

Economics of Land Governance

Week 1

Land property rights, economic structure and political economy

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INSTRUCTOR:

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ONLINE CLASS MATERIALS: github.com/jhconning/land_uct_2018

(Slides, jupyter notebooks, lab materials)

SCHEDULE OF CLASSES: Topics and required readings to be covered in each class or lab are described below. Class slides and supporting jupyter notebooks with additional content and code will be made available ahead of class via the class [github repository](https://github.com/jhconning/land_uct_2018). These often refer in depth to studies that we will not have time to read in detail but that are listed in the end bibliography.

DAY 1: Land tenure and governance: origins, change, diversity and performance

Topics: Introduction to the week's topics including a brief sketch of the diversity of land tenure and governance regimes across time and space and a short list of topics where ineffective land rights institutions or concentrated land ownership could affect the efficiency and equity of land-related resource allocations and matter for the direction of structural transformation in the economy. We then examine theories of the origins and evolution of property rights and contracts starting with the ideas of Ronald Coase, Esther Boserup and others. Some 'Coasean bargaining' theories suggest that land property rights and tenure evolve to overcome externalities and economize on 'transactions costs' to adapt to new challenges and opportunities that arise in response to rising population and changing technologies and opportunities for trade. While local norms and institutions can provide the self-enforcing spontaneous order required to organize activity in many situations, authors like Douglas North argue that a powerful and yet impartial and constrained state is needed to provide effective institutions to delineate rights and adjudicate disputes in order to sustain impersonal trade over larger distances and networks. Today we read and discuss theories and divergent historical trajectories on the origin and evolution of property rights. Do property rights evolve toward ever more efficient forms as argued by some or are coordination failures other 'transactions' allow maladapted institutions to persist? Is the direction of institutional change and the establishment of new forms of property rights directed by the search to reduce 'transactions costs' or by the interests and appropriative activities of elites? We lay out simple benchmark models with and without missing markets to study how technology, relative factor endowments and the existing structure of property rights and contracts might shape equilibrium resource allocation or misallocation, and the rewards to institutional innovation.

Required Reading:

North, Douglass. 1990. “An Introduction..,” chapter 1 in *Institutions, Institutional Change, and Economic Performance*. Cambridge ; New York: Cambridge University Press. [\[link\]](#)

Otsuka, K and F. M. Place, 2001. “Issues and Theoretical Framework,” chapter 1 in *Land tenure and natural resource management: A comparative study of agrarian communities in Asia and Africa*. IFPRI & Johns Hopkins University Press. (read only pages 3-19) [\[link\]](#)

Binswanger, H.P., K. Deininger, and G. Feder. 1995. “Power, Distortions, Revolt and Reform in Agricultural Land Relations,” in *Handbook of Development Economics, Vol 3*. 2659–2772. North Holland: Elsevier. (read only pages 2659-2682) [\[link\]](#)

Lecture slides, [jupyter notebooks](#) on ‘Coase and the “Coase Theorem”’

DAY 2. Resource Allocation Benchmarks, the markets for land, labor and other factors

Topics: We extend our benchmark models to study equilibrium farm responses in subsistence and market contexts and characterize planner and market problems with households that are differentiated in their initial ownership of traded land and labor and non-traded farming skill. We study how resource allocation and shadow factor prices adjust in response to changes technology, land abundance, or market access, and the property rights and costly contracting adaptations that might be needed to adapt to such changing circumstances, as well as the conditions for these to arise. Land rent and land tax issues are also discussed. We then study a calibrated application of farm land use in Malawi that claims to measure resource mis-allocation which the authors attribute to failures of land rental markets. We examine recent empirical evidence on the role of emergent land markets in Africa. We can extend this class of models to study how insecure land rights might affect migration incentives and therefore also resource allocation *across* sectors. We look at evidence from recent natural experiments. Finally, we read an empirical paper that cautions against attributing most of measured misallocation from cross sectional studies to land market imperfections, as it is likely confounded with household and plot-specific unobserved heterogeneity that can be controlled for with better data and methods.

Lecture slides, [jupyter notebooks](#) on: ‘Farm Household Models’, ‘The Equilibrium Size Distribution of firms’

Required Reading:

Restuccia, D., and R. Santaella-Llopis. 2017. “Land Misallocation and Productivity.” National Bureau of Economic Research. [link](#)

Deininger, Klaus, Sara Savastano, and Fang Xia. 2017. “Smallholders’ Land Access in Sub-Saharan Africa: A New Landscape?” *Food Policy, Agriculture in Africa – Telling Myths from Facts*, 67 (Supplement C):78–92. <https://doi.org/10.1016/j.foodpol.2016.09.012>.

