*Economic Adversity and Voter Turnout**

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Does economic adversity affect whether people vote? Data from the November 1974 Current Population Survey are used to estimate the effect that unemployment, poverty, and a decline in financial well-being have on voter turnout. Each economic problem suppresses participation. These individual level findings are corroborated with aggregate time-series data from presidential and midterm elections since 1896. When a person suffers economic adversity his scarce resources are spent holding body and soul together, not on remote concerns like politics. Economic problems both increase the opportunity costs of political participation and reduce a person's capacity to attend to politics.

For nearly a decade the economy has been the most salient issue in American politics, and economic concerns—jobs, the cost of living, and an adequate income—have been the most pressing personal problems Americans have faced. Although the social, economic, and electoral consequences of fluctuations in the economy have been widely examined, no consensus has been reached on the impact of economic adversity on political participation. The economy clearly affects *how* a person votes, but does it affect *whether* he votes?

Competing Claims

Economic Adversity Increases Voter Turnout ("Mobilization")

One point of view is that economic duress increases political participation. The argument here is that people under economic strain blame the government for their situation and vote, organize, lobby, protest, and so on to redress their grievances (Schlozman and Verba, 1979, pp. 12–19). Lipset puts it this way: "Groups subject to economic pressures with which individuals cannot cope, such as inflation, depression, monopolistic exploitation, or structural changes in the economy, might also be expected to turn to government action as a solution and to show a high voting average" (1960, p. 192). There is also evidence that the motivation

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to politically punish is greater than the motivation to politically reward (Kernell, 1977). If this "negative voting" theory holds, it is reasonable to expect that "the punishers"—those who experience economic duress—would be more likely to vote than people without economic problems.

Economic Adversity Decreases Voter Participation ("Withdrawal")

A second perspective makes the opposite claim: people with financial difficulties are less likely to vote. The reason is that economic adversity is stressful: it causes a preoccupation with personal economic well-being, and as a result, the citizen withdraws from such external matters as politics. Economic duress reduces a person's *capacity* to participate in politics because the poor and unemployed are financially strained, despite income security programs (Kosa, 1969; Fried, 1969). The poor are more likely to be preoccupied with personal economic concerns than the rest of the population (Brody and Sniderman, 1977, p. 344), and the unemployed often must cut back financially, dip into their savings, borrow money from family and friends, apply for welfare and food stamps, and move into cheaper housing (Wilcock and Franke, 1963, pp. 69–81; Stein, 1964, p. 144; Schlozman and Verba, 1979, p. 88; Maurer, 1980).

Thus, when a person experiences economic adversity his scarce resources are spent on holding body and soul together—surviving—not on remote concerns like politics. "Citizens whose chief worry is making ends meet, holding onto their job, or finding one, may well find any interest they might have in the broad affairs of politics deflected to coping with finding a way to deal *now*, or as soon as possible, with the most immediate and pressing of 'bread-and-butter' problems" (Brody and Sniderman, 1977, p. 346). In 1972, among citizens who said they usually voted, those with personal economic problems voted significantly less than those with other types of problems (ibid., 1977, p. 350).[1] The poor and unemployed also were less likely to vote in that election (Wolfinger and Rosenstone, 1980, pp. 25–6; 29). Similar effects of unemployment have been found for elections in 1960, 1964, 1966, and 1970 (Kinder, forthcoming).

Economic Adversity Is Not Related to Voter Turnout ("No Effect")

An assumption of the mobilization argument is that citizens who experience economic duress blame the government for their hardship and believe that changes in government policy or changes in who holds office would improve their own personal economic situation. But this link between personal well-being and political orientation may be weak, or even

[1] Their analysis is based on a "two-step" regression procedure that is likely to produce biased and inconsistent estimates (Achen, 1980b). However, the bias is small, as Westlye (1978) demonstrates in his reanalysis of their data.

nonexistent. For example, Kinder and Kiewiet (1979, 1981) show that *personal* economic experiences are not politically important in either presidential or congressional elections. Similarly, unemployment does not affect (1) the perception of equality of opportunity; (2) class consciousness; or (3) support for policies that would significantly change the government's power over the economy (Schlozman and Verba, 1979, ch. 6).

One reason why personal economic conditions may be unrelated to political preferences and behavior is that most people do not seek a political solution to their predicament; rather, they hold themselves personally responsible (Sniderman and Brody, 1977; Schlozman and Verba, 1979, p. 199). Or, as Kinder and Kiewiet conclude, "Economic discontents and political judgments inhabit separate mental domains" (1979, p. 523).

An alternative explanation may be that unemployment, poverty, and other economic problems simply do not produce much personal strain (Garraty, 1978, p. 251). As one journalist puts it, "Unemployment just doesn't hurt as much as it used to" (Donnelly, 1978, p. 1785). Most people are out of work for a relatively short period of time (half for five weeks or less); unemployment compensation and supplemental unemployment benefits are available on a widespread basis; and three out of five families benefit from the earnings of more than one worker, so that the strain is cushioned (*Manpower Report of the President*, 1975, p. 253). Similarly, food stamps, Medicaid, Aid to Families with Dependent Children, public housing, and other government programs may have reduced the pain of poverty and other economic problems to the point that they no longer produce enough sting to generate a political effect.

In short, if people with economic problems either do not experience personal duress or do not draw a connection between their situation and politics, then economic adversity will not affect the likelihood of voting.

Several studies support the "no effect" claim. In presidential elections Lane finds that "electoral participation over the years is not related to increase or decline in business activity" (1959, p. 330). In congressional elections between 1896 and 1970, changes in real compensation and changes in unemployment have a small and insignificant effect on aggregate levels of voter participation, although inflation does have a small negative relationship with turnout (Arcelus and Meltzer, 1975, pp. 1237–38). But these aggregate analyses do not partial out the effect of noneconomic trends caused by changes in the legal requirements governing voter registration or changes in the demographic composition of the electorate, so the estimates are unlikely to be unbiased.

