

Week 1:

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

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

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5-week outline

1. Property Rights, contracts, structure and performance (J.Conning)
2. Factor markets and structural transformation (M.Carter)
3. Economics of urban land use and policy (R. Jedwab)
4. Survey and spatial data methods ()
5. Impact evaluation of land interventions (A. Coville and D.Ali)

Week 1 outline

1. Intro. Land tenure, origins, heterogeneity, change. North/Coase
2. Land and other factor markets and resource (mis)allocation.
Malawi study.
3. Production and contract structure. Appropriation, conflict and the state.
4. Power, distortions and persistence of inefficient institutions
5. Property Rights reforms, policy and impacts

- models and applications
- liven with economic history and history of ideas
- tour of interesting natural experiments and empirical studies
- discussion and debate

Labs

1. Problem Set
2. Problem Set
3. Groups for research proposal outlines
4. Problem Set
5. Research Proposal Presentations

Problem dig deeper into topics described in class. Write up answers, work in groups.

Douglas North on Institutions

- "are the rules of the game .. the humanly devised constraints that shape human interaction ... structure incentives"
 - economic, political, social
 - formal and informal (norms, codes of behavior, conventions)
- "reduce uncertainty by providing a structure to everyday life"
- Differential performance of economies over time is fundamentally influenced by the way institutions evolve

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
 - also provide structure.. but purpose is to 'win/advance interests' of team
 - are agents of institutional change

"The Central puzzle of human history:"

