ECON 272: Economic History of North America to 1913

Lecture 2: Were People from the Past Irrational Morons?

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Outline

1. Kulturhistoriker
   - Rationality as a Modern Invention?
   - Rationality is a constant
2. Simple Models
   - Constraints, Opportunity Costs and Transaction Costs
3. Past economies can be explained easily
   - Scattered farming
   - Risk-Sharing, Pooling and Reciprocal Systems
4. Little Empirical Evidence
   - The Example of French-Canadians (and many others)
5. One man's weirdness is another man's efficient system
   - Efficient Ordeals
   - Do not replace what is built from accumulated experience

Rationality as a Modern Invention?

- An argument with different iterations that boils down to the following: rational behavior was invented in the eighteenth century and actions of past people cannot be understood with modern rational tools.
- The different iterations: the moral economy (Polanyi, 1944; Thompson, 1971); the peasant *mentalités* (sometimes labelled pre-industrial mentalities) (Henretta, 1978); the intergenerational transmission preferences (Bouchard, 1994); the peasant mode of production (Wickham, 2005).

Rationality as a Modern Invention?

- Some are quite crude, but the best variations are quite clear and are more positive (in the sense of attempting to forego the observer's preferences):

> *in the ideal-type peasant mode his exchange is reciprocal, embedded in the network of social relationships, and also based on need. In the peasant mode, surpluses are not easily accumulated; after the acquisition of essential goods like tools and utensils, they are generally given away, as part of the social network, to kin first, to friends next, to other neighbours thereafter; or else they are collectively consumed, in celebrations of different kinds (Wickham, 2005, 537).*

Rationality as a Modern Invention?

- Another to summarize this is that markets are a recent invention in human history.
- In other words, we now exchange through prices while economies of the past used different systems.

Rationality is a constant

- Economists and economic historians are heavily skeptical of such views for numerous reasons:
  - Economic theory is quite able to explain the moral norms of the past (risk-sharing, pooling, redistributive systems etc.)
  - Pre-industrial societies clearly had markets and responses to incentives were robust.
  - The true difference is that constraints in the past led to different institutional mechanisms to permit exchange, some that may appear odd for modern observers. Nevertheless, these strange arrangements were quite efficient and were conform with even the most elementary economic models.
  - Most empirical studies defy claims of irrationality and show quite high levels of allocative efficiency.

Rationality is a constant

- The viewpoint of economists as pictured in caricature (not accurate):

Rationality is a constant

- The viewpoint of economists as described by economists:

  The peasant's goals and aspirations are not altogether different from our own; his behaviour can be explained without having to resort to a different logical framework; his uncertainties are phrases differently, perhaps, but his response to them is similar to ours. Peasants are not endowed with a different soul or a different perception of the world from ours. If they behave differently, if they shy away from recommended policies it is because they are either less informed about certain events or perhaps better informed about the realities of their physical, social and economic world than we are (Ortiz Sutti, 1973, p. 1)

Constraints, Opportunity Costs and Transaction Costs

- Three key to the economic framework:
  - Everyone is constrained by scarcity which entails that we have to make choices
  - Choices entail opportunity costs (there aint no such thing as a free lunch).
  - Transaction costs are relevant (crucially) too.
- To see all this, the best way to proceed is summarized by Ogilvie (2001, p. 436): "Actions are generally preferable to statements, since people are seldom fully conscious of their own conceptual system"

Constraints

- Time is limited and there were competing uses:
  - Household maintenance
  - Crop planting
  - Herding
  - Child-rearing
  - Carting some crop to market
  - Hand-milling (sometimes)
  - Landclearing
  - Collecting firewood
  - Occupying a smaller non-farm job to earn wages to acquire some more sophisticated goods
  - Risks and uncertainty regarding subsistence (McCloskey, 1976)

Opportunity cost

- Everything has an opportunity cost (Ogilvie, 2001):