Gollin, Douglas, and Chris Udry. 2017. “Heterogeneity, Measurement Error, and Misallocation: Evidence from African Agriculture.” (*read only to section 4*) [\[link\]](#)

DAY 3: Contracting for Property Rights

Topics: Most of the ‘transactions costs’ we’ve examined on land and labor markets thus far have been modelled in reduced form: for example, by assuming the non-tradability of farm management ability or land or by introducing a wedge between hiring and selling factor prices. Modern contracting model transactions costs as the emerging in environments where asymmetric information and costly enforcement lead to constraints on the tradability of property claims and/or leading to the distortion or breakdown of many markets (Stiglitz, Holmstrom, Tirole, Hart). Contractual arrangements adapted to the information and enforcement environment may emerge to attempt to ameliorate problems of moral hazard and imperfect commitment. However, agent’s ability to capture gains to trade and coordination via contracting may be strongly shaped by the initial allocation of ownership of land and other assets. This may give rise to empirical phenomena such as an inverse relationship between farm-size and productivity, and in general suggests that redistributing land via political channels might raise total output. We study simple game-theoretic and contracting situations to model a variety of situations including: land tenancy contracts (e.g. choice between fixed rent, wage and share-crop), non-unitary models of the household, the analysis of expropriation risk and taxation and credit rationing. We also touch on a few simple models of common pool resource management and models of land conflict and appropriation – all situations where the inability to establish and enforce property rights and commitments leads to contractual innovations to try to appropriate resources and/or ameliorate inefficiencies.

Hotte, Louis. 2001. “Conflicts over Property Rights and Natural-Resource Exploitation at the Frontier.” *Journal of Development Economics* 66 (1):1–21.

Goldstein, Markus, and Christopher Udry. 2008. “The Profits of Power: Land Rights and Agricultural Investment in Ghana.” *Journal of Political Economy* 116 (6):981–1022.

Lecture slides, [jupyter notebooks](#) on: ‘risk sharing’, ‘moral hazard and credit rationing’, ‘property rights on the frontier.’

Day 4: The political economy of land rights

Topics: Another perspective is that the direction of institutional change is largely shaped by elite interests and the shifting balance of power, Institutions are shaped by histories of conquest and appropriation, efforts by local elites or emerging state powers to extract tribute or taxes from their subjects or rents as well as by resistance to such efforts. In states with relatively weak central states local elites often act as gatekeepers, arbiters or intermediaries on local land and labor allocation issues. Socially inefficient institutions may arise when elites find it more advantageous to distort the economy to grab resources, extract rents and stay in political power than provide more efficient services. Even if new property arrangements emerge that might improve the utilization of resources in the economy there is no guarantee that the winners from such reforms will ever compensate the losers. In conditions of land abundance labor is the more valuable scarce factor of production. In some land abundant regions an open frontier allowed households to enjoy freedoms and establish family farms to escape elite controls which established *de facto* land property rights (that depending

on political context may or may not have become secure) but in other regions more organized and powerful elites imposed mechanisms of labor coercion and/or restrictions on smallholder's access to land. We model some of these ideas explicitly and review a number of natural experiment studies that explore how well they might account for many historical forms of production organization, custom and law.

Reading:

Soto, Hernando de. 2001. "Citadels of Dead Capital: What the Third World Must Learn from U.S. History." *Reason* May. [\[link\]](#)

Fenske, J. 2013. "Does Land Abundance Explain African Institutions?" *The Economic Journal* 123 (573):1363–1390.

Binswanger, H.P., and K. Deininger. 1993. "South African Land Policy: The Legacy of History and Current Options." *World Development* 21 (9):1451–1475.

Lecture slides, [jupyter notebooks](#) on 'Latifundia economics'

Day 4: Land property rights reforms: successes, failures and impact evaluation challenges

Topics: Property rights and institutions are fundamental determinants of long run growth because they shape the incentives of individuals to invest, manage joint resources, innovate and trade. Yet land insecurity has persisted for long periods of time in many parts of the world, even where seemingly far-reaching reforms were already attempted. The reason of course is that changing land institutions and the distribution of rights is deeply political. Land property rights and tenure systems, as well as the governance structures that sustain them are endogenous. The decision to establish, challenge, or respect property rights (for example via investments in buildings, improvements or protection or by seeking approval and legitimacy from others, including local or legal authorities is a personal one but one that is strongly conditioned by the incentives created by existing institutions and the shifting distribution of power. On this last day we study several reform attempts around the world, some which have succeeded and helped pave the road for structural transformation and broadly inclusive growth, and others that were delayed, stalled, or otherwise failed to achieve their potential for reasons including: program capture by politicians and insiders, failure to protect the rights of women, smallholders and other 'weak' stakeholders, land grabbing and other appropriation activities by connected insiders, or failures of the state to build supporting institutions.

