

Week 1 (J. Conning)

Land property rights, origins, evolution and economic and political impacts

(originally: "Landownership as determinant of economic structure and political economy")

Jonathan Conning

Hunter College and The Graduate Center*

City University of New York

5-week outline

1. (Conning) The political economy of property rights
 2. (Carter) Factor markets and structural transformation
 3. (Jedwab) Economics of urban land use and policy
 4. (Kilic & Moylan) Survey and data methods
 5. (Keswell) Impact evaluation of land interventions
-

Slides -- Table of Contents

A very broad description of topics for each day:

[Day 1](#): Land tenure. Diversity, origins and change.

[Day 2](#): Resource allocation benchmarks. Misallocation.

[Day 3](#): Land markets

[Day 4](#): Political Economy of land, conflict and appropriation.

[Day 5](#): Property rights reforms and governance challenges

Course Materials

Materials posted to: github.com/jhconning/land_uct_2019

- [Syllabus](#)
 - links to readings
- Slides
- Lab problem sets and solutions
- Other materials (e.g. jupyter notebook for code/visualization)

Grading

Course Overall

- 50% -- 3hr exam at end of course 50% (10% each module)
- 50% -- module specific assignments, labs, participation, presentations, etc.

Week 1 module breakdown

- 30% -- Labs and Participation
- 20% -- Research proposal development (essay and presentation)
- 50% -- Exam questions at end of course 50%

Day 1

Day 1 topics

1. Intros; Land tenure systems, diversity, change.
2. Approaches to a theory of institutions and institutional change
3. Tenure and production relations: some historical trajectories
4. Technology, factor endowments and choice of technique (Isoquants and Edgeworth boxes)
5. Land and labor resource (mis)allocation. Benchmark planner and market models. Boserup (Otsuka/Place) on technological and institutional adaptation in response to rising land pressure
6. Evolutionary theories (Coase and transaction costs). When do property assignments matter?

Labs

1. Problem Set 1 (Coase and land market transactions)
2. QGIS setup, basics. Form groups for research proposals
3. Problem Set 2 (allocation, appropriation and conflict). 1 paragraph research summaries.
4. Problem Set 3: Replicating Bubb (2013).
5. Research Proposal Presentations

Work in groups, try to write up answers individually.

What are Property Rights?

Where do they come from?

Are they formal or informal?

Property Rights and Institutions

North, Douglass. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press. From chapter 1 which you must read:

- "Institutions are the rules of the game .. the humanly devised constraints that shape human interaction ... they structure incentives in human exchange, whether political, social, or economic...
 - "... reduce uncertainty by providing a structure to everyday life. They are a guide to human interaction... define and limit the set of choices of individuals"
 - formal and informal (norms, codes of behavior, conventions)
 - Differential performance of economies over time is fundamentally influenced by the way institutions evolve. Dysfunctional institutions may persist.
-

North's sports analogy

- **Institutions:** like rules of the game in competitive sport
 - **Organizations:** like teams
 - political (parties, village council), economic (firms, unions, cooperatives), social (churches, clubs, families, educational orgs).
 - orgs. also provide structure.. but purpose is to 'win/advance interests' of team. Are the agents of institutional change
 - **Individuals:** the players
-

"The Central puzzle of human history:

is to account for widely divergent paths of historical change and disparate performance"

Land tenure and production relations

Possible Historical Trajectories

The diagram on next two slides is from Binswanger, Deininger, Feder (1995). It is a schematic of the diversity of historical land tenure systems and production relations in agriculture.

