

**Climbing the Agricultural Ladder: Horatio
Alger and Having the Right Parents**

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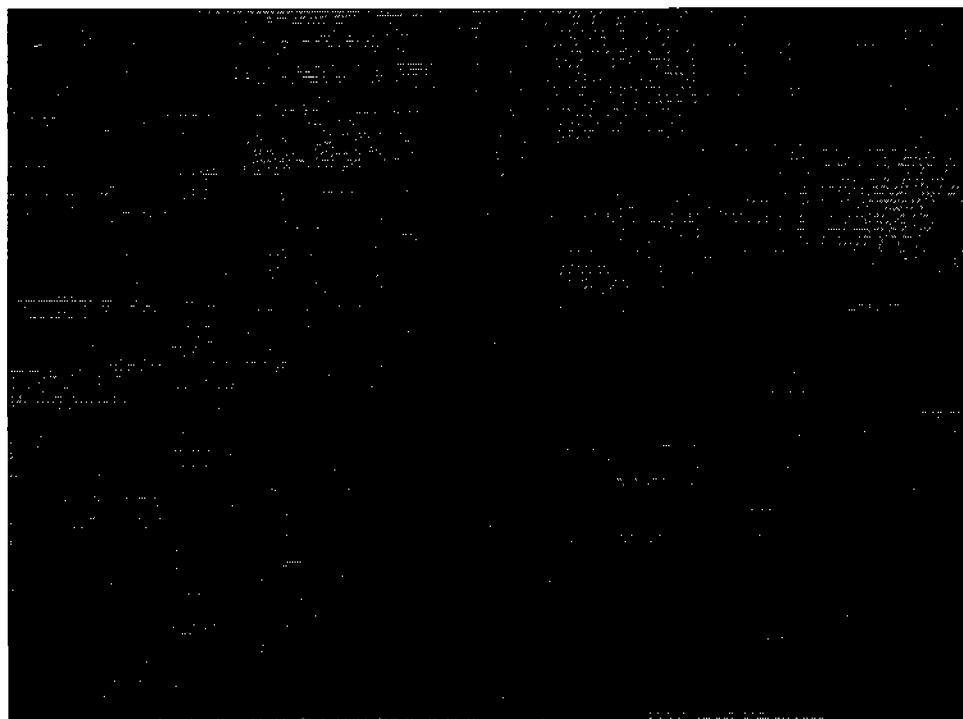
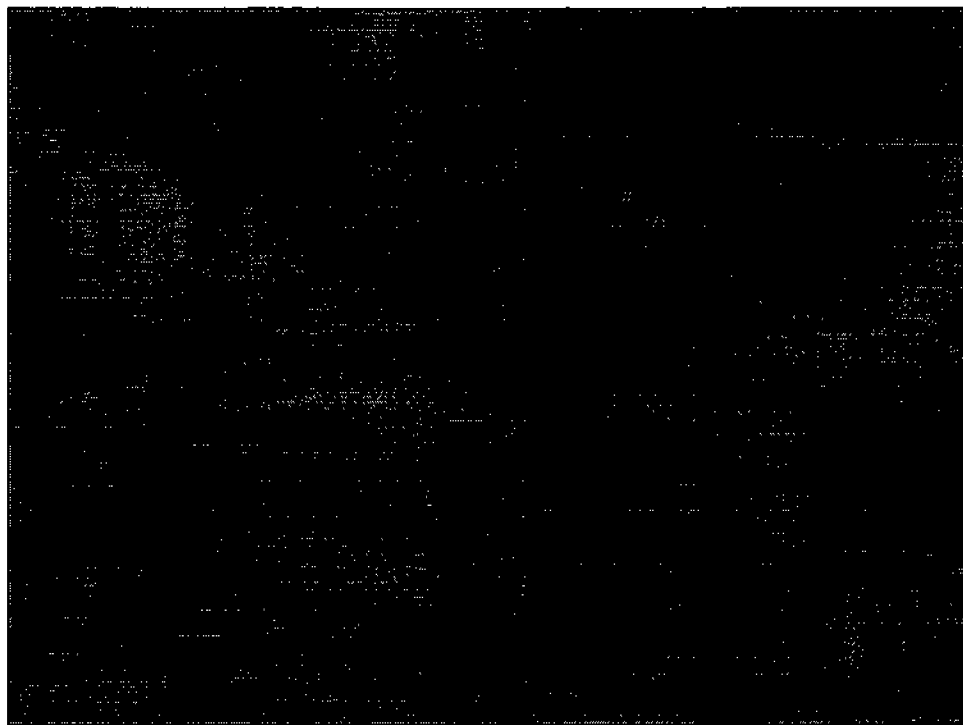
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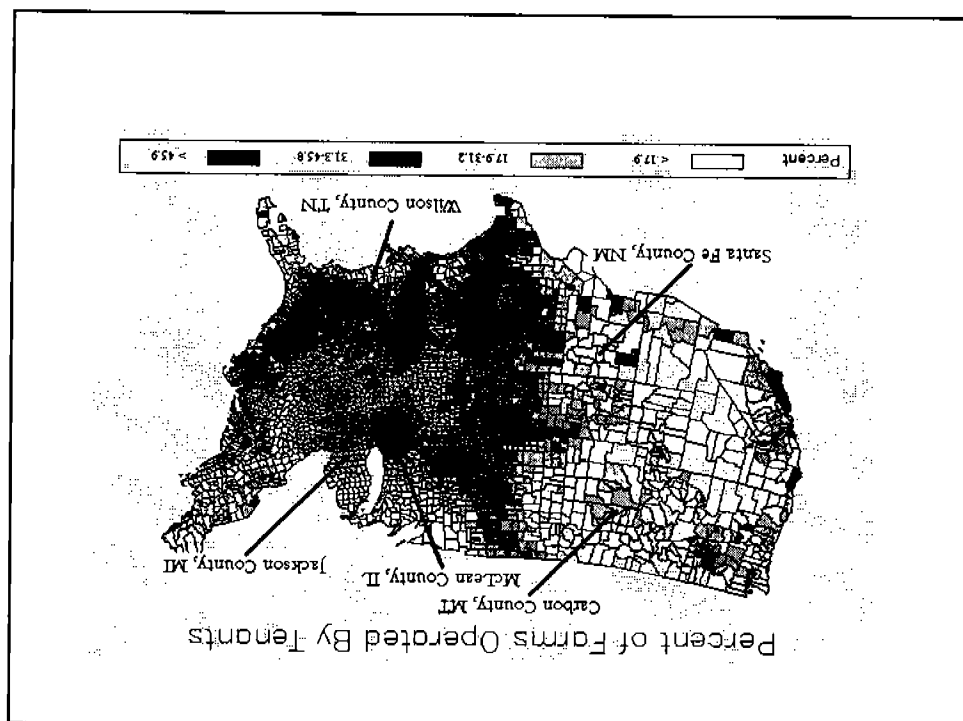
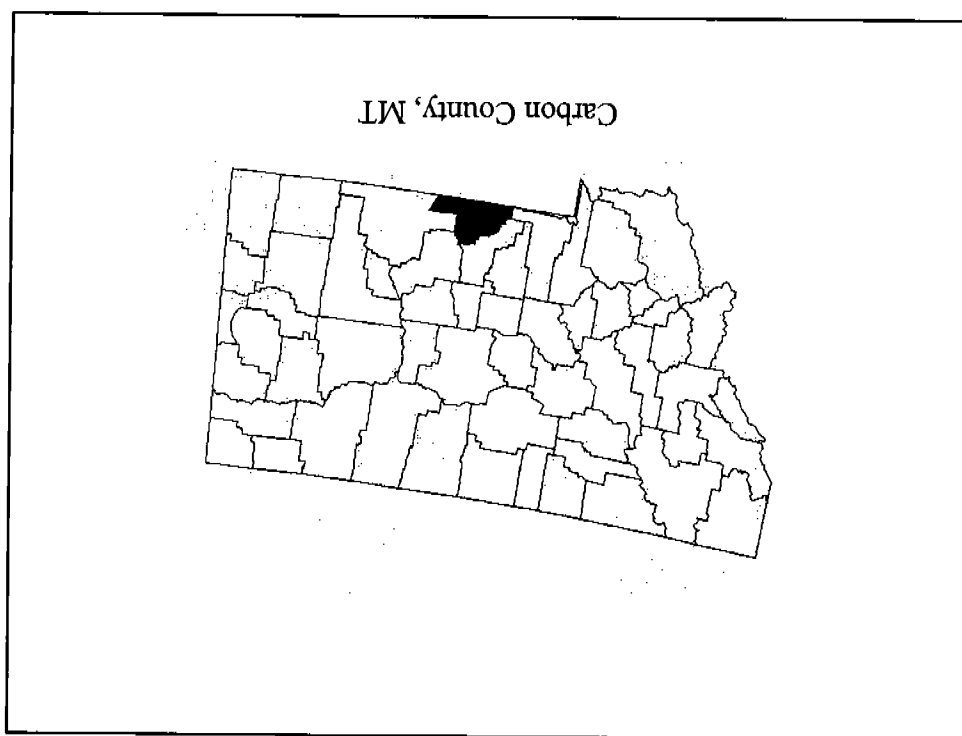
Tenure Mobility in Early 20th Century

