
Pre-Analysis Plan*

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Abstract

A large literature on public opinion towards government spending indicates that most forms of social spending on education, old-age pensions, and family policies are highly popular among the wider public. More recently, the literature on the multidimensional nature of welfare politics has forcefully shown that the main line of conflict does not revolve around more or less spending per se, but rather around more fine-grained distributional issues between different welfare state orientations. Scholars have therefore started to emphasize differences in voters’ preferences between consumption- and investment-oriented social spending. The existing research on public opinion towards welfare state recalibration, however, is limited by its empirical foundation. Most research asks about attitudes towards individual social policies, but these unidimensional questions fail to capture priorities and trade-offs inherent in the multidimensional recalibration of the welfare state. In times of austerity, governments always face trade-offs between spending in different social policy areas. In order to address this weakness of the existing literature, we use original survey experiments that measures preferences on six subfields of social policy (including labor market policy, education, family policy, and pensions), while accounting for trade-offs between different subfields. The survey experiments are carried out in Italy, Spain, Germany, and the United Kingdom, allowing us to shed light on how citizens evaluate different forms of welfare state recalibration in different contexts.

Keywords: Welfare state, social investment, social consumption, austerity, public opinion, conjoint experiments

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Project Description

A large literature has studied public opinion towards government spending and towards redistribution more generally. Existing research indicates that most forms of government spending such as education, old-age pensions, and family policies are very popular among the wider public. This omnipresent support for the welfare state is also mentioned as a major factor that explains the difficulty of full-frontal attacks on major welfare state programs (Pierson, 2001; Brooks and Manza, 2007). More recently, the literature on the multidimensional nature of welfare politics has forcefully shown that the main issue of conflict does not revolve around more or less spending *per se*, but rather around more fine-grained distributional issues between different welfare state orientations (Pierson, 2001; Häusermann, 2010; Häusermann, 2012; Morel et al., 2012b; Bonoli and Natali, 2012b).

Moving beyond the narrow focus on retrenchment by the “new politics of the welfare state” literature (Pierson, 2001), welfare states since the 1990s have started to incorporate a new set of functions and policy tools that aim to alleviate new social problems that have occurred due to structural change (Bonoli and Natali, 2012a). This reorientation in social policy-making has been captured by different terms such as “social investment” (Morel et al., 2012a; Hemerijck, 2013), “new social risk policies” (Taylor-Gooby, 2004; Bonoli, 2005; Armingeon and Bonoli, 2007; Häusermann, 2012) or “flexicurity” (Wilthagen and Tros, 2004; Viebrock and Clasen, 2009). They all share in common a multidimensional perspective of welfare state reforms and stress the importance to recalibrate welfare state institutions to the needs of new social risk groups. The social investment paradigm is the most encompassing, ranging from traditional social consumption policies (old-age pension, passive labor market policies, employment protection legislation) over new social investment policies (active labor market policy, family policy, early childcare and education) to policy fields previously neglected in the welfare state literature (education, life-long learning). The main argument of this strand of literature is to transform the welfare state from a protective, consumption-oriented welfare state to a more capacitating, investment-oriented welfare state (Esping-Andersen, 2002; Morel et al., 2012a; Hemerijck, 2013)
Scholars have, therefore, also started to emphasize differences in voters’ preferences between consumption-oriented and investment-oriented government spending (Bonoli, 2013; Fossati and Häusermann, 2014; Beramendi et al., 2015; Busemeyer and Garritzmann, 2017; Busemeyer and Neimanns, 2017). Notwithstanding these differences, public support remains high for both types of social spending (Kölln and Wlezien, 2016) and, as a result, there are some authors, who argue fiscal retrenchment is unpopular.

Ever since the economic crisis in the 1970s, however, financial resources are limited and a further expansion of the welfare state is extremely difficult to achieve. In this era of permanent austerity (Pierson, 2001), governments have to make tough distributional choices when they are reforming the welfare state. The politics of welfare state recalibration have, therefore, transformed from a positive to a zero-sum game (Häusermann, 2010) with strong distributive effects. This means that governments may be able to increase spending in one specific policy field (e.g. education) but only at the cost of decreasing spending somewhere else (e.g. pensions).