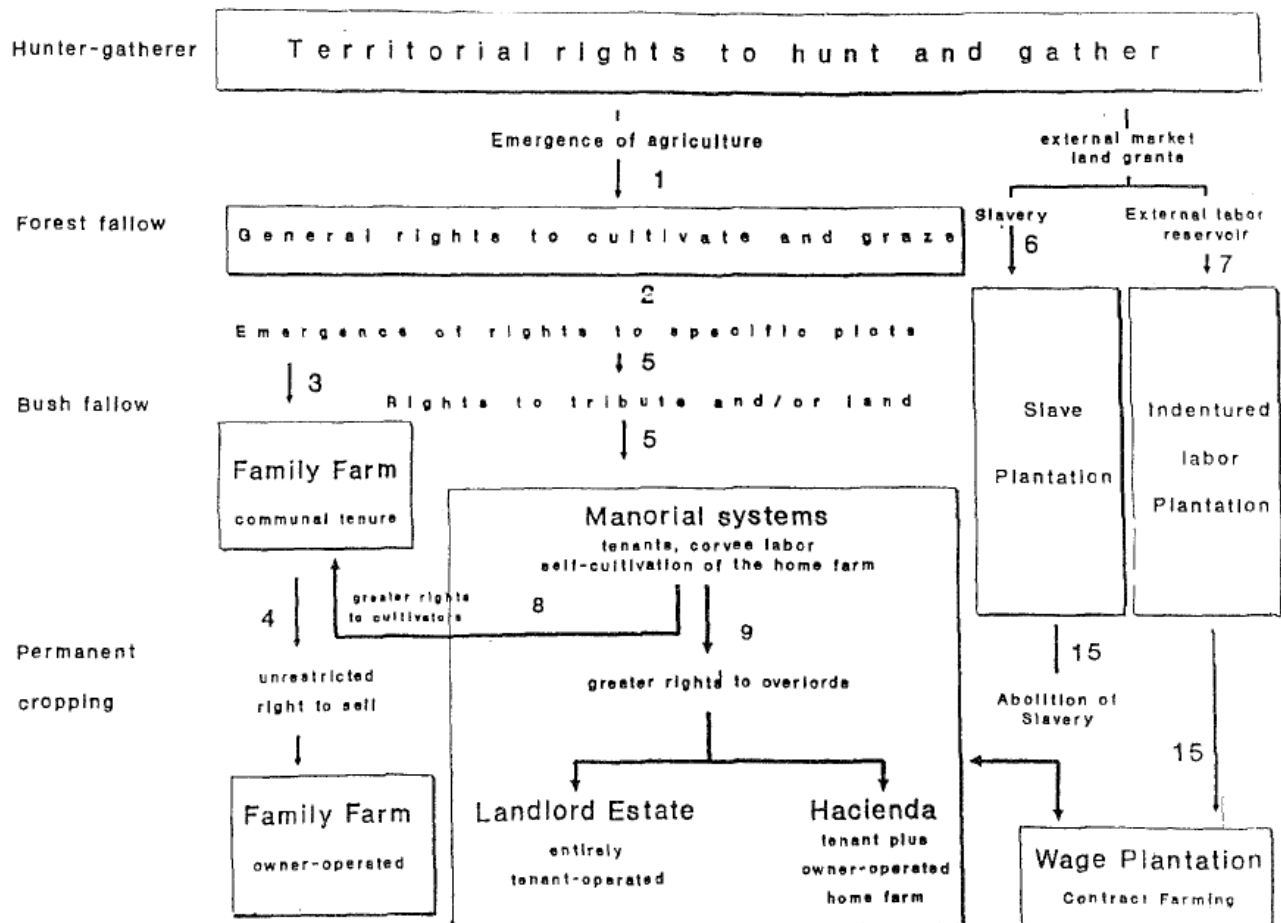
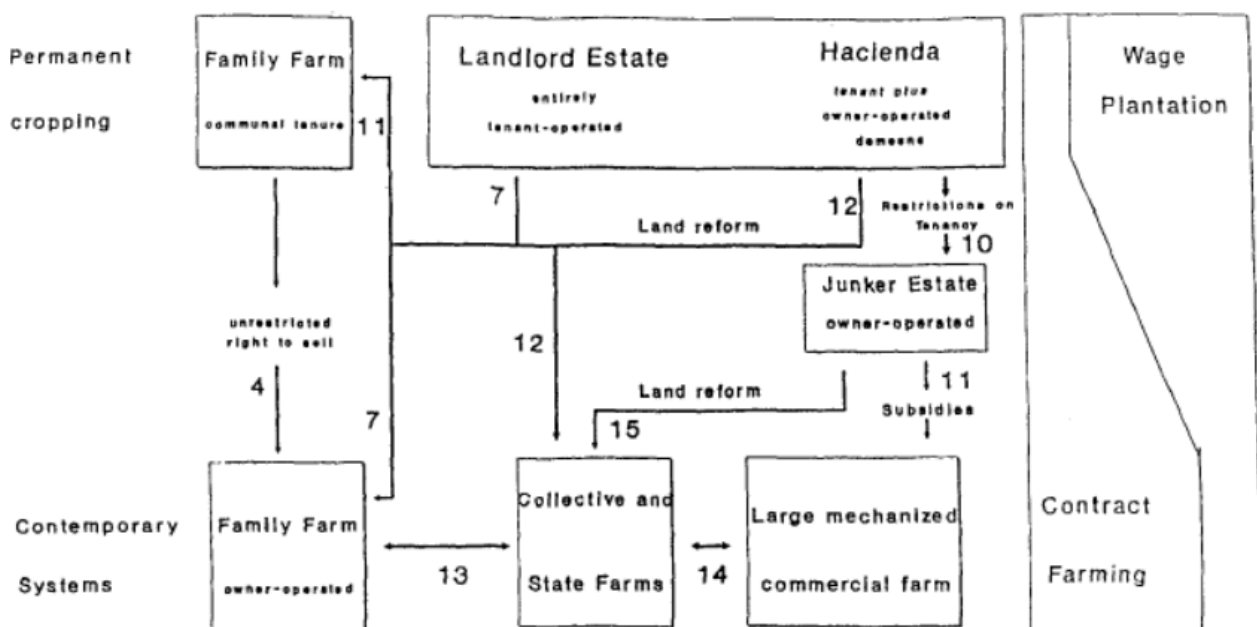