Analysis of survey data has produced similar findings. Looking at those who were worse off financially, Fiorina concludes that "there is no discernible relationship between economic conditions and voting turnout" (1978, p. 439). (The only control variable in Fiorina's model is party

identification. He does not hold constant age, income, education, occupation or sex—all correlated both with turnout and changes in financial well-being.)[2] The same conclusion also has been reached for unemployment: "Any difference between the employed and the unemployed in their amount of political activity is a function of the social characteristics of the unemployed rather than a result of the experience of unemployment" (Schlozman and Verba, 1979, pp. 245–46). This finding is reported for both voter turnout in November 1972 and nonelectoral participation in April 1976. However, it should be noted that in their analysis of turnout Schlozman and Verba do not have an accurate measure of whether the respondent was unemployed on election day;[3] in their analysis of nonelectoral participation they do not have a valid measure of the respondent's rate of political participation either during the period he was employed or during the period he was out of work.[4]

[2] Fiorina has indicated, by personal communication, that this finding does not change when these demographic variables are held constant.

[3] Schlozman and Verba erroneously assume that "because the study was conducted very shortly after the election [they] can be reasonably sure of the respondents' employment status at the time of the election" (1979, p. 249). In 1974, for example, 70 percent of the Census Bureau interviews were conducted two weeks after the election, and the remaining 30 percent in the third week, *but* a quarter of the unemployed were out of work for two weeks or less and over a third for three weeks or less. This means that a large proportion of the people Schlozman and Verba count as unemployed were actually working on election day. Similarly, some people who were working when interviewed by the Census Bureau were actually unemployed on election day.

This is corrected in the present study by coding respondents as employed if they were out of work at the time of the interview but held a job on election day. (This is learned by comparing the date of the interview to the length of time the person was unemployed.) Unfortunately, people who were employed at the time of the interview but out of work on election day still cannot be identified.

A second problem is that Schlozman and Verba's conclusion is based on analysis only of people who were registered to vote. This means that only those with the resources to bear the costs of registration are skimmed off into their subsample. Analysis of only this elite population does not produce an unbiased and consistent estimate of the effect of unemployment on turnout (Heckman, 1976; Achen, 1980a). When they analyze the entire sample they find that unemployment decreases turnout.

[4] This analysis is based on a participation scale constructed from responses to the following three items on their April 1976 *telephone* survey:

> Could you tell me if you've ever done any of the following: Have you *ever* contributed money or done work for a candidate in a political campaign? (If yes) Have you done that in one election campaign or more than one?
>
> Have you *ever* contacted or written a letter to a public official, somebody like a Congressman or Senator or a state or local official? (If yes) Was that once or more than once?
>
> Have you *ever* picketed or taken part in a demonstration on some political issue? (If yes) Was that once or more than once? (Schlozman and Verba, 1979, p. 381, emphasis added.)

Mobilization, withdrawal, and no effect are each plausible claims, but the conflicting and weak empirical findings make it difficult to choose one over the others. I will examine both survey data from the 1974 recession and aggregate time-series data from presidential and congressional elections since 1896 to help settle this issue.

Turnout in the 1974 Recession

In 1974 the United States was in the midst of its worse economic downturn since the end of the Second World War. Real GNP declined 1.4 percent, and real personal disposable income per capita decreased 2.2 percent. The cost of living rose 11.0 percent—it was the first year of double digit inflation in a generation (*Economic Report of the President*, 1981).

For two out of three Americans the economy was the most salient *personal* problem they confronted (Center for Political Studies, 1975). It was also the most salient political issue in the country. The Vietnam War had wound down; the December gas lines had disappeared; only 11 percent of the population still viewed Watergate and government performance as the most salient political problem. By election day 1974, four out of five Americans identified the economy as the nation's most important problem (Gallup, 1974, p. 17). It was the predominant issue in that year's elections.

Measures of Economic Adversity

Worse Off Financially. In 1974, 41 percent of the population felt worse off financially than in 1973.[5] This effect of the recession did not fall equally on all citizens. Poor people—those with a 1973 family income of less than $6,000—were about one and one-half times more likely than those making over $25,000 to feel worse off financially. People aged 65 or older were least likely to report that they were worse off.[6] In addition, students, people who did not live with a spouse, and the unemployed, were all more likely to feel worse off.

As Schlozman and Verba admit (p. 244), "Some unemployed respondents, in reporting on past activities are discussing acts undertaken while employed; conversely, at least some of the working respondents are probably reporting on activities performed while out of work."

[5] The question asked in the Center for Political Studies 1974 National Election Study is: "Would you say that you (and your family) are better off or worse off financially than you were a year ago?"

[6] At first this might seem surprising since most people in this age group are pensioners and thus presumably particularly vulnerable to inflation. This finding probably reflects the fact that not only did Social Security increases keep pace with inflation in 1974 but the two increases that occurred that year were the first increases since September 1972 (Tufte, 1978, ch. 2). Thus, these perceptions were probably accurate ones.

Unemployed. In November 1974, 5.6 percent of the labor force were unemployed.[7] The burden of unemployment did not fall equally on all segments of the population. Among those who had not gone beyond high school, over 6 percent were without jobs compared to less than 4 percent of those who attended college. Unemployment was virtually nonexistent among farmers—a mere .2 percent were out of work. Only about 2 percent of professionals, managers, and administrators were jobless compared to rates of two to three times that for other occupations. Unemployment was also considerably higher among women, blacks, Chicanos, and Puerto Ricans. Over 11 percent of 18–24-year-olds were out of work (U.S. Bureau of the Census, November 1974 Current Population Survey, my analysis).