Readings:

Onoma, Ato Kwamena. 2009. "Explaining Institutional Choice and Change," chapter 2 in *The Politics of Property Rights Institutions in Africa*. Cambridge University Press.

Conning, Jonathan, and Partha Deb. 2007. *Impact Evaluation for Land Property Rights Reforms*. World Bank, Poverty Reduction and Economic Management, Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation. (read only to page 15) [\[link\]](#)

Holden, Stein, Keijiro Otsuka, and Klaus Deininger. 2013. “Land Tenure Reforms, Poverty and Natural Resource Management: Conceptual Framework ,” Chapter 1 in *Land Tenure Reform in Asia and Africa: Assessing Impacts on Poverty and Natural Resource Management*. Springer. [\[link\]](#)

Sitko, Nicholas J., Jordan Chamberlin, and Munguzwe Hichaambwa. 2014. “Does Smallholder Land Titling Facilitate Agricultural Growth?: An Analysis of the Determinants and Effects of Smallholder Land Titling in Zambia.” *World Development* 64:791–802.

Afternoon Lab Day 1:

Topic: Modelling land transactions and resource allocation across farms

Description: Scaffolded exercises lead participants to first analytically describe and then numerically simulate resource allocations in the following settings:

- (1) a single farm household in both subsistence and market-inserted settings. Understand how to solve for optimal farm input scale and consumption-leisure tradeoff as well as net supply of land and labor in a market setting.
- (2) a (planning and market) equilibrium in a farm economy with farm households are differentiated in terms of their initial holding of non-traded farming skill and traded land and labor endowments. The exercises show how resource allocations, the pattern of land and labor leasing, factor prices and the income distribution change in response to changes technology, the total land and the distribution of land across farms.
- (3) a setting like (2) but where the land market is shut down or operates imperfectly.

The exercises and python code for simulations will be provided in a jupyter notebook which students can run online without needing to install software on local machines.

Afternoon Lab Day 2:

Topic: Land Misallocation and productivity in Malawi

Description:

Afternoon Lab Day 3:

Topic: Replicating James Fenske’s “Does Land Abundance Explain African Institutions?”

Description: Using the original data set and code files from this paper we replicate two of the paper’s regression tables. A separate scaffolded exercise leads students to understand several of the right hand side variables (e.g. land suitability measures) can be constructed (brief demo using QGIS and standalone python scripts – not meant to be an intro to GIS, just a demonstration of the possibilities of using geospatial regression methods).

Supporting reading and materials:

Online jupyter notebook on [Fenske’s](#) regressions. Notebook on [Factor Market Power distortions](#) (both rough drafts)

DAY 4: Why are property rights insecure?

Topics: Regardless of how we got to the situation the fact of the matter is that a very large fraction of the world’s rural population and urban poor do not have formal legal title to their land and homes. Millions have customarily recognized rights under communal forms of property. Economic theory offers reasons for why such circumstance might possibly make it difficult to sell or use land as collateral, might possibly lead to insecurity and costly and defensive or incursive investments or to the ‘mining’ of resources under the fear of eviction. In some cases it is argued that common property resources ought to be enclosed and individualized. For these and other reasons policy makers have made land regularization, registration and titling programs a state priority in many countries. We review a number of these arguments theoretically and some empirical papers that do point to evidence that property rights insecurity may lead to economic distortions and lost trade. We study simple models of land conflict where property rights insecurity and the production organization are jointly determined. We examine several of testable hypotheses about the possible impacts of land property rights reforms and some identification challenges (only briefly here, you will have much more on impact evaluation of reforms in week 4).

Required reading:

Soto, Hernando de. 2001. “Citadels of Dead Capital: What the Third World Must Learn from U.S. History.” *Reason* May.

Goldstein, Markus, and Christopher Udry. 2008. “The Profits of Power: Land Rights and Agricultural Investment in Ghana.” *Journal of Political Economy* 116 (6):981–1022.

