

Economics C23-1

Lecture 11

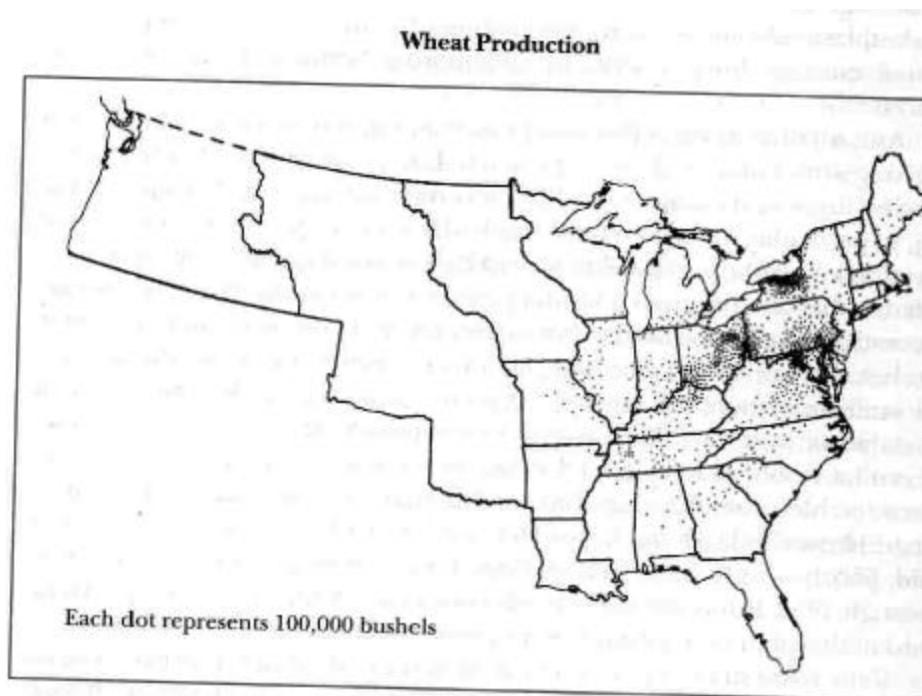
Northern Agriculture Before the Civil War

I. “Free land”?

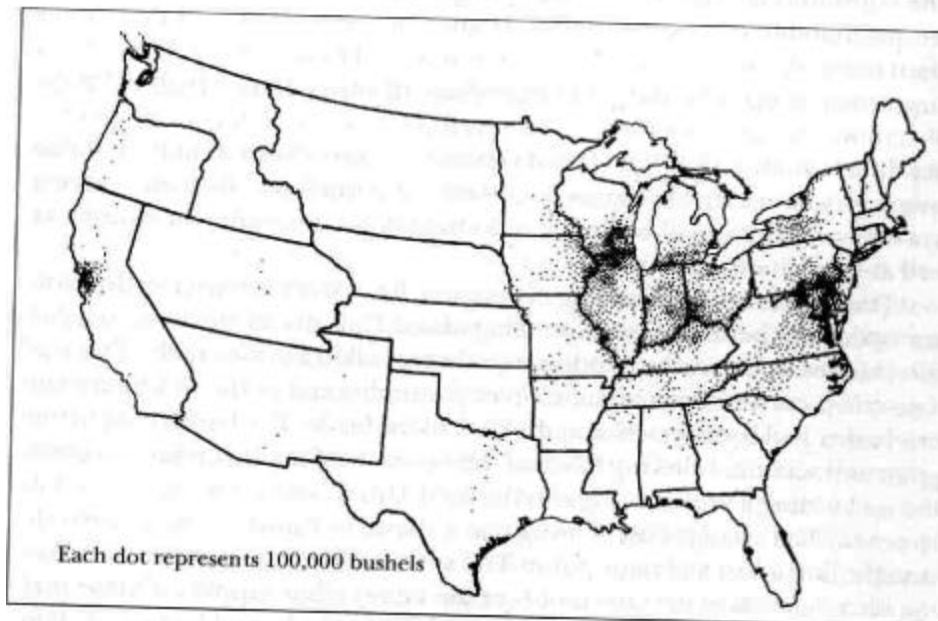
	40-Acre Farm		80-Acre Farm		160-Acre Farm	
	Owner-Occupied	Tenant	Owner-Occupied	Tenant	Owner-Occupied	Tenant
<i>Midwest</i>						
Farm value	738	969	1,363	1,460	2,490	2,151
Implement value	46	38	67	57	96	87
Livestock value	197	219	285	268	426	335
Total cost to owner-occupier	981		1,715		3,002	
Total cost to tenant (number)	(494)	(130)	(885)	(232)	(565)	(213)
<i>Northeast</i>						
Farm value	1,599	2,967	2,621	2,772	3,966	3,636
Implement value	65	58	116	80	162	124
Livestock value	256	256	401	277	615	501
Total cost to owner-occupier	1,920		3,138		4,743	
Total cost to tenant (number)	(85)	(9)	(94)	(23)	(63)	(14)