Most of the unemployed in November 1974 were out of work for a relatively short period of time: 51 percent had been without a job for less than 5 weeks, and 33 percent for 5 to 14 weeks; only 16 percent were jobless for more than 14 weeks. But the correlates of long-term unemployment are quite different from the pattern described above. Although unemployment rates are lowest among the well educated, professionals, administrators, and those over age 36, these groups are unemployed for the longest period of time. For example, 25 percent of the unemployed professionals were without work for more than 14 weeks compared to 14 percent of the unskilled workers.

Poverty. Rather than decide *a priori* where the poverty line should be drawn, one can simply examine the effect of income on voter participation and pay particular attention to the turnout of the lowest income groups. The median 1973 household income (reported in November 1974) was $10,500.[8] Four percent of the population had incomes of less than $2,000; 14 percent had incomes of less than $4,000 a year. (A $4,000 income in 1973 is equivalent to about $7,100 in January 1981 dollars.) Compared to the rest of the population, blacks, Chicanos, the young, the elderly, blue collar workers, and those with little formal schooling are most likely to be poor.

Income is sometimes regarded as a measure of socioeconomic status

[7] "Unemployed persons are those civilians who, during the survey week, had no employment but were available for work and (1) had engaged in any specific jobseeking activity within the past 4 weeks, such as registering at a public or private employment office, placing or answering advertisements, writing letters of application, or being on a union or professional register; (2) were waiting to be called back to a job from which they had been laid off; or (3) were waiting to report to a new wage or salary job within 30 days" (U.S. Bureau of the Census, 1976, p. 88).

[8] The median household income is the median income for families and unrelated individuals who are heads of households.

(SES). But when the components of SES are analyzed separately, one finds not only that income has a very different effect on turnout than education or occupation but also that social status per se does not affect the decision to vote (Wolfinger and Rosenstone, 1980, ch. 2). Accordingly, the marginal effect of income on turnout will be estimated; education and occupation will be control variables.

Estimating the Effect of Economic Adversity

Economic adversity is correlated with age, sex, marital status, race, ethnicity, education, and occupation—variables that also affect whether a person will go to the polls. Therefore, to isolate the effect of personal economic conditions on turnout, these demographic variables must be held constant. Because the dependent variable, turnout, is dichotomous, the data do not meet the usual regression assumptions, so I use probit analysis to estimate the partial effect of each economic adversity. (For a discussion of probit analysis, see Hanushek and Jackson, 1977.)

Data gathered by the U.S. Bureau of the Census in its November 1974 Current Population Survey are used to make these estimates. Several characteristics of this data file make it particularly well suited for this analysis. These are the same data used for the Bureau of Labor Statistics monthly unemployment estimates. A large subsample of respondents—8,980—are analyzed here.[9] Many subpopulations that are represented by only a handful of respondents in the usual national survey are in abundance in this analysis. For example, in this Census subsample there are 751 unemployed people and 1,220 people with family incomes of less than $4,000. In addition, because the Census Bureau interviews people who live in rooming houses, hotels, and motels, and completes 94 percent of its interviews, the young, the less educated, the poor, and the transient—groups more likely to suffer economic adversity—are more fairly represented in this sample than in most national surveys. Taken together, these properties of the Census Bureau survey mean that the sampling variability is very small and the resulting population estimates are unusually precise, especially for people under economic duress. (For a

[9] Because it was very expensive to use the full sample of 89,008 respondents, a subsample was used for the probit analysis. Ten percent of the respondents were randomly selected. In addition, government employees, Puerto Ricans, Chicanos, and people unemployed more than five weeks were oversampled to further increase the efficiency of their estimated turnout. Noncitizens and respondents from the District of Columbia were deleted from the subsample. Since their franchise is limited and an inordinate number of District residents maintain legal voting residences elsewhere, deleting them avoids unnecessary complications. The resulting subsample of 8,980 respondents was used for the probit analysis. The estimates are not biased by using this subsample instead of the full sample. The only statistical "cost" is a slight increase in the standard error of each estimate.

fuller discussion of the Census sample and a comparison with other data sets, see Wolfinger and Rosenstone, 1980, Appendix A.)

The probit estimates are reported in Table 1. The measures of economic adversity are whether one is worse off financially,[10] whether one is unemployed and for how many weeks, and household income. The other variables in the equation are entered as control variables.[11] The coding procedures and the impact of the control variables on turnout are discussed in Wolfinger and Rosenstone (1980).

The Effect of Economic Adversity on Turnout in 1974

If the mobilization claim is correct, the unemployed, the poor, and those worse off financially will all be more likely to participate. If the withdrawal argument holds, these groups will be less likely to vote. And if these groups vote at the same rate as the rest of the population or if

[10] The worse off financially question was asked in the Center for Political Studies 1974 National Election Study but not in the Census Bureau's November 1974 Current Population Survey. To construct this variable for the census respondents, a probit equation for being worse off financially was first estimated on the Center for Political Studies respondents. The right-hand-side variables were age, sex, income, whether the respondent was the head of household, a woman head of household, a student, unemployed, a manager, or administrator. In addition, the unemployment rate and change in real personal income per capita in the respondent's community were predictors in this equation. Three of these exogenous variables do not appear in the turnout equation (Table 1). The coefficients from this equation were used to generate for respondents in the November 1974 Current Population Survey their estimated probability of being worse off financially.