> The treatment by serfs of labour dues reflects a recognition of the opportunity cost—and the cash value—of labour lost to the family farm. In 1650, for instance, the Friedland serfs agreed to pay 490 *Gulden* in cash in place of carting 130,000 litres of wheat to the manorial brewery, so as to be 'spared the carting there and back, in order to be able to earn their piece of bread in other ways during this time'—as clear a statement as one would wish of the concept of the opportunity cost of labour expressed in money terms.[44] Serfs paid cash bribes to avoid spending time doing *Robot* (labour dues, derived from the Czech word for 'work'): in 1687, for instance, the manager of the Engelsdorf demesne farm was imprisoned because he 'took it upon himself to accept money from the peasants so that they would not have to go on the *Robot*'.[45]

Transaction costs

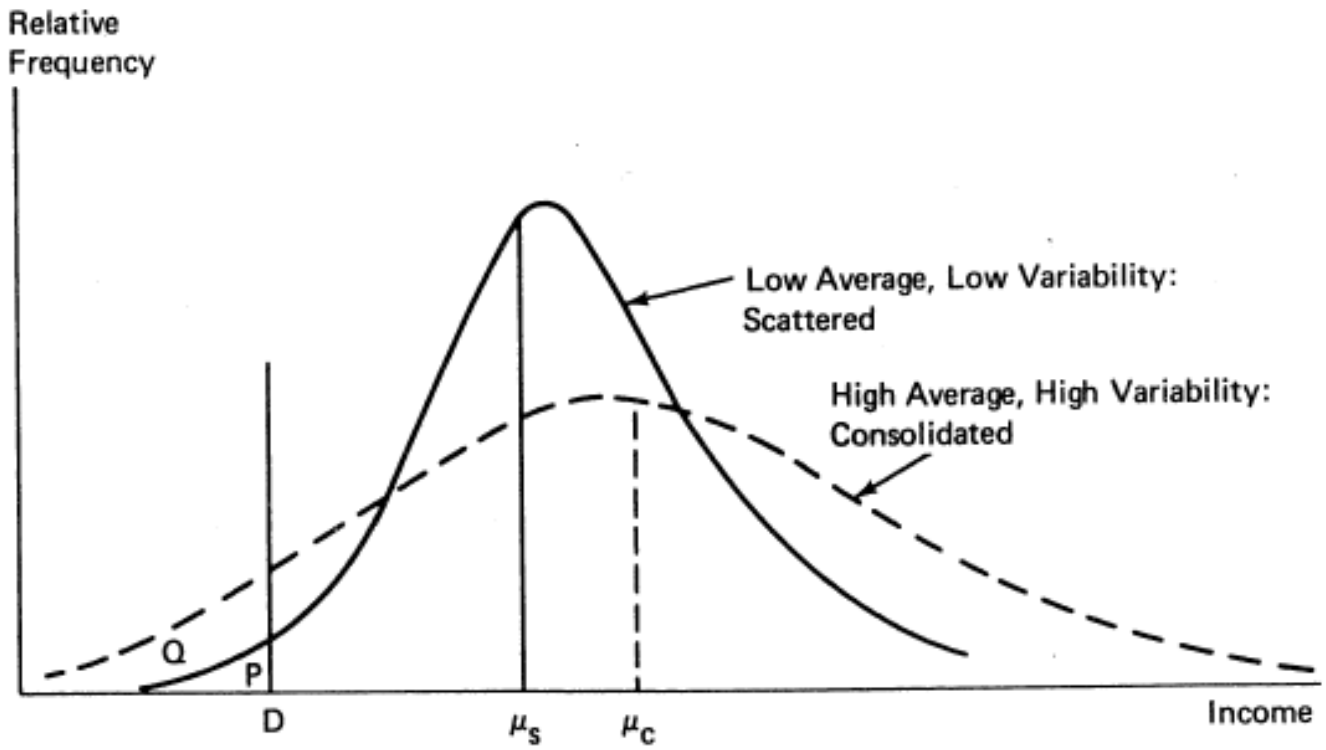
- Markets are not "costless". The organization of exchange (i.e. transaction) comes with costs (i.e. transaction costs)
- Transaction costs are barriers to exchange (uncertainty about the definition of property rights, contract incompleteness, cost of adjudication etc.)
- Reducing theses barriers expand the number of exchanges that can be made and thus the scope and scale of wealth creation.
- Institutions (more on this next week) are answers to create stable rules of the game and deal with transaction costs so as to permit exchange.
- Institutions can take a great many forms such as those that defined peasant economies of the past (see more below)