Udry, Christopher. 2011. “Land Tenure.” *The Oxford Companion to the Economics of Africa* 1 [[link](#)].

Hotte, Louis. 2001. "Conflicts over Property Rights and Natural-Resource Exploitation at the Frontier." *Journal of Development Economics* 66 (1):1–21.

Supplemental:

Conning, Jonathan, and Partha Deb. 2007. Impact Evaluation for Land Property Rights Reforms. World Bank, Thematic Group on Poverty Analysis, Monitoring and Impact Evaluation.

Conning, J, and J. A. Robinson. 2007. "Property Rights and the Political Organization of Agriculture." *Journal of Development Economics* 82 (2):416–47.

Janvry, Alain de, and Elisabeth Sadoulet. 1989. "A Study in Resistance to Institutional Change: The Lost Game of Latin American Land Reform." *World Development* 17 (9):1397–1407.

Samuelson, Paul A. 1974. "Is the Rent-Collector Worthy of His Full Hire?" *Eastern Economic Journal* 1 (1):7–10.

Macours, Karen, Alain de Janvry, and Elisabeth Sadoulet. 2010. "Insecurity of Property Rights and Social Matching in the Tenancy Market." *European Economic Review* 54 (7):880–99.

DAY 5: The Political Economy of Land Property Rights Reforms and their long-term impacts

Banerjee, Abhijit, and Lakshmi Iyer. 2005. "History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *American Economic Review* 95 (4):1190.

Arezki, Rabah, Klaus Deininger, and Harris Selod. 2015. "What Drives the Global 'Land Rush'?" *The World Bank Economic Review* 29 (2):207–33.

Supplemental readings:

Bastos, P and N. Bottan. 2016. Resource Rents, Coercion, and Local Development: Evidence from Post-Apartheid South Africa. Policy Research Working Papers. The World Bank.

Bubb, Ryan. 2013. "The Evolution of Property Rights: State Law or Informal Norms?" *The Journal of Law and Economics* 56 (3):555–594.

AFTERNOON LABS:

Afternoon Lab Day 5: TBD

Relevant/mentioned in class (see end bibliography):

Still very incomplete

Day 1: (Bardhan 1989; Platteau 1996)

(Ronald H. Coase 1937; R. H. Coase 1960; Sugden 1989; Murtazashvili 2013; Alston, Livecap, and Mueller 1999; Libecap 1993)

(de Janvry 1981)

(Acemoglu 2003; Acemoglu and Robinson 2013, 2000; Acemoglu and Wolitzky 2011)

(Domar 1970; Green 2014; Klein and Ogilvie 2017)

(Banerjee 2001; Banerjee, Ghatak, and Gertler 2000)

(Lucas 1978; Lowder, Skoet, and Raney 2016; Eswaran and Kotwal 1986)

(Scott 1998, 2017)

(Lewis 1954)

(Carter 1984; Carter and Olinto 2003; Carter and Yao 2002)

(De Janvry and Sadoulet 1989)

(Douglas Gollin 2008; Douglas Gollin and Rogerson 2014; D. Gollin, Parente, and Rogerson 2002; Douglas Gollin, Lagakos, and Waugh 2014)

(De Soto 1989; Soto 2000)

Extended Bibliography

Acemoglu, Daron. 2003. "Why Not a Political Coase Theorem? Social Conflict, Commitment, and Politics." *Journal of Comparative Economics* 31 (4):620–652.

Acemoglu, Daron, and James A. Robinson. 2000. "Political Losers as a Barrier to Economic Development." *The American Economic Review* 90 (2):126–130.

———. 2013. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Business.

Acemoglu, Daron, and Alexander Wolitzky. 2011. "The Economics of Labor Coercion." *Econometrica* 79 (2):555–600.

Alston, Lee J., Gary D. Livecap, and Bernardo Mueller. 1999. *Titles, Conflict and Land Use : The Development of Property Rights and Land Reform on the Brazilian Amazon Frontier*. Economics, Cognition and Society. University of Michigan Press.

