

C23-1

Lecture 14

I. Slavery and Southern Economic Development (more)

Wealth

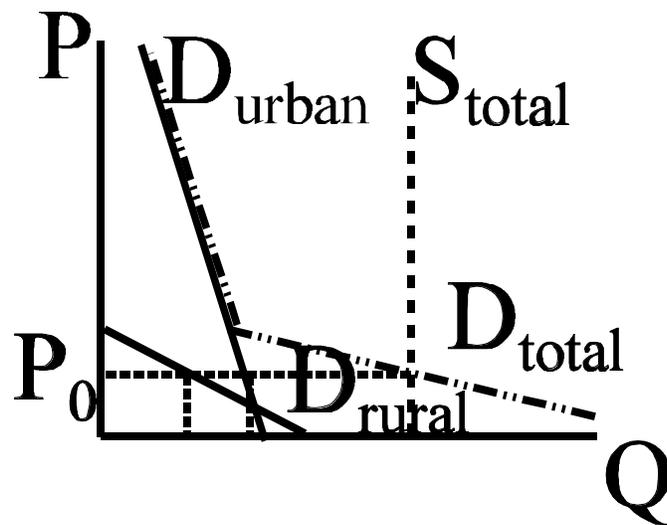
Economic growth

Responses to price signals

People

Crops

Industries and urban/rural



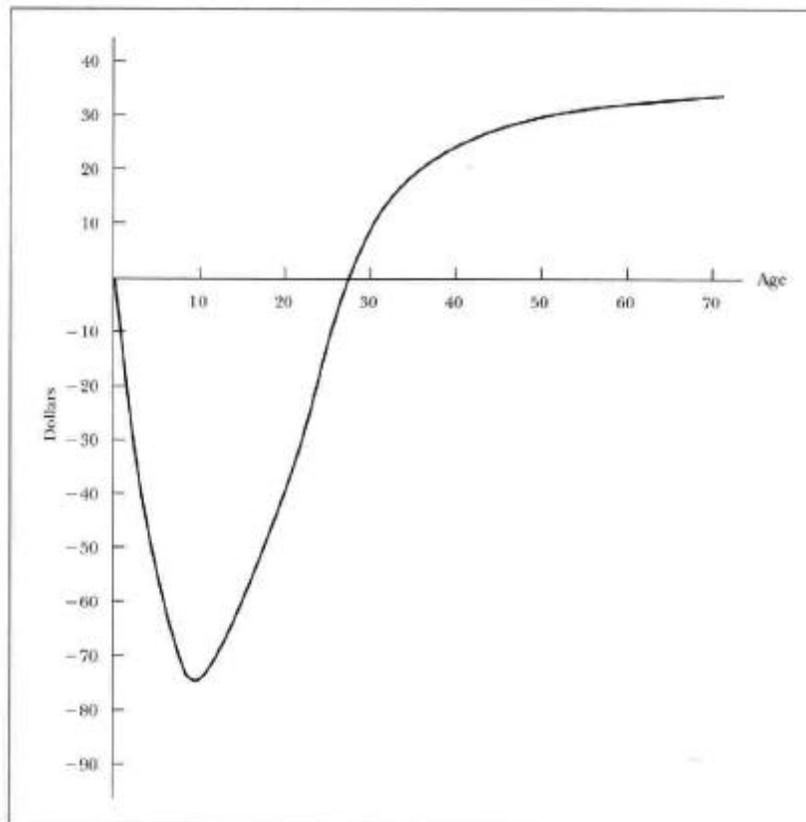
II. Slaves lives

A. exploitation

Life-time earnings

Average Accumulated Value (Discounted to Birth) of Income
Appropriated from Slaves
(1850 dollars)

The chart shows the cumulative value of the surplus an average slave earned over his or her lifetime. Note that owners begin to get back more than they put into a slave at about age nine. Sometime in the slave's early twenties the owner breaks even on the investment, as the slave's earnings discounted back to birth equal the slave's discounted rearing cost. Fogel and Engerman guess that around age fifty slave earnings again fall to about the level of maintenance costs. By this point, the cumulative value, discounted back to birth, a net slave earnings equals a little more than \$30. Hence the argument that at birth a slave is worth about \$30.



Source: Robert Fogel and Stanley Engerman, *Time on the Cross* (Boston: Little, Brown, 1974): 154.

