## 1 Appendix

### 1.1 A Methodological Note on Correlations of Time Series

Because we are correlating time series in this analysis there remains the possibility of trend on trend spuriousness as well as the more modest effects of systematic error aggregation in left and right hand side variables. Problems, if any, to be expected depend upon the properties of the individual time series. Are they integrated or stationary, and, if integrated, do they have linear trends?

We know from the work of Suzanna DeBoef (2000) and DeBoef and Granato (1997) that mood, macropartisanship, and presidential approval—and in general, all time series generated from survey marginals by similar methods—are "near-integrated." Near-integrated time series are those that pass a stationarity test but have persistence properties "similar" to integrated series. As non-integrated series they may not have linear trends and therefore trend on trend spuriousness is impossible. Trend on trend spuriousness requires trending series on both sides of the equation. Here we have trending behavior in neither. <sup>1</sup>

What then of the lesser issue, integration-like persistence—generally AR(1) error with  $\rho$  estimates close to, but significantly less than, 1.0? Theoretically we know that such errors will violate the OLS assumption of no autocorrelated error. The known consequence of this violation is  $\beta$  (and therefore correlation) estimates that are unbiased, but inefficient. The inefficiency in turn produces standard errors that are biased downward, resulting in tests of significance biased toward finding significance.

Thus our correlation estimates will be inefficient, Linear Unbiased Estimates,

 $<sup>^1 \</sup>rm Our$  equality series is the exception. It trends toward greater support for equal treatment of all.

(LUE), but not Best Linear Unbiased Estimates (BLUE), and will have significance tests that should be treated with caution and skepticism. We have no interest in significance testing. This is a measurement technique. And LUE estimates instead of BLUE estimates is a problem we can live with, a much smaller issue than the small sample sizes which are a fundamental limitation of the moving windows technique.

#### 1.2 A Moving Windows Approach

The correlational analysis above is designed to catch a fixed relationship over time. For policy attitudes as old as those toward New Deal issues that is a reasonable way to go. These issues have been continuously on the political agenda for the full span of our analysis (1946-2011). But what of newer influences on American politics? If a controversy attained political relevance part way through our seven-decade period, then its correlation for the full span will understate its importance for the relevant period, which is only the span after it was incorporated into ideological debate.

Racial issues, for example, first develop their modern association with left and right in 1964 (Carmines and Stimson 1989), after the flowering of the Civil Rights Movement of the early 1960s. So a correlation for the whole span will combine an expectation of zero before 1964 and positive thereafter. Thus the positive effect after 1964 will be underestimated, perhaps seriously.

To avoid biasing the result of newer issues by a false assumption of uniform influence over time we turn to estimating correlations as a moving window (of various sizes) to capture the coming and going of issues that were defining issues for ideology for a limited time. The strength of the method is that it allows change to be observed. Its weakness is that estimates are based on small samples of time.

The product of the moving windows analysis is 61 time series for the policy preference measures where each point is the moving window sample correlation assigned to the window midpoint year. For example, employing a 21-year window size we observe a product moment correlation for one of the preference series with identification for the period 1950-1970 and assign it to 1960. (And then we observe the correlation for 1951-1971 and assign it to 1961, and so on.) And so we have about 2,500 estimates of the association for each window size employed.<sup>2</sup>

We use windows of 21 years in this article, a compromise between too small windows, which ease the observation of novel issue influence, but in tiny samples, and too large ones, which make it difficult to observe the influence of new issues. We choose an odd number of years so that we have a defined midpoint year. Windows of size 21 cover 10 years before and 10 years after the midpoint. We can thus view the evolving correlation as a time series and visually see the coming and going of the influence of particular controversies for the meaning of left and right.

We emphasize that these estimates are nothing more than Pearson product moment correlations, created as time series. We assume only that policy debates which move with self-identification as liberal or conservative lend their meaning to the terms. A controversy strongly correlated with identifications lends its meaning to the meaning of identification. One with little or no association does not.

#### **1.3** Scope of Government: A Special Case

Most analysts agree that some conception of the size and scope of government activities in the domestic economic sphere is the central element of the debate between left and right in the United States. It goes by several names, economic issues, New Deal issues, social welfare issues, and the like. Its core policy content is whether or not the Federal government ought to do more or less, spend more or less, and regulate more or less in the domestic sphere. Because of this claim to theoretical centrality we treat it as a special case.

Our measure of scope of government attitudes is based on a very large number

<sup>&</sup>lt;sup>2</sup>We refer to "association" here because we are agnostic about causal direction in this analysis. That is, taking a liberal position on policy x may cause a person to think of him or herself as a liberal. But equally, identifying as a liberal may cause a person to learn the liberal position on x and adopt it. We wish to know which policy preferences most define "liberal" and "conservative" and thus we have no interest in sorting out the competing causal ideas.

of repeated survey questions that ask whether the government should do more or less, spend more or less, and regulate more or less in various specific domestic policy spheres. It is the centerpiece of the concept domestic policy mood. But here it is purified by including only size of government questions and not the many logically distinct but empirically correlated issues.

The question is: is this intellectualized version of operational ideology—what citizens want government to do or not do—closely associated with the decision to call oneself a liberal or conservative? The answer is given by Figure 1, which displays the midpoint correlations between scope of government and ideological identification.



Figure 1: Moving Window Correlations of Liberal-Conservative Self-Identification with Scope of Government Mood Estimates: 21 Year Moving Windows Centered on Midpoint Year

The figure displays moving window correlations assigned to midpoint years 1962-1995 (and for windows extending 10 years before and after those dates). As we saw earlier, with the feeling thermometer data of Section ??, the

earliest measures found large numbers of respondents having no affective reaction to "liberals," signaling probably an absence of connotation. Here we see the related phenomenon that correlations between scope of government attitudes and ideological identification are quite small at the outset and grow substantially thereafter. Much of the growth occurs in the decade of the 1960s. American citizens got a better handle on who was who, producing a learning curve in the association of policy attitudes and self-identification.

After the learning curve we see the high level of association between policy attitudes and self-identification that most expect. Scope of government attitudes will turn out to be not quite as powerful in predicting self-identification as other, more symbolic, attitude clusters. This is consistent with the known disconnect between operational attitudes of all kinds and the symbolic act of identification. But left and right in American politics is to a substantial degree about the size and scope of government.

# References

- DeBoef, Suzanna. 2000. "Persistence and Aggregations of Survey Data Over Time: From Microfoundations to Macropersistence." <u>Electoral Studies</u> 19:9–29.
- DeBoef, Suzanna & Jim Granato. 1997. "Near-integrated Data and the Analysis of Political Relationships." <u>American Journal of Political Science</u> 41:619–640.