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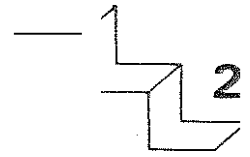
Nonwhite Migration, Welfare, and Politics; A Re-Examination

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2 August 1977

Online at <https://mpra.ub.uni-muenchen.de/51649/>
MPRA Paper No. 51649, posted 22 Nov 2013 06:18 UTC



Nonwhite migration, welfare, and politics: a re-examination

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Professor Jones-Hendrickson (hereafter, J-H) raises a very important point regarding the specification of my model. I shall first directly address the basic J-H comment and then correct my model accordingly.

1. The J-H criticism

Essentially, J-H is arguing that in the final analysis, my two-equation system is not properly identified. I have two observations to make. First, from a technical viewpoint, each equation must have at least two exogenous variables and at least one exogenous variable not found in the other equation. Clearly, equation (1) has the exogenous variables U_i and Y_i ; whereas equation (2) has the exogenous variables U_i and I_i . Thus, since I_i and Y_i are not identical, the system is in fact appropriately identified the computer *can* run the model by TSLS. Second, J-H is in a very real *theoretical* sense correct in his charge because I_i and Y_i are so highly (and positively) correlated. In other words, the results of my estimates may be biased due to the existence of co-linearity between Y_i and I_i . As a result, the hypothesis requires re-examination for my original estimates may lack dependability.

2. The re-examination

To re-examine the hypothesis that nonwhite migration and welfare benefit levels may be bi-directionally related, the following model is estimated:

$$M_i = a_0 + a_1 W_i + a_2 Y_i + a_3 E_i + \mu_1 \quad (1)$$

$$W_i = b_0 + b_1 M_i + b_2 I_i + b_3 A_i + \mu_2 \quad (2)$$

Where

a_0, b_0 constants
 μ_1, μ_2 error terms
 M_i : volume of net nonwhite migration to state i , 1960-1970
 W_i : AFDC level in state i , 1965

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- Y_i = Per capita income in state i , 1960
 E_i = Dummy variable to indicate a 'western' state
 (see Gallaway and Cebula, 1973)
 I_i = Median income in state i , 1959
 A_i = Dummy variable to indicate a 'warm weather' state
 (see Gallaway and Cebula, 1973).

This system differs markedly from my original. For one thing, the unemployment rate (which failed to be significant in the original estimate) is dropped from both equations. In addition, each equation has a *new* and *different* exogenous variable that was not present in the original model. Thus, no specification problems exist in this system.

Estimating equation (1) and then equation (2) yields (3) and (4), respectively:

$$M_i = -3.98 (10^5) + 1294.831 W_i + 111.620 Y_i + 57.129 E_i; \quad (3)$$

(+ 3.03) (+ 2.75) (+ 0.01)

$$DF = 39, \quad R^2 = .664, \quad F = 25.669$$

$$W_i = 49.653 + 0.001 M_i + 0.016 I_i - 20273 A_i; \quad (4)$$

(+ 2.97) (+ 3.15) (-2.57)

$$DF = 39, \quad R^2 = .764, \quad F = 42.120$$

where terms in parentheses are t-values.

Clearly, these results are much stronger in virtually all respects than my original estimates. The most relevant result, from this paper's viewpoint, is the very strong support for the hypothesis that welfare levels and nonwhite migration are bi-directionally related. My thanks to J-H.

References

- Gallaway, L.E. and R.J. Cebula. 'Differentials and Indeterminacy in Wage Rate Analysis: An Empirical Note.' *Industrial and Labor Relations Review* 26, April 1973, pp. 991-995.