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Are conservatives overconfident?

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ABSTRACT

Recent studies suggest psychological differences between conservatives and liberals, including that conservatives are more overconfident. We use a behavioral political economy model to show that while this is undoubtedly true for election years in the current era, there is no reason to believe that conservative ideologies are intrinsically linked to overconfidence. Indeed, it appears that in 1980 and before, conservatives and liberals were equally overconfident.

1. Introduction

In recent years, there have been a number of scholarly articles written with the premise that there is something fundamentally different about conservatives and conservative beliefs. Alford et al. (2005) shows that there are genetic differences between liberals and conservatives. Oxley et al. (2008) shows that conservatives are more responsive to threatening stimuli. Jost et al. (2003) finds that conservatives are less prone to enduring uncertainty. This led Moore and Healy (2007) to speculate, and find, that conservatives were, in their study, more overconfident.

Our own recent work seems to add to this general trend, finding that conservatives are more overconfident in a large, representative U.S. survey (Ortoleva and Snowberg, 2015). However, our work differs in a fundamental way from the work described above: the findings are based on a formal model of beliefs. In our model, the relationship between overconfidence and conservatism comes from a single parameter, x, that captures the average signal received by the members of the society in a given period, and specifically, from the fact that in our dataset $x > 0$. But there is nothing in the model that says that this parameter has to be greater than zero. In fact, in other times and places it could be equal to zero, or less than zero, or vary over time, leading to much different results.

In this paper we generalize the model of Ortoleva and Snowberg (2015) to allow this parameter to vary over time, and investigate the implications of that generalization for the relationship between overconfidence and ideology in Sections 2 and 4. This generalization introduces the concept of a political *zeitgeist*—a prevailing set of political beliefs in a period that shape people who live through

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that period.[1]

After the theoretical analysis, we turn to examine the predictions in data from a representative survey of the U.S. in 2011 in Sections 3 and 5. This analysis benefits from the presence of two measures of overconfidence that we can use to eliminate biases due to measurement error. We find that, contrary to the analysis of similar data in 2010, there is no relationship between overconfidence and conservatism. From this, we conclude that $x = 0$ in 2011, and show that other predictions of the model that depend on x have changed in accordance with the change in x. That is, despite the change in the value of x, the theory continues to provide an accurate description of the data.

We then take advantage of the fact that our extended model allows x to change over time—that is, there is a time dependent x, given by x_t, when examining the relationship between age, media exposure, and overconfidence in Section 6. Here, we find support for the more nuanced predictions of the theory. In particular, our analysis of media exposure once again is compatible with the conclusion that $x_t = 0$ in our data. However, the patterns associated with age and ideology suggest that the residual effects of $x_{t-1} > 0$, $x_{t-2} > 0$, … in many previous years are still influencing older U.S. citizens today.

Our final set of analyses tries to confirm this using data from the American National Election Study's cumulative data file. This data contains many similar surveys going back over 50 years. However, we are hampered by the fact that key variables we wish to analyze—ideology, media exposure, and overconfidence—are not consistently measured (or measured at all) during that entire time period. Still, we find evidence consistent with $x > 0$ in election years from 1982–2008. However, before 1980, it appears that $x = 0$ (or very close to it).

Bringing these results together, it appears that there is no intrinsic relationship between overconfidence and conservatism, yet our theory is still consistent with the data we have analyzed. In particular, there is little doubt that conservatives were more overconfident in 2010, the year of our previous study. Moreover, this is likely to have been the case in election years since 1980. However, before 1980, and in non-election years (when surveys are rarely run), conservatives and liberals appear to be equally overconfident. These results are consistent with our (fully formalized) theory, and provides a deeper understanding of political belief formation: it appears that these differences can be rationalized by the existence of different political zeitgeists that shape people's political beliefs over the course of their lives.

More generally, this suggests that in order to truly understand the links between different behavioral economic traits and biases and political attributes, it is necessary to build and test models which specify where these links come from. Failing to do so creates confusion when “things change”, as they inevitably do. For example, Foley (2013) tries to replicate the study of Oxley et al. (2008), referenced above, and finds the opposite result: namely, that liberals are more sensitive to threatening stimuli. Because there is no formal theory underlying these results, there is no way to tell if the difference comes from a change in the conception of ideology, a change in the set of stimuli people are concerned about, or a change in the relationship between threatening stimuli and ideology, or more than one of these factors.

2. Theoretical framework

The basic structure of the theory follows Ortoleva and Snowberg (2015) with one important difference: we allow for shocks to the state variable. This allows us to examine time variation in preferences and overconfidence, giving a crisper picture of the relationship between overconfidence and left–right ideology.[2]

For modeling purposes, we consider “today” to be period T. There is a unit measure of citizens $i \in [0, 1]$, each with age $t_i \sim F_t$ with support $\{1, 2, 3, \ldots, T\}$. Each citizen i has a utility over political actions that depends on a state of the world. A citizen's belief about the state is determined by her experiences, and her ideology reflects these beliefs.

2.1. Utilities

Each citizen i has a standard quadratic-loss utility over actions $a_i \in \mathbb{R}$, which depends on a state $x \in \mathbb{R}$

$$U(a_i|x) = -(a_i - x)^2.$$

Throughout, a_i is the policy implemented by government.[3] The state x is a single draw from $\mathcal{N}[0, \tau]$ where τ is the *precision* of the normal distribution.[4] Importantly, x does not change over time, but aggregate beliefs about it may, as we detail below.

With uncertainty about the state, it is straightforward to show that the policy preferred by citizen i will be $a_i^* = E_i[x]$, where E_i is the expectation taken over citizen i's beliefs. We define this quantity as the citizen's *ideology*,

$$\mathcal{I}_i \equiv E_i[x], \tag{1}$$

and, as the expectation of x is zero, ideological extremeness as $\mathcal{E}_i = |\mathcal{I}_i|$.

[1] Zeitgeist is an English loan word from German, which the Oxford English Dictionary defines as, “The defining spirit or mood of a particular period of history as shown by the ideas and beliefs of the time.”

[2] Another difference from Ortoleva and Snowberg (2015) is that we omit preferences from ideology—that is, we have a common-value environment. All results would remain the same if we included preferences as well, but it would complicate the analysis without producing additional, testable results.

[3] To add preference biases, we could model $U(a_i, b_i|x) = -(a_i - p_i - x)^2$, where $p_i \sim \mathcal{N}[0, \tau_p]$.

[4] The precision is the inverse of the variance.