Following Maddala and Lee (1976), the "normit" version of the estimated worse off financially variable was used in the turnout equation, and the scale of the resulting coefficients and standard errors was rescaled. (The reported standard errors may still be biased, but Maddala and Lee do not propose a correction.) I appreciate Christopher Achen's suggestions on this point. The probit coefficients in the turnout equation are consistent. Moreover, assuming the three variables that appear only in the worse off equation are uncorrelated in the limit with the other causes of turnout and with measurement error in the worse off variable, this two-stage procedure also has purged the worse off financially variable of its measurement error. Thus its coefficient in the turnout equation is corrected for attenuation. See Johnston (1972, pp. 283–84).

[11] Several other variables were deleted from the probit equation because they did not affect turnout: race, urban or rural residence, and dummy variables for additional occupation categories. Variables measuring unemployment, inflation, and change in real personal income in one's community did not have a significant effect on turnout and also were deleted from the equation. Thus, although these contextual variables affect whether an individual is likely to be worse off financially (see note 10, above), they do not have a direct effect on the likelihood that an individual will vote. Alternative functional forms of income were tested; the linear term best fit the data. However, the categories of the income variable provided by the Census Bureau resemble a log scale and are not linear increments of income. Thus, although the functional form actually used in the probit analysis is linear, it is linear for the coding categories, which themselves are closer to the log of income.

TABLE 1

Estimated Effects of Economic Adversities on 1974 Turnout
(controlling for demographic and contextual variables)

Variable	Probit Estimate	Standard Error
(Constant)	-2.019	.213
Economic Adversities		
Unemployed	-.193	.107
Weeks Unemployed	.011	.005
Weeks Unemployed Squared /100	-.013	.009
Worse Off Financially	-.086	.062
Income	.023	.011
Control Variables		
Education Squared	.020	.002
Occupation: Farmers	.373	.150
Sales and Clerical	.157	.041
Farm Workers	-.195	.162
Unable to Work	-.472	.121
Chicanos	.100	.079
Puerto Ricans	-.216	.096
Age	.038	.011
Age Squared /100	-.020	.001
Age Squared for Women /100	-.004	.001
Age × Unmarried /100	-.353	.081
South	-.344	.037
Students	.142	.089
Federal Employees and Teachers	.143	.058
State Government Employees	.386	.098
Local Government Employees	.522	.078
Length of Residence	.053	.032
Length of Residence Squared	-.010	.002
Length of Residence × Age /100	.384	.121
Length of Residence × Age Squared /100	-.003	.001
Length of Residence × Education	.006	.002
Lives in Trailer	-.280	.080
Registration Closing Date	-.008	.002
Monday through Friday Registration Office Hours	-.106	.049

Source: U.S. Bureau of the Census, November 1974 Current Population Survey.
Note: $N = 8{,}980$.
-2.0 times log likelihood ratio = 2237.3.
Degrees of freedom = 29 ($p < .0001$).
Percent of cases correctly predicted = 70.5.
Probability that effect of worse off financially is negative > .90.
Probability that effect of unemployment is negative > .99.
Probability that effect of income is positive > .99.

some groups vote more and others less, then economic adversity does not affect voter participation.

Worse off Financially. People who were worse off financially in 1974 than in 1973 were about 10 percent less likely to vote than the rest of the population.[12] This implies that for every 10 percent of the population that was worse off financially, voter turnout was down about 1 percentage point. This reduction in turnout was broad in scope: citizens of all ages, incomes, occupations, and educations were about equally affected by this economic problem.

Unemployed. Unemployment further reduces turnout by about 2 percent. As shown in Figure 1, the effect is greatest among those who most recently lost their jobs: those without work for less than three weeks are about 4 percent less likely to go to the polls. The effect of unemployment gradually decreases until the sixteenth jobless week, when being unemployed no longer decreases the likelihood of voting.

That there is a curvilinear relationship between the duration of unemployment and voter participation makes sense when one considers the unemployment experience. Nearly half the unemployed were fired (*Manpower Report of the President*, 1975). Nearly three out of five are out of work for the first time in ten or more years (Schlozman and Verba, 1979, p. 44). For most this is an extremely stressful experience (Holmes and Rahe, 1967, p. 216) that has severe social, psychological, and financial repercussions. One woman, fired from the job she held for fifteen years, described her feelings this way:

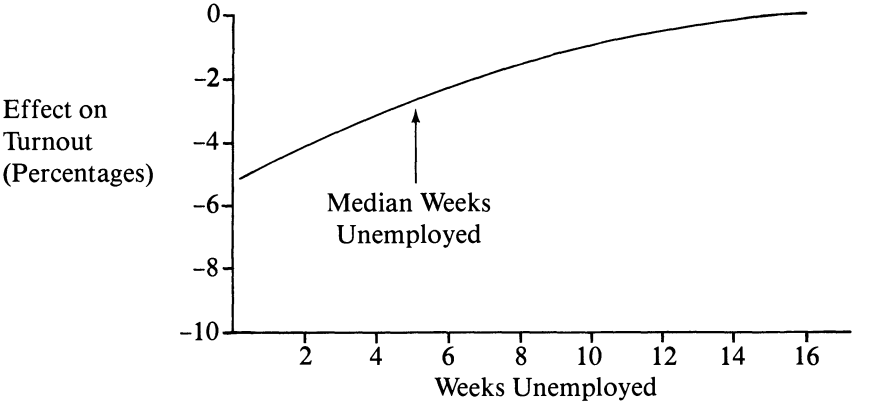
> It was the worst blow I ever had. . . . I've been through a lot of emotional upheaval in my life and I've never been through anything like getting fired. It doesn't simply take

[12] One repercussion of using instrumental variables with survey data is that the standard error of the coefficient for the endogenous right-hand-side variable is usually quite large, as it is for worse off financially. Although a more efficient estimate would be desirable, it is clear that this coefficient is different from zero. The center of the distribution for the estimate is substantively a large number, as reported. In addition, there are approximately 90 chances out of 100 that being worse off reduces turnout, and 75 chances out of 100 that it reduces turnout by more than 5 percent.