Figure 42.1. Evolution of production relations & property rights.

continues...

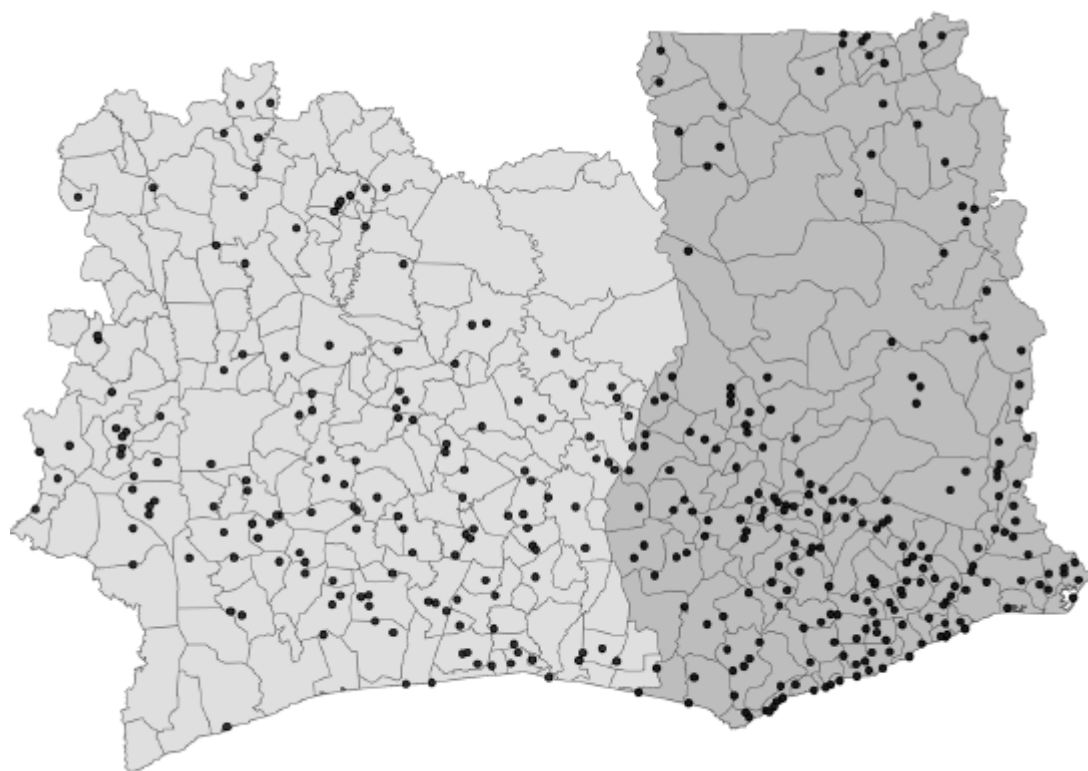


Land rights institutions

Form	Functions
Laws, norms, rules, and policies	State proper ways of transacting
Registries, survey departments, councils of elders, land overseers	Keep information on interests, dimensions, and locations
Courts, tribunals	Adjudicate land disputes
Police, task forces, village committees, boards	Enforce and monitor compliance with rules concerning rights

from Onoma (2009) *The Politics of Property Rights Institutions in Africa*, Table 1.1

Where is this?