Yet, the existing research on public opinion towards welfare state recalibration is limited by its empirical foundation. Most research asks about attitudes towards individual social policies, but these unidimensional questions fail to capture priorities and trade-offs inherent in the multidimensional recalibration of the welfare state (Giger and Nelson, 2013). In times of austerity, governments always face trade-offs between spending in different social policy areas. In order to address this weakness of the existing literature, we use two original survey experiments. First, we use a conjoint analysis that simultaneously varies spending on six subfields of social policy including labor market policy, education, family policy, and pensions. Second, we use a split-sample experiment to further test whether citizens change their preferences towards these social policy subfields, when they are confronted with trade-offs. The survey experiments are carried out in Italy, Spain, Germany, and the United Kingdom, allowing us to shed light on how citizens evaluate different forms of welfare state recalibration in different contexts. The main research question that this paper tries to address is as follows: What are citizens preferred forms of welfare state recalibration in Italy, Spain, Germany and the United Kingdom?
Part 1: Conjoint Survey Experiment

Research design

Existing surveys do not allow us to answer the questions posed above because they largely pose uni-dimensional questions and fail to measure priorities and trade-offs (Giger and Nelson, 2013). In order to address this weakness, we use a research design that overcomes the problems with conventional surveys. In the first part of our project, we use a conjoint survey experiment that simultaneously varies six characteristics of a government spending in order to measure how citizens evaluate different social policies. Previously, conjoint surveys have been used widely in product analysis in order to measure how people value different attributes of a product or service. Recently, conjoint experiments have also successfully been employed by social scientists (e.g. Bechtel and Scheve, 2013; Hainmueller et al., 2014; Hainmueller and Hopkins, 2015; Bansak et al., 2016) and they are increasingly used in comparative political economy to capture the importance of trade-offs (Gallego and Marx, 2016; Häusermann et al., 2016; Kölln and Wlezien, 2016). Conjoint analysis is well suited for this purpose because it requires respondents to evaluate entire packages instead of simply asking about support for individual measures (Häusermann et al., 2016).

In our survey we ask respondents to evaluate different proposals for changes to government spending in a set of choice tasks. Each task presents respondents with two profiles of possible spending changes and respondents have to select their most preferred alternative. Profiles comprise six attributes corresponding to particular elements of a government spending and each attribute can take on a set of discrete and pre-defined levels, which represent different spending options. The profiles are then generated randomly, i.e. they contain a fixed number of attributes attributes, which are shown to respondents in random order and with a random display of an attribute level.

Concretely, our reform profiles contain six attributes (as shown in Table 1) that were chosen to represent two different dimensions of government social spending: social investment and social consumption. We use education, childcare services and training for the unemployed (active labor market policy) as proxies for social investment spending and
Table 1: Attributes and Levels of the Conjoint Experiment

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Attribute Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td></td>
</tr>
<tr>
<td>Training for the unemployed</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
<tr>
<td>Childcare services</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
<tr>
<td>Education</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
<tr>
<td>Consumption</td>
<td></td>
</tr>
<tr>
<td>Unemployment benefits</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
<tr>
<td>Child benefits</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
<tr>
<td>Old-age pensions</td>
<td>Decrease spending</td>
</tr>
<tr>
<td></td>
<td>No change</td>
</tr>
<tr>
<td></td>
<td>Increase spending</td>
</tr>
</tbody>
</table>

old-age pensions, child benefits and unemployment benefits (passive labor market policy) as proxies for social consumption spending.

For each attribute, we developed three levels, allowing us to test attitudes towards different forms of government social spending, as shown in Table 1. In theory, there would be 729 combinations of all the levels in a fully randomized setting. However, the focus of this conjoint survey experiment is entirely on trade-offs and priorities on the social spending side between consumption and investment policies. In order to avoid “free lunches” where respondents can favor spending increases on all social policies, we force respondents to make a decision, which social policies they prefer over others. We achieve this by showing respondents only reform proposals where the budget is balanced. This means that no reform proposal either increases or decreases spending overall.

We therefore impose a situation of austerity on the respondents that they might disagree with. What if someone wants to decrease spending on all social policies? Or what if someone wants to increase spending on all social policies? This is certainly possible, but we know from the literature that full-scale welfare state expansion is politically unlikely due to austerity, while full-scale retrenchment is politically unlikely due to electoral repercussions. We use the balanced-budget restriction to tease out the respondent’s pol-
icy priorities on welfare state recalibration in times of austerity, where a (more or less) budget-neutral reform is politically most likely.

We, therefore, only allow combinations in which every increase in expenditure in an attribute is matched by a simultaneous decreases in expenditure in another attribute. As a result, we exclude 588 combinations and are left with 141 possible combinations. Importantly, when the profiles are randomly generated, the likelihood that a level is shown remains the same for all possible levels. Hence, as Hainmueller et al. (2014) have shown, respondents do not need to evaluate every possible combination of attributes and levels to identify the component-specific effect. Our research design exploits this important feature of conjoint experiments, allowing us to efficiently run multiple-treatment choice experiments without needing a sample size large enough to present respondents with every possible comparison.

