

**Syllabus
AAE 731
Fall 2016**

Professor Jeremy Foltz

1. Administrative Details

Course meets: Room B30 Taylor Hall, Tues/Thurs 9:30-10:45
Office: 412 Taylor Hall
Email: jeremy.foltz@wisc.edu
Office Hours: Wednesday 10 – noon, or by appointment
Class website: On Learn@UW

2. Learning Objectives

This class is a PhD level “frontiers” class on development economics. We will cover some of the major issues in development economics with a focus primarily on micro-economic issues. The topics have been chosen to provide coverage of some of the key models and methodologies in the field.

In general for each topic we will start with texts that illuminate the basic theory and then proceed to works that analyze the issue empirically. Students are expected to have read the articles and be prepared to discuss them in class in depth.

In this course you can expect to learn

- A. How to formulate theoretical models to describe economic behavior of actors and markets in developing countries.
- B. How to develop and estimate empirical models that tests the propositions of those theoretical models.
- C. How to choose among empirical methodologies to study economic phenomena in developing countries.
- D. How to present economic work to an audience.

3. Prerequisites

A PhD level microeconomic theory course and a PhD level econometrics course are prerequisites for this class. Taking this course without that knowledge may be difficult. If you are not a PhD student enrolled in Economics or AAE you must obtain my consent to take the course for credit.

4. Course Requirements

40% -- Final paper, **Abstract due 5pm Saturday September 29**
15% -- In-class presentation of papers (2-3) in the semester
10% -- A Research idea
20% -- Two take-home mid-term/problem sets
15% -- Take home final

4.1. Final Papers

Your final paper's abstract is due **September 29th** and the full paper is due the last day of class **December 15**. I will allow you to take an incomplete on the paper if you hand in an abstract, outline and a full bibliography by the last day of classes. If you take an incomplete, you must hand in your paper by **5pm January 16, 2017**. **All papers handed in after that deadline will receive a failing grade.**

For subject matter you have two choices:

- 1) Write a paper of your choice, which has to be a **new research** idea related to the topics covered in this course and approved by me in advance.
- 2) Write your class paper to respond to **USAID's MCC Open Data Challenge**, which is designed to have graduate students work on analyzing their available data. Their website provides data and evaluations from 25+ different projects throughout the world. You can choose to do a theoretical paper or an empirical paper, so long as it responds to the USAID call.

The MCC request is for you to do the following:

Using data available on the [MCC Evaluation Catalog](#), we are looking for up-to 7,000-word papers that provide analysis in any of the following categories:

- Analysis that supports or challenges assumptions made in ex-ante economic rate of return estimates (all ERRs are available on the MCC public website)
- Analysis that supports or challenges results of independent evaluations (all final evaluation reports are published on the [MCC Evaluation Catalog](#))
- Deeper dive analysis that goes beyond analysis presented in independent evaluator reports
- Policy relevant analysis, particularly on topics related to MCC priorities, such as gender and poverty-related analysis.

As part of the process, you must register with their site and submit an abstract online by **4pm CST, October 17**. Your MCC challenge paper is due to them by **4pm CST, February 15, 2017**.

Example

The evaluation of the BRIGHT program in Burkina Faso led to this academic paper. Kazianga, H., D. Levy, L. Linden, and M. Sloan. "The Effects of "Girl-Friendly" Schools: Evidence from the BRIGHT School Construction Program in Burkina Faso" [*American Economic Journal: Applied Economics* 2013, 5\(3\): 41-62.](#)

Kazianga et al. conclude that "An important area for future research is to disentangle the effects of individual characteristics." The data available provides some ways to do so. Alternatively the data set has information on issues such as child labor, teacher performance, and access to water that do not seem to have been analyzed. Further there is the potential need for a model of household decision making that could better inform our understanding of the results of this program and help us understand where and why it might work.

4.2. Research idea, Due October 27

You must put together a 2 page research idea that includes 1) a research question, 2) an outline of the theory relevant for the question, 3) a discussion of data and potential estimation of a model, 4) a discussion of potential difficulties.

4.3 Take-home mid-terms/problem sets due October 11 and November 22

This will be like a problem set, but to be done individually rather than in groups. There will be questions primarily related to estimating models with empirical data.

4.4 Take home final handed out Dec 15, Due December 22 at 5pm

The take home final will be primarily asking you to apply some of the theories you've learned to an economic problem. It will follow much of the form of a development prelim.