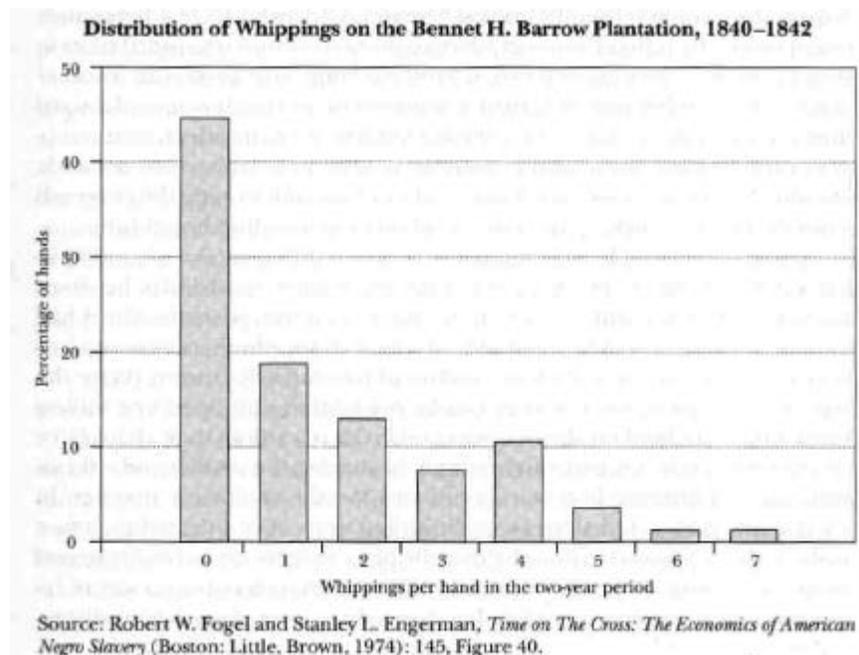
Rate of exploitation

Estimates of the Neoclassical Rate of Exploitations of Slave Workers

| | Vedder | Ransom and Sutch | | Fogel and Engerman | |
|---------------------------------|---------|------------------|-------------------|--------------------|-------------------|
| | | All Slave Farms | Large Plantations | All Slave Farms | Large Plantations |
| Marginal worker's contribution | \$85.76 | \$62.46 | \$78.78 | \$73.98 | \$85.80 |
| Less value of slave consumption | 30.00 | 28.95 | 32.12 | 34.13 | 42.99 |
| Equals expropriated income | 55.76 | 33.51 | 46.66 | 39.85 | 42.81 |
| Rate of exploitation | 65% | 54% | 59% | 54% | 50% |

Sources: Richard K. Vedder, "The Slave Exploitation (Expropriation) Rate," *Explorations in Economic History* 12 (1975): 455; Roger Ransom and Richard Sutch, *One Kind of Freedom* (Cambridge, England: Cambridge University Press, 1977): 203-12, reprinted by permission of Cambridge University Press; Robert W. Fogel and Stanley L. Engerman, *Time on the Cross: Evidence and Methods* (Boston: Little, Brown, 1974): 159.

B. Reward v. Punishment



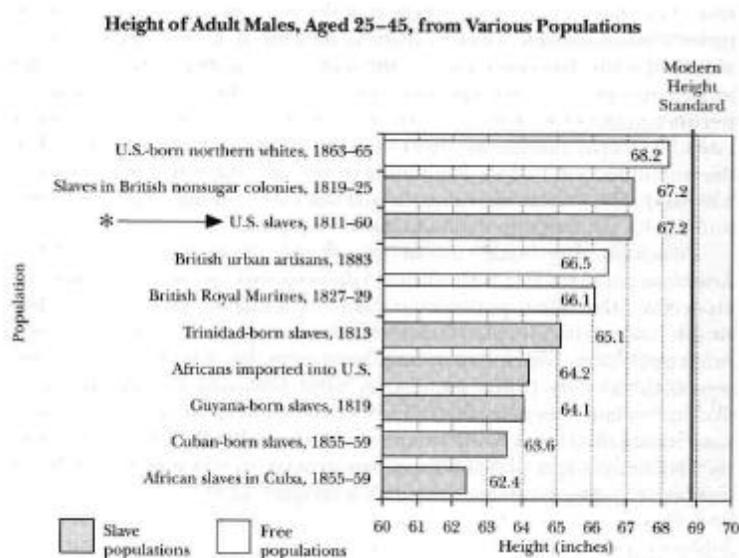
B. care and feeding

A Comparison of Slave Diets
(pounds per day)

| | Least-Cost Diet | Fogel & Engerman Estimate | Sutch Estimate | "Standard Ratio" |
|----------------------|-----------------|---------------------------|----------------|------------------|
| Pork | — | 0.31 | 0.53 | 0.50 |
| Beef | — | 0.15 | 0.10 | — |
| Mutton | — | 0.01 | — | — |
| Butter | — | 0.01 | 0.01 | — |
| Milk | 0.60 | 0.60 | 0.41 | — |
| Sweet potatoes | 0.25 | 1.12 | 0.72 | — |
| Irish potatoes | — | 0.08 | 0.06 | — |
| Cowpeas | 0.58 | 0.35 | 0.12 | — |
| Corn | 1.74 | 1.78 | 2.23 | 2.00 |
| Wheat | — | 0.12 | 0.12 | — |
| Cost per day (cents) | 4.4 | 8.2 | 8.7 | 5.2 |