Cote d'Ivoire and Ghana

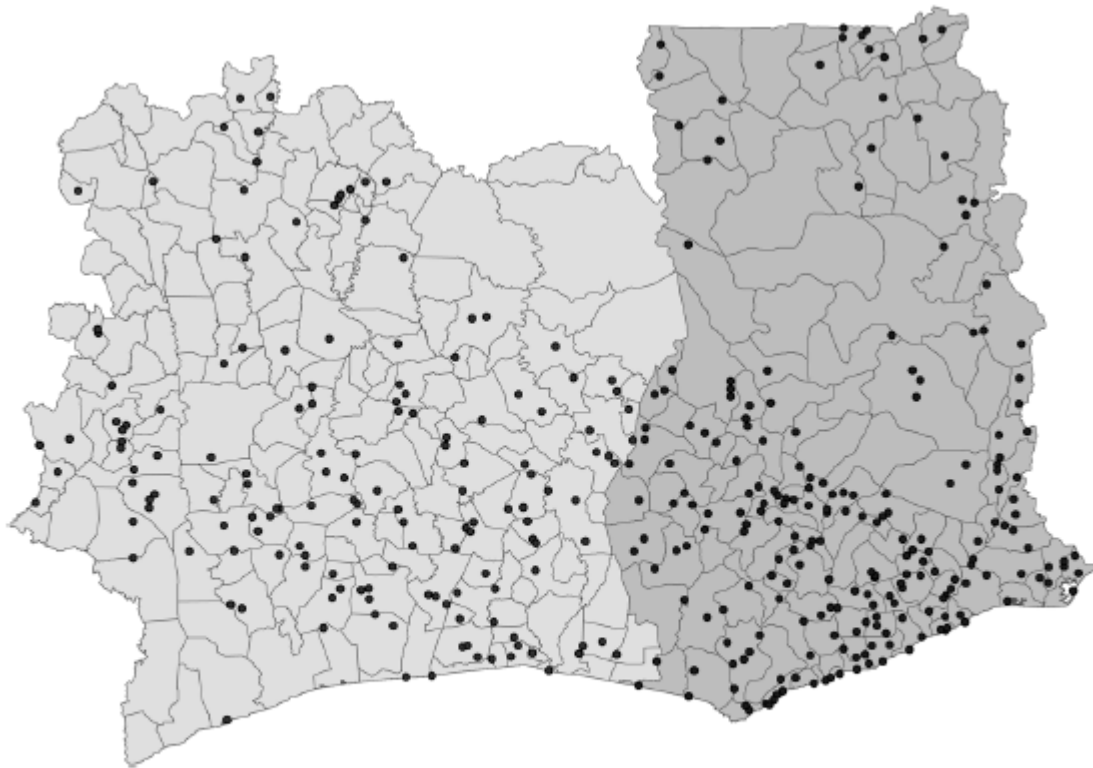


Figure 1. Ghana Living Standards Survey rounds 1 and 2 and Côte d'Ivoire Living Standards Survey enumeration areas.

State law in Cote d'Ivoire and Ghana

- Ghana maintained British common law institutions. Indirect-rule delegated authority to local elites, legalized form of customary law. Slowed individualization of property rights.
- In Cote d'Ivoire french colonial authorities initially claimed state ownership of all 'unoccupied and uncultivated land', extinguishing customary claims, established freehold. Independent CI maintained state legal framework to loosen customry claims.

de-jure vs. de-facto law.

Lab exercise to replicate maps and regressions in:

Bubb, Ryan. 2013. "The Evolution of Property Rights: State Law or Informal Norms?" *The Journal of Law & Economics* 56 (3): 555–94.

- Compare state boundaries to [Murdock Ethnic Atlas Map](#)
- Research discontinuity design to explore whether state law or more organic customary law prevails (distance to border as running variable).
- Combine raster and polygon data to calculate crop suitability zonal statistics and explore how varies with measures of property rights individualization.

What drives institutional change?

In most accounts:

- changing relative factor scarcities (e.g. rising population)
 - technological innovation and change
 - new opportunities for trade, changing relative prices
 - State capacity and power, constraints on the state.
 - Imposed political and economic change (appropriation, coercion, tribute)
-

Evolutionary versus non-evolutionary approaches

- Evolutionary adaptations/innovations to take advantage of new opportunities. Emergent, spontaneous.
- Purposefully (coercively) imposed institutions. The State.
 - Power balance outcome between those who want to impose their interests and those who resist

Do institutions, property rights and land tenure systems evolve to organize production more efficiently over time?