4.5. In class presentations

Each student will be expected to make 2-3 in class presentations on the readings in the class during the course of the semester. Presentations (15-20 minutes) of the readings should briefly present the model & method, note key assumptions, summarize the results and provide some context. You will be judged on your clarity of 1) understanding the work and 2) presentation.

Course Outline and Readings

1. Overview September 6

- *Banerjee, A. and E. Duflo 2007. "The Economic Lives of the Poor" *Journal of Economic Perspectives*.
- *Schultz, Theodore W. Nobel Lecture: The Economics of Being Poor. *Journal of Political Economy*, Vol. 88, No. 4 (Aug., 1980), pp. 639-651
- *Gollin, D. "The Lewis Model a 60 yr retrospective" *Journal of Economic Perspectives*. 2014

2. Household Models, September 8, 13, 15

a. Canonical Household model

- * Bardhan and Udry *Development Microeconomics* Chapter 2
- * Benjamin, D. (1992) Household Composition Labor Markets and Labor Demand- *Econometrica* 60(2):287-322
- Singh, I, L Squire, and J Strauss, eds. (1986). *Agricultural Household Models: Extensions, Applications, and Policy*. Baltimore: Johns Hopkins University Press.
- Udry-Efficiency & Market Structure testing profit maximization in African Agriculture- Mimeo Northwestern-1996

b. Using HH models to search for missing markets September 15 (Student presentations)

- * Eswaran, Mukesh and Ashok Kotwal. Access to Capital and Agrarian Production Organisation *The Economic Journal*, Vol. 96, No. 382 (Jun., 1986), pp. 482-498
- * Dillon, B. & C. B. Barrett. 2014. "Agricultural Factor Markets in Sub-Saharan Africa: An Updated View with formal tests for market failure." World Bank Policy Research Working Paper, #7117.
- *LaFave, D. & D. Thomas "Farms Families & Markets new evidence on agricultural labor markets" NBER Working Paper 2014
- Yang-Ming Chang, Biing-Wen Huang b,□ Yun-Ju Chen "Labor supply, income, and welfare of the farm household". *Labour Economics* 19 (2012) 427-437

3. Savings

a. Savings behavior theory, September 20

- * Deaton, A. (1991). "Savings and Liquidity Constraints," *Econometrica* 59(5):1221-1248.
- * Rosenzweig, Mark "Savings Behaviour in Low Income Countries" *Oxford Review of Economic Policy* Vol. 17 No.1. 2001.
- * Fafchamps, Marcel, Chris Udry and Katherine Czukas (1998). "Drought and saving in West Africa: are livestock a buffer stock?" *Journal of Development Economics* 55:273-305.
- Rosenzweig, Mark- R., and Kenneth- I. Wolpin. "Credit Market Constraints, Consumption Smoothing, and the Accumulation of Durable Production Assets in Low-Income Countries: Investment in Bullocks in India." *Journal of Political Economy* 101, no. 2 (1993): 223-44.

Paxson, Christina- H. "Using Weather Variability to Estimate the Response of Savings to Transitory Income in Thailand." *American Economic Review* 82, no. 1 (1992): 15-33.

b. Nudging increased savings, September 22 (Student presentations)

*Ashraf, N., D. Karlan, and W. Yin (2006). Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines. *Quarterly Journal of Economics* 121 (2), 635–672.

Dupas, P., D. Karlan, J. Robinson, & D. Ubfal. "Banking the Unbanked: Evidence from three countries." NBER working paper, 2016.

Schaner, S. "Persistent Power of behavioral change in savings Kenya." NBER Working paper. 2016

Dupas, Pascaline & Jonathan Robinson 2011. Why Don't The Poor Save More? Evidence From Health Savings Experiments NBER Working Paper 17255, <http://www.nber.org/papers/w17255>

4. Poverty Traps

a. Theory September 27

*Kraay, Art and David McKenzie (2013). "Do Poverty Traps Exist?" *Journal of Economic Perspectives*.

*Barrett, C. T. Garg, and L. McBride. (2016) "Well Being Dynamics and Poverty Traps" Working paper.

Barrett, C., M.R. Carter, and M. Ikegami (2013). "Poverty Traps and Social Protection," working paper.

Barrett, C. and M. Carter (2013). "The economics of poverty traps and persistent poverty: Policy and empirical implications," *Journal of Development Studies* 49:7, 976-990.