The estimates reported in this section are the aggregate *marginal* effects of each variable on turnout. They are computed as follows: (1) For each respondent in the subsample the probit equation (in Table 1) is used to compute his predicted probability of voting. (2) Step 1 is repeated except it is now assumed that each respondent does not suffer from the economic adversity being examined (worse off financially in this case). (3) These two probabilities are subtracted. The difference is the effect of not experiencing the economic adversity compared to one's observed financial situation. (4) These individual effects are aggregated across cases in the subsample and weighted by the inverse of the subsampling proportion and the Census Bureau case weight. For those who suffer from the economic adversity, this is the estimate of its effects on their probability of voting.

FIGURE 1

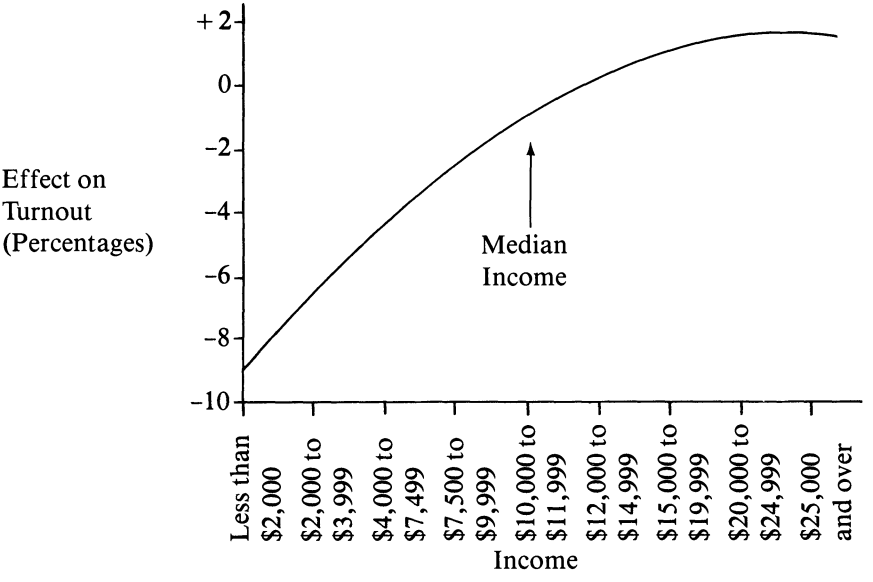
The Effect of Unemployment on Voter Turnout in the 1974 General Election



Source: Probit analysis of U.S. Bureau of the Census, November 1974 Current Population Survey.

FIGURE 2

The Effect of Poverty on Voter Turnout in the 1974 General Election



Source: Probit analysis of U.S. Bureau of the Census, November 1974 Current Population Survey.

> away your self-confidence. It destroys you. Utterly . . . The feelings were so elemental, and so strong, just overpowering. Betrayal. Depression. Shock. (Maurer 1980, pp. 19–20)

During this initial period one must not only adjust to joblessness, one also must file for unemployment benefits. This usually means several trips to a county office. And because half the unemployed are out of work for less than five weeks, for most this initial period also is spent hunting for a new job. Thus, the preoccupation of the newly unemployed with personal problems, the cumbersome process of filing for insurance, and searching for a new job are likely to drive out thoughts about politics.

By the third jobless week the eligible start to receive their unemployment benefits and the pace of the job search slows. Adjustment to unemployment begins and its displacement of other concerns, such as politics, declines.[13] "You do eventually become accustomed to being unemployed, in the way you might accept a bad limp," recounts one unemployed person. "And you gradually quit beating yourself. . . . You recover some of [your] confidence" (Halvorsen, 1980).

In light of the sizable effect that being worse off financially has on turnout, the effect of unemployment is perhaps smaller than one might expect. One should keep in mind that this is the estimated marginal effect of unemployment controlling for the other variables in the equation. In other words, this is the estimated effect of unemployment *over and above* the effect of being worse off financially. In addition, because unemployment causes some people to move into cheaper housing, and a change of residence itself reduces turnout, part of the total impact of unemployment is through the effect of mobility.[14]

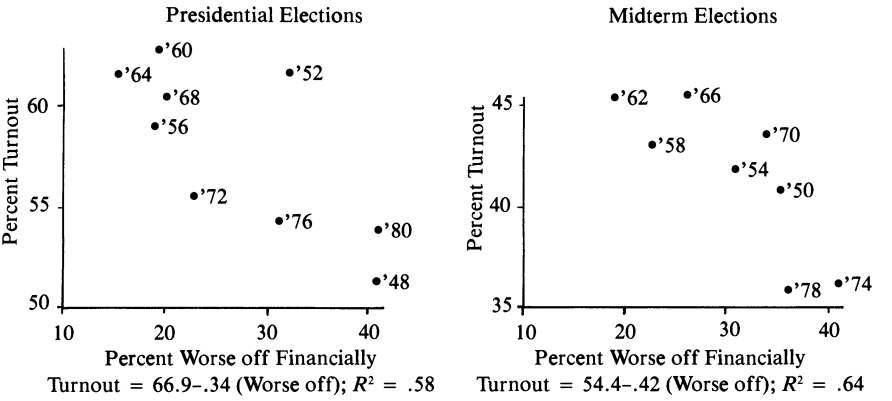
Poverty. Finally, like the unemployed and those worse off financially, the poor are also less likely to vote than the rest of the population. As shown in Figure 2, compared to those with a median household income, people making less than $2,000 a year are 9 percent less likely to vote; people with an income $2,000 to $3,999 are about 5 percent less likely to vote; and people with household incomes of $4,000 to $7,499 are 4 percent less likely to vote. But once a median income has been

[13] This parallels conclusions from studies conducted during the depression (Bakke, 1940).