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

Land tenure and production relations trajectories

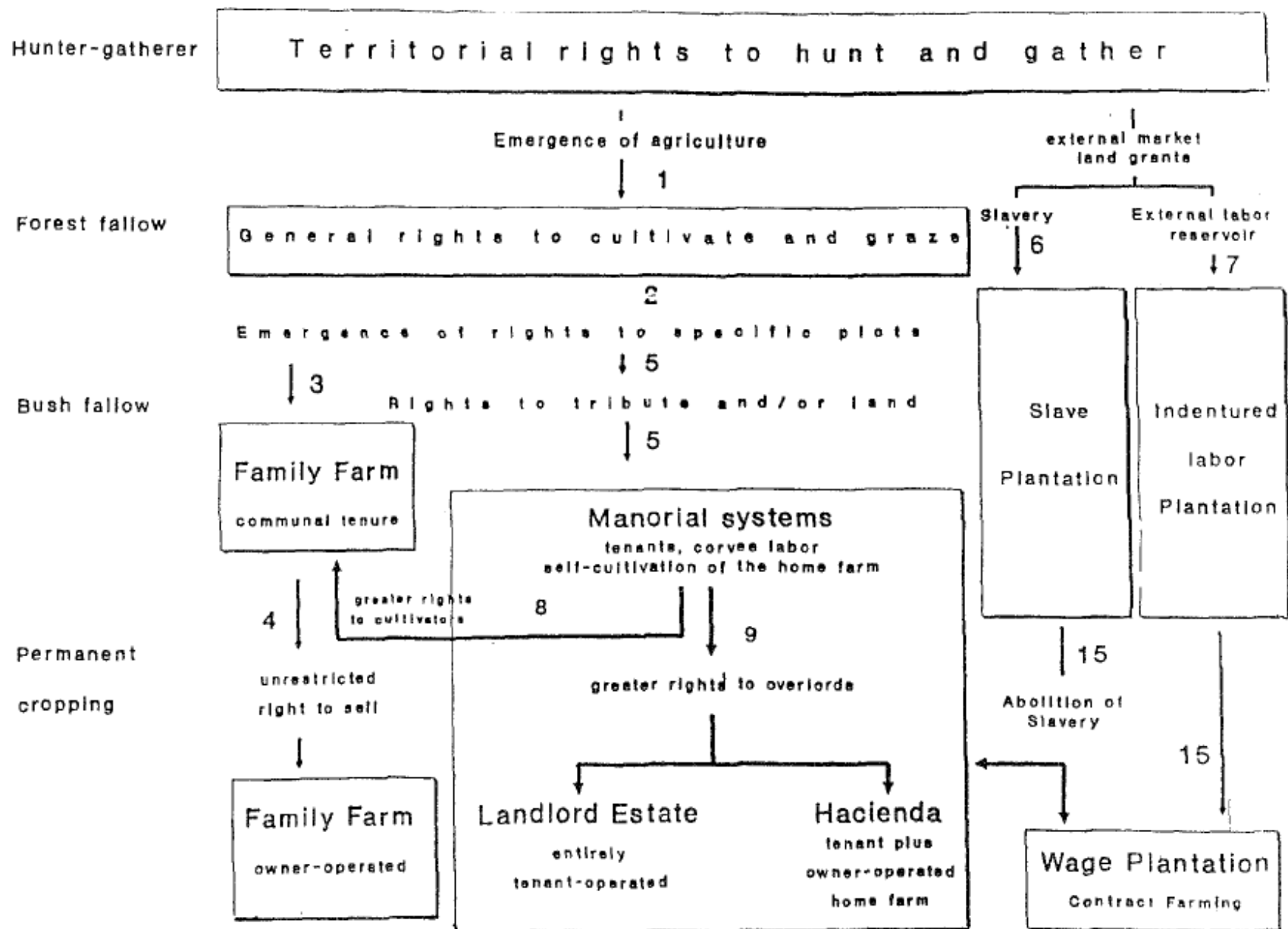
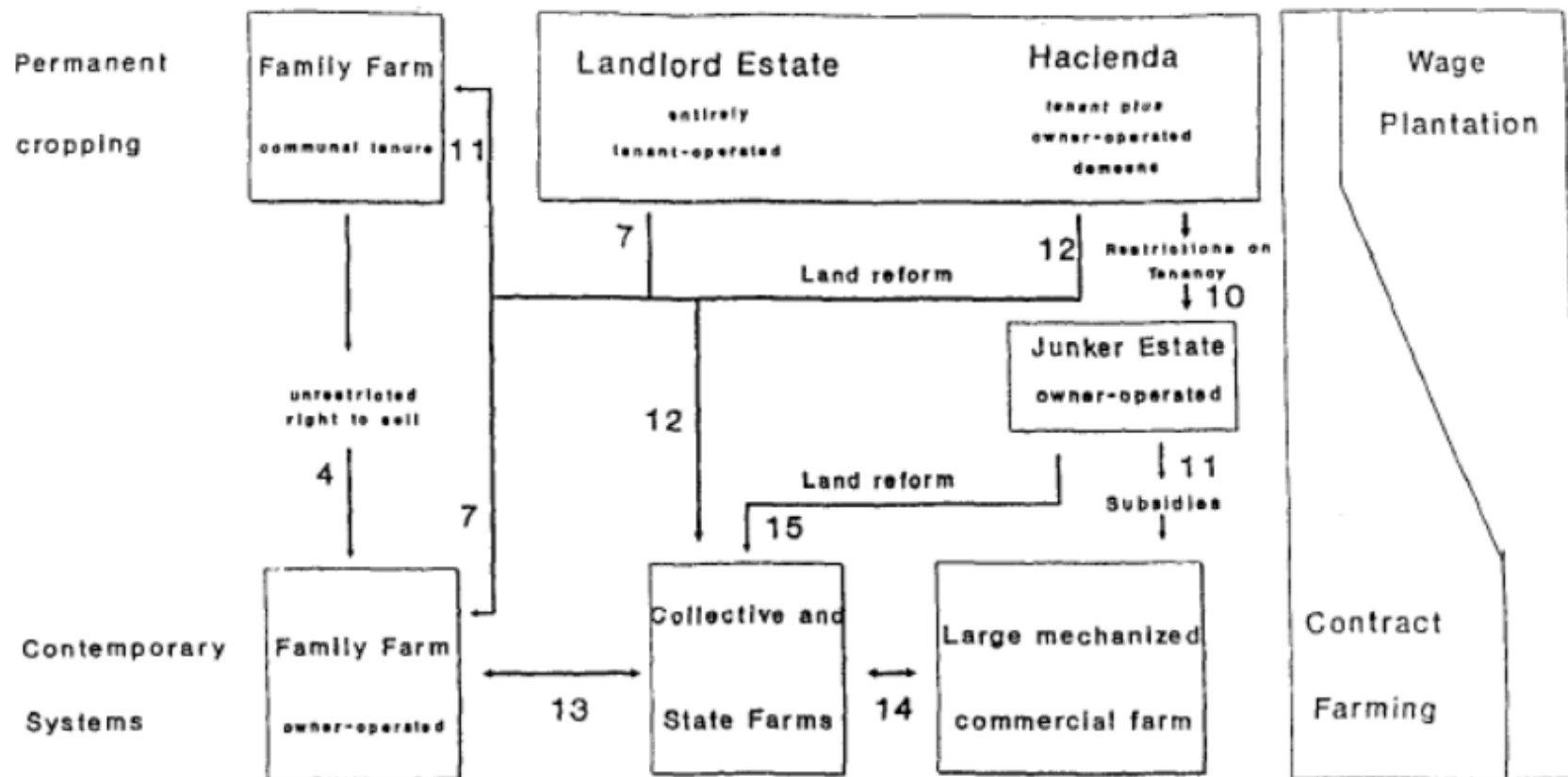


Figure 42.1. Evolution of production relations & property rights.



What drives institutional change?

In most accounts:

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

What drives the direction of institutional change?

- Evolutionary adaptations/innovations to take advantage of new opportunities. Emergent, spontaneous.
- Purposefully imposed reforms
- Balance of power between those who want to impose their interests and those who resist

Introductions

- Your name, place of study, country of origin
- Research topics or experience on land or land-related topics
- Special training (e.g. law, GIS..)
- Small land-related anecdote in your life