Buera, Francisco (2005). "A Dynamic Model of Entrepreneurship with Borrowing Constraints," working paper, Northwestern University.

Final Paper abstracts due September 29

b. Empirics of poverty traps, September 29 (student presentations)

* Carter, Michael R. and Travis Lybbert (2012). Consumption versus Asset smoothing: Testing the Implications of Poverty Trap Theory in Burkina Faso," *Journal of Development Economics* 99:255–264.

*McKenzie, D. and C. Woodruff (2006). "Do Entry Costs Provide an Empirical Basis for Poverty Traps? Evidence from Mexican Microcredit," *Econ Dev and Cult Change* 55(1):3-42.

Udry and Kazianga (2006). "Consumption smoothing? Livestock, insurance and drought in rural Burkina Faso," *J of Dev Econ* 79(2): 413-446.

McKay, Andy and Emilie Perge (2013). "How Strong is the Evidence for the Existence of Poverty Traps? A Multi-country Assessment," *Journal of Development Studies* 49:7.

Zimmerman, F. and M. Carter (2003). "Dynamic Portfolio Management under Risk and Subsistence Constraints in Developing Countries" *J of Dev Econ*.

- Adato, M., Carter, M. and J. May (2006). "Exploring Poverty Traps and Social Exclusion in South Africa using Quantitative and Qualitative Data," *Journal of Development Studies* 42(2): 226-247.
- Santos, Paulo, Christopher B. Barrett (2011). "Persistent poverty and informal credit," *Journal of Development Economics* 96 (2011) 337–347.
- Lybbert, Travis J., Christopher B. Barrett, S. Desta, and D.L. Coppock. "Stochastic Wealth Dynamics and Risk Management among a Poor Population." *Economic Journal* 114 (2004): 750-77.

5. Methodological interlude October 4, 6

a. Random Controlled Trials & critiques

- Blundell & Dias-Alternative Approaches to Evaluation in Empirical Microeconomics-*Journal of Human Resources*-2009
- Duflo Glennerster & Kremer-Using randomization in development research-*Handbook of Dev Econ* Ch 61
- Deaton-Instruments Randomization & Learning about Development-*Journal of Economic Literature*-2010
- Jung and Pirog-What works best and when accounting for sources of selection bias in program evaluations- *Journal of Policy Analysis & Modeling* 2014
- Pirog-Art and Science of Scholarly Publishing-*Journal of Policy Analysis & Modeling* 2014
- List Sadoff and Wagner-Rules of Thumb for Optimal Experimental Design-NBER-2010
- Keane-Structural v Atheoretic approaches to econometrics-*J of Econometrics*-2010
- Rust, J. Comments on Keane *J of Econometrics* 2010
- Blundell-Comments on Keane- *J of Econometrics* -2010
- Sims, C. "But economics is not an experimental science" *Journal of Economic Perspectives*-2010

PROBLEM SET #1 DUE OCTOBER 11 IN CLASS

6. Productivity Estimation

a. Estimation of firm level production functions October 11

Theory

- *Levinsohn, James and Amil Petrin. Estimating production functions using inputs to control for unobservables. *Review of Economic Studies*, 70(2)(243):317–342, 2003.
- *Olley, Steven and Ariel Pakes. The dynamics of productivity in the telecommunications equipment industry. *Journal of Econometrics*, 64:1263–97, 1996.
- *Gandhi, A., S. Navarro & D. Rivers "Identification of Production Functions How Heterogeneous is Productivity?" *Working paper* 2016
- Daniel A. Akerberg and Kevin Caves. Structural identification of production functions - an application to the timing of input choice. mimeo, 2003.
- Wooldridge-On Estimating Firm level production functions using proxy variables to control for unobservables-*Econ Letters*-2009
- R. W. Blundell and S. R. Bond. Initial conditions and moment restrictions in dynamic

panel data models. *Journal of Econometrics*, 87:115–143, 1998

b. Empirics October 13 (Student presentations)

Frazer-Which Firms die: a look at manufacturing firm exit in Ghana-*Economic Development and Cultural Change*. 2005

N. Pavcnik. Trade liberalization, exit, and productivity improvements: Evidence from Chilean plants. *The Review of Economic Studies*, 69:245–276, January 2002.

c. Production Functions and Productivity in agricultural development October 18,

*Suri, T. 2011. "Selection and comparative advantage in technology adoption." *Econometrica* 79(1):159-209.

