# Voting with One's Feet: A Brief Note on the Case of Public Welfare and the American Indian

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# Voting with one's feet: A brief note on the case of public welfare and the American Indian

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## 1. Introduction

Roughly a quarter of a century ago, Charles M. Tiebout (1956: 418) hypothesized that:

> ... the consumer-voter may be viewed as picking that community which best satisfies his preference pattern for public goods ... the consumer-voter moves to that community whose local government best satisfies his set of preferences ...

The process of expressing one's preferences for publicly provided goods by relocating is referred to as 'voting with one's feet.'

The hypothesis of voting with one's feet has been empirically investigated by a number of authors, including Cebula (1978), Chao and Renas (1976), Glantz (1974), Greenwood and Anderson (1974), Pack (1973), and Sommers and Suits (1973). These studies examine the impact of various differential state and local government policies on the geographic mobility of consumer-voters; in all cases, attention is directed toward consumervoters in the United States who are categorized as 'white,' 'black,' or 'non-white' (principally black).

The purpose of this brief Note is to examine the Tiebout hypothesis in relation to a population group heretofore altogether expressly ignored in the literature: the American Indian. Hopefully, the analysis below will shed additional light upon such timely policy issues as the efficiency effects of current welfare policy and the need for welfare reform.

## 2. The model and analysis

The case of the American Indian is unique from that of other population groups in several respects. To begin with, relative to all other major population groups, Indians are very poorly endowed with human capital. Given this fact and the persistence of net adverse discrimination, American Indians are at

United States. Next, until comparatively recently, the American Indian has been principally concentrated on reservations. In the 1950s, a major move by the federal government to encourage relocation off the reservations was initiated (see Brophy and Averle, 1966; and Sorkin, 1971). Thus, the American Indian was being pushed into a labor market (a) that he was poorly prepared for and (b) that, in addition, was less than receptive to him. Given these circumstances, it is argued here that the relocation decisions of American Indians may be significantly influenced by the level and availability of public assistance. In other words, lacking labor market skills and job opportunities, the need for simple survival would make the level of available public as- sistance a significant component in the locational decisions of American Indians. Thus, the Tiebout hypothesis – in this case – would be manifested principally in a strong attraction of the Indian to high welfare areas.

To test the Tiebout hypothesis for welfare policies and Indian consumer- voters, we postulate the following model:

$$Ii = a_0 + a_1 AFDCi + a_2 Yi + a_3 \Delta Yi + a_4 Ui + a_5 Wi + a_6 DDi + \mu \quad (1)$$

where
$Ii =$ a measure of the net movement of (change in) the Indian population to (in) state $i$, 1960-1970[1]

$a_0 =$ monthly aid to families with dependent children, in state $i$, 1965, per recipient family

$Yi =$ 1960 per capita income in state $i$

$\Delta Yi =$ growth in per capita income in state $i$, 1960-1970

$Ui =$ 1970 average unemployment rate in state $i$

$Wi =$ dummy variable to indicate a 'western' state [$Wi = 1$ if a state is so classified and $Wi = 0$ otherwise][2]

$DDi =$ annual degree days in state $i$, as a measure of the extent of cold weather in the state

$\mu =$ stochastic error term[3]

If the Tiebout hypothesis is valid for the case of welfare policies and Indian consumer-voters, we would expect, *ceteris paribus*, that the Indian population would be strongly attracted to areas with higher welfare ($AFDC$) levels: $a_1 > 0$.[4]

In the interest of completeness, not only is equation (1) to be estimated empirically but so also are the following three modified versions of equation (1):

$$Ii = b_0 + b_1 AFDCi + b_2 Yi + b_3 Ui + \mu' \quad (2)$$

$$Ii = c_0 + c_1 AFDCi + c_2 Yi + c_3 \Delta Yi + \mu'' \quad (3)$$

$$Ii = d_0 + d_1 AFDCi + d_2 Yi + d_3 \Delta Yi + d_4 Ui + \mu''' \quad (4)$$

ble 1. Ordinary least-squares regression results

| riables gression | $AFDC_i$ | $Y_i$ | $\Delta Y_i$ | $U_i$ | $W_i$ | $DD_i$ | $R^2$ | F-ratio |
|---|---|---|---|---|---|---|---|---|
| coefficient (t-value) | 0.00006*** (+2.90) | +0.000003*** (+4.11) | +0.00015*** (+2.58) | −0.00021 (−0.59) | −0.00049 (−0.43) | −0.0000008 (−0.36) | .38 | 4.46** |
| coefficient (t-value) | +0.00007*** (+3.18) | +0.000003*** (+3.28) | | −0.00021 (−0.57) | | | .27 | 5.61** |
| coefficient (t-value) | +0.00006*** (+3.22) | +0.000004*** (+5.15) | +0.00014*** (+2.86) | | | | .37 | 9.17*** |
| coefficient (t-value) | +0.00006*** (+2.96) | +0.0000005*** (+4.31) | +0.00014*** (+2.84) | −0.00021 (−0.60) | | | .38 | 6.87** |

* Significant at the .01 level or beyond.
* Significant at the .05 level.
* Significant at the .10 level.

where

$b_0, c_0, d_0$ = constants

$\mu', \mu'', \mu'''$ = error terms

The ordinary least-squares estimates of regressions (1), (2), (3), and (4) are presented in Table 1 in rows (1)', (2)', (3)', and (4)', respectively. In all four sets of regression results, the coefficient for the AFDC variable has the expected positive sign; in addition, in all four cases, the AFDC coefficient is statistically significant at the .01 level or beyond. Thus, all four variants of this model find strong empirical support for the Tiebout hypothesis in terms of welfare policy and the geographic distribution of American Indians.

## 3. Conclusion

This brief Note has found that the location decisions of the American Indian are influenced by geographic AFDC differentials. In particular, the American Indian population is apparently strongly attracted to high welfare areas. This finding may be interpreted as yet further support for the Tiebout hypothesis of 'voting with one's feet,' with the Indian consumer-voter in this case 'balloting' in terms of welfare services. In addition, like the studies by Cebula (1978), Chao and Renas (1975), Glantz (1974), Greenwood and Anderson (1974), Pack (1973), and Sommers and Suits (1973), this set of results provides additional evidence that the current welfare system distorts spatial resource allocation;[5] presumably, such distortions are avoidable under a standardized welfare system.

NOTES

1. The variable $Ii$ is used to measure the relocation of the Indian population. It is computed, as follows:

$$Ii = \frac{\text{Indian Population in state } i, 1970}{\text{Total Population in state } i, 1970} - \frac{\text{Indian Population in state } i, 1960}{\text{Total Population in state } i, 1960}$$

2. Related to which states are classified as 'western', see Gallaway and Cebula (1973).

3. The data sources were the *Statistical Abstract of the United States*, various issues; Gallaway and Cebula (1973); *The Census of the United States*, 1960; and *The Census of the United States, 1970*.

4. Research by Gallaway, et al., (1967) and Greenwood and Anderson (1974), among others, has concluded that the impact of AFDC payments on the migration of the *total* population is

negligible. Hence, it is appropriate to conclude that the coefficient on the AFDC variable in our model reflects the response of Indians to different levels of AFDC payments.

5. That is, the present welfare system distorts the functioning of regional and interregional labor markets.

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