[14] Another reason for the small coefficient may be attenuation due to measurement error stemming from the inability to identify respondents who were employed when they were interviewed but were unemployed on election day (see note 3, above).

FIGURE 3

Financial Problems and Turnout in U.S. Elections, 1948–1980



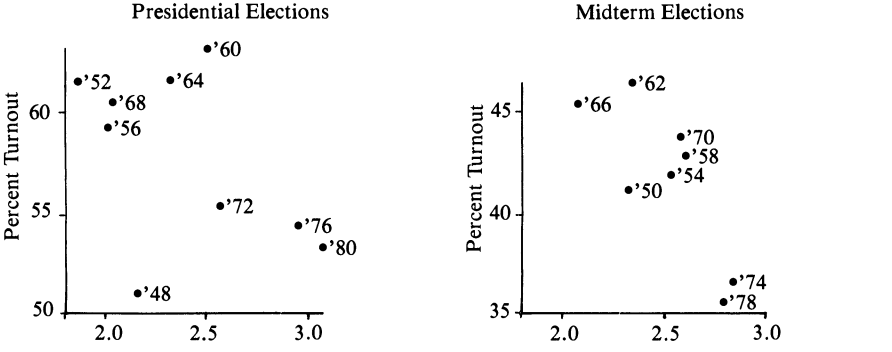
Turnout = 66.9–.34 (Worse off); R^2 = .58

Turnout = 54.4–.42 (Worse off); R^2 = .64

Sources: Current Population Reports, Series P-25, No. 879, March 1980; *Congressional Quarterly Weekly Report*, January 17, 1981, p. 138; Center for Political Studies, National Election Studies and Surveys of Consumer Finances.

FIGURE 4

Short-Term Unemployment and Turnout in U.S. Elections, 1948–1980



Turnout = 69.3–4.81 (STU); R^2 = .47

Turnout = 74.8–12.95 (STU); R^2 = .78

Sources: Current Population Reports, Series P-25, No. 879, March 1980; *Congressional Quarterly Weekly Report*, January 17, 1981, p. 138; *Economic Report of the President*, 1981.

reached, more money no longer affects turnout. Thus, while rock-bottom poverty depresses participation, extreme wealth does not increase one's likelihood of voting.

In summary, the unemployed, the worse off financially, and the poor were all less likely to vote in 1974.

Time-Series Evidence 1896–1980

Does economic adversity reduce voter turnout in all elections or is this relationship unique to 1974? If these findings generalize, then turnout should be lower in years when short-term unemployment is high and a large proportion of the population is worse off financially. Data on these two variables are available only since 1948 and are displayed in Figures 3 and 4. It appears that in both presidential and midterm elections since 1948 the higher the short-term unemployment rate and the larger the proportion of the electorate that is worse off financially, the lower the voter turnout.

The curvilinear relationship between the duration of unemployment and turnout found in 1974 also appears at the aggregate level. Between 1948 and 1980, the short-term unemployment rate (percentage of civilian labor force unemployed less than five weeks) is a much better predictor of turnout than the total unemployment rate (R^2 = .58 versus .17 in midterm years; R^2 = .22 versus .11 in presidential years). In addition, the long-term unemployment rate (percentage unemployed over 14 weeks) is unrelated to turnout in both midterm (R^2 = .00) and presidential years (R^2 = .08).

To estimate the impact over time of these variables it is necessary to control for all other causes of turnout that are associated with changes in the economy. With 17 aggregate data points, this is impossible. However, an alternative is to model the trend in turnout due to noneconomic factors and assess whether during periods of economic duress turnout is lower than otherwise would be expected given the trend in turnout. The trend in turnout due to noneconomic factors is represented by an autoregressive model. In addition, variables are included for midterm elections (which have lower turnout) and the enfranchisement of 18–20-year-olds in 1972 (which reduced turnout). The estimated parameters are reported in the following display.[15]

[15] There are other ways to model the trend in turnout due to noneconomic factors, but each yields about the same substantive results as those reported here. (The worse off coefficient ranges between –.167 and –.350; the short-term unemployment coefficient ranges between –2.759 and –4.822. In all the models the probability of these coefficients being negative is >.90 and usually >.99.) Among the models tested were ones with first and second order autocorrelation. Because both the data set and the estimates of rho were small (.2), ordinary least squares is the preferred estimator. The coefficients are virtually the same in

Effect of Unemployment and Economic Duress on Turnout in Presidential and Midterm Elections, 1948–1980

$$\begin{aligned}\text{Turnout}_t = {} & .606 - .254\ \text{Worse}_t - 2.759\ \text{STU}_t + .268\ \text{Turnout}_{t-1} \\ & (.149) \quad (.113) \quad (2.020) \quad (.252) \\ & - .200\ \text{Midterm}_t - .041\ \text{Youth}_t \\ & (.051) \quad (.026)\end{aligned}$$

$N = 17$
$R^2 = .96$
Standard error of residuals = .023
M.A.D. = .015
Durbin H-Statistic = −1.196 (probability of autocorrelation < .88)
Probability that effect of Worse is negative > .98
Probability that effect of STU is negative > .90

Where:

Turnout_t = proportion of the electorate who voted;
Worse_t = proportion of the electorate who were worse off financially;
STU_t = proportion of the civilian labor force unemployed less than five weeks;
Turnout_{t-1} = turnout in the previous national election;
Midterm_t = 1 if midterm year, 0 if presidential year; and
Youth_t = if 1972, 0 otherwise (18–20-year-old suffrage).

Source: Figures 3 and 4.