- In 1920 more Americans lived in rural than urban settings
- Movement from wage to tenant comparable in earnings to movement from unskilled to skilled workers in mfg.
- Mobility reflects economic opportunity and may shape beliefs about redistributive policies
- Individual observations allow inferences about ability, entrepreneurship, willingness to work and familial connections

Data

- Individual observations from the 5 extant collections of county manuscripts from the 1920 Census of Agriculture; N= 10,924
- McLean County, IL; Jackson County, MI; Wilson County, TN; Carbon County, MT; and Santa Fe County, NM
- Current status and previous years spent as wage worker, tenant and owner

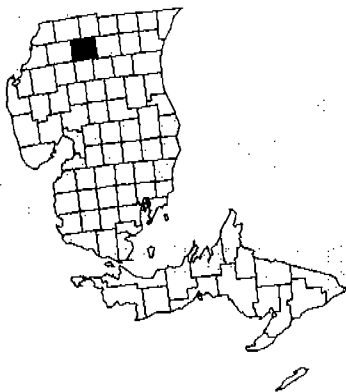




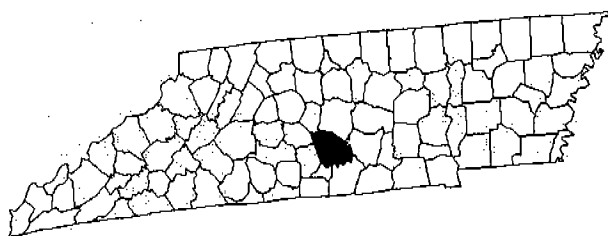
McLean County, IL



Jackson County, MI



Wilson County, TN



Santa Fe County, NM

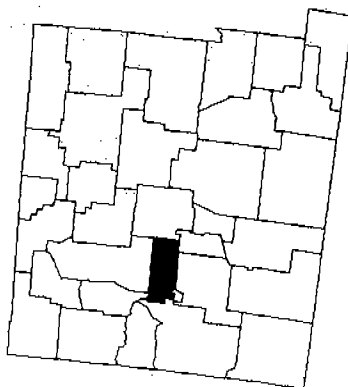
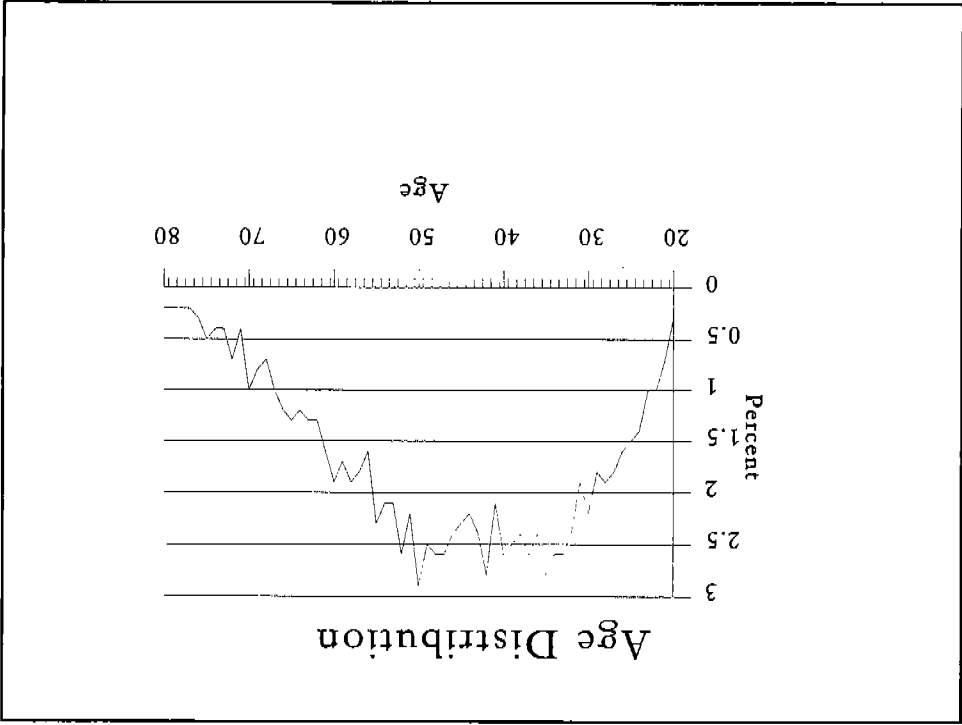
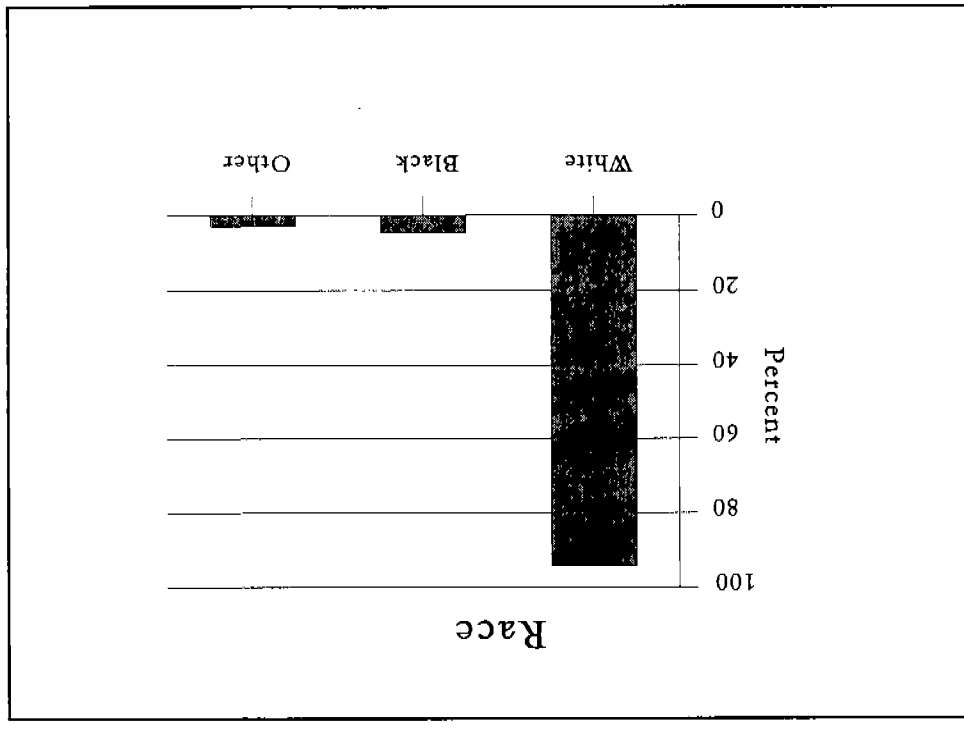
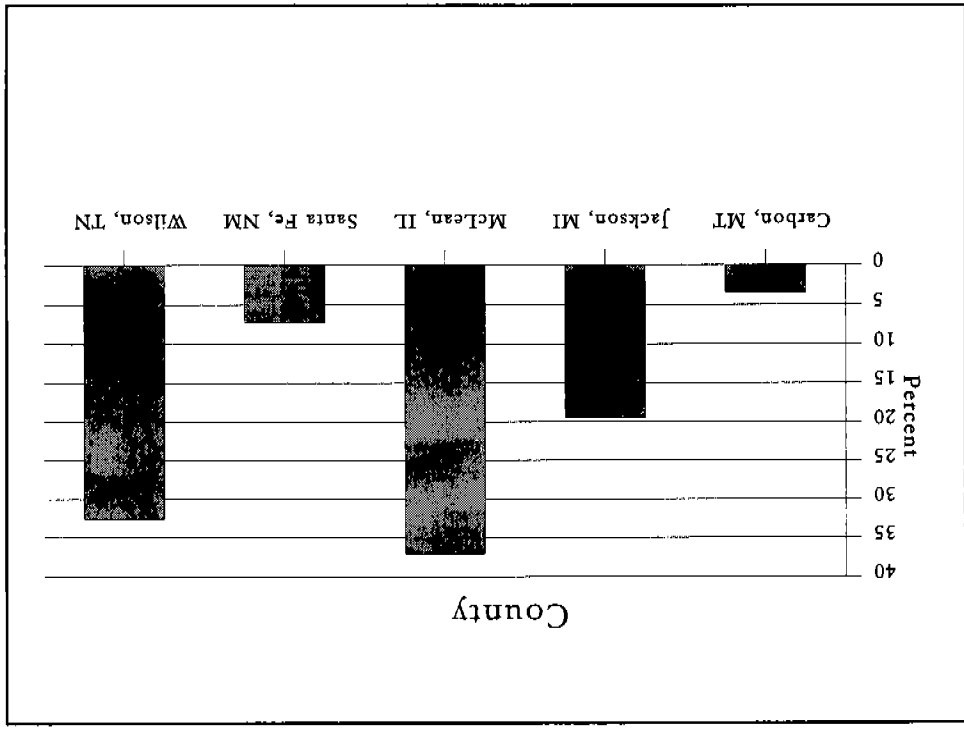
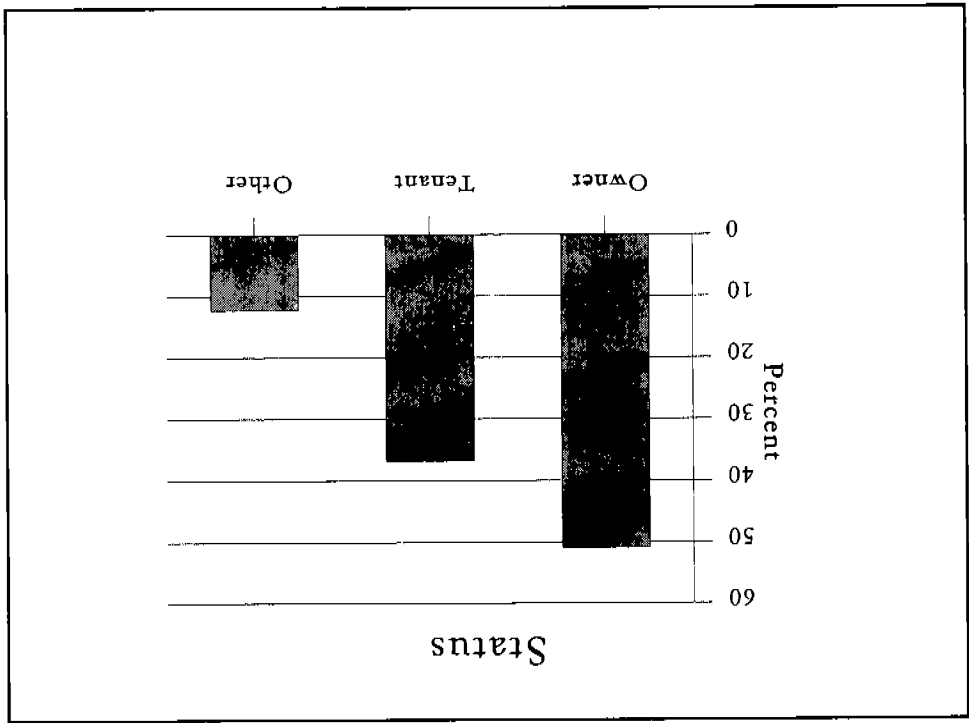
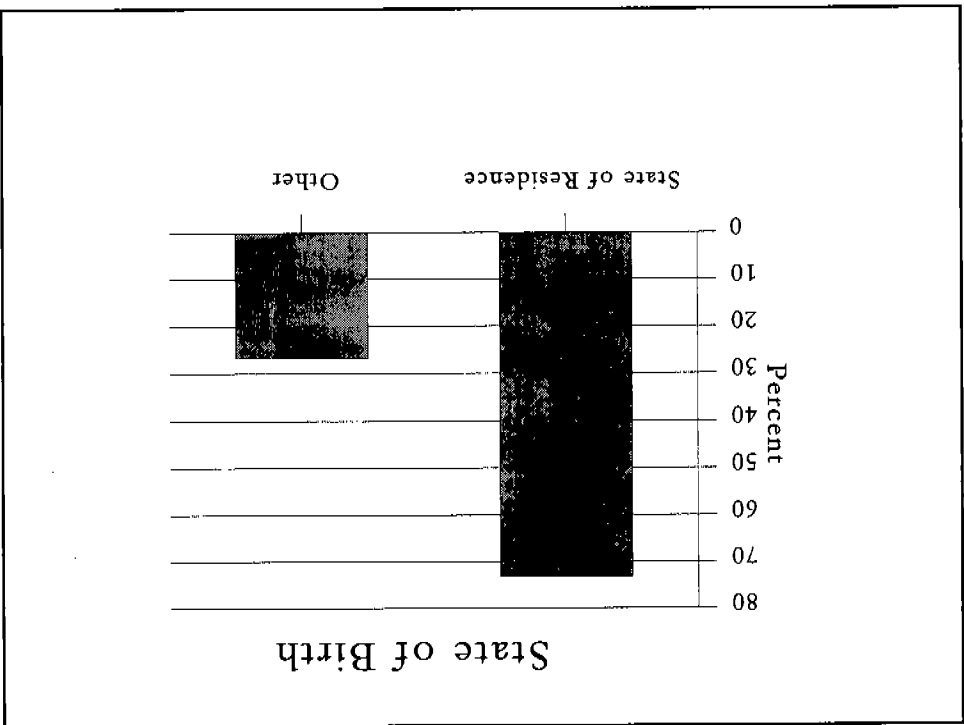


