

## **Franklin and Lutz - ONLINE APPENDIX**

### **I) Replacing PTV with the other affinity measures**

In the main text of this chapter we gave relatively short shrift to measures of voter-party affinity other than PTV, once we had established that only PTVs produced a choice set that explained more variance than the corresponding affinity measure taken alone. Yet many existing datasets (including that used for our time-series analyses) do not ask the PTV questions while asking other affinity questions thought to yield comparable measures.

In our opinion these alternative affinity measures have been preferred because they add to our understanding of why voters make the choices they do rather than simply encapsulating the motivations for choice whatever those motivations may be. When identifying a choice set we do not need to know what the reasons were for the establishment of that set; we do require that the choice set be as all-encompassing as possible, not excluding choices based on other considerations than those brought to mind by the question concerned. Thus liking and sympathy bring to mind particular reasons for supporting a party and exclude other reasons (especially strategic ones).

However, this does not help scholars who only have liking or sympathy scores to use as measures of voter party affinity, because those are the scores yielded by the questions that were actually asked. Can such questions help to define a choice set that, when culled by the same means as used for PTVs, yield the same or similar predictions of party choice? Table A1 replicates the final model of Table 4 in the main text for PTV and, for each of the alternative indicators (liking, warmth and sympathy), then adds a model including the primary variable omitted from the PTV model (because it was not needed): party size. As can readily be seen, most of the alternative choice sets taken alone makes less of a contribution towards the

prediction of vote choice (only the warmth indicator matches PTV in this respect); and all of them require party size to be added to the criteria for culling the choice set if the percent of correctly predicted outcomes is to come anywhere close to the percentage we see for the culled PTV choice set. For likes/dislikes and warmth, party size is the most powerful of all the components in the choice set and culling procedure taken together; for sympathy is party closeness that contributes most.<sup>1</sup>

**Table A1. Performance of alternative choice set indicators as compared with PTV (first differences from mixed effects hierarchical logit analysis with standard errors)**

| Inputs                                       | Source of choice set        |   |                                    |                                     |                                       |                                      |                   |
|--|-----------------------------|---|------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|-------------------|
|  | Model A<br>PTV<br>(no size) | Models B & C<br>Likes/dislikes<br>(no size) | Models D & E<br>Warmth<br>(w'size) | Models D & E<br>Warmth<br>(no size) | Models F & G<br>Sympathy<br>(no size) | Models F & G<br>Sympathy<br>(w'size) |                   |
| Is (one of) max value(s)<br>(standard error) | 0.296<br>(0.003)            | 0.255<br>(0.005)                            | 0.226<br>(0.005)                   | 0.301<br>(0.005)                    | 0.269<br>(0.005)                      | 0.248<br>(0.005)                     | 0.235<br>(0.005)  |
| N of max values<br>(standard error)          | -0.034<br>(0.001)           | -0.031<br>(0.002)                           | -0.028<br>(0.002)                  | -0.040<br>(0.002)                   | -0.036<br>(0.002)                     | -0.001<br>(0.000)                    | -0.001<br>(0.000) |
| Maximum value<br>(standard error)            | 0.004<br>(0.001)            | -0.017<br>(0.001)                           | -0.015<br>(0.001)                  | -0.005<br>(0.001)                   | -0.004<br>(0.001)                     | -0.003<br>(0.000)                    | -0.002<br>(0.000) |
| Party R feels close to<br>(standard error)   | 0.388<br>(0.005)            | 0.418<br>(0.011)                            | 0.370<br>(0.011)                   | 0.349<br>(0.011)                    | 0.279<br>(0.011)                      | 0.573<br>(0.006)                     | 0.556<br>(0.006)  |
| Party size<br>(standard error)               |                             |   | 0.333<br>(0.013)                   |                                     | 0.318<br>(0.011)                      |                                      | 0.262<br>(0.011)  |
| % correctly predicted*                       | 60.7                        | 50.5  | 53.5                               | 54.0                                | 56.0                                  | 57.2                                 | 58.1              |
| N of responses                               | 51,114                      | 15,978                                      | 15,978                             | 15,978                              | 15,978                                | 35,136                               | 35,136            |
| N of respondents                             | 7,055                       | 2,663                                       | 2,663                              | 2,663                               | 2,663                                 | 4,392                                | 4,392             |

Note: Outcome variable is vote choice. All coefficients significant at  $p < 0.001$ .

\* % correctly predicted is the square root of the variance explained (Buyse, 2000).