Source: Jeremy Atack and Fred Bateman, *To Their Own Soil: Agriculture in the Antebellum North* (Ames: Iowa State University Press, 1987): 134, Table 8.2.

II. Changing Technology: The Reaper



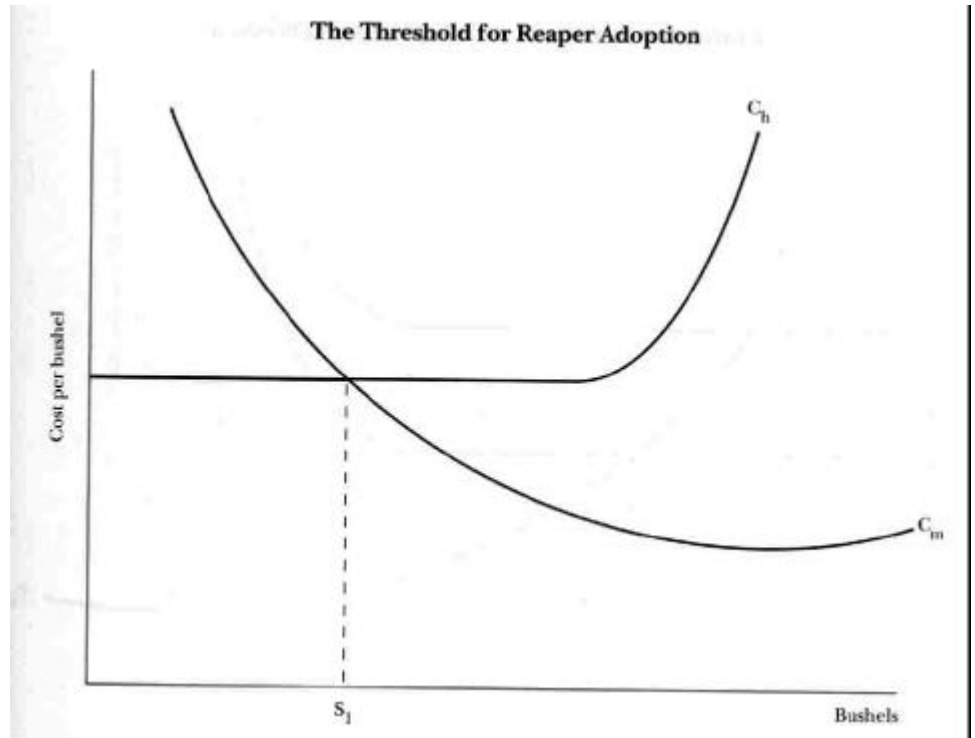
PANEL A: 1839



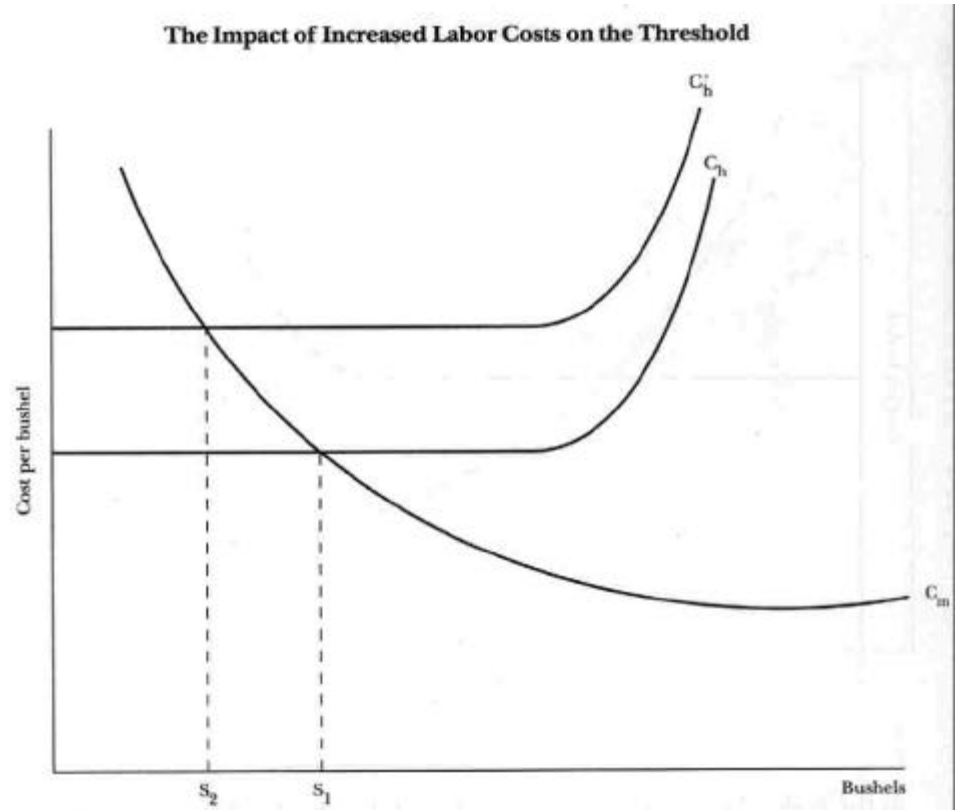
PANEL B: 1859

Source: Charles O. Paullin, *Atlas of the Historical Geography of the United States* (Washington, D.C.: Carnegie Institution, 1932): Plates 143P and 143Q.