To advance the interests of elites?

Do dysfunctional institutions arise and persist? Why?

Economic approaches to study of land institutions

- **Classical** (Smith, Ricardo, Mill...). Great attention to land.
 - **Marxian**: More conflict base model of institutional change. Appropriation and control.
 - **Neo-classical** (marginalist). Institutional and organizational problems black-boxed, land just one more factor.
 - **New-institutional** (transactions costs; CDawn -Coase, Demsetz, Alchian, Williamson, North). Institutions and contract forms shape incentives; evolve over time.
 - **Modern asymmetric information contracting** (Stiglitz, Holmstrom, Tirole, Hart). Property rights and contracting matter with asymmetric information.
 - **Modern political economy** (later North, Acemoglu/Robinson, Engerman/Sokoloff and others). Institutions fundamental, shaped by political as well as economic interests.
-

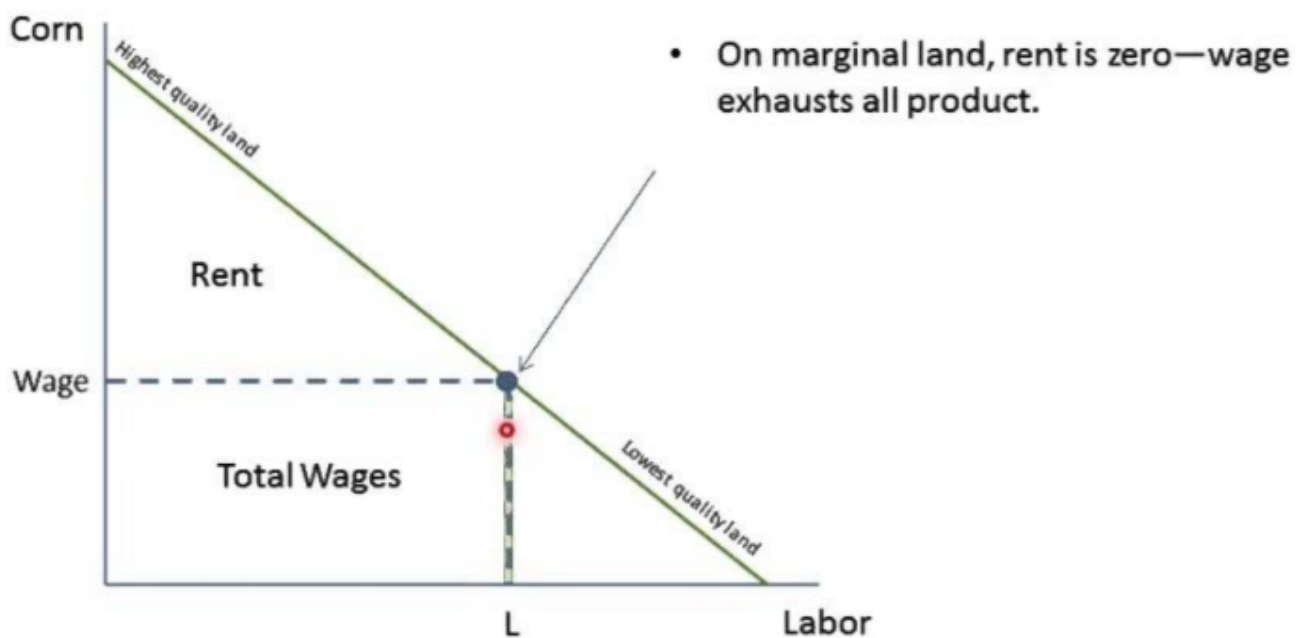
Classical economists on land rents, enclosure and incentives

How land ownership and contracts shaped incentives and divided output was a central concern for 18th and 19th centuries Political Economists:

- "landlords' right has its origin in robbery (Say)"
 - "landlords...love to reap where they never sowed... demands a rent even for unimproved land... when the lease comes to be renewed.. the landlord commonly demands augmentation of rent [made by the tenant] (Smith)"
 - "Those laws and customs so favorable to the yeomanry, have perhaps contributed more to the present grandeur of England, than all their boasted regulations of commerce taken together .. the security of the tenant is equal to that of the proprietor (Smith)"
 - Marx on transformation of manorialism and enclosure. On Wakefield and land policy in colonies.
-