Picking up bills on the sidewalk

- The simplest of summarizing the economist's reply to the "irrationality claim" is the following: if people from the past were irrational, they would not have responded to incentives (or at least, very weakly).
- This is akin to saying that they would have left 100$ bills on the sidewalk.
- The best example is "scattered farming"

Scattered farming

- Assume that each distribution is a production method that yields you annual returns. Which would you pick?



- At first sight, if your your goal is to have *more* income (maximizing only that), you pick μ_c instead of μ_s. Otherwise, you'd be leaving 100$ bills on the sidewalk.

Scattered farming

- However, the assumption above was risk-neutral. What if you are risk-averse?

Table 1. The Average and Standard Deviation of Income for Consolidated and Scattered Holdings.

				When Disaster = 50		
	Average Income	Coefficient of Variation	Standard Deviation	Distance from D	Probability of Disaster	Frequency of Disaster
Consolidated	110	.440	48.4	1.24	.108	every 9.30 years
Scattered	100	.347	34.7	1.44	.075	every 13.4 years

- A risk-averse person sees utility in reducing variance and increasing income. There is a tradeoff between the two in certain instances.

Risk-Sharing, Pooling and Reciprocal Systems

- A large numbers of practices observed in agrarian societies and pre-industriesl economies also fall under a similar logic.
- Gift-exchange, egalitarian norms and pooling are rational insurance mechanisms in which relatively small communities did engage so as to maximize their utility (De Janvry et al., 1991; Fafchamps, 1992)
- There are mechanisms meant to illicit selt-interested reciprocity (foster trust as a mechanism to reduce transaction costs and permit exchange and in practice define de facto property rights).
- Also observed in animals: biologist Gerald Wilkinson (1984) observed that vampire bats in Costa Rica harvested more blood than they needed, shared the surplus with other less successful bats – regardless of kinship. If a bat had shared in the past, the other bat would reciprocate when the luck of the first bat turned sour. Like human beings, they were able to develop self-interested reciprocity.

Little Empirical Evidence

- The claims of irrationality has been made of everyone. Often by people who had incentives in disparaging the locals.
  - For example, many British governors of the French portion of Quebec kept trying to explain their performance as governors. If results did not pan out, it was a good idea to disparage the French-Canadians. Many letters like that.
- Most empirical evidence has thrown this into contention: Russian serfs (Nafziger, 2010; Dennison, 2011), Irish potato farmers (Mokyr, 1984), Massachussetts farmers (Rothenberg, 1992), Vietnamese rice farmers (Popkin, 1979).

Little Empirical Evidence

- Think in terms of a Cobb-Douglas production function:

$$Y = AK^{\beta}L^{\alpha} \tag{1}$$

- Where K and L are the production factors of a farm household and β and α are the elasticities of each of these factors (and they must respect unity condition). A is the technical efficiency that scales up those inputs (also known as TFP for total factor productivity).
- If a group is composed of "bad" farmers (who are just culturally bad), they are just less able to "scale up" K and L because A is low. Thus, if you have two groups (i.e. two different production functions), you can rearrange equation (1) to get an index of relative efficiency:

$$\frac{A_1}{A_2} = \frac{\frac{Y_1}{Y_2}}{((\frac{L_1}{L_2})^{\alpha} \cdot (\frac{K_1}{K_2})^{\beta})} \tag{2}$$

Little Empirical Evidence

- French Canadians were quite efficient farmers

Table 1. Relative productivity (French/English) by region.

	Gross output (all)	Gross output (areas in Lewis McInnis 1980)	Net output 1 (all)	Net output 1 (areas in Lewis McInnis 1980)
Output / Labor	91.6%	86.4%	90.6%	89.1%
Output / Capital	110.5%	116.7%	107.8%	104.6%
Output / Land	107.9%	108.7%	109.9%	122.2%
TFP 1[a]	99.5%	97.6%	98.8%	98.2%
TFP 2[b]	96.5%	93.3%	95.7%	94.8%

- You can also use econometrics to test if exogenous factors explain the productivity differences (e.g. land quality, distance from markets etc.)