Approaches to the of study land institutions and institutional change

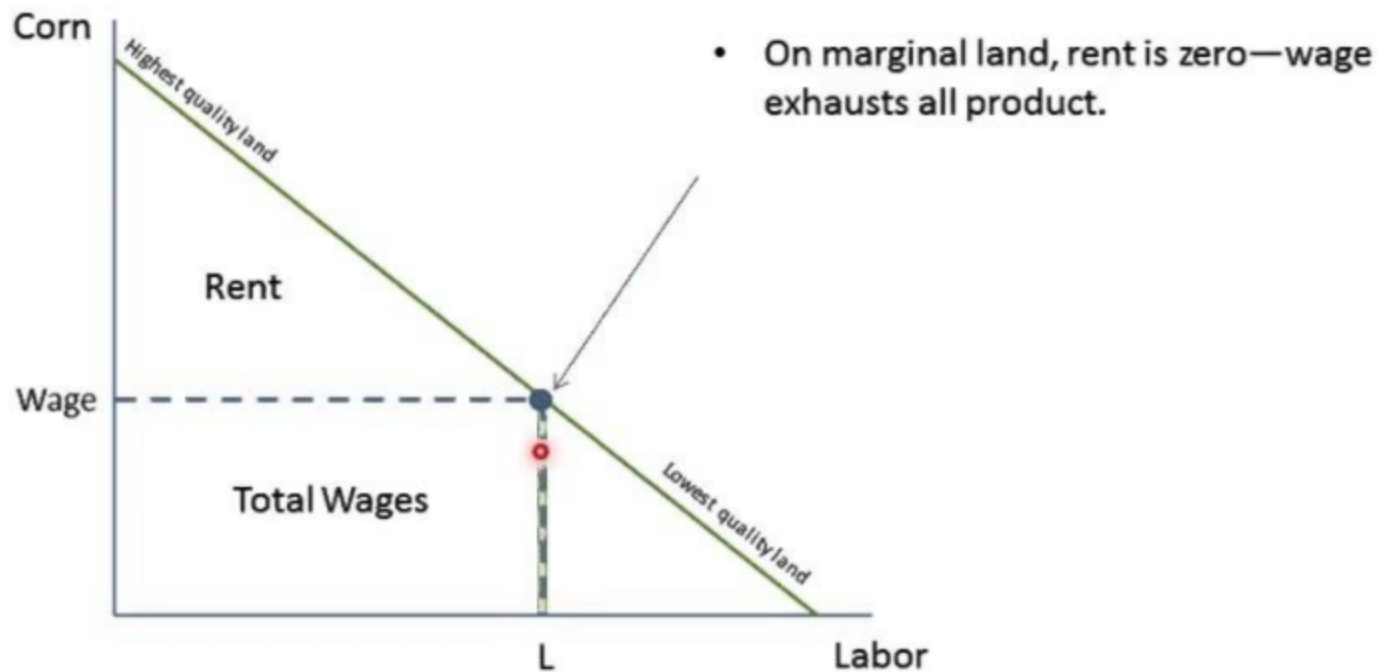
- **Classical** (Smith, Ricardo, Say, Mill, George)
- **Neo-classical** (marginalist revolution)
- **New-institutional** (transactions costs; CDAWN -Coase, Demsetz, Alchian, Williamson, North)
- **Marxian**
- **Modern contracting** (Stiglitz, Holmstrom, Tirole, Hart)
- **Modern political economy** (later North, Acemoglu/Robinson, Engerman/Sokoloff and others)

Classical economists on landlords, land rents and incentives

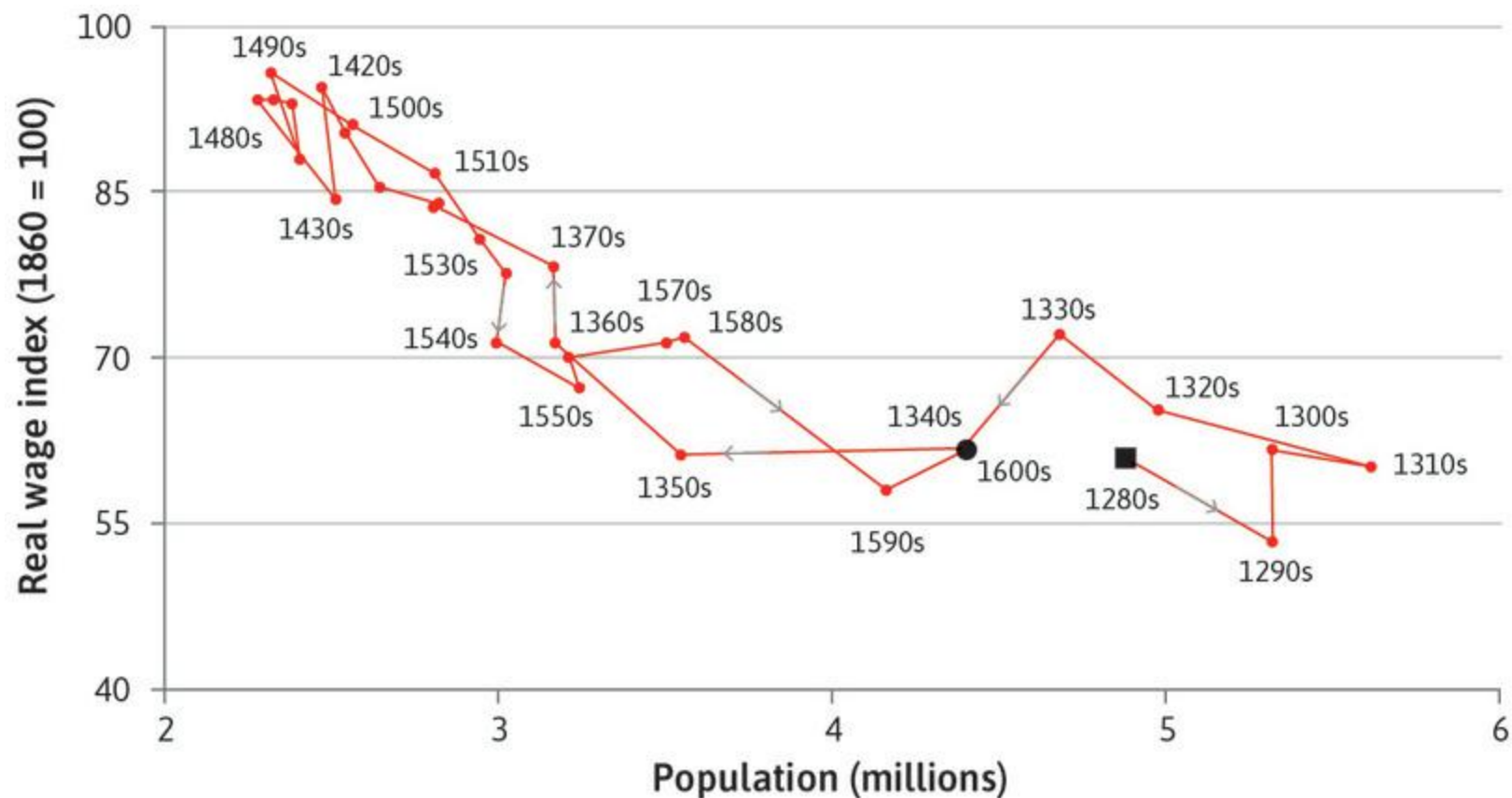
Writing in 18th and 19th centuries:

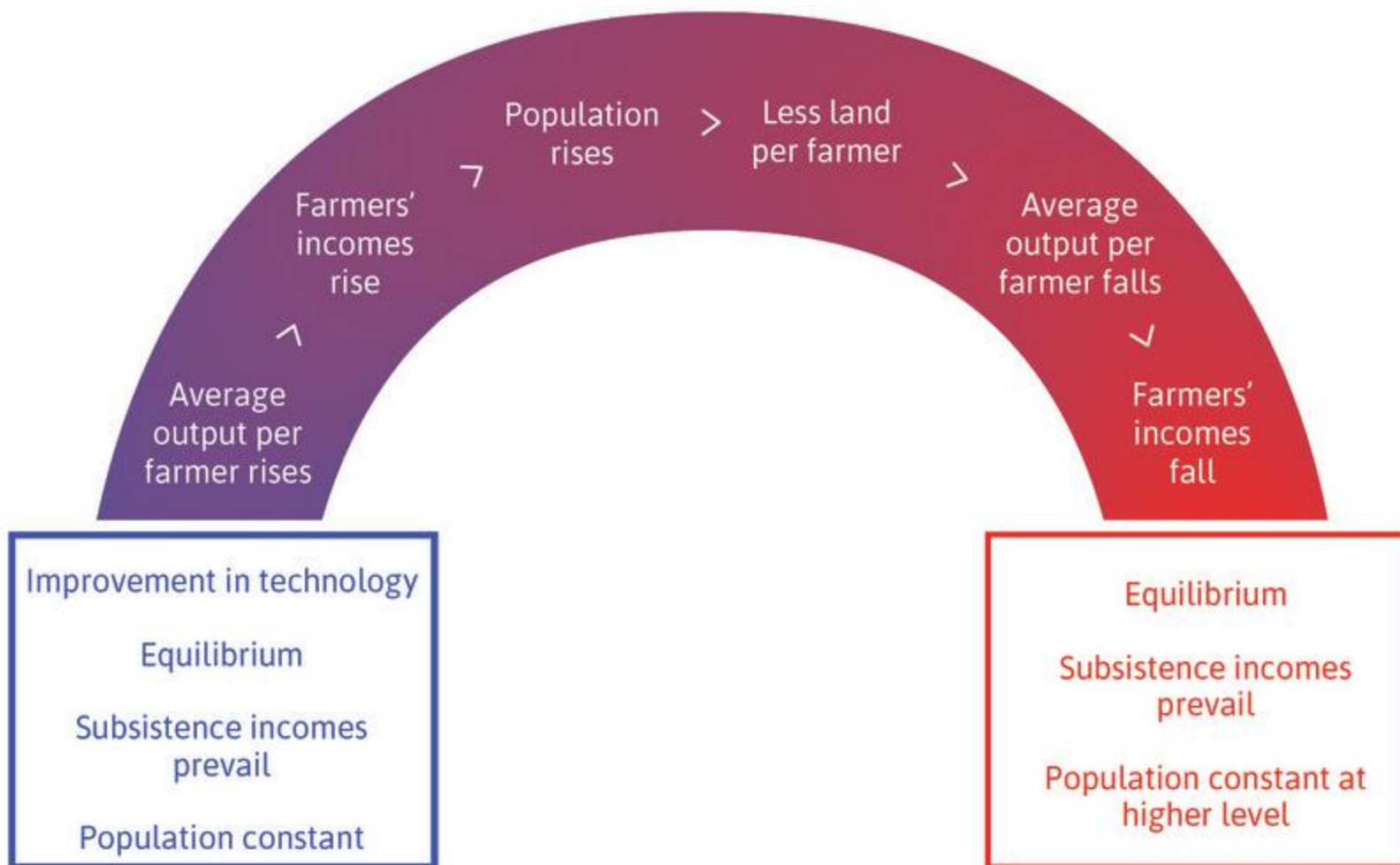
- "landlords' right has its origin in robbery (Say)"
- "landlords...love to reap where they never sowed... demands a rent even for unimproved land... when the lease comes to be renewed.. the landlord commonly demands augmentation of rent [made by the tenant] (Smith)"
- "Those laws and customs so favorable 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)"