- Banerjee, Abhijit. 2001. "Inequality, Control Rights, and Rent Seeking: Sugar Cooperatives in Maharashtra." *Journal of Political Economy* 109 (1):138–90.
- Banerjee, Abhijit, Maitreesh Ghatak, and Paul Gertler. 2000. "Empowerment and Efficiency: The Economics of Tenancy Reform." Massachusetts Institute of Technology.
<http://www.src.uchicago.edu/users/mghtml/papers.html>.
- Bardhan, Pranab. 1989. "Alternative Approaches to the Theory of Institutions in Economic Development." In *The Economic Theory of Agrarian Institutions*. Oxford; New York; Toronto and Melbourne: Oxford University Press.
- Carter, Michael R. 1984. "Identification of the Inverse Relationship between Farm Size and Productivity: An Empirical Analysis of Peasant Agricultural Production." *Oxford Economic Papers* 36 (1):131–45.
- Carter, Michael R., and Pedro Olinto. 2003. "Getting Institutions 'Right' for Whom: Credit Constraints and the Impact of Property Rights on the Quantity and Composition of Investment." *American Journal of Agricultural Economics* 85 (1):173–87.
- Carter, Michael R., and Yang Yao. 2002. "Local versus Global Separability in Agricultural Household Models: The Factor Price Equalization Effect of Land Transfer Rights." *American Journal of Agricultural Economics* 84 (3):702–15.
- Coase, R. H. 1960. "The Problem of Social Cost." *The Journal of Law and Economics* 3:1–44.
- Coase, Ronald H. 1937. "The Nature of the Firm." *Economica* 4 (16):386–405.
- De Janvry, A., and Elisabeth Sadoulet. 1989. "A Study in Resistance to Institutional Change: The Lost Game of Latin American Land Reform." *World Development* 17:1397–1407.
- De Soto, Hernando. 1989. "The Other Path: The Invisible Revolution in the Third World." *New York*.
- Domar, Evsey D. 1970. "The Causes of Slavery or Serfdom: A Hypothesis." *The Journal of Economic History* 30 (1):18–32.
- Eswaran, M., and A Kotwal. 1986. "Access to Capital and Agrarian Production Organization." *Economic Journal* 96:482–98.
- Gollin, D., S. Parente, and R. Rogerson. 2002. "The Role of Agriculture in Development." *American Economic Review* 92 (2):160–64.
- Gollin, Douglas. 2008. "Nobody's Business but My Own: Self-Employment and Small Enterprise in Economic Development." *Journal of Monetary Economics* 55 (2):219–33.
<https://doi.org/10.1016/j.jmoneco.2007.11.003>.
- Gollin, Douglas, David Lagakos, and Michael E. Waugh. 2014. "Agricultural Productivity Differences across Countries." *The American Economic Review* 104 (5):165–170.
- Gollin, Douglas, and Richard Rogerson. 2014. "Productivity, Transport Costs and Subsistence Agriculture." *Journal of Development Economics* 107:38–48.
- Green, Erik. 2014. "The Economics of Slavery in the Eighteenth-Century Cape Colony: Revising the Nieboer-Domar Hypothesis." *International Review of Social History* 59 (1):39–70. <https://doi.org/10.1017/S0020859013000667>.
- Janvry, Alain de. 1981. *The Agrarian Question and Reformism in Latin America*. Baltimore: Johns Hopkins University Press.
- Klein, Alexander, and Sheilagh Ogilvie. 2017. "Was Domar Right? Serfdom and Factor Endowments in Bohemia."
- Lewis, W. Arthur. 1954. "Economic Development with Unlimited Supplies of Labour." *The Manchester School* 22 (2):139–191.
- Libecap, Gary D. 1993. *Contracting for Property Rights*. Cambridge university press.
<https://books.google.com/books?hl=en&lr=&id=F4LRUB361n0C&oi=fnd&pg=PR9&dq=>

Libecap+contracting+for+property+rights&ots=6v6Mfzj04U&sig=Tg-aJZV3EWFK8G_wckTwM3IQ01c.

- Lowder, Sarah K., Jakob Skoet, and Terri Raney. 2016. “The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide.” *World Development* 87 (November):16–29. <https://doi.org/10.1016/j.worlddev.2015.10.041>.
- Lucas, Robert E. 1978. “On the Size Distribution of Business Firms.” *The Bell Journal of Economics* 9 (2):508–23.
- Murtazashvili, Ilia. 2013. *The Political Economy of the American Frontier*. Cambridge University Press.
- Platteau, Jean-Philippe. 1996. “The Evolutionary Theory of Land Rights as Applied to Sub-Saharan Africa: A Critical Assessment.” *Development and Change* 27 (1):29–86.
- Scott, James C. 1998. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Yale University Press.
- . 2017. *Against the Grain: A Deep History of the Earliest States*. 1 edition. New Haven: Yale University Press.
- Soto, Hernando de. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Sugden, Robert. 1989. “Spontaneous Order.” *The Journal of Economic Perspectives* 3 (4):85–97.