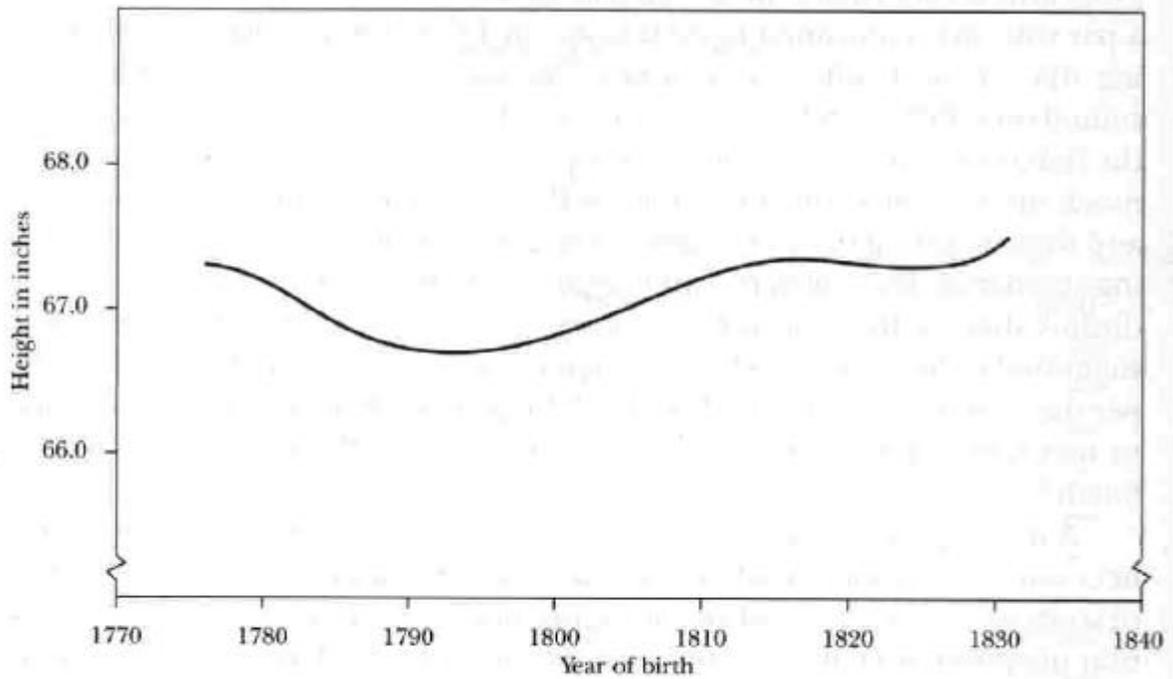
Source: Charles Kahn, "A Linear Programming Solution to the Slave Diet," in *Without Consent or Contract: The Rise and Fall of American Slavery* (New York: W. W. Norton, 1992): 529, Table 25.3.

"Ample – but *adequate?*"



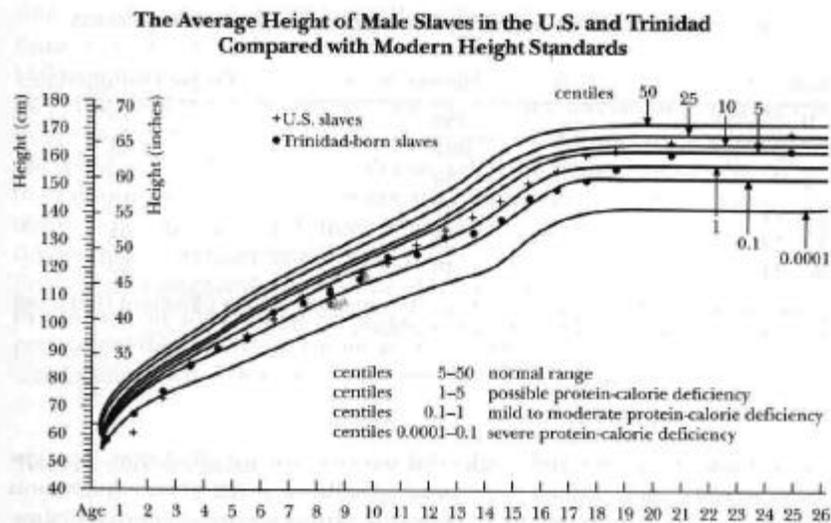
Source: Robert W. Fogel, *Without Consent or Contract: The Rise and Fall of American Slavery* (New York: W. W. Norton, 1989): 141, Figure 24.