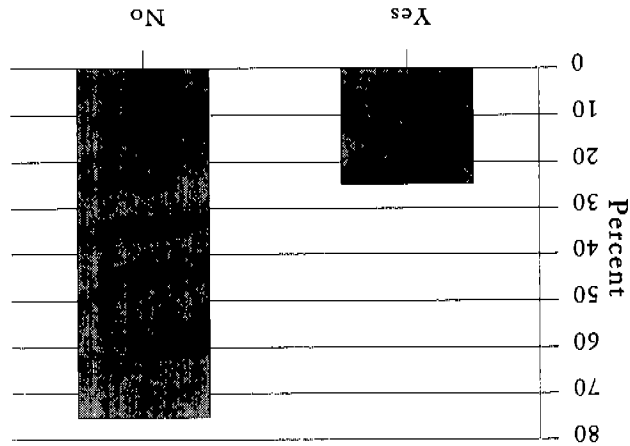
Table 1. Farm Characteristics of Sample Counties, States, Regions, and Total U.S.						
	Crop	Cereal	Fruit &	Livestock	Average	Tenancy
	Value	Value	Veg. Value	Value	Acre	Rate
	per acre	per acre	per acre	per farm	per farm	
Total U.S.	\$15.44	\$7.26	\$8.38	\$1,242.70	148.24	38.07
New England	16.20	1.22	9.60	1,042.15	108.52	7.41
Middle Atlantic	22.54	7.16	14.50	1,383.98	95.43	20.74
E. N. Central	23.94	15.26	12.92	1,402.77	108.54	28.06
Illinois	27.04	21.42	13.96	1,881.07	134.81	42.67
Michigan	21.22	8.98	10.73	1,039.76	96.89	17.68
Indiana	21.22	8.98	10.73	1,039.76	96.89	17.68
Illinois	37.71	34.38	15.43	2,558.05	165.79	57.86
California	37.71	34.38	15.43	2,558.05	165.79	57.86
Washington	18.58	10.21	10.67	1,239.58	116.16	22.09
W. N. Central	14.31	10.44	9.18	2,150.51	234.26	34.19
South Atlantic	21.31	4.95	6.62	558.27	84.37	46.77
E. S. Central	16.56	5.71	7.34	551.26	75.03	49.67
Tennessee	16.31	7.42	8.89	686.47	77.19	41.10
Wisconsin	14.01	8.63	12.12	1,024.21	84.50	29.34
W. S. Central	12.50	4.47	5.88	1,023.78	174.13	52.88
Mountain	4.80	1.47	6.21	2,987.33	480.68	15.35
Montana	2.00	0.64	4.40	2,673.33	608.05	11.28
Carbon	7.01	1.93	8.02	2,647.04	329.92	14.56
New Mexico	1.66	0.75	3.84	3,137.19	817.91	12.25
Santa Fe	1.32	0.35	2.63	1,533.55	583.47	4.69
Pacific	16.90	4.76	7.52	1,730.57	239.80	20.07







