



## REGISTRATION AND VOTING

Edward R. Tufte     *Princeton University*

### THE QUESTIONS

If citizens are to express their preferences on election day in the U.S., they must register to vote some weeks or even months prior to the election. The inability or failure to do so deprives the citizens of their votes. Many other democracies have automatic registration of all voters or no registration procedures at all. What are the consequences, if any, of the more elaborate voter registration practices in the U.S.? And furthermore, since the particular rules for registration differ greatly from place to place throughout the country, what are the consequences of such differences?

Recently several students of politics sought to answer these questions by analyzing quantitative data on registration and voting. In particular, they discovered answers to questions such as "Why does the proportion of citizens registered to vote differ so much in different cities? Why are, for example, 96% of all eligible citizens registered in South Bend, Indiana, about 65% in New York City and Dallas, and only 34% in Atlanta? Why is voter

turnout on election day in the U.S. lower than in other democracies, such as England, France, Norway, and Canada?"

Many have suggested answers to these questions. For example, some have felt that the low voter turnout in the U.S. occurs because American citizens are more apathetic than their counterparts in other democracies. But when this suggestion and others are investigated more precisely and deeply with careful statistical procedures, not all of the old speculations prove to be correct. And the new answers have important consequences for increasing political participation in the U.S.

#### THE IDEAS BEHIND THE STUDY OF REGISTRATION AND VOTING

A key part of the idea of democracy is that citizens participate in the choice of their leaders. Constraints on the ability of citizens to participate in politics restrict voting to those who have the resources and energy to overcome such obstacles. In theory, citizens will generally make greater efforts to overcome limitations on their ability to participate if they feel their efforts will amount to something; that is, if a citizen feels his vote will make a difference, he may be willing to stand in line to register weeks before the election and then, on election day, walk through the rain in order to cast a ballot. This reasoning, which suggests that people assess (whether consciously or unconsciously) the costs and potential benefits of registering and voting, implies that citizens will be more likely to register and then later vote if the costs of registering to vote are low and the election is thought to be closely contested. In other words, citizens may attach more value to their votes, and therefore be more likely to vote, if they think the election is going to be close simply because they believe their votes might make a difference, other things being equal. Now it is important to note at this point that these assertions have not been proven; they are only a plausible theory. Three scholars at Princeton University—Stanley Kelley, Jr., Richard E. Ayres, and William G. Bowen—set out to test these ideas. Let us now see what they learned about registration and voting in their study.

#### THE STUDY AND THE RESULTS

Their first question was "Do rates of registration vary in different parts of the country and, if so, are the differences in registration rates important in a political sense?" In studying 104 of the nation's largest cities, they found that voter registration rates ranged from a high of 96.4% of those of voting age who were registered in South Bend, Indiana, to a low of 32.1% in Columbus, Georgia.

Table 1 shows both the registration and the voting rates for all 104 cities. The rates varied a great deal from city to city and, moreover, registration

TABLE 1. Registration and Voting Rates in 104 Cities, 1960\*

CITY	REGISTRATION RATE AS PERCENT OF VOTING AGE POPULATION	TURNOUT RATE AS PERCENT OF VOTING AGE POPULATION
South Bend, Ind.	96.4	85.2
Des Moines, Iowa	92.6	71.6
Minneapolis, Minn.	92.5	58.5
Detroit, Mich.	92.0	70.0
Seattle, Wash.	92.0	70.8
Lansing, Mich.	91.9	72.4
St. Paul, Minn.	91.2	72.1
Berkeley, Calif.	90.5	70.4
Scranton, Pa.	90.4	80.3
Spokane, Wash.	89.4	67.0
Dearborn, Mich.	89.3	81.2
Albany, N. Y.	88.4	87.2
Torrance, Calif.	87.7	76.5
Peoria, Ill.	87.4	64.9
Gary, Ind.	87.3	72.5
Tacoma, Wash.	87.3	67.8
Salt Lake City, Utah	87.0	76.6
Portland, Ore.	85.8	74.1
Duluth, Minn.	85.1	74.9
Glendale, Calif.	84.9	73.1
Memphis, Tenn.	84.7	50.1
Hammond, Ind.	84.0	71.3
Pasadena, Calif.	83.2	69.2
Grand Rapids, Mich.	83.2	72.9
Buffalo, N. Y.	83.0	69.7
New Bedford, Mass.	82.4	74.6
Tulsa, Okla.	82.4	69.4
Rockford, Ill.	82.0	75.1
Topeka, Kans.	81.9	69.3
Fort Wayne, Ind.	81.7	71.1
Waterbury, Conn.	81.4	77.4
Camden, N. J.	81.3	69.0
Pittsburgh, Pa.	81.2	68.3
Fresno, Calif.	81.1	44.6
Jersey City, N. J.	81.1	72.8
Worcester, Mass.	81.0	74.0
Youngstown, Ohio	81.0	71.6
Canton, Ohio	80.9	73.2
Oklahoma City, Okla.	80.4	62.7
Omaha, Neb.	79.8	66.8
Flint, Mich.	79.6	69.4
Lincoln, Neb.	79.4	64.5
Cincinnati, Ohio	79.4	67.9

