

PROPOSAL: ARE SMARTER VOTERS MORE LIBERAL? EVIDENCE FROM SALT IODIZATION IN THE UNITED STATES

Achyuta Adhvaryu, Assistant Professor, Yale University
<http://www.yale.edu/adhvaryu/index.html>

Steven Bednar, Assistant Professor, Elon University
<http://www.elon.edu/e-web/academics/business/economics/faculty/bednar/default.xhtml>

Anant Nyshadham, Yale University
<http://nyshadham.squarespace.com/>

In 1922, the Michigan State Medical Society created the Iodized Salt Committee to explore the feasibility of eliminating iodine deficiency by adding potassium iodine to table salt. Realizing that iodized salt would need to be sold nationally in order to be profitable, the major salt companies introduced the new product to the United States in 1924 with an aggressive advertising campaign. By 1930 eight cases of iodized salt were sold for every one case on non-iodized salt and the incidence of goiter in Detroit fell from 9.7% to 1.4%. There is a large literature in economics, epidemiology and associated fields that finds another detrimental effect of iodine deficiency in utero is impaired cognitive development. The introduction and rapid adoption of iodized salt should therefore have a secondary effect of increasing cognitive ability in formerly high deficient areas compared to areas that had a lower deficiency level due to geographic difference in local iodine content in the soil. We ask whether this increase in cognitive ability through salt iodization has spillover effects into the political process.

While preliminary results suggest large effects of salt iodization on voter and politician behaviors, there are several main challenges that still need to be overcome in our analysis, for which working with a student will be extremely beneficial. First, we do not actually observe cognitive ability, so we need to uncover whether other changes often associated with an increase in cognitive ability evolve according to the same patterns as the changes in voting habits. This will involve cleaning and manipulating large data sets from the census. Second, the timing of salt iodization and our findings on political behavior coincides with the Great Depression and New Deal legislation. Our information on voting habits comes from a data base on roll call votes in Congress. We need to separate votes on policies intended to get the country out of recession from other votes on social issues to better identify the tendency to vote more liberally. Third, we need a better understanding of how votes in congress relate to the general preference of a congressman's constituency. This will involve conducting a literature review of economic and political science literature and summarizing the current state of knowledge. Finally, we would like to know more about the general preferences of the constituency. This will involve locating and summarizing historical polling data and possibly culling information from newspaper articles.

The student must possess a working knowledge of Stata. S/He will learn how to clean and manipulate large data sets, collect and summarize relevant background literature, and will apply statistical techniques, including regression analysis and quasi-experimental methods, to an economic research question.