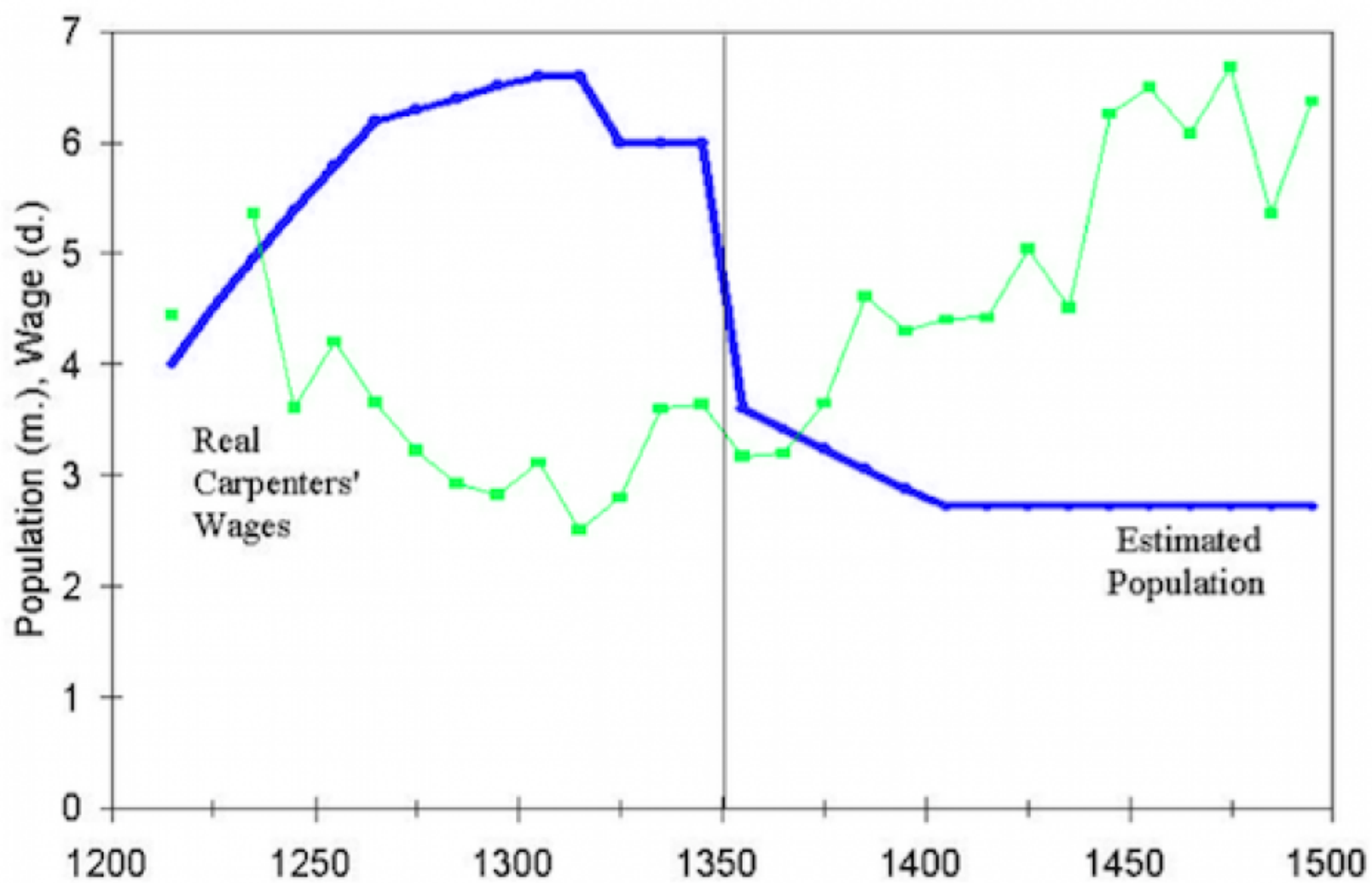
Ricardian Rent

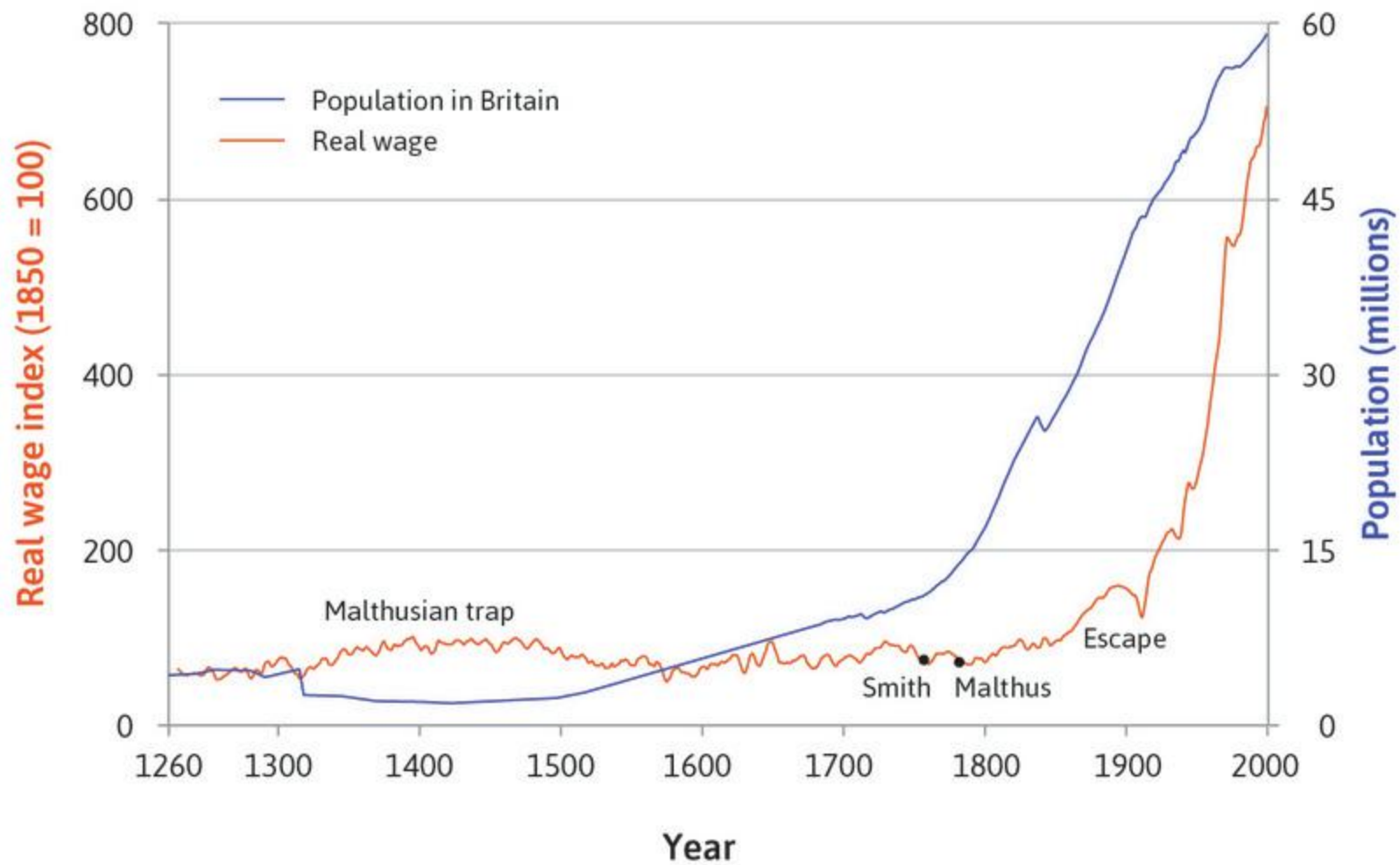


Ricardo, Malthus and diminishing returns









Much more later on landlords, customary land tenure and enclosures below.

Neo-classical approaches

Pareto, Walras, Jevons, Marshall. The marginalists.

- Land now treated more symmetrically with other factors
- Contracting and property rights problems assumed away

Neo-classical efficient allocation

- Under strong assumptions about nature of technology and preferences and costless enforcement of property rights, complete markets.
- **First-welfare Theorem** (Smith's 'invisible hand'): competitive market equilibria will be Pareto efficient (*regardless of the initial distribution of property rights*).
- Abstracts away from (assumes too much about) property rights and markets. Secure and perfectly and costlessly enforced.
- Institutional and organizational detail erased

“Economics has gained the title ‘Queen of the Social Sciences’ by choosing solved political problems as its domain.”

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

New-institutional Economics

- 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, capture potential gains to trade. Bad institutions are weeded out via process similar to natural selection (Alchian, Demsetz, early North).
 - Transaction costs may be hard to overcome (coordination, information, etc) so dysfunctional institutions may be slow to change.
 - Those with power try to shape institutions in their interests, may not be efficient.

The appeal to Hayek, libertarians and anarchists

Customs are better understood as a living, negotiated tissue of practices which are continually being adapted to new ecological and social circumstances—including, of course, power relations. Customary systems of tenure should not be romanticized; they are usually riven with inequalities based on gender, status, and lineage. But because they are strongly local, particular, and adaptable, their plasticity can be the source of microadjustments that lead to shifts in prevailing practice.

Scott, James C.. Seeing Like a State, p.34

The Emergence of Property rights in Land

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.

Land abundant settings

- Critical issue is access to labor, not land.
- No 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 (Boserup, 1965)... [m]arginal lands ...brought under cultivation requiring higher investments... Only now, ownership security becomes and important incentive

Esther 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 and induced technical change

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.
- Does not imply private property preferable (e.g. negative externalities like soil erosion may intensify, inequity may rise, costly defense)

Model elements (problem set 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.