Related to Landlord



Owners Reporting Experience As

Owner, Tenant, and Wage Worker	Owner and Tenant	Wage Worker only	Owner only
41.6	14.1	23.7	41.6
38.8	17.5	20.4	38.8
31.4	11.7	27.5	31.4
22.0	10.0	31.9	22.0
43.5	21.5	14.4	43.5
30.7	21.9	18.3	30.7
44.6	5.9	33.1	44.6
42.5	5.8	34.9	42.5
42.7	4.6	37.6	42.7
41.3	22.3	16.8	41.3
35.6	33.1	11.3	35.6
46.4	11.9	11.2	46.4
57.2	13.5	17.1	57.2
66.4	14.6	10.9	66.4

Notes: * Published Census Totals * Five County Sample.
 Source: U.S. Census Bureau, *Fourteenth Census of the U.S., 1920, Volume V, Agriculture*, Table 28 (Washington, D.C., 1922).

Table 2. Owners Reporting Experience as Wage Worker, Tenant, and Owner, 1920.

Table 3. Tenants Reporting Experience as Wage Worker, Tenant, and Owner, 1920.

Notes: "Published Census Totals" Five County Sample.
Source: U.S. Census Bureau, *Fourteenth Census of the U.S., 1920, Volume V, Agriculture*, Table 28 (Washington, D.C., 1922).

Region, State, and County	N	Tenant, Wage Worker and Owner	Tenant and Wage Worker	Owner only
Total U.S.	2,203,769	4.8	42.3	6.3
E.N. Central	273,613	5.2	50.3	4.3
Illinois	93,335	4.1	54.6	3.3
McLean Co.	2,272	2.5	61.1	2.3
Michigan	29,652	9.6	46.7	6.4
Jackson Co.	463	7.6	55.5	4.1
E.S. Central	473,420	3.1	36.5	5.9
Tennessee	96,300	3.5	33.5	7.2
Wilson Co.	1,021	3.5	31.8	8.0
Mountain	30,749	17.6	38.2	14.3
Montana	5,403	22.4	39.6	14.4
Carbon Co.	57	8.8	54.5	7.0
New Mexico	2,498	15.2	27.6	19.6
Santa Fe Co.	23	39.1	4.4	26.1

Notes: "Published Census Totals" Five County Sample. Owners reporting some time as owners, tenants, and wage workers; tenants reporting some time only as tenants and wage workers.
Source: U.S. Census Bureau, *Fourteenth Census of the U.S., 1920, Volume V, Agriculture*, Table 29 (Washington, D.C., 1922).

Status and Region, State, and County	N	Wage Worker	Tenant	Owner
Total U.S.	724,801	5.8	8.0	13.3
E.N. Central	162,338	6.1	8.1	13.4
Illinois	34,979	6.0	9.6	13.6
McLean Co.	312	6.5	11.7	14.5
Michigan	30,390	6.0	6.3	13.8
Jackson Co.	382	6.8	7.4	13.1
E.S. Central	77,692	5.2	9.1	14.2
Tennessee	22,907	5.6	9.7	14.1
Wilson Co.	265	6.8	9.9	14.7
Mountain	35,634	6.2	5.7	10.3
Montana	9,083	6.4	5.2	9.7
Carbon Co.	57	7.5	4.5	10.8
New Mexico	2,744	6.6	6.7	11.8
Santa Fe Co.	45	5.5	7.6	14.4

Table 4. Average Years Spent as Wage Worker, Tenant, and Owner for Owners in 1920.