Little Empirical Evidence

Variables	OLS, robust SE (9) ln TFP1	OLS, robust SE (10) ln TFP1	MM, robust SE, 85% (11) ln TFP1	MM, robust SE, 95% (12) ln TFP1
Share of Catholics x 100	0.0174	0.0975	−0.0370	−0.0305
	(0.0590)	(0.0846)	(0.0677)	(0.0614)
Years since settlement x 100		0.0931***	0.0880**	0.0843**
		(0.0352)	(0.0367)	(0.0339)
Growing season x 100		0.1958	0.0873	0.0598
		(0.1942)	(0.2202)	(0.1913)
Distance x 100		−0.0547	0.0053	0.0018
		(0.0464)	(0.0420)	(0.0396)
Cleared land x 100		−0.5080***	−0.1979*	−0.2129*
		(0.1500)	(0.1156)	(0.1121)
Share of pupils x 100		−0.0103	−0.0498	−0.0374
		(0.0684)	(0.0536)	(0.0521)
Herfindahl Index x 100		0.0124**	0.0056	0.0070
		(0.0049)	(0.0045)	(0.0044)
Land per capita x 100		0.1165	0.2044*	0.1895*
		(0.1101)	(0.1069)	(0.0995)
Land quality x 100		1.3055	0.7888	0.7933
		(1.2372)	(1.2437)	(0.1129)
Grist mills per capita x 100		2.5281***	1.3021	1.2786
		(0.9377)	(0.8180)	(0.7973)
Constant	5.6190***	5.0459***	5.3592***	5.3962***
	(0.0531)	(0.4385)	(0.4735)	(0.4162)
Observations	248	248	248	248
R-squared	0	0.194		
R-squared Adjusted	0	0.160		
R-squared (w)			0.154	0.133
R-squared (Rho)			0.0766	0.0819

Robust standard errors in parentheses

Efficient Ordeals

- Weird practices are not necessarily inefficient. They may serve clear ends to maximize utility under constraints.
  - Ordeals (Leeson, 2012) were a crime-reduction mechanism.
  - Land reclamation in land-abundant (which may seems strange) Maritime Canada during colonial era cemented peaceful trade with Natives and permitted gains from trade (especially with fur trade) (Geloso and Candela, 2017)
  - Strict churches (or religious groups with initiation rituals) are better able to filter out potential free-riders and "cream-skim" the most willing members (Iannaccone, 1994).
  - Oracles improve welfare in instances where stakes are small (but reoccuring) (Leeson, 2014)

Accumulated Wisdom

- Careful about trying to replace complex systems that emerged from the ground up. These are systems that have been tinkered with by experience and developed to match the settings in which people evolved (Demsetz, 1967).
- Replacing them with top-down plans may backfire (Ostrom, 2015; Scott, 1998; Leeson and Harris, 2018)

Accumulated Wisdom

Biological welfare and the commons: A natural experiment in the Alps, 1765–1845

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ABSTRACT

In the late 18th century hundreds self-governing alpine communities in Northern Italy came under the direct control of centralized states (Austria and France) at different times. We exploit the timing and location of these interventions in a difference-in-differences type design to investigate the effects of removing CPR (common-pool resources) institutions on biological welfare. We find a significant and persistent increase in infant mortality rates and a more modest decrease in birth rates as a result of state centralization. We provide evidence that these demographic changes reflect a critical loss of natural resource income caused by the disruption of communal institutions. Impacts are most severe in communities that have no prior experience with formal institutions.