TABLE 1. Registration and Voting Rates in 104 Cities, 1960\* (Continued)

CITY	REGISTRATION RATE AS PERCENT OF VOTING AGE POPULATION	TURNOUT RATE AS PERCENT OF VOTING AGE POPULATION
Syracuse, N. Y.	79.3	72.3
New Haven, Conn.	79.2	72.1
Kansas City, Kans.	78.9	66.4
Erie, Pa.	78.8	68.3
Philadelphia, Pa.	77.6	69.8
Sacramento, Calif.	77.3	66.4
Springfield, Mass.	77.1	67.0
Utica, N. Y.	77.1	76.1
Los Angeles, Calif.	77.0	64.2
Akron, Ohio	77.0	70.5
Toledo, Ohio	76.9	69.4
Trenton, N. J.	75.8	63.8
Elizabeth, N. J.	75.6	68.0
Santa Ana, Calif.	75.1	60.1
Rochester, N. Y.	74.9	72.2
Boston, Mass.	74.0	63.3
San Diego, Calif.	73.9	61.4
Cambridge, Mass.	73.8	65.9
Dayton, Ohio	73.6	62.5
Columbus, Ohio	72.4	63.1
Oakland, Calif.	71.9	66.2
Cleveland, Ohio	71.5	61.4
Winston-Salem, N. C.	71.2	50.5
Hartford, Conn.	70.7	34.1
Chattanooga, Tenn.	70.7	46.6
Bridgeport, Conn.	70.6	67.5
Charlotte, N. C.	69.9	54.5
St. Petersburg, Fla.	69.7	59.5
Tampa, Fla.	68.8	63.6
St. Louis, Mo.	68.5	62.0
Patterson, N. J.	68.4	55.4
Baltimore, Md.	68.1	54.0
San Francisco, Calif.	68.0	64.4
Niagara Falls, N. Y.	67.7	55.4
Allentown, Pa.	67.7	60.2
Greensboro, N. C.	66.6	52.6
Kansas City, Mo.	65.8	59.8
New York, N. Y.	65.7	58.8
Dallas, Texas	65.0	57.3
Baton Rouge, La.	64.7	47.8
Wichita, Kans.	62.2	43.0
Corpus Christi, Texas	61.8	53.9

TABLE 1. Registration and Voting Rates in 104 Cities, 1960\* (Continued)

CITY	REGISTRATION RATE AS PERCENT OF VOTING AGE POPULATION	TURNOUT RATE AS PERCENT OF VOTING AGE POPULATION
Newark, N. J.	61.4	50.4
Little Rock, Ark.	61.2	46.9
Honolulu, Hawaii	60.0	54.7
Houston, Texas	60.0	57.2
Miami, Fla.	59.2	43.7
Louisville, Ky.	59.0	32.4
Nashville, Tenn.	55.9	38.0
New Orleans, La.	55.6	45.9
Jacksonville, Fla.	54.9	46.9
Fort Worth, Texas	48.4	23.9
Austin, Texas	48.3	28.0
Richmond, Va.	46.5	31.2
Norfolk, Va.	43.6	22.4
San Antonio, Texas	42.6	31.4
Birmingham, Ala.	39.1	13.8
Portsmouth, Va.	38.0	25.7
Newport News, Va.	35.0	28.8
Atlanta, Ga.	33.8	25.6
Columbus, Ga.	32.1	24.2