Table 5. Average Years Spent as Wage Worker, Tenant, and Owner for Tenants in 1920.

Status and Region, State, and County	N	Years Spent As		
		Wage Worker	Tenant	Owner
Total U.S.	931,657	6.1	11.0	16.0
E.N. Central	137,501	9.3	16.0	10.4
Illinois	50,965	6.9	10.9	10.9
Michigan	13,834	6.4	7.3	8.0
Jackson Co.	257	6.6	8.0	13.5
E.S. Central	172,587	5.6	13.5	13.1
Tennessee	32,302	5.8	11.3	11.3
Wilson Co.	294	7.5	5.9	5.4
Mountain	11,743	6.4	5.9	5.4
Montana	2,142	6.7	5.4	4.8
Carbon Co.	31	6.3	4.8	6.1
New Mexico	690	7.2	6.1	6.1
Santa Fe Co.	-	-	-	-

Notes: * Published Census Totals * Five County Sample. Owners reporting some time as owners, tenants, and wage workers; tenants reporting some time only as tenants and wage workers.
Source: U.S. Census Bureau, *Fourth Census of the U.S., 1920, Volume V, Agriculture*, Table 29 (Washington, D.C., 1922).

Table 6. Average Years Spent as Wage Worker, Tenant, and Owner by Age and Status in 1920.

Status and Age	N	Years Spent As		
		Wage Worker	Tenant	Owner
Owners				
20-29	321	1.0	1.7	3.6
30-39	921	1.7	3.2	6.9
40-49	1,383	2.2	4.6	11.8
50-59	1,514	2.6	5.5	18.1
Tenants				
20-29	1,008	1.9	3.7	0.1
30-39	1,429	3.6	8.4	0.3
40-49	908	5.0	13.2	0.9
50-59	486	6.3	17.4	2.1

	(1)	(2)	(3)
	Years As Wage Worker	Years as Tenant	Years as Owner
Age	0.279	0.934	-0.620
Age ²	(11.12)**	(27.35)**	(16.41)**
White	-2.350	(21.22)**	(28.55)**
Born in State	(10.64)**	(5.10)**	(2.76)**
Owner	-1.507	-4.441	4.044
Tenant	0.999	3.788	-6.428
Constant	-1.994	-15.838	11.964
Observations	10,924	10,924	10,924
R ²	0.059	0.224	0.563
Absolute value of z statistics in parentheses			
* significant at 5%; ** significant at 1%			

Table 10. Seemingly Unrelated Regressions on Years in Each Category, All Observations Pooled, Tenants and Part-Tenants Only.