Accumulated Wisdom

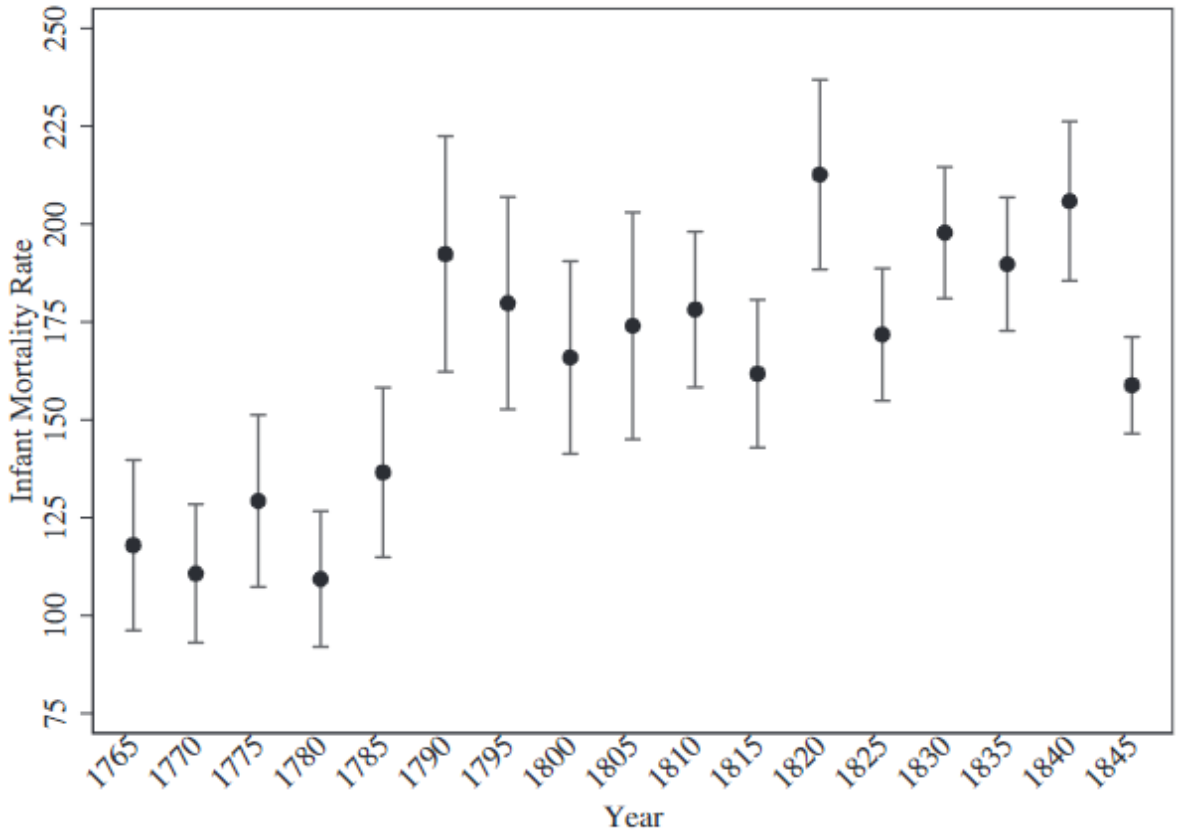

Fig. 3. Infant mortality rates (1765–1845). Note: IMRs means, with standard error bars (95% interval), computed on the 227 parishes. The figure shows a remarkable break between 1785 and 1790, commented in the text. To compare IMR with birth, death, and infant death trends, see Fig. 6 in the Appendix B (supplementary figure). Authors' elaboration on historical data, see Appendix B (supplementary figure).

A note of caution

- Be careful too not to fall in the trap that "Whatever is, is efficient".
- Next class, we will see the Political Coase Theorem and the role of institutions in explaining why "bad" institutions can be a problem and persist in spite of being socially costly. The closing words go to economist Steven Nafziger (2010) on this: .
  - *The empirical evidence (on Russian peasant communes) indicates that peasant households did have substantial flexibility when it came to allocating their land and labor holdings. In response to mortality shocks or lags in the communal adjustment of land, households engaged in land rentals and off-farm labor market transactions to improve upon suboptimal factor endowments. Although these findings do not imply that the resulting allocation of resources was fully efficient,* ***they do illustrate how peasants made rational factor market transactions in a seemingly inhospitable institutional environment***(emphasis mine)

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