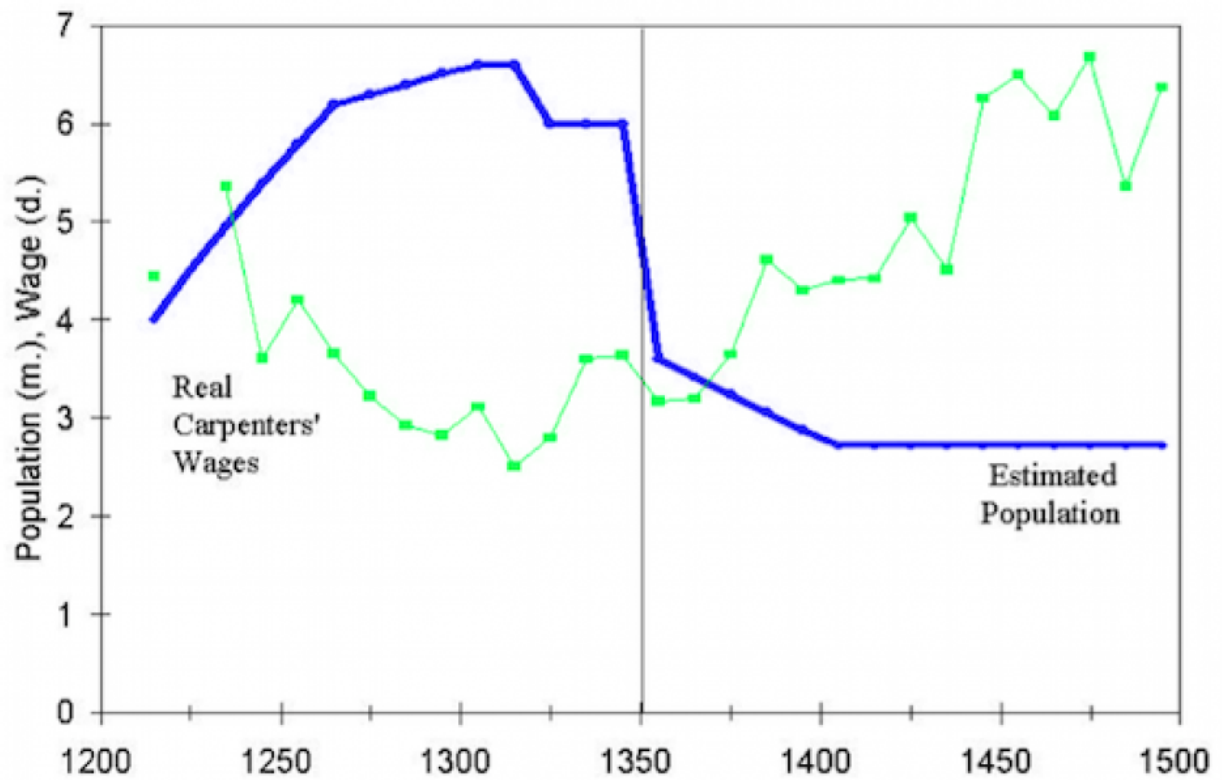
Ricardian Rent

- Most fertile land used first.
 - No 'rent' can be charged (above cost of clearing land) if worker can clear land of same quality on frontier.
 - Land rent hence zero on 'marginal' (last to be used) land so long as not-exhausted.
 - Positive rent only on infra-marginal land. Rent is charged for resource scarcity of higher fertility, better access/location.
-