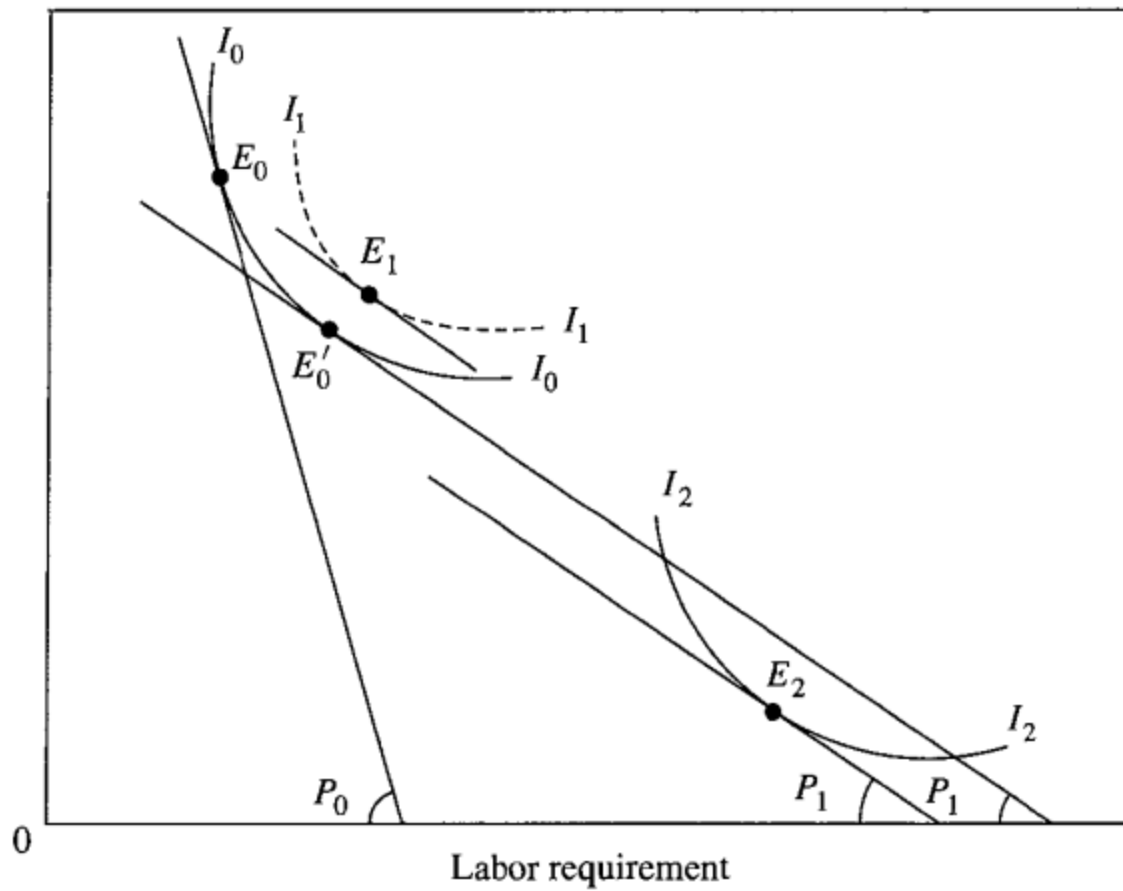
Usufruct rights of individual members are well establish for cultivated fields but less so for fallow. Community chief may determine its allocation

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

FIGURE 1.2 A model of induced institutional innovation

Land or natural
resource requirement



On Chalkboard

- Effect of rising population density
 - Change to Edgeworth Box
 - Change in equilibrium efficient choice and shadow w/r
 - Shorter fallowing \rightarrow declining land productivity

Without technological/institutional change commercialization accelerates process placing pressure on most elastic factors (land, resources)

On Chalkboard

Sustainable responses:

- improve land quality by investing in irrigation or terracing
- investing in commercial trees (cocoa, coffee, rubber, etc). To maintain soil fertility under continuous cultivation new farming systems with composting and other organic and inorganic fertilizer.
- Viewed as *new* more labor intensive production technology
- Depict new technology as more profitable

Changes in land tenure system for sustainability

- restricted transfer rights and not totally secure usufruct rights under traditional land tenure may lower expected returns to investment.
 - Fear may not reap full benefits of investment or inability to bequeath to desired heirs or sell land freely if need arises.
- Establishment of clearer common property for degraded secondary forests

Induced institutional change?

Demand driven process toward greater individualization or continued resource degradation?

Factors that may inhibit

- high cost of investments, or poor returns
- difficulties in organizing collective actions
- high transaction costs
- legal restrictions (e.g. nationalization of forests, granting leasehold/freehold to large holders, suppression of tenancy contracts)

Coase (1960) and the 'Coase Theorem'

See [Coase jupyter notebook](#) (and Lab 1 problem 1)

Emergence of land rental markets

See jupyter Coase notebook (Lab 1 problem 2) o do with government action

- Spontaneous (non-state) order (Hayek, Sugden)

Back to 19th Century Europe

- Remember Smith celebrating the efficiency of English tenancy markets? How did that come about?

Manorial Estates, open field system and customary tenure

- Open-field system prevalent throughout Europe during middle age. Up to 20th century in many parts of Western Europe, Turkey, Iran.



source

Land tenure open field system

- Manor or village had 2-3 large fields divided into narrow strips (or selions) cultivated by tenants or serfs.
- Lord levied rents and demanded labor service for own demesne land.
- Peasants customary use rights to cropland and common land.
- elaborate laws and controls, partly set by Lord and partly by tenants regulated planting, harvest, and pasturing. Inheritable usufruct rights, strip rotation. After harvest others had grazing rights.. Common property during fallow.
- Variations around similar forms around the world: e.g. Russia, Turkey, Western Europe.

