



THE PRINCIPAL FACTORS ASSOCIATED WITH FARM TENANCY

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(Abstract)

The method employed in this problem is multiple correlation and the results are stated in terms of separate determination. The data employed are from the *United States Decennial Census* of 1930 and of 1910. They have all of the limitations and defects of such data. The units of information are counties. Smaller subdivisions would be better.

The twelve regions chosen for study, the number of counties in each area and the results in terms of separate determinations are given in Table I.

The range, mean, and median values for each variable may be readily seen from the table. The variables rank in degree of association with tenancy as follows: (1) simple extensive crops including corn, cotton, wheat, oats and hay; (2) submerged populations, such as negroes; (3) value of land and buildings (median value); (4) change in value of land and buildings (median value); (5) size of farms; (6) intensive agriculture such as fruits and vegetables.

The total determination ranges from .46 to .99 for the twelve regions, with eleven of the twelve at .68 or higher, seven of the areas above .80, and four above .90.

Tenancy is declining in all of the Atlantic states north of Virginia. In all other states it is increasing but at a decreasing rate for the past two decades. Tenancy seems to decline with (1) an increase of intensive agriculture, (2) increased urbanization, and (3) reduction in size of farms. It increases with increases in (1) extensive agriculture, (2) submerged population, (3) size of farms, (4) value of lands and buildings, and (5) percentage of population that is rural.

TABLE I. TENANCY CORRELATION COEFFICIENTS OF d. R. AND R²

	No. Cotton Count or Tobacco	Acres of Tobacco	Acres Wheat or Hay	Acres Fruit & vegetables	Negro tenants	Value land & bldgs.	Size of farms	Change in value of land & bldgs.	R	R ²
1. Miss. River	36	.48	.....	.00	.44	.18	.25	.66	.99	.99
2. Georgia	56	.41	.....	.01	.34	.18	.27	.00	.97	.94
3. Tex. Black Land	36	.78	.....	-.01	.10	-.05	.04	.00	.90	.83
4. S. W. Cotton	36	.05	.....	.54	.05	.19	.00	.41	.95	.92
5. Tobacco	64	.14	.....	.05	.61	.02	.13	.13	.92	.84
6. Kansas Wheat	70	.....	-.15	.00	.....	.63	.41	.24	.94	.89
7. Dakota Wheat	62	.....	.16	.....	.....	.31	.07	.63	.68	.46
8. W. C. Gen. Farmg.	118	.....	.58	.02	.....	.08	.01	.01	.82	.68
9. E. C. Gen. Farmg.	109	.....	.82	.02	.....	.08	.02	.28	.96	.92
10. Dairy Section	81	.....	.46	-.02	.....	.29	.07	.07	.88	.80
11. Irrigated Area	50	.....	.52	.16	.....	.06	.04	.01	.86	.73
12. New England	65	.....	.37	-.02	.....	.20	.08	.12	.87	.76
TOTAL	181	365	855	75	164	212	139	266	1069	964
Mean	36	51	51	.07	31	18	.12	22	.98	.80
Median	41	45	45	.00	34	16	.07	12	.91	.83

d—separate determination, a percentage coefficient.