*Mundlak, Y.; R. Butzer & D. Larson-Heterogeneous Technology and panel data-the case of the agricultural production function-*Journal of Development Economics*-2012

Reimers, M. & S. Klasen-Revisiting the Role of Education for Agricultural Productivity-*American J. Agricultural Economics*. 2013-131-52

Roberts, M.; W. Schlenker & J. Eyer. "Agronomic Weather Measures in Econometric Models of Crop Yield." *American J. of Agricultural Economics*. 2012

Schlenker, W. & M. Roberts "Nonlinear temperature effects indicate severe damages to US crop yields under climate change" *Proceedings of the National Academy of Sciences*. 2009 Vol 107(37).

Gollin, D. Lagakos & Waugh, "Agricultural Productivity Differences Across Countries", *American Economic Review*.

d. Production function empirics (Fertilizer): October 20 (Student presentations)

Arndt, C., K. Pauw, and J. Thurlow The Economy-wide Impacts and Risks of Malawi's Farm Input Subsidy Program *Am. J. Agr. Econ.* (2016) 98 (3): 962-980

Bellemare, M. F. (2013). "The Productivity Impacts of Formal and Informal Land Rights: Evidence from Madagascar." *Land Economics*, 89(2), 272-290.

Carter, M., R. Laajaj and D. Yang. "Subsidies and the Persistence of Technology Adoption: Field Experimental Evidence from Mozambique." NBER Working Paper 20465, 2014.

Dufflo, Esther, Michael Kremer, and Johnathan Robinson, "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya," *American Economic Review*, 2011, 101 (6), 2350–2390.

Marenja, P. and C. Barrett-2009-Soil Quality and Fertilizer Use in Kenya-*Agricultural Economics* 40: 561-572.

Marenja, P. & C. Barrett-State Conditional Fertilizer Yield Response in Kenya-*Am. J. Agr. Econ.* 91(4) (November 2009): 991–1006

Sheahan Black & Jayne-Are Kenyan Farmers under utilizing fertilizer-*Food Policy*-2013

7. Firms and Entrepreneurship October 25

- *Bloom, N., A Mahajan, D McKenzie, J Roberts. "Why do firms in developing countries have low productivity?" *The American Economic Review* 100 (2), 619-623
- *McKenzie, D. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition", BREAD Working Paper no. 462. 2016

b. Empirical papers (student presentations) October 27

- Ashraf, N., X. Giné, and D. Karlan. (2009). "Finding missing markets (and a disturbing epilogue): Evidence from an export crop adoption and marketing intervention in Kenya." *American Journal of Agricultural Economics* 91(4): 973-990.
- Atkin, Khandelwal & Osman-Exporting and Firm Performance Evidence from an RCT-NBER-2014
- De Mel, S., D. McKenzie & C. Woodruff. "Innovative Firms or Innovative Owners? Determinants of Innovation in Micro, Small, and Medium Enterprises" World Bank Policy Research Working Paper No. 4934.
- Fafchamps, M. D McKenzie, S Quinn, C Woodruff. "Microenterprise growth and the flypaper effect: Evidence from a randomized experiment in Ghana." *Journal of Development Economics* 106, 211-226
- Keniston, D. (2011), "Bargaining and Welfare: A Dynamic Structural Analysis of the Autorickshaw Market," Unpublished working paper.
- Macchiavello, R. & A. Morjaria (2015), "The Value of Relationships: Evidence from a Supply Shock to Kenya Rose Exports," *American Economic Review* 105(9), 2911-2945.

RESEARCH IDEA DUE OCTOBER 27

8. Technology Adoption and networks

a. Technology Adoption Theory November 1

- * Bardhan and Udry, Chapter 12
- *Foster, A.D., and M.R. Rosenzweig. 2010. "Microeconomics of technology adoption." *Annual Rev. Econ.* 2(1):395-424.7
- Besley, Timothy, and Anne Case. "Modeling Technology Adoption in Developing Countries." *American Economic Review* 83, no. 2 (1993): 396-402.
- Feder, G., R.E. Just, and D. Zilberman. 1985. "Adoption of agricultural innovations in developing countries: A survey." *Economic Development and Cultural Change* 33(2):255-298.

b. Technology Adoption / Risk & uncertainty November 3 (Student presentations)