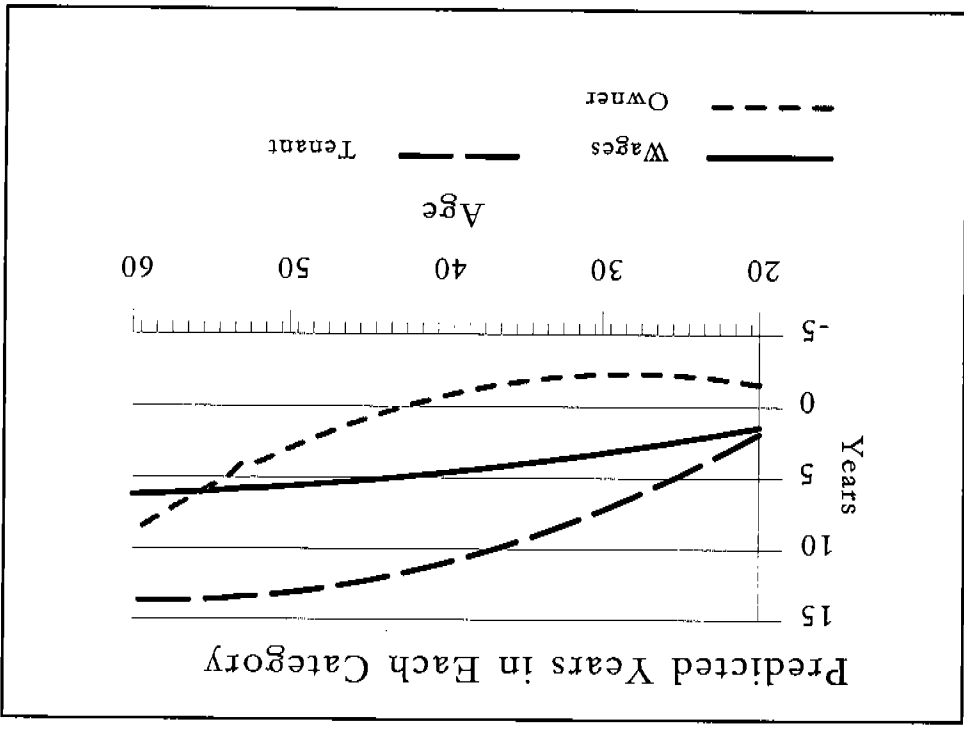
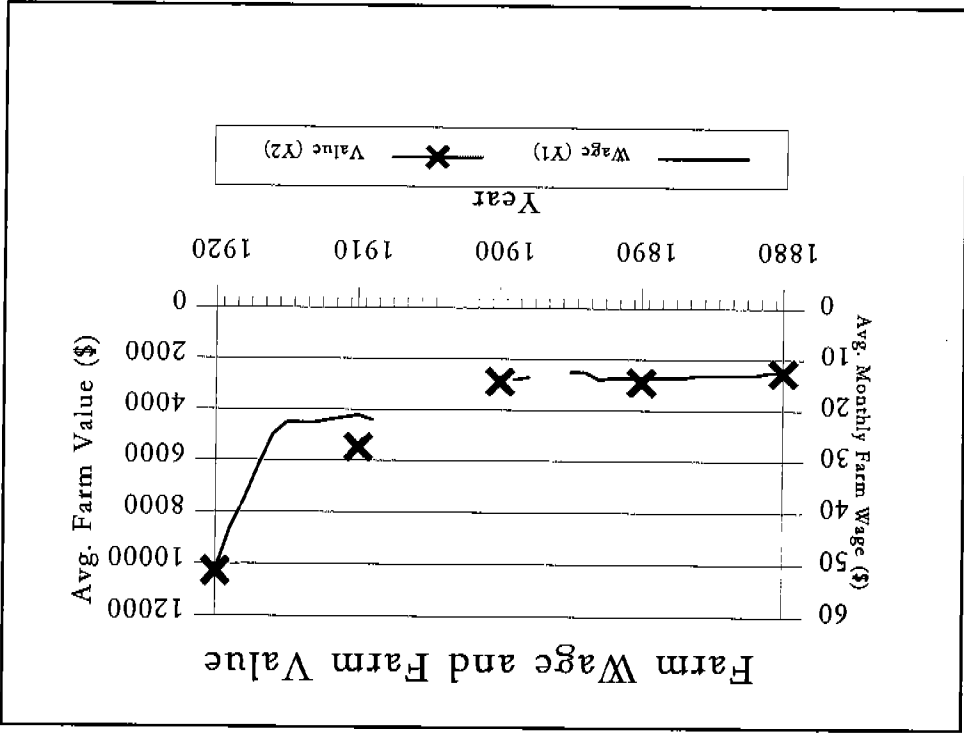
	Age As Years As Worker	Years As Tenant	Years As Owner
Age	0.223	0.814	-0.186
Age ²	(5.42)**	(15.31)**	(4.70)**
Age ³	-0.002	-0.005	0.004
White	(3.26)**	(7.40)**	(9.16)**
White	-2.485	-0.255	0.724
Born in State	(7.09)**	(0.56)	(2.14)*
Born in State	-1.040	0.530	0.203
Rehired to Owner	(5.53)**	(2.18)*	(1.12)
Rehired to Owner	-2.269	0.664	0.772
Tenant	(12.30)**	(2.79)**	(4.34)**
Tenant	0.909	3.605	-6.849
Tenant	(5.04)**	(15.46)**	(39.34)**
Jackson, MI	0.756	1.254	0.225
Jackson, MI	(1.40)	(1.79)	(0.43)
McLean, IL	0.387	4.537	-0.904
McLean, IL	(0.76)	(6.93)**	(1.85)
Santa Fe, NM	-2.780	-0.833	3.654
Santa Fe, NM	(4.20)**	(0.97)	(5.72)**
Wilson, TN	-2.054	5.698	-0.150
Wilson, TN	(3.92)**	(8.43)**	(0.30)
Constant	0.318	-21.746	7.704
Constant	(0.30)	(15.95)**	(7.57)**
Observations	5,370	5,370	5,370
R ²	0.117	0.343	0.385

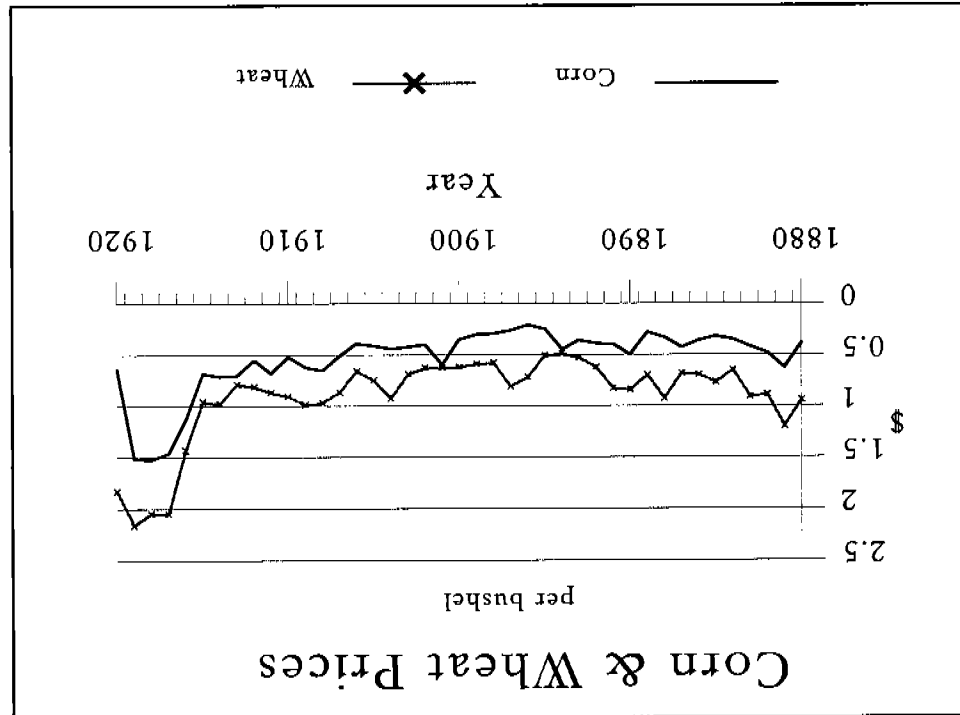
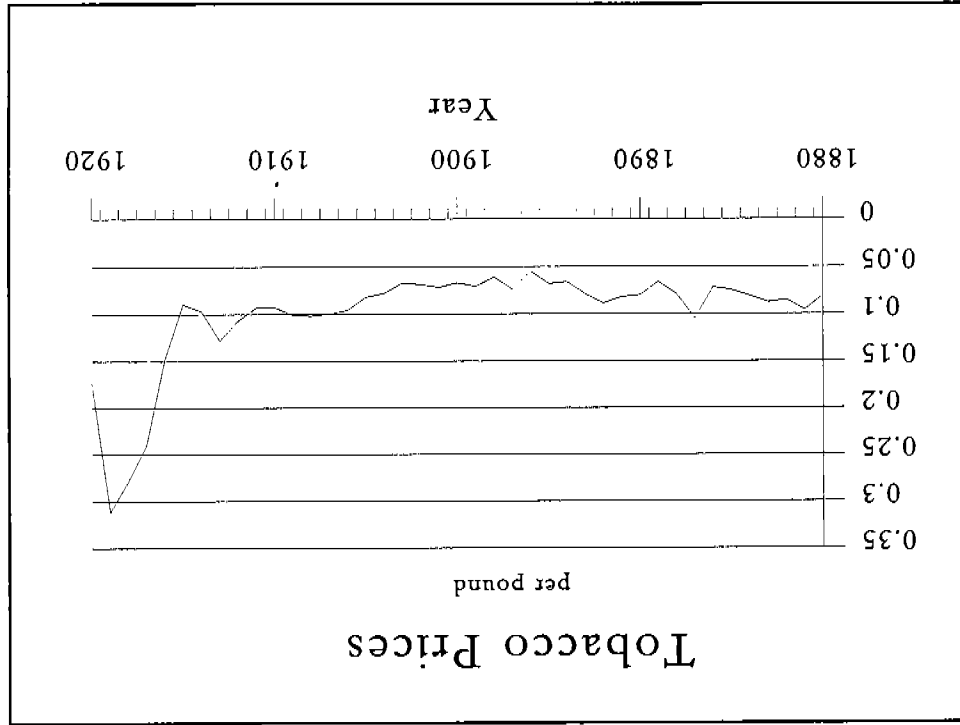
* significant at 5%; ** significant at 1%
Absolute value of z statistics in parentheses

