The multi-store model for economic voting: Rome wasn't built in a day☆

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A R T I C L E   I N F O

A B S T R A C T

The 2012 presidential election was closely contested with the media predicting that the unemployment rate announcement just before the election would be the deciding factor. If a single economic indicator could buoy up job approval ratings, delivering positive economic statistics to the voters would be a rational re-election strategy for an incumbent. In contrast, this paper presents a model in which voters do not immediately convert each economic statistic into a performance evaluation. Only after many "rehearsals" do voters convert statistics into a positive or negative evaluation. I take the case of Japan and use a survey experiment and an inverse probability weighting (IPW) estimator to assess whether short-, medium- and long-term performance evaluations form based on voter perception of economic conditions.

1. Introduction

The final phase of the 2012 presidential election was a closely fought. In hindsight, Hurricane Sandy was the biggest October surprise, but at the time, people thought the unemployment rate announcement on the eve of the election would be the clincher.

This prediction was based on two assumptions. First, if the past national economic indicators are good, people vote for the incumbent, and if the indicators are bad, they vote for the challenger. Second, people form performance evaluations based on a single announcement of economic indicators, at least to the degree that their evaluations can determine the outcome of a close race.

Of these two assumptions, researchers confirmed the presence of the former phenomenon, "retrospective voting," decades ago. Downs (1957) and Key (1966) presented its theoretical origins and Kramer (1971) pioneered aggregate level analysis to show the correlation between economic conditions and election results. Taking these studies a step further, Fiorina (1978) established a systematic economic retrospective voting model at the micro level. There is an extensive body of further research and numerous literature reviews, including Lewis-Beck (1988); Norpoth et al. (1991); Lewis-Beck and Paldam (2000); Lewis-Beck and Stegmaier (2007); and Lewis-Beck and Whitten (2013).

Yet whether the second assumption—that people evaluate job performance based on a single announcement—is realistic has not been demonstrated. If a single set of economic indicators influences the performance evaluation of the incumbent, the incumbent should manipulate the economy to achieve reelection. In other words, he or she should pursue the political business cycle not on an annual basis, but rather attempt to manipulate economic measures right up to election day.[1] If the election is narrowly-contested all the way through, the rational re-election strategy is for the incumbents not to concern themselves with post-election backlash and instead stimulate the economy by targeting an area in which short-term effects will appear, thereby delivering positive economic statistics to the voters just before the election—even if just once. Conversely, if at most one or two rounds of economic indicators will not affect the general trend of the election, the candidate should find a surprise other than short-term economic policy. This paper uses a survey experiment and an inverse probability weighting (IPW) estimator and finds support for the latter view: one or two sets of economic indicators at the end of an election cycle do not majorly affect the election. For national

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[1] Political business cycle theory has its origins in Nordhaus (1975). For summaries of the evidence, see, e.g., Alesina et al. (1997) and Drazen (2000).

economic indicators to translate into a performance evaluation, good news must be repeated many times over a set period of time.

The structure of this paper is as follows. The first section takes a brief look at issues in retrospective voting related to this paper, focusing on the micro level, then presents several models on retrospective sociotropic evaluation formation mechanisms. The second section verifies the presence of short-, medium-, and long-term performance evaluations as affected by the perception of economic conditions. After summarizing the results, the final section considers the implications of the findings.

2. Models of retrospective economic assessments

Fiorina (1978) took changes in the personal financial situation—later termed pocketbook voting—as a key variable.[2] Meanwhile, Kinder and Kiewiet (1979, 1981) and Kiewiet (1983) argued that sociotropic voting has greater electoral consequences than the pocketbook. Since then, scholars such as Kinder et al. (1989), Alvarez and Nagler (1995, 1998) and Lanoue (1994) have shown that sociotropic considerations have as strong or stronger influence on voting behavior as the pocketbook. Outside the United States as well, scholars such as Anderson (2000) analyze individual-level survey data on 13 European countries and conclude that sociotropic effects are stronger than egocentric (pocketbook) ones.

If it is true that people vote not by assessing the contents of their own wallets but based on the national economic situation, the next question that arises is which indicators people use to assess the economic situation. Based on individual-level data, Conover et al. (1987) posit that most voters do not correctly understand the economic situation. To address this issue, Kinder et al. (1989) ask in a survey about the general economic situation, employment, and the cost of things over the past 12 months, and through factor analysis aggregate these items into a single national economic assessment. Meanwhile, Holbrook and Garand (1996) use the unemployment and inflation rates as an index and find that whether these were correctly understood depends on personal characteristics such as socioeconomic status, gender, race, and age, as well as retrospective personal evaluations, political interest, and media exposure. Ansolabehere et al. (2013) find that people correctly identify familiar economic quantities such as the price of gas.