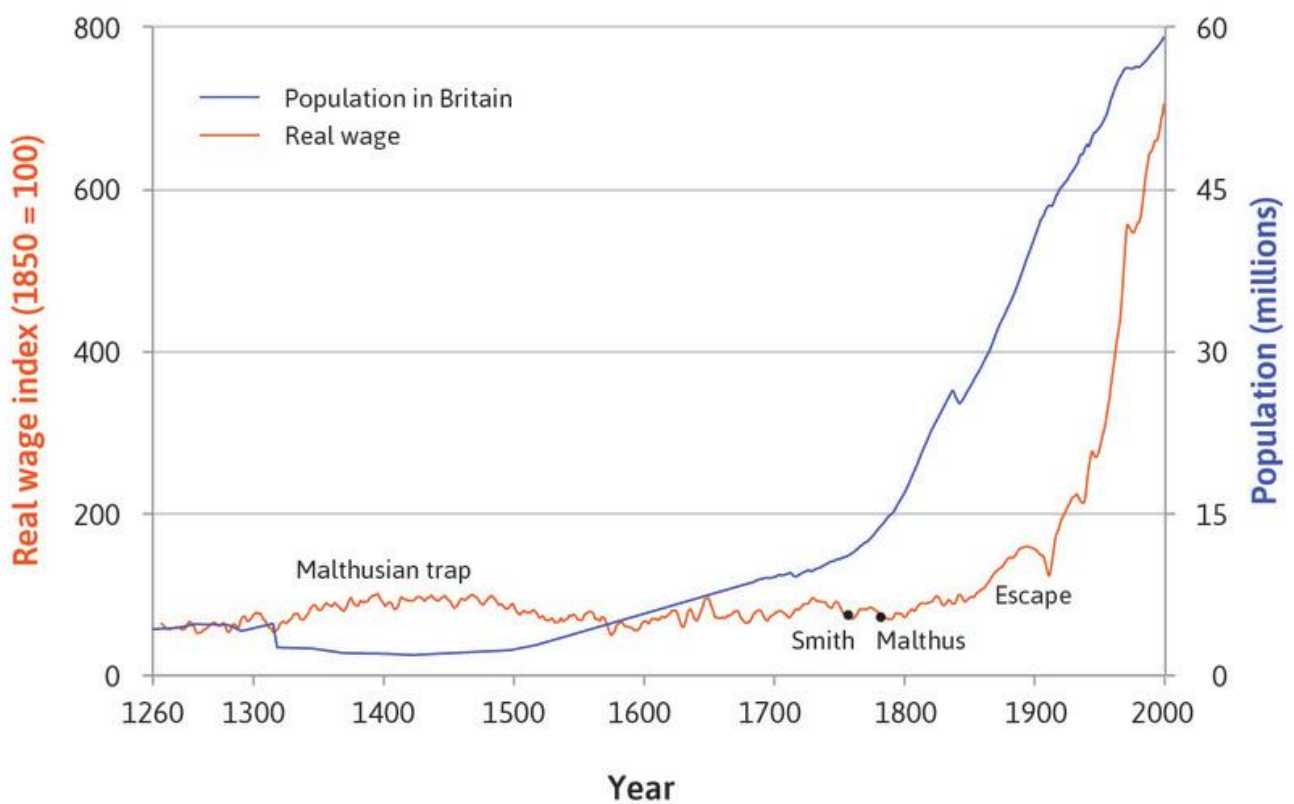


Ricardo, Malthus and diminishing returns

With fixed technology, rising population pushes against fixed land and other natural resources.



In W. Europe when pop fell, wages rose and serfdom collapsed. in E. Europe landlords responded to labor scarcity w/ 2nd serfdom



Ricardo and Malthus were contemporaries, Marx wrote in late 19th

What allowed this escape?

- Technology, rising productivity, industrialization, competition, new rights. But what led those things to happen and why didn't it happen before?
 - Structural and institutional transformation
 - What role did the transformation of customary land tenure in Europe play (much more below)?
-

Neo-classical approaches

Pareto, Walras, Jevons, Marshall. Textbooks are now dominated by 20th century marginalism.

- Land now treated more symmetrically with other factors
 - Property rights typically analyzed as individualized.
 - Contracting and property rights problems assumed away
-

Neo-classical efficient allocation

- Under strong assumptions about technology and preferences and the perfect and costless enforcement of property rights: complete markets.
 - **First-welfare Theorem** (Smith's 'invisible hand'): competitive market equilibria with complete markets will be Pareto efficient (***regardless of the initial distribution of property rights***).
 - Abstracts away (assumes too much about) how property and contracts are enforced.
 - Institutional and organizational detail erased. Firms are black boxes, contracts are all arms length.
 - Claim that efficiency and equity considerations can be separated.
-

'An economic transaction is a solved political problem ...economics has gained the title Queen of the Social Sciences by choosing solved political problems as its domain'

Abba Lerner (1972, p259) cited in Bowles and Gintis (1993)

Neoclassical models typically assume property claims are perfectly defined and costlessly enforced.

Modern microeconomics studies more realistic situations where there are 'transactions costs', where information is asymmetric and enforcement is costly and imperfect. Agents anticipate possibility of misrepresentation, fraud, hold, renegotiation, etc. Costly endogenous enforcement must be built into contracts of exchange.

Historical contexts: like classical pols (Smith, Ricardo, Marx, Mill), many early 20th century marginalists writing during period of transformation of land rights transformations, colonial expansion: saw security of tenure and land markets as important to prosperity but also thought about ownership/tenancy incentives and land rents from rising value of unimproved land as 'unearned.'