The coefficients indicate that between 1948 and 1980 a 1 percent increase in short-term unemployment decreases voter turnout by 2.8 percent. A 10 percent increase in the proportion of the electorate that is worse off financially reduces turnout by 2.5 percent. Both the rise in turnout between 1948 and 1960 and the decline in turnout since the 1960s is explained, in part, by changes in the economy.

Although prior to 1948 there are no data on the proportion of the electorate that was worse off financially or unemployed less than five weeks, this analysis can be extended to earlier elections by focusing on the effect of changes in consumer prices—a variable that, during the 1948–1980 period, is positively associated both with the likelihood of being worse off financially and with short-term unemployment (r = .68 and .59, respectively).

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presidential and midterm years as are the standard errors of the residuals. Thus the two sets of years can be safely combined.

The effect of change in prices on turnout is estimated for elections since 1896. Autoregressive terms to control for the trend in turnout due to noneconomic factors, as well as variables for midterm elections, the enfranchisement of 18–20-year-olds in 1972, the enfranchisement of women in 1920, and the lower turnout in World Wars I and II are included in the equation in the following display.[16]

Effect of Change in Prices on Turnout in Presidential and Midterm Elections, 1896–1980

$$\begin{aligned}\text{Turnout}_t = {} & .229 - .223\ \Delta\text{Prices}_t + .567\ \text{Turnout}_{t-1} + .215\ \text{Turnout}_{t-2} \\ & (.031)\quad (.123)\qquad\quad (.104)\qquad\quad (.100) \\ & - .221\ \text{Midterm}_t - .124\ \text{Women}_t - .047\ \text{Youth}_t - 9.736\ \text{War}_t \\ & (.032)\qquad\quad (.032)\qquad\quad (.028)\qquad\quad (3.601)\end{aligned}$$

$N = 43$
$R^2 = .95$
Standard error of residuals = .028
M.A.D. = .019
Durbin H-Statistic = −0.130 (probability of autocorrelation $< .55$)
Probability that effect of ΔPrices is negative $> .96$

Where:

Turnout_t = proportion of the electorate who voted;
ΔPrices_t = absolute value of the election year change in consumer prices;

[16] Models where price changes are measured by election year changes in the GNP price deflator or the GNP personal consumption price deflator were also estimated; the model using the Consumer Price Index (CPI) best fit the data, although the substantive conclusions would remain unchanged if another index were used. (They are highly correlated with each other: $r = .9$.) Since the CPI is the most publicized of the three statistics, its effect on turnout may be due not only to economic adversity but to a citizen's preoccupation with economic concerns caused by bad economic news.

There are other ways to model the trend in turnout due to noneconomic factors, and each yields virtually the same coefficient for change in prices. (Differences are in the second decimal place.) There is some evidence that the effect of price instability on turnout is greater in midterm than presidential years ($p = .80$), but the evidence is not strong, nor does it hold for the other indicators of price change. The standard errors of the presidential and midterm year residuals are nearly identical. Years prior to 1896 had very large residuals and were therefore excluded from the analysis.

Finally, it is interesting to note how the effect of the two world wars parallels the curvilinear effect of unemployment. Eleven months into World War II (November 1942), turnout was 8 percent lower than otherwise would be expected. But the effect of war dissipates with time: 19 months into World War I (November 1918), turnout was down 3 percent, and in November 1944 (35 months into World War II), turnout was only 1 percent lower than would be expected. In the initial months of national mobilization, attention turns away from politics. With time, war's displacement of other concerns lessens and its effect on turnout is negligible.

$Turnout_{t-1}$ = turnout in the previous national election;
$Turnout_{t-2}$ = turnout in the second previous national election;
$Midterm_t$ = 1 if midterm year, 0 if presidential year;
$Women_t$ = 1 if 1920, 0 otherwise (women's suffrage);
$Youth_t$ = 1 if 1972, 0 otherwise (18–20-year-old suffrage); and
War_t = (1/(# of months at war squared)) if 1918, 1942, or 1944, 0 otherwise.

Sources: Economic Report of the President, 1981; *Historical Statistics, Colonial Times to 1970; Statistical Abstract of the United States,* 1969; *Current Population Reports*, Series P-25, No. 879, March 1980; *Congressional Quarterly Weekly Report*, January 17, 1981, p. 138.

From the coefficients one can see that years with large changes in consumer prices (either steep inflation or steep deflation) have lower than expected rates of voter turnout. A 10 percent election year change in consumer prices reduces turnout by about 2.2 percent. Thus if inflation is running 12 to 13 percent instead of 3 to 4 percent, turnout is about 2 percent lower than it otherwise would be.

Discussion

Economic adversity reduces voter turnout. The unemployed, the poor, and the financially troubled are less likely to vote. Turnout is lower when short-term unemployment is high, prices are unstable, and a large proportion of the population experience financial difficulties. These findings are inconsistent with the mobilization or no effect hypotheses. When economic adversity strikes, withdrawal from politics is the likely result.

What is the explanation for this relationship? Theories of political participation generally point to the effects of costs, benefits, and resources. The greater the benefits (either expressive or instrumental), or the lower the costs, or the greater the individual's resources to bear the costs, the more likely a person is to participate. Traditionally, costs have been thought of as hurdles associated with the participation act itself—registering to vote, gathering information about the candidates, going to the polls, making decisions, and the like. But the relationship between economic adversity and turnout suggests that another set of costs—*opportunity costs*—also affect an individual's decision to participate in politics. When a person votes, attends political meetings, or works for a candidate he foregoes spending scarce resources on other, more personal concerns. When the return from attending to an immediate stressful personal problem, such as unemployment, is greater than the return from participating in politics, the opportunity costs of participation are higher.

The higher the opportunity costs, the lower the probability the citizen will participate in politics.