Instead of recognizing individual variation in national economic assessments, other research uses the same value for all respondents in the same year as an index. For Markus (1988, 143), "the annual rate of change in real disposable personal income per capita (ΔRDPI) serves as the summary indicator of national economic circumstances." Similarly, as a voter measure of the national economy, Nadeau and Lewis-Beck (2001) create a National Business Index based on the Survey of Consumer Attitudes and Behavior's question, "Would you say that at the present time business conditions are better or worse than a year ago?" The basis of such approaches is found in Sanders (2000), who argues that "although voters may have only a hazy factual knowledge about the state of the economy, their overall sense of macro-economic improvement and decline"—the unemployment or inflation rates—"is remarkably acute."

In summary, concerning retrospective sociotropic voting, while there are individual differences, when it comes to familiar economic indicators that are part of every day life and relative trends (improvement or deterioration), people more or less accurately interpret economic trends and use them in economic voting.

The remaining issue is the mechanism behind formation of retrospective sociotropic evaluations. How much time is required between perceiving trends in the national economic situation and connecting these to a performance evaluation of the government? Previously, time-series analysis based on aggregate data took this issue as one of the speed at which economic knowledge deteriorates and handled it by deciding how much of a time lag to include in economic indicators in the model (e.g., Paldam and Nannestad, 2000). In contrast, in analyses based on survey data, it has become standard to ask voters their perception of the current economic situation compared to one year prior and find that individual answers have a significant effect on her voting behavior. Yet the assumption that people correctly remember economic statistics from one year ago and can compare them with the latest statistics is a fairly high bar. So how well do voters recall the past national economic situation? How do people process news on the national economic situation, which is covered every day or month? This paper applies insights from psychology and proposes three mutually-exclusive hypotheses on retrospective sociotropic evaluation mechanisms.

The first hypothesis posits that individual announcements of national economic statistics form a performance evaluation of the government, the institution responsible for economic policy. If on-line information processing (Lodge et al., 1989; Lodge and Stroh, 1993; Lodge et al., 1995) is valid, even for information on the economic situation, every single piece of information should transform into a positive or negative evaluation of the president or prime minister and stored in an on-line tally.

Even if information is processed on-line, the second hypothesis posits that the connection to government performance evaluation occurs in an asymmetrical way depending on if it is information that indicates an improvement in the economic situation or deterioration. According to Blendon et al. (1997), their survey finds that a large portion of the public believes that the economy is performing less well than official government data suggest—data like the unemployment and inflation rates of the past five years. Further, Alvarez et al. (2000) showed that economic conditions influence voting behavior more strongly in times of recession than prosperity. In the United Kingdom, only when the economy is performing extremely badly does perception of the economic situation link to performance evaluation of the government (Chzhen et al., 2014). The micro-foundations for this phenomenon may be the negativity bias in that voters have a negativity bias that affects voting behavior (Bloom and Price, 1975; Kernell, 1977; Lau, 1985; Pierson, 1996; Soroka, 2014). If this second hypothesis is correct, while individual news stories about the unemployment rate decreasing, prices decreasing, or stocks rising is unlikely to lead to an improvement in the government performance evaluation, bad news of the unemployment rate or prices rising or stocks falling will have an instant, negative effect.

The third hypothesis modifies the on-line model by revisiting a classical theory of cognitive psychology. According to the multi-store model Atkinson and Shiffrin proposed, information from the outside world goes through sensory memory in a few seconds and becomes short-term memory while "rehearsed" information becomes long-term memory (Atkinson and Shiffrin, 1968). The brilliance of their concept is the assumption of short-term memory one step before information is stored long-term. Applying this multi-store model, the national economic assessment process can be depicted as follows. First, if people receive news about the unemployment rate, prices, and stocks gaining or falling, this information is only recorded as "tentative." Every piece of economic information is not converted to a performance evaluation; rather, when information points in the same direction and repeats over a certain period of time, the government's performance evaluation is

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[2] Fiorina (1981) held that both simple retrospective evaluations (such as personal financial situation) and mediated retrospective evaluations (such as administration economic performance) form people's evaluation of the economic situation.