Enclosure Movements

- Legal process of consolidating communal fields, meadows, pastures and other commons lands into individually owned and managed plots.
- In England from 12th century to end of 19th. Rest of Europe mostly in 19th century.
 - Landlords appropriated public lands for own purposes
 - 19th century Parliamentary acts... to consolidate strips.

Triumphant interpretations of enclosures impact

- Led to agricultural Revolution and Industrial Revolution
 - Land markets led to more efficient use, crop yields increased
 - Rising gentry 'improving capitalists'.
- Civil War... Constraints on the King, Rise of Democracy
- Structural change: peasant proprietors and serfs to 'free' urban wage-laborers

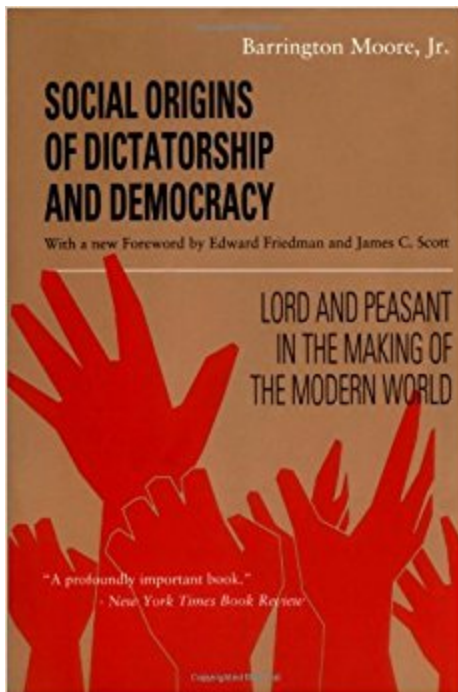
The peasantry

Stop to consider how the so-called owners of the land got hold of it. They simply seized it by force, afterwards hiring lawyers to provide them with title-deeds. In the case of the enclosure of the common lands, which was going on from about 1600 to 1850, the land-grabbers did not even have the excuse of being foreign conquerors; they were quite frankly taking the heritage of their own countrymen, upon no sort of pretext except that they had the power to do so.[35]

George Orwell in 1944:

That the violence and coercion which produced these results took place over a long space of time, that it took place mainly within a framework of law and order and helped ultimately to establish democracy on a firmer footing, must not blind us to the fact that it was massive violence exercised by the upper classes against the lower.

Barrington Moore



A natural Experiment

Heldring, Robinson, Vollmer. 2015. "Monks, Gents and Industrialists: The Long-Run Impact of the Dissolution of the English Monasteries." Working Paper 21450. National Bureau of Economic Research. ([link](#))

- Long-run impacts of Dissolution of the English monasteries in 1535
- Tawney (1941) thesis that led to 'rise of gentry' tied to commercialization of agriculture and location of industrial Revolution.

- Monasteries controlled large portion of lands in late medieval period.
 - No effective land market.
 - Feudal privileges, customary tenure
- in 1530s Henry VIII expropriated and then sold off enormous estates

Table 1: Distribution of Landownership in England in 1436 and 1688: Percentages of cultivated land owned

	1436	1688
Aristocracy and greater gentry	15-20	15-20
Middling and lesser gentry	25	45-50
Yeomen, family farmers and other small owners	20	25-33
Church & Crown	25-35	5-10

Notes: Adapted from Clay (1986, p. 143)

Natural Experiment: How did plausibly exogenous geographic variation in institutions (land markets) affect long run outcomes:

- Digitized the 1535 Valor Ecclesiasticus (locations and values)
- Outcomes:
 - Industrial revolution (1838 Mills)
 - Agricultural revolution
 - Wheat yields 1836
 - Agricultural patents
 - land enclosures 1750-1840

$$y_p = \gamma_f + \alpha_M \cdot M_p + \alpha \cdot X_p + \epsilon_p$$

- y_p is parish level outcome
- γ_f county or 'hundred' fixed effects
- X_p controls (physical area, soil, 1524 tax levy, distance to nearest town, etc)

Marxian models of institutional change

- Views changes in 'relations of production' (institutions/property rights) as driven by 'changes in material forces of production (new technological opportunities)'

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. ..

- Old institutional order becomes a 'fetter' or barrier for rising group to capture new benefits.
- Changes through conflict/revolution

...At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or – this merely expresses the same thing in legal terms – with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution.

Preface to A Contribution of the Critique of Political Economy, 1859

- Marx was looking back on collapse of feudalism/manorialism and the rising industry and urban bourgeoisie
- 'Primitive accumulation' and monopoly view of things. Enclosure movements broke customary tenure, releasing new landless labor force
- Sees new property forms as expanding production possibilities but benefits not widely shared.
- Contrast to Adam Smith who feared monopoly but saw competitive free movement and gains to trade as potentially raising all incomes.

Farm Household Models

- We built simple model of land market (no real labor market). - Now we study land and labor markets together for several applications:
- Endogenous labor supply
- Work own farm plot and/or hire or sell labor from the market. Market for land leases.
- Misallocation from shutting down one or more markets. Role of asset distribution with non-traded factors.
- Land rent and land taxes
- Equilibrium farm size distributions and (mis) allocation

See [Farm Household jupyter notebook](#) on Farm Households