- *Dercon, S., and L. Christiaensen. 2011. "Consumption risk, technology adoption and poverty traps: evidence from Ethiopia." *Journal of Development Economics* 96(2):159-173.
- *Emerick, Kyle, Alain de Janvry, Elisabeth Sadoulet and Manzoor H. Dar. 2016. "Technological Innovations, Downside Risk, and the Modernization of Agriculture." *American Economic Review*, 106(6): 1537-61.
- Liu, E.M. 2014 "Time to Change What to Sow: Risk Preferences and Technology Adoption Decisions of Cotton Farmers in China." *Review of Economics and Statistics*.

c. Technology Adoption / Learning & social networks November 8

- *Conley, T.G., and C.R. Udry, 2010. "Learning About a New Technology: Pineapple in Ghana." *The American Economic Review* 100(1): 35-69.
- *Bandiera, O., and I. Rasul. 2006. "Social Networks and Technology Adoption in Northern Mozambique*." *The Economic Journal* 116(514):869-902.
- Foster, Andrew- D., and Mark- R. Rosenzweig. "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture." *Journal of Political Economy* 103, no. 6 (1995): 1176-209.
- Stoneman, P. 1981. "Intra-Firm Diffusion, Bayesian Learning and Profitability." *Economic Journal*. Vol. 91(362): 375-388.

d. Tech adoption learning and networks empirics November 10 (Student presentations)

- Aldana, Ursula, Jeremy Foltz, Bradford Barham, and Pilar Useche, "Sequential Adoption of Package Technologies: Dynamics of Stacked Trait Corn Adoption," *American Journal of Agricultural Economics* 93 (2011), 130–143.
- Atkin, D., A. Chaudhry, S. Chaudhry, A. Khandelwal, & E. Verhoogen (2015), "Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan," Unpublished working paper.
- Dupas Pascaline Short-Run Subsidies And Long-Run Adoption Of New Health Products: Evidence From A Field Experiment. *Econometrica*, Vol. 82, No. 1 (January, 2014), 197–228
- Munshi, Kaivan, "Social Learning in a Heterogeneous Population: Technology Diffusion in the Indian Green Revolution," *Journal of Development Economics* 73 (2004), 185–213.

9. Migration November 15/17

a. Migration Theory November 15

- *Bardhan and Udry Chapter 5
- *McKenzie, David, and Hillel Rapoport. 2007. "Network Effects and the Dynamics of Migration and Inequality: Theory and Evidence from Mexico." *Journal of Development Economics* 84(1): 1–24.
- Stark, Oded, and David E Bloom. 1985. "The New Economics of Labor Migration." *American Economic Review* no. 75 (2):173-178.
- Shen, I., Docquier, F. and Rapoport, H. (2010). 'Remittances and Inequality: A Dynamic Migration Model', *Journal of Economic Inequality*, vol. 8(1): 197-220.

b. Migration empirics November 17 (student presentations)

- Bryan Chowdhury & Mobarak-Underinvestment in Technology when experimentation is risky Migration experiment in Bangladesh-NBER-2014
- Halliday, T. "Intra-HH Labor supply migration & subsistence constraints El Salvador" *European Economic Review*-2012
- Hirvonen "Temperature Changes household consumption and internal migration in Tanzania" *American J. of Agricultural Economics*-2016-1230-49
- McKenzie, D. and Rapoport, H. (2011). 'Can Migration Reduce Educational Attainment? Evidence from Mexico', *Journal of Population Economics*, vol. 24(4): 1331-58.

- Morten, M. 2013 “Temporary Migration and Endogenous Risk Sharing in Village India” Stanford working paper.
- Munshi, Kaivan. 2003. "Networks in the modern economy: Mexican migrants in the US labor market." *The Quarterly Journal of Economics* no. 118 (2):549-599.
- Munshi, K. and Rosenzweig, M. (2009). ‘Why is Mobility in India So Low? Social Insurance, Inequality, and Growth’, NBER Working Paper, No. w14850.