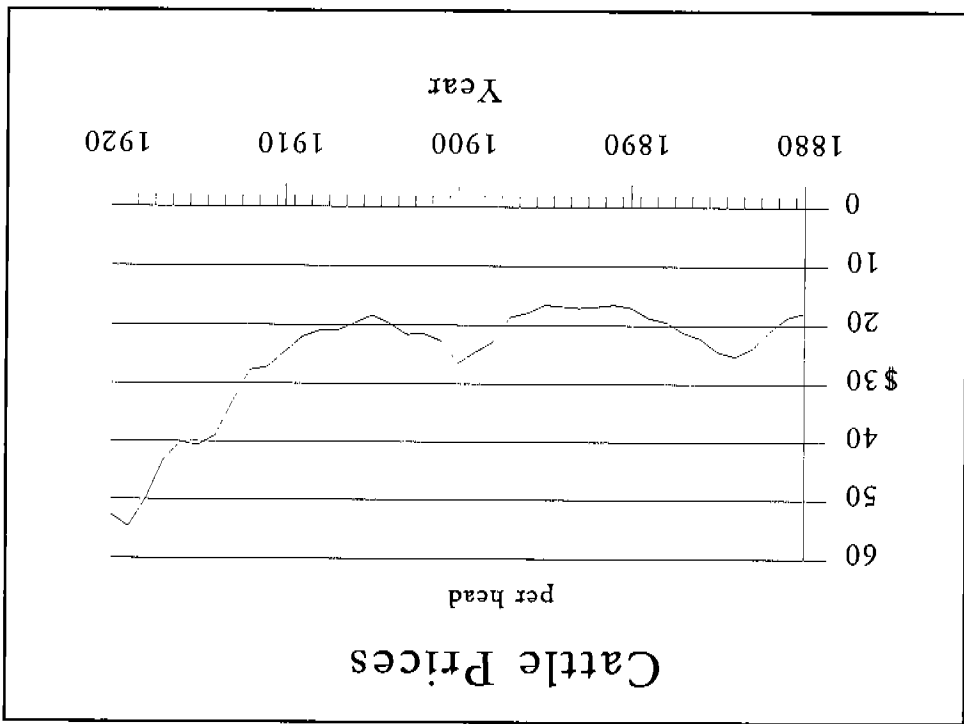
Table 9. Seemingly Unrelated Regressions on Years in Each Category, All Observations Pooled, Tenants and Part-Tenants Only.

	Age As Years As Worker	Years As Tenant	Years As Owner
Age	0.291	0.811	-0.221
Age ²	(7.00)**	(15.00)**	(5.56)**
Age ³	-0.002	-0.005	0.005
White	(4.72)**	(7.34)**	(10.01)**
White	-0.639	-1.084	0.035
Born in State	(1.94)	(2.52)*	(0.11)
Born in State	-0.432	-0.264	0.216
Rehired to Owner	(2.44)*	(1.14)	(1.27)
Rehired to Owner	-2.256	0.727	0.727
Tenant	(12.03)**	(3.17)**	(4.04)**
Tenant	0.990	4.471	-7.261
Tenant	(5.56)**	(19.27)**	(42.53)**
Constant	-3.347	-17.187	8.952
Constant	(3.63)**	(14.31)**	(10.13)**
Observations	5,370	5,370	5,370
R ²	0.085	0.308	0.371

* significant at 5%; ** significant at 1%
Absolute value of z statistics in parentheses







Concluding Remarks

- Three tracks: 1) inherit the farm; 2) climb the ladder to owner; and 3) climb to tenant
- Considerable mobility in all counties: climb to ownership 78% (McLean) to 34% in (Santa Fe)
- Age tenure profile in all counties
- Caution: peak of boom times; farm failures climbed in 1920s and 1930s.