\* The list consists of all the cities in the U.S. with populations greater than 100,000 in 1960, with the following exceptions: registration figures were not available from 16 cities; similarly it was impossible to get accurate information concerning registration procedures for eight other cities. For further discussion, see the original study.

rates were closely related to the turnout on election days in all the cities. The table shows the cities ordered from highest to lowest registration rate. As the table shows, the turnout figures generally followed the pattern of the registration figures quite closely, and the correlation between registration and voting was 0.88 (where 0.00 represents no linear association and 1.00 represents a perfect linear association). Note also the pattern of the *differences* between cities; the authors report "if the percentage of the population of voting age registered to vote in city A was one percent higher than in city B, then the percentage of the population of voting age actually voting in city A was, on the average, almost exactly one percent higher than in city B." This relationship held quite reliably for almost all of the 104 cities. (See Figure 1, in which the data of Table 1 are plotted.)

Plainly those factors related to low turnout in cities might also be related to low registration rates. But, in addition, does the nature of the registration procedure itself operate to limit the number of voters who register and, conse-

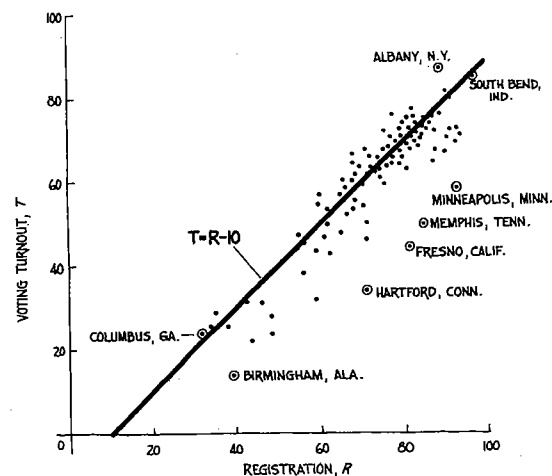


FIGURE 1

*City voting registration and election-turnout percentages*

quently, to limit turnout? The strong relationship between registration and turnout naturally suggests taking a careful look at factors that may produce the wide range of differences among cities.

The preceding discussion suggests three sets of forces determining the registration rate:

*Factors affecting the value of the vote, measured by*

Closeness of recent elections

*Factors affecting the costs of registration, measured by*

Closing date for registration

Provisions regarding literacy tests

Times and places of registration

*Socioeconomic characteristics, measured by*

Age (percent who are 20 to 34)

Race (percent white)

Education (median school years completed by persons over 25 years of age)

Each of the 104 cities was measured on each of these seven variables. Census data were used to determine the age, racial, and educational distribution of each city; the results of recent elections for President and Governor assessed the competitiveness or closeness of elections; and information on the

differing registration procedures provided data on the "costs of registration" in each city.

The statistical technique of multiple regression was used to estimate the impact of each variable on the registration rate. Simply, the multiple regression equation provides, under some assumptions, estimates of the effect of each of the variables in determining the registration rate. These estimated weights of impact, combined with each city's score on each of the seven variables, generate a predicted value for the registration rate of each of the 104 cities. This predicted registration rate can then be compared with the city's actual registration rate in order to assess the accuracy of the prediction equation. In this study, the predictions were generally quite accurate and most (80%) of the variation in the registration rate from city to city was described by, or in the statistical jargon, "explained by," the weighted combination of the seven variables. By using these statistical procedures, the authors concluded that

(1) "Extending the closing date for registration from, say, one month to one week prior to election day would tend to increase the percentage of the population registered by about 3.6 percent." Thus the *convenience* of registration for the potential voter was strongly related to the rate of registration. It appears that in many cities political parties and politicians have manipulated the convenience of registration in order to decrease or increase the size of the electorate. This is, of course, a familiar story in some southern cities where Blacks have been prevented from registering to vote by means of violence, poll taxes, literacy tests, and other cumbersome and expensive registration procedures. Politicians and parties in the North, however, have also not been immune from designing registration procedures that have effectively prevented many citizens from voting. For example, one study found an almost perfect correlation between the ease of registration in different wards in a major city and the proportion of votes for that city's long-time incumbent mayor in the different wards.