Thus, theories of political participation must take into account not only the costs associated specifically with the act of participation but other life circumstances that also place demands on the citizen. Only one set of conditions—economic adversity—has been identified here. Others, such as marital problems, family illness, death of a close friend or relative, problems at work, or a change of residences also surely increase the opportunity costs of political participation.

A second mechanism also may be at work. Economic adversity disrupts social relationships. An unemployed worker put it this way: "You're not able to keep up your end of social obligations. Friends are reluctant to include you in plans for parties, trips, and other things that involve spending money" (Wilcock and Franke, 1963, p. 86). Unemployment, of course, means that usual social interaction with coworkers has been eliminated. Financial problems and unemployment also are likely to produce marital and family problems (ibid.; Rainwater, 1974; Voyondoff, 1977).[17] Because coworkers, friends, and one's spouse are sources of political information and they encourage participation, a breakdown of these relationships will reduce turnout.

Naturally the shock of unemployment, the anxiety of struggling to make ends meet, and the disruption of usual social relationships takes a heavy psychological toll as well. These psychological effects have been documented through case studies, mass surveys, in-depth interviews, and aggregate analyses. Whether one looks at research conducted during the depression or during the 1970s, in the United States or in Europe, the same conclusion emerges: unemployment and other economic adversities are extremely stressful and cause such numerous psychological problems as loss of self-esteem, pride, and self-confidence (Brandt, 1932; Hall, 1933; Kardiner, 1936; Eisenberg and Lazarsfeld, 1938; Komarovsky, 1940; Wilcock and Franke, 1963; Fried, 1969; Cohn, 1978); depression (Slote, 1969; Catalano and Dooley, 1977); and other more serious mental disorders (Brenner, 1973, 1976, 1977; Fried, 1969; Dooley and Catalano, 1980). "When you have no job," a 41-year-old unemployed autoworker explains, "it's like dying—except you don't stop breathing. Your whole source of motivation is gone" (Fritz, 1980, p. 68). This low efficacy, low self-confidence, and intraversion reduces political participation (Milbrath and Goel, 1977, pp. 58–85; Scott and Acock, 1979). Studies conducted during the depression also attributed the low rates of participation among the unemployed to the psychological problems produced by job-

[17] Family problems also cause financial problems (Morgan et al., 1974).

lessness and financial duress (Bakke, 1940, pp. 46–70; Jahoda, Lazarsfeld, and Zeisel, 1971, pp. 40–41; Eisenberg and Lazarsfeld, 1938).

Several questions remain. Under what circumstances do the opportunity costs, disruption of social relationships, and psychological explanations apply? Do economic adversity and other personal problems reduce other forms of political, economic, and social particpation as well? Since other kinds of activity are more costly than simply voting, is the reduction in participation even greater than for turnout?

Analysis of these questions must be sensitive to the undersampling of people with economic adversities that occurs in surveys, particularly in telephone surveys. Samples should be drawn to accurately represent this segment of the population. Failing to do so, or failing to take this selection bias into account in the analysis will make it difficult to accurately assess the effect of economic adversity on political behavior (Achen, 1980a).

The effect of economic adversity on voter turnout also has several implications for theories of voting. Given the demographic correlates of unemployment and economic duress discussed earlier, Democrats are more likely than Republicans to be affected. Thus, although in 1980 voters surely punished Carter for his mismanagement of the economy, part of the explanation for the Democratic debacle is that the bad economy kept more Democrats than Republicans away from the polls. The current findings also help explain why change in real income, but not unemployment or inflation, appears in most aggregate vote equations. The effects of short-term unemployment and price fluctuations are missed because they affect who votes in the election. Similarly, the reason why *personal* economic well-being does not appear to be related to candidate choice (Kinder and Kiewiet, 1979, 1981) may be that many of the potential "punishers" simply do not make it to the polls. Part of the effect of personal economic adversity on *how* people vote is absorbed by its effect on whether people vote.

What all this implies is that models of the relationship between the economy and election outcomes must account both for who votes and how they vote. Estimating the effect of economic conditions on how people cast their ballots without modeling its effect on turnout is unlikely to yield accurate estimates of the impact of economic adversity on the vote (Heckman, 1976; Achen, 1980a).

The current findings also suggest that explanations of changes in the level of voter turnout must take into account changes in the economy. The economic decline in recent decades in part explains the drop in voter turnout since the early 1960s. When the economy recuperates we can expect an increase in turnout. This means that if the economy remains dis-

tressed in 1982, turnout will be only 36 percent—about what it was in 1978.[18] But if economic conditions dramatically improve, turnout in the midterm election will be about 44 percent—8 points higher.[19]

The most troubling implication of the relationship between economic adversity and turnout is that unless the poor, unemployed, and financially troubled represent a very large proportion of the population, candidates are ill-advised to focus their campaigns on these groups. They are unlikely to show up at the polls.[20]

This leaves us, then, with a paradox. Theories of democracy generally view political participation as a way for citizens to constrain elected officials and influence public policy. In most instances, intensity of concern increases the likelihood that people will become politically active; but when people suffer economic adversity, the very problem that is foremost in their minds impedes their participation in the political process.

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[18] This scenario assumes that short-term unemployment is 3.1 percent (as in 1980) and 41 percent of the population are worse off financially (as in 1974). This turnout forecast is based on the equation reported in the first display. The standard error of the forecast is 2.5 percent.

[19] This scenario assumes that short-term unemployment is only 2.1 percent (as in 1966) and only 19 percent of the electorate are worse off financially (as in 1960). This turnout forecast also is based on the equation reported in the first display.

[20] This is not to say that candidates who base their appeals on economic issues will do poorly. The effect of "sociotropic" concerns (Kinder, forthcoming) on participation still must be explored.

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