The full instructions for the conjoint tasks are shown below. First, respondents will be presented the following introduction to the experiment:


Please take your time and read the information below very carefully. It contains the instructions for the next part of the survey.

Every year the [COUNTRY] government spends money in a variety of different areas. We are interested in how you would like the government to change its spending pattern.

We will now show you several proposals for possible changes to government spending in different areas. We will always show you two possible proposals in comparison. For each comparison we would like to know which of the two proposals you prefer. You may like both proposals or neither. In any case please chose the proposal that you like the most. In total, we will show you five comparisons.

The possible proposals only include changes with regard to a few selected types of government spending. Please assume that spending in all other areas is held constant. Please also assume that taxation and the level of government debt are held constant.

People have different opinions about this issue and there are no right or wrong answers.

Please always take your time when reading the proposals.
This introduction will be followed by a screen presenting two reform proposals, as shown in Figure 1. In this way, respondents are asked five times to choose (i) between two packages (choice variable) and (ii) to indicate how likely they are to support each of the proposals (ranking variable).

Through randomization and a high number of such pairwise comparisons, conjoint analysis allows us to identify – and quantify – the causal effect that individual elements (attribute levels) have on the support for the entire reform proposal, compared to a reform proposal that contains the baseline category on a particular attribute. The order
in which the attributes are presented to different respondents is randomized to avoid that the order influences the relative impact of attributes on the acceptance of different reform proposals. However, the order is held constant within individual respondents across the five different tasks to avoid confusion.

Sample

The survey will be fielded in four large European countries: Germany, Italy, Spain, and the United Kingdom (UK). In each country, 1,200 respondents will be recruited to participate in the survey. For this purpose, we use large online panels provided by Qualtrics. Respondents are drawn from a pool of eligible voters in each country and the sample is representative of all eligible voters based on gender and age. Further, we will weight the sample to match the demographic characteristics of the population in each country as closely as possible using entropy balancing (Hainmueller, 2012; Hainmueller and Xu, 2013). The survey will be fielded on December 8, 2017.

Analysis

Main Analysis

The main variable of interest that we generate from the conjoint experiment is the average component-specific effect (AMCE) of a change in the value of one of our six dimensions on the probability that the reform proposal is chosen by the respondent. The variable is binary and it takes the value of 1 if a reform proposal is chosen and 0 if a reform proposal is not chosen. Following the recommendations from Hainmueller et al. (2014), we estimate the ACME by using linear probability models and regress the dependent variable on dummy variables for each of our levels (where the status quo is used as the baseline for each dummy). To estimate these effects we use the cjoint package in R (Hainmueller et al., 2014) with clustered errors by respondents to account for correlations within responses from a given respondent.
**Heterogeneous Effects**

In addition to the conjoint experiment, the survey also includes questions about demographics, socio-economic characteristics of individuals (e.g. income, occupation, wealth) and political preferences (or ideological predispositions) of respondents. This will allow us to test whether the AMCEs differ between different groups by interacting attributes and respondent characteristics and by using split-sample analyses. We will present the subgroup analysis graphically by showing plots with results for different groups side by side. The subgroup analysis is based on the following variables: country, income level, wealth level, level of education, occupational class, employment status, marital status, sex, age, household size/number of children, urban vs. rural, partisanship, left-right placement, union membership, political interest, trust in government, state of the economy, religiosity, preferences for redistribution, preferences for government debt, attitudes towards the role of women, attitudes towards immigration.

**Analysis of Support for Entire Packages**

Our analysis includes 141 different packages that are randomly created. Due to the design of our survey, these packages include some profiles, which strongly differ from the status quo as well as some in which very few or no attributes change from the status quo. Moreover, these packages also include different combinations of government social spending. We will also analyze the overall support for the 141 different packages to check whether there are certain combinations of attribute-levels that are especially popular or unpopular.

**Robustness Tests**

We will use a series of tests to check whether our results are robust. They are designed to check that the common assumptions involved in conjoint analysis are satisfied and to probe potential concerns about the validity of our results.

On the one hand, we will conduct most of the diagnostic tests suggested by Hainmueller et al. (2014). First, conjoint analyses relies on the assumption that there are
no carryover effects between the different rounds of conjoint tasks. To test whether this assumption holds, we will estimate AMCEs separately for each of the five rounds of conjoint tasks. Second, we will check whether there are profile order effects, i.e. whether the AMCEs depend on whether the attribute occurs in the first or second profile in a given task. To this end, we will estimate AMCEs separately for all the observations where attribute levels occurred in the first and the second profile respectively. Third, we will check whether there are attribute-order effects, i.e. whether the AMCE of an attribute depends on the order in which it appears in the conjoint table. We will estimate row-specific AMCEs, testing whether the estimates are significantly different from each other.