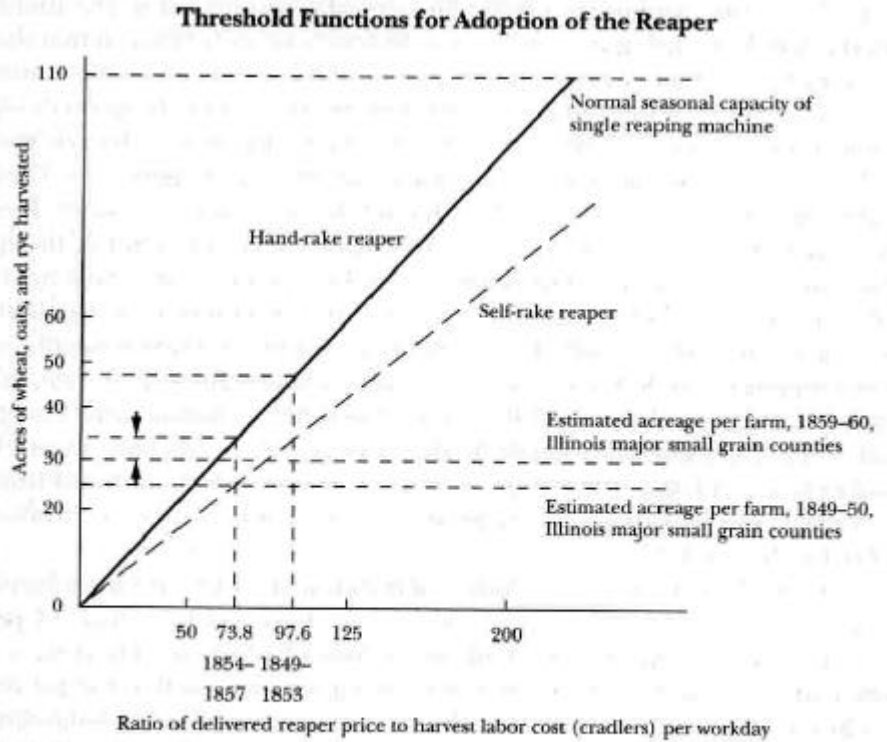
A. The Simple Story



B. The Dynamic Element

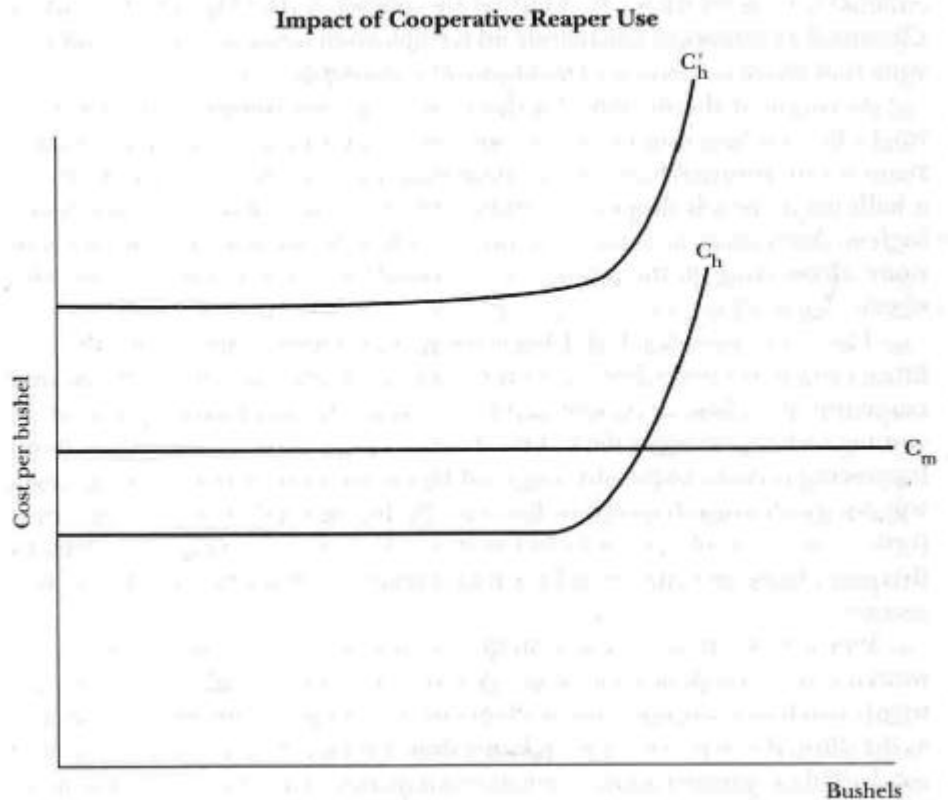


C. The Result: A neat, logical story roughly consistent with the facts



Source: Paul A. David, "The Mechanization of Reaping in the Ante-Bellum Midwest," in *The Reinterpretation of American Economic History*, ed. Robert W. Fogel and Stanley L. Engerman (New York: Harper & Row, 1971): 223. Originally published in *Industrialization in Two Systems: Essays in Honor of Alexander Gershenkron*, ed. Henry Rosovsky (New York: Wiley, 1966).

D. One slightly inconvenient fact and an important lesson



III. Impact on the Northeast of western expansion

IV. Impact on the West of trade

Western Terms of Trade, 1816–1860

Years	5-Year Average
1816–20	58
1821–25	59
1826–30	75
1831–35	105
1836–40	125
1841–45	111
1846–50	130
1851–55	160
1856–60	162

Note: Western “terms of trade” are defined as an index of prices received for western goods divided by an index of prices paid for eastern goods where the average terms of trade between 1824 and 1846.

Source: Thomas S. Berry, *Western Prices before 1861: A Study of the Cincinnati Market* (Cambridge: Harvard University Press, 1943), copyright © 1943 by the President and Fellows of Harvard College, cited in Douglass North, *The Economic Growth of the United States, 1790–1860* (New York: W. W. Norton, 1966): 255.

V. Profitability?

State/Region	Per Capita Farm Income Tenants	Owner-Occupiers
Illinois	82	165
Indiana	58	113
Iowa	60	104
Kansas	52	120
Michigan	78	85
Minnesota	61	94
Missouri	21	68
Ohio	99	146
Wisconsin	73	96
Midwest	61	113
Connecticut	68	170
Maryland	19	88
New Hampshire	71	113
New Jersey	100	153
New York	133	221
Pennsylvania	76	128
Vermont	125	177
Northeast	78	174
Entire North	67	135

Source: Jeremy Atack and Fred Bateman, *To Their Own Soil: Agriculture in the Antebellum North* (Ames: Iowa State University Press, 1987): 243, Table 13.8.