PROBLEM SET # 2 DUE NOVEMBER 22

10. Gender and Intra-household economics

a. Deconstructing Household Preferences, November 22

- *Thomas, D. (1990). “Intra-Household Resource Allocation: An Inferential Approach,” *J of Hum Resources* 25(4): 635-664.
- Folbre, Nancy, 1984. "Household Production in the Philippines: A Non-neoclassical Approach," *Economic Development and Cultural Change*. 32(2), pages 303-330.
- M.B. McElroy with M. J. Horney, "Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Consumer Demand", *International Economic Review*, vol. 22 no. 2 (June, 1981), pp. 333-349.
- Carter, M. R. and E. Katz (1997). “Separate Spheres and the Conjugal Contract: Understanding Gender-Biased Development,” in L. Haddad , J. Hoddinott and H. Alderman (eds.) *Intrahousehold Resource Allocation in developing Countries: Methods, Models and Policy* (Johns Hopkins).
- Haddad, L. and R. Kanbur (1990). “How Serious is the Neglect of Intra-Household Inequality?” *Econ Journ* 100(402): 866-881.

b. Testing gender inequality November 29

- *Udry, C. (1996). "Gender, Agricultural Production and the Theory of the Household," *J of Polit Econ* 104(5): 1010-1046.
- Ashraf, Nava (2009). “Spousal Control and Intra-household Decision making: Evidence from an Experiment in the Philippines,” *American Economic Review*.
- Cherchye, L., B. de Rock and F. Vermeulen (2009). “Opening the Black Box of Intrahousehold Decision Making: Theory and Nonparametric Empirical Tests of General Collective Consumption Models,” *Journal of Political Economy*.

c. Empirical tests of gender December 1 (Student Presentations)

- *Andrews, M J Golan and J Lay-Inefficiency of Male and Female Labor Supply in Ag Households Uganda-Am. J. Agr. Econ.-2015-998-1019
- Barham, Bradford and Takayoshi Kusago (2001). “Preference Heterogeneity , Power and Intrahousehold Decision-Making in Rural Malaysia,” *World Development* 29(7):1237-1256.
- Ngo, T. and Z. Wahhaj (2012). “Microfinance and Gender Empowerment,” *J of Dev Econ* 99:1-12.
- Jacoby, H. (1995). The economics of polygyny in Sub-Saharan Africa: Female productivity and the demand for wives in Côte d’Ivoire. *The Journal of Political Economy*, 103(5), 938-971.
- Kazianga, H., & Wahhaj, Z. (2013). Gender, social norms and household production in Burkina Faso. *Economic Development and Cultural Change*, 6(3), 539-576.
- Kevane, M. & Widdyck, B. (2008). Social norms and the time allocation of women’s

labor in Burkina Faso. *Review of Development Economics*, 5(1), 119–129

11. Corruption

a. Corruption theory Dec 6

Acemoglu, D. & Jackson “Social Norms and Enforcement of Laws” Working Paper-MIT-2014

Banerjee, A., S. Mullainathan, R. Hanna “Corruption” NBER Working Paper #17968, 2012.

Becker, G. “Crime and Punishment” *Journal of Political Economy*-1968

Olken, B. & R. Pande- “Corruption in Developing Countries” *Annual Rev of Econ*-2011

b. Corruption empirics December 8 (Student presentations)

Anderson Brandon Gneezy & List “Toward Understanding Reference Dependent Labor Supply Field Experiment” NBER Working Paper-2014

Olken, B & Barron. “Simple Economics of Extortion Trucking in Aceh” *Journal of Political Economy*. 2010.

Lambert-Mogiliansky et al- “Strategic Analysis of Petty Corruption” *Journal of Development Economics*-2007

Svensson, J. “Who must pay bribes and how much” *Quarterly Journal of Economics*-2003

Van Rijckeghem & Weder “Bureaucratic Corruption and Rate of Temptation” *Journal of Development Economics* -2001

12. Agricultural Transformation

a. Theory

Adamopoulos, T., D Restuccia “The size distribution of farms and international productivity differences” *American Economic Review* 104 (6), 1667-1697

Gollin, D, D Lagakos & M Waugh-Agricultural Productivity Differences Across Countries- *American Economic Review* -2014

*Gollin, D., S Parente, R. Rogerson-Role of Agriculture in Development- *American Economic Review*

Lagakos, D, ME Waugh “Selection, agriculture, and cross-country productivity differences” *American Economic Review*, 2013

b. Empirics

McMillan, M & Harttgen-What is driving the African growth miracle-NBER-WP 20077-2014

Bustos, P., Caprettini & Ponticelli “Agricultural Productivity and Structural Transformation Evidence from Brazil” Working Paper-2015

Final Exam take home handed out in class December 15

Due December 22 at 5pm.