The role of economic issues in elections: The case of the 1988 Chilean presidential referendum

JOHN PANZER
The World Bank, 1818 H. Street N.W., Room 1-5119, Washington, DC 20433
RICARDO D. PAREDES
Department of Economics, University of Chile, Avda Bernardo, O'Higgins 1058, Casilla 10-D, Santiago, Chile

Submitted 3 September 1989; accepted 15 March 1990

1. Introduction

It has been a long-standing and widely accepted hypothesis that economic events play an important role in the results of elections. The theoretical frame for this hypothesis stems from the perception that voters are rational beings who will express their preferences for an alternative of government that will enhance their expected utility. It is assumed, then, that economic performance is a part of the individual's utility function.

In terms of empirical analysis, the studies of Kramer (1971), Stigler (1973), Meltzer and Vellrath (1975), Arcelus and Meltzer (1975), Frey and Schneider (1978), Fair (1978), and Peltzman (1988) deserve special mention. They all have studied the relationship between the performance of the economy and the results of different electoral processes (congressional, presidential and gubernatorial elections) by utilizing both time series as well as cross-section United States data; and even though their results differ in many respects, it is possible to conclude that economic variables significantly influence the election results.

This paper aims at further testing the hypothesis that economic issues have a role in the shaping of voters preferences. To do so, we have used data from the presidential referendum held in Chile on 5 October, 1988. The referendum presented two options: The option YES implied the continuation of General Augusto Pinochet as president of Chile for an eight year period; the option NO implied open general elections to be held in December of 1989.

2. The model and the data

The model used hinges on the idea that voters are rational and maximizing individuals who vote for an option that enhances their expected utility. Their
expectations are based on both the present and past performances of the political options. Although there are different assumptions as to the degree of sophistication of the information which the voters rely on to shape their preferences, the general notion is that individuals will make efficient use of all the available information.

The macroeconomic variables which have traditionally been envisaged as most representative of the information taken into account by voters are the disposable income and the unemployment and inflation rates; yet it is also necessary to specify the way in which the information contained in those economic variables operates in generating the voter's preferences. One specific question to be answered is whether voters are more influenced by variables related to the level of economic activity (i.e., the unemployment rate) or by the trends of the economic activity (i.e., changes in the unemployment rate). Another relevant aspect is determining how "long" the memory of the voters is, or, to put it differently, at which discount rate they write off the past. Accordingly, the general model to be tested is:

\[ V_{ij} = \alpha_0 + \alpha_1 ECO_{jt} + \alpha_2 AECO_{jt} + \epsilon_{ij} \]  

where \( V_{ij} \) is the probability that individual \( i \), living in district \( j \), will support the incumbent candidate. \( ECO_{jt} \) is an indicator of the economic activity level (present and past) in district \( j \), and \( AECO_{jt} \) reflects changes in the economic activity (present and past) in the same district. Finally, \( \epsilon \) is a zero mean error term, with constant variance \( \sigma^2 \) and not correlated among individuals.

Since the information needed to estimate the model is only available at an aggregated level, the estimated model is:

\[ V_j = \beta_0 + \beta_1 ECO_{jt} + \beta_2 AECO_{jt} + \epsilon_j \]  

where \( V_j \) is the proportion of individuals in district \( j \) who voted YES, and \( \epsilon_j \) is the average error for district \( j \). In this case, the variance for the stochastic term is no longer constant, thus making it necessary to estimate the model by the method of the Generalized Least Squares (GLS).  

The model was estimated using unemployment data and the result of the referendum in 24 cities and provinces within the country, covering approximately 95% of voters. The unemployment data used were the unemployment rates for years 1986 to 1988 as well as the change in the unemployment rate in the election year.