(2) The closeness or competitiveness of past elections was also strongly related to the registration rate: the closer the previous elections in the state, the more people registered to vote in the next election. Competitive elections not only offer the voter a greater range of plausible choices, but they also probably lead some voters to value their vote more than they would if elections were not close.

(3) The various socioeconomic variables entered into the regression equation indicating that they, too, were associated with the registration rate. If a relatively large proportion of young people, Blacks, and families with less than average education lived in a city, then the registration rate in that city tended to be low.

## CONCLUSIONS AND IMPLICATIONS

The results of the statistical analysis point to a number of important conclusions. The authors report that differences from city to city in participation in elections by the citizens were to a large extent related to registration rates, which, in turn, strongly reflected the local laws and practices regulating registration. Registration in some cities was made so difficult and so costly that fewer than one-third of the eligible voters ever registered to vote. In other cities, however, the ease of registration procedures, the competitiveness of elections, and certain socioeconomic factors resulted in more than 95% of the eligible citizens registering to vote. It is clear that many citizens were excluded from the polls because the costs of registering were too high for them to overcome. The elimination of restrictive and difficult registration requirements, both in the North and in the South, would increase political participation in the U.S. by reducing the costs of voting. Successful efforts to reduce the stringency of registration requirements would be far more effective in increasing voter turnout than exhortations by the mass media for citizens to go out and vote.

These suggestions, which grew out of the statistical study of registration and voting reported here, receive some further support from the experiences following the passage of the 1965 Voting Rights Act. Since the passage of the law, designed to simplify registration procedures and to reduce intimidation and other obstacles associated with registering in areas with low rates of registration, millions of citizens (both black and white) in the South now are registered and voting for the first time. In this political "experiment" the sudden reduction in the cost of registration led to sharp increases in political participation: prior to the law, less than 10% of the eligible citizens voted in some areas; now, in those same areas, 60% to 70% vote. No increases in registration and voting have been observed in areas not covered by the Voting Rights Act. Note that the theory that Americans are uniquely apathetic compared to the citizens of other democracies neither suggests remedies such as the Voting Rights Act nor explains the sudden upsurge in registration and voting in those areas covered by the Act. The experience with the new law, although certainly not representing a carefully controlled experiment, does at least provide some further independent evidence consistent with the results of the multiple regression study of registration and voting reported here.

The results also help to explain why turnout in elections in the U.S. is lower than in many other countries. Many democracies simply do not have voter registration procedures. (A few countries, in fact, even seek to increase the cost of *nonvoting* by means of compulsory voting.) Because a potential voter has to expend less time and energy to vote in democracies other than the U.S., it is not surprising that a great fraction of the citizens

of other countries votes. Roughly 80% of all potentially eligible voters register to vote in the U.S. And about 80% of those registered actually do vote on election day—resulting in an overall turnout of around 64% of all potentially eligible voters. In those countries (Canada, France, and Great Britain) with automatic registration requiring no effort on the part of the citizen, typically about 75% to 80% of all eligible citizens vote in national elections. Thus the persistently lower turnout in the U.S. is more likely due to inconvenient registration procedures than to any lack of civic virtue unique to Americans.

Finally, the findings in this statistical study of registration and voting suggest that nonvoting results from *political* factors as well as from socioeconomic factors. Kelley, Ayres, and Bowen found evidence to support the conclusion that registration rules are manipulated by the party in power in order to make it easier for that party to continue to rule. Thus, although nonvoting is related, in part, to persistent social conditions, it also often occurs because the dominant party has simply raised the inconvenience of voting to a high enough level so as to exclude many voters from the polls.

## REFERENCE

- Stanley Kelly, Jr., Richard E. Ayres, and William G. Bowen. 1967. "Registration and Voting: Putting First Things First." *American Political Science Review* 61: June, pp. 359-379. Reprinted in Edward R. Tufte, ed. 1970. *The Quantitative Analysis of Social Problems*. Reading, Mass.: Addison-Wesley. Pp. 250-283.