Time Profile of Height of Slave Men Aged 23–49



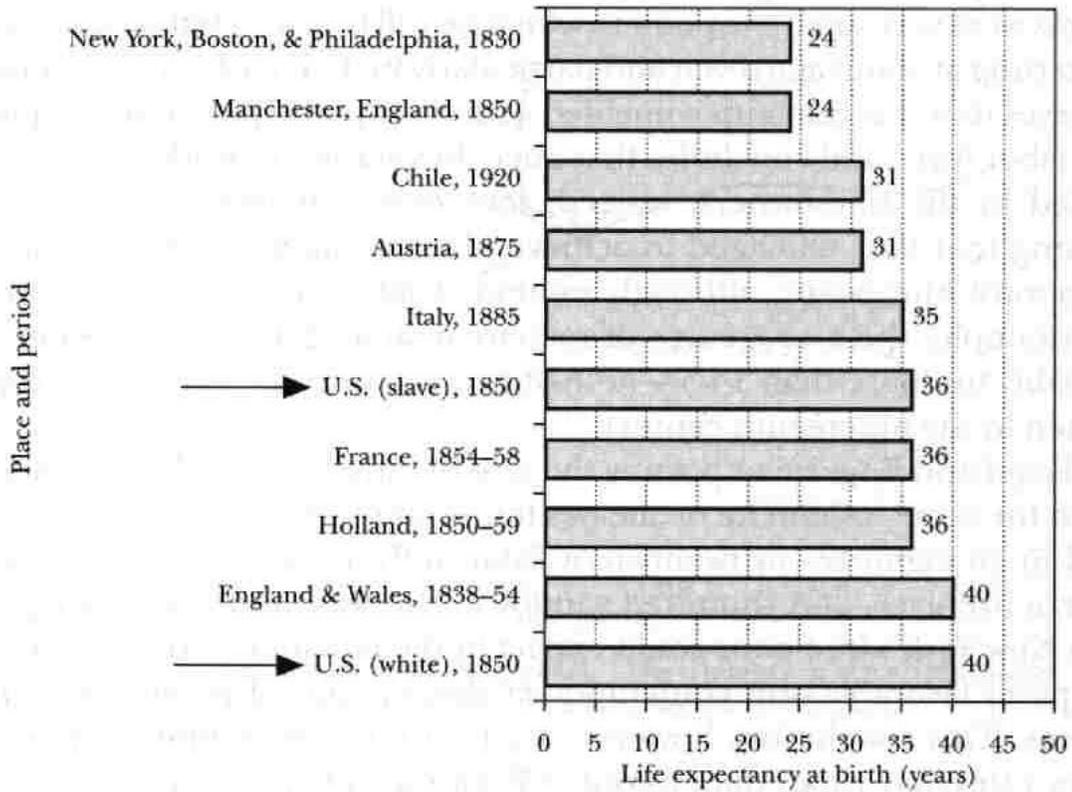
Source: Robert A. Margo and Richard H. Steckel, "The Heights of American Slaves: New Evidence on Slave Nutrition and Health," *Social Science History* 6 (1982): 523.

C. health and longevity



Source: Robert W. Fogel, *Without Consent or Contract: The Rise and Fall of American Slavery* (New York: W. W. Norton, 1989): 143, Figure 25.

Life Expectancy at Birth for Various Populations, 1830–1920



Source: Robert W. Fogel and Stanley L. Engerman, *Time on The Cross: The Economics of American Negro Slavery* (Boston: Little, Brown, 1974): 125, Figure 36.

Mortality Rates per Thousand for Slaves and the Antebellum Population

| Age | Slaves | Entire United States |
|-------|--------|----------------------|
| 0 | 350 | 179 |
| 1–4 | 201 | 93 |
| 5–9 | 54 | 28 |
| 10–14 | 37 | 19 |
| 15–19 | 35 | 28 |
| 20–24 | 40 | 39 |

Source: Richard H. Steckel, "Dimensions and Determinants of Early Childhood Health and Mortality among American Slaves," *Social Science History* 10 (1986): 428.