From the point of view of understanding the choice process, PTV is the most informative; but in the absence of PTV, other choice set indicators do work quite well (especially warmth and sympathy) provided party size is taken into account as one of the criteria for culling the choice

<sup>1</sup> Note that, for choice sets other than the PTV choice set, effects of the level at which ties occur have perversely negative coefficients, as though higher scores are *less* likely to lead to a definitive choice of party, in contrast to PTV choice sets for which level of propensity has the expected positive effect. Understanding why this should be the case is beyond the remit of this chapter but these perverse effects underline the superiority of PTV as choice set indicator.

set (generally the most important one) in the effort to produce ‘a winner’. Note that this process still leaves a lot to be desired. Even the culled PTV choice set still fails to predict 39 percent of the actual outcomes in terms of party choice. But this is better than the prediction we make with even the best available alternative models (models that do not employ culled choice sets) – at least in Switzerland and Ireland.

## **II) Top-tied PTVs, age and closeness**

In the text of the chapter we refer to a table showing the evolution, with increasing age, of size of choice set and level at which choices are tied. Table A2 is organized with low-value large sized choice sets at bottom left and high-value small sized choice sets at top right. In the cells of the table we see the number of respondents occupying that cell and their average ages. There is a lot of random noise, due to the small number of respondents in most of the cells, but we can see that ages are generally rising from bottom left to upper right. This is particularly clear inside the box that outlines the cells at the top-right of the table (encompassing PTV values above 6 and number of tied PTVs less than 4) where the Ns for each cell are large enough as to give greater stability to the mean values of age.

Within this box we see clear evolution with advancing age towards fewer ties at higher PTV values. As expected theoretically, with increasing age respondents seem to narrow their focus on smaller choice sets to which they ascribe higher probabilities of voting. This progression culminates in the top-right cell containing choice sets of single parties to each of which respondents assign a 100% probability of electoral support. Note that this cell contains well over half of those casting a ballot (2,475 out of the 4,228 Swiss and Irish voters in Table 1).<sup>2</sup>

---

<sup>2</sup> 60 percent of 4,392 Swiss respondents and 68.9 per cent of 2,367 Irish respondents.

**Table A2. Evolution of maximum PTV values with advancing age (Swiss 2007 election study)**

|                                     |   | Value of top-rated PTV |      |      |      |      |      |      |      |      |      |       |
|-------------------------------------|---|------------------------|------|------|------|------|------|------|------|------|------|-------|
|                                     |   | 1                      | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |       |
| Number of PTVs tied for first place | 1 | Mean age               | 48.8 | 42.1 | 54.9 | 53.1 | 53.9 | 49.6 | 48.3 | 50   | 48.5 | 51.5  |
|                                     |   | N                      | 6    | 11   | 12   | 26   | 87   | 149  | 365  | 838  | 754  | 2,475 |
|                                     | 2 | Mean age               | 58   | 49.6 | 52.3 | 53.2 | 54.3 | 46.1 | 46.1 | 48.1 | 47.4 | 47.6  |
|                                     |   | N                      | 12   | 16   | 24   | 20   | 212  | 152  | 382  | 652  | 326  | 962   |
|                                     | 3 | Mean age               | 44   | 33.5 | 65   | 42.7 | 53.9 | 59   | 42.8 | 48.2 | 45.7 | 49.1  |
|                                     |   | N                      | 3    | 12   | 6    | 30   | 147  | 60   | 114  | 213  | 102  | 207   |
|                                     | 4 | Mean age               | 58   | 46   | 51.5 | 43.8 | 54.9 | 50.7 | 54.8 | 49.4 | 56   | 51.8  |
|                                     |   | N                      | 4    | 4    | 8    | 20   | 112  | 24   | 32   | 48   | 48   | 132   |
|                                     | 5 | Mean age               |      | 54   | 75   | 52   | 50.4 | 55.5 | 43   | 23.5 | 51.3 | 49.6  |
|                                     |   | N                      |      | 5    | 5    | 10   | 130  | 10   | 20   | 10   | 30   | 50    |
|                                     | 6 | Mean age               | 48   | 41.7 | 52.7 | 49   | 42.3 | 50   | 51.5 | 46.3 | 39.6 | 41    |
|                                     |   | N                      | 180  | 18   | 18   | 48   | 354  | 18   | 36   | 24   | 42   | 120   |

*Note:* 704 respondents omitted with max PTV=0; box encloses cells with Ns above 100, adequate for valid comparisons.

### III) Data and measures for time-series analyses

Variables employed in these analyses are generally a subset of those employed in analyses of Swiss and Irish data – data that also form part of the IMD (CSES, 2018). However, for convenience the distance measure used in those analyses has been recast as a measure of proximity (by taking its absolute difference from 1). This makes it easier to compare effects across models by transforming a measure of distance into one of closeness.