- Leon Walras argued for common ownership (e.g. competitive market for leases), Henry George for that or 100% tax on unearned land rent.
- Broadening of land rights ownership in late 19th century early 20th century under political pressure from below in W. Europe (franchise extension led to far-reaching tenancy reforms; Irish revolts) and in USA rapid transfer of public lands under pressure of squatters, claims clubs, speculators. Preemption and Homesteading acts.

Autocratic landownership prevailed longer elsewhere in East Europe, Russia, Asia, Latin America.

Colonial Scramble for Africa in late 19th century led to large scale colonial expropriation and new tensions and intermediaries in state law versus customary law.

New-institutional Economics

Focus on institutions and property rights (largely within a neo-classical market framework):

- Coase (1937) 'The Boundaries of the Firm',
Coase (1960) "The Problem of Social Cost."
- "Transactions Costs" get in the way of trades. Views:
 - "Property Rights and Markets Paradigm": Institutions and organizations emerge/evolve to economize on transactions costs (TC), capture potential gains to trade. Bad institutions are weeded out via process similar to natural selection (Alchian, Demsetz, early North).
 - TC hard to overcome (coordination, information, etc), dysfunctional institutions slow to change.
 - Those with power may shape institutions in their interests, to stay in power, not necessarily to be efficient.

The Emergence of Property rights to Land

Coase and the Property Rights and Markets paradigm

- Property rights emerge when they become worth enforcing
- Rising land scarcity leads to better definition of rights; over time leading to accessible sale and rental markets
- Perhaps empirically true in some cases, clearly not in others.
- Important grain of truth worth understanding.
 - Why does it fail to happen.

When land is abundant, control over labor

- Critical issue is access to labor, not land.
- Little incentive to invest in soil fertility (restored naturally through long tree fallow)

"When population densities rise, fallow periods ...shortened until the land is continually cultivated. Then plows, manure, artificial fertilizers, and other investments and labor intensive methods ...required to maintain soil fertility ... [m]arginal lands ...brought under cultivation requiring higher investments... Only now, ownership security becomes an important incentive

Boserup, 1965, quoted in Binswanger, Deininger Feder (1995)

Transformation of land tenure systems in response to rising population pressure (Boserup)

Before the emergency of private property in land...certain families are recognized as having cultivation rights within a given area...

Members 'general cultivation right to cultivate a plot inalienable ...but after lapse of normal period of allow if family does not re-cultivate a given plot, it may lose its right to this particular plot ... As long as forest-fallow cultivators has abundant land ...shift to new plot or have it allocated by the chief of the tribe...

Otsuka, Keijiro, and Frank M. Place. 2001

"Issues and Theoretical Framework", *Land Tenure and Natural Resource Management: A Comparative Study of Agrarian Communities in Asia and Africa*. IFPRI & Johns Hopkins University Press.

Synthesis evolutionary model of farming systems & induced technical change

In a book with chapters on Ghana, Malawi, Uganda, Nepal, Sumatra, Vietnam and Japan. Property rights institutions or land tenure systems:

- communal, state, common-property, individual
- As population grows and markets penetrate demand for individual property rights grows, communal and state ownership may face serious difficulties.
- Not clear that making private property is always preferable (e.g. negative externalities like soil erosion may intensify, inequity may rise, costly defense)

Model elements (Lab 1)

Endowments, technology and choice of techniques

- territory-wide endowment of land \bar{T} and labor \bar{L}
- $F(T, L)$ assume CRS or linear homogenous at first
 - isoquant and choice of technique
 - iso-cost lines
 - cost-minimization

Technology vs. choice of technique

$$F(T, L) = A \cdot T^\alpha L^{1-\alpha}$$

Simplify to two groups of identical farmers

Land T : includes 'fallowed lands'. Fallow land is not unused.

If population is scarce and land abundant little incentive to claim individual property rights. Forest area use is unrestricted except exclusion of outsiders.

Usufruct rights of individual members are well establish for cultivated fields but less so for fallow. Community chief may determine its allocation

Diagrammatic analysis

(on Chalkboard)

- Homogenous production functions, properties.
- Cobb-Douglas properties
- Isoquant and isocost lines
- A as total factor productivity and land quality parameter
- Planner and competitive market first order necessary conditions for efficient allocation
 - Appropriate choice of technique
 - Equilibrium (shadow) wage-rental
 - Edgeworth Box