremer, M., and Robinson, J. (2011). Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya. *American Economic Review*, 101(6):2350–2390. (link)
 - Suri, T. (2011). Selection and Comparative Advantage in Technology Adoption. *Econometrica*, 79(1):159–209. (link)

Giorcelli, M. (2019). The Long-Term Effects of Management and Technology Transfers. *American Economic Review*, 109(1):121–52 (link)

Munshi, K. (2004). Social Learning in a Heterogeneous Population: Technology Adoption in the Indian Green Revolution. *Journal of Development Economics*, 73:185–213. (<u>link</u>)

Bandiera, O. and Rasul, I. (2006). Social Networks and Technology Adoption in Northern Mozambique. Economic Journal, 116(514):pp. 869 – 902. (link)

Adhvaryu, A., Kala, N., and Nyshadham, A. (2019). Management and Shocks to Worker Productivity. NBER working paper no. 25865 (link)

Menzel, A. (2019). Knowledge Exchange and Productivity Spill-overs in Bangladeshi Garment Factories. Unpub. paper (<u>link</u>)

Foster, A. D. and Rosenzweig, M. R. (2010). Microeconomics of Technology Adoption. *Annual Review of Economics*, 2(1):395–424 (link)

Verhoogen, E. (2020). Firm-Level Upgrading in Developing Countries. CDEP-CGEG working paper no. 83, Columbia University. Section 3.3. (link)

8 Trade and Productivity

- * Melitz, M. J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica*, 71(6):1695–1725. (link)
- * Melitz, M. J. and Ottaviano, G. I. P. (2008). Market Size, Trade, and Productivity. Review of Economic Studies, 75(1):295 316. (<u>link</u>)
- * De Loecker, J., Goldberg, P. K., Khandelwal, A. K., and Pavcnik, N. (2016). Prices, Markups and Trade Reform. *Econometrica*, 84(2):445–510 (link)
- * Atkin, D., Khandelwal, A. K., and Osman, A. (2017b). Exporting and Firm Performance: Evidence from a Randomized Trial. *Quarterly Journal of Economics*, 132(2):551–615 (<u>link</u>)
- * Bustos, P. (2011). Trade Liberalization, Exports and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinian Firms. *American Economic Review*, 101(1):304–340. (<u>link</u>)

Clerides, S., Lach, S., and Tybout, J. (1998). Is Learning by Exporting Important? Micro-Dynamic Evidence from Colombia, Mexico and Morocco. *Quarterly Journal of Economics*, 113:903–947. (link)

Amiti, M. and Konings, J. (2007). Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia. *American Economic Review*, 97(5):1611 – 1638 (link)

Pavcnik, N. (2002). Trade Liberalization, Exit and Productivity Improvements: Evidence from Chilean Plants. Review of Economic Studies, 69:245–276. (link)

De Loecker, J. and Goldberg, P. K. (2014). Firm Performance in a Global Market. *Annual Review of Economics*, 6(1):201–227. (link)

Verhoogen, E. (2020). Firm-Level Upgrading in Developing Countries. CDEP-CGEG working paper no. 83, Columbia University. Sections 3.1, 3.2. (link)

Alfaro-Urena, A., Manelici, I., and Vasquez, J. P. (2020). The Effects of Joining Multinational Supply Chains: New Evidence from Firm-to-Firm Linkages. Unpub. paper. (link)

9 Trade, Quality, Inputs, Wages

- * Kugler, M. and Verhoogen, E. (2012). Prices, Plant Size and Product Quality. Review of Economic Studies, 79(1):307–339. (link)
- * Verhoogen, E. (2008). Trade, Quality Upgrading, and Wage Inequality in the Mexican Manufacturing Sector. Quarterly Journal of Economics, 123(2):489–530. (link)

Bastos, P., Silva, J., and Verhoogen, E. (2018). Export Destinations and Input Prices: Evidence from Portugal. American Economic Review, 108(2):353–392. (link)

Bastos, P. and Silva, J. (2010). The Quality of a Firm's Exports: Where You Export to Matters. *Journal of International Economics*, 82(2):99–111. (<u>link</u>)

Manova, K. and Zhang, Z. (2012). Export Prices Across Firms and Destinations. *Quarterly Journal of Economics*, 127(1):379–436. (link)

Brambilla, I., Lederman, D., and Porto, G. (2012). Exports, Export Destinations and Skills. *American Economic Review*, 102(7):3406–3488. (link)

Goldberg, P. K. and Pavcnik, N. (2007). Distributional Effects of Globalization in Developing Countries. *Journal of Economic Literature*, 45(1). (link)

Frías, J. A., Kaplan, D. S., Verhoogen, E., and Alfaro-Serrano, D. (2018). Exports and Wage Premia: Evidence from Mexican Employer-Employee Data. Unpub. paper, Columbia University (<u>link</u>)

Hansman, C., Hjort, J., León-Ciliotta, G., and Teachout, M. (2020). Vertical Integration, Supplier Behavior, and Quality Upgrading among Exporters. *Journal of Political Economy*, 128(9):3570–3625 (<u>link</u>)

10 Misallocation

- * Banerjee, A. and Duflo, E. (2005). Growth Theory Through the Lens of Development Economics. In Aghion, P. and Durlauf, S., editors, *Handbook of Economic Growth*, pages 473–552. Elsevier, Amsterdam. (<u>link</u>)
- * Hsieh, C.-T. and Klenow, P. J. (2009). Misallocation and Manufacturing TFP in China and India. *Quarterly Journal of Economics*, 124(4):pp. 1403–1448. (link)
- * Rotemberg, M. and White, T. K. (2017). Measuring Cross-Country Differences in Misallocation. Unpub. paper, NYU (link)
- * Gollin, D. and Udry, C. (forthcoming). Heterogeneity, Measurement Error and Misallocation: Evidence from African Agriculture. *Journal of Political Economy* (link)

Hsieh, C.-T. and Olken, B. A. (2014). The Missing 'Missing Middle'. *Journal of Economic Perspectives*, 28(3):89–108 (link)

Hsieh, C.-T. and Klenow, P. J. (2014). The Life Cycle of Plants in India and Mexico. *Quarterly Journal of Economics*, 129(3):1035–1084. (link)

Peters, M. (2020). Heterogeneous Mark-Ups, Growth and Endogenous Misallocation. *Econometrica*, 88(5):2037–2073. (<u>link</u>)

11 Industrial Policy and its Discontents

- * Crespi, G., Fernández-Arias, E., and Stein, E., editors (2014). Rethinking Productive Development: Sound Policies and Institutions for Economic Transformation. Inter-American Development Bank, Washington DC. Read English synopsis. (link)
- * Rodrik, D. (2004). Industrial Policy for the 21st Century. Unpub paper, Harvard University. (link)

Harrison, A. and Rodríguez-Clare, A. (2010). Trade, Foreign Investment, and Industrial Policy in Developing Countries. In Rodrík, D. and Rosenzweig, M., editors, *Handbook of Development Economics*, vol. 5, pages 4039–4214. North-Holland. (<u>link</u>)

Lane, N. (forthcoming). The New Empirics of Industrial Policy. *Journal of Industry, Competition and Trade* (<u>link</u>)