Fourth, our analysis depends on the fact that profiles are randomly created. Although our design guarantees that this assumption holds, we will still check whether the randomization actually produced experimental groups that are well balanced in our sample. Therefore, we compare the profiles rated by different groups of respondents in our sample and conduct multivariate balance checks by regressing the characteristics of respondents on indicator variables for all profile attributes used in our design. Finally, note that we already addressed the concern about atypical profiles raised by (Hainmueller et al., 2014) in our research design. Specifically, we included a large number of restrictions to prevent profiles that are unrealistic and/or would violate the balanced-budget assumption.

One the other hand, we will also use further robustness tests, which are important due to the design of our survey. First, we will check whether respondents lose concentration throughout the survey by estimating all results based on the first two (out of five) conjoint comparisons only. Moreover, we will include round or task fixed effects to take account of the fact that respondents might make different choices in later stages of the conjoint experiment, for example due to fatigue or lack of concentration. Second, we will assess the relative time that respondents took to complete the conjoint tasks. We will assess results separately by time of survey completion and exclude those respondents that speed through the conjoint tasks, comparing the results with the overall sample. Third, the conjoint survey experiment described above is embedded in a survey, which includes two different
set of conjoint tasks\textsuperscript{1}. The order in which these conjoint experiments occurs in the survey is randomized. Still, we check whether respondents are influenced in their evaluations of the conjoint profiles if they have already completed a different set of conjoint tasks beforehand. For this purpose, we will split the sample and analyze the results separately depending on whether the conjoint experiment occurred before or after the other conjoint experiment in the survey. Fourth, there is also a concern that the screen size might affect the way respondents evaluate the conjoint tasks. We will therefore separately analyze responses from mobile versus non-mobile respondents and check to what extent they differ. Finally, we also repeat our analysis without the weights created with entropy balancing to check whether the results are dependent on the weights.

Part 2: Experiment with Split-Sample Questions

Research Design

To test how respondents perceive and react to trade-offs, we also confronted respondents with a series of questions that try to measure individuals’ support for different social policies given different kinds of trade-offs. Following Busemeyer and Garritzmann (2017), respondents were randomly assigned to four different groups, including one ‘control’ group and three different ‘treatment’ groups. In each group, respondents were asked to evaluate six different statements about government social spending. Respondents in the ‘treatment groups’ were presented with statements that raised awareness for different kinds of trade-offs, while the control group was presented with statements that did not allude to any kind of trade-offs. Subsequently, respondents were asked to evaluate to what extent they agree or disagree with these different statements. Table 2 shows the full list of statements that were included in the four different groups.

\textsuperscript{1}Pore information on the other conjoint experiment is available on the Political Science Registered Studies Dataverse under the title “Public Preferences Towards Fiscal Policies: Survey Experiments on Budgetary Priorities and Trade-Offs.”
Analysis

Main Analysis

To analyze whether support for certain forms of government social spending varies across our four groups, we follow the approach used by Busemeyer and Garritzmann (2017). Specifically, we will first analyze the results descriptively. To the end, we graphically present the means and 95 per cent confidence intervals of the control group and the three different treatment groups for each of the six statements. Using unpaired t-tests of differences in means between the control and each treatment group, respectively we test whether any observed differences between the groups are statistically significant. To assess whether there are significant differences across countries, we will also plot cross-country variations across the four different groups.

Afterwards, we test whether the preferences differ across specific groups by interacting the preferences with the respondent characteristics and by using split-sample analyses. We will present the subgroup analysis graphically by showing plots with results for different groups side by side. These subgroups will be created based on the following variables: country, income level, wealth level, level of education, occupational class, employment status, marital status, sex, age, household size/number of children, urban vs. rural, partisanship, left-right placement, union membership, political interest, trust in government, state of the economy, religiosity, preferences for redistribution, preferences for government debt, attitudes towards the role of women, attitudes towards immigration.

In a last step, we use multivariate regression analysis to identify individual-level characteristics that correlate with people’s support for different forms of government spending, depending on which trade-offs they were presented with. For this purpose, we use support for the different statements as the dependent variable, which we will regress on a number of basic control variables and independent variables (e.g. age, sex, income level, education, occupational class, employment status, wealth, children, left-right placement, preferences for redistribution). Moreover, we will include country-fixed effects and country-clustered standard errors in the models to account for possible contextual effects.
Table 2: Design of the split experiment

<table>
<thead>
<tr>
<th>Split 1 (Control)</th>
<th>Split 2 (Treatment 1)</th>
<th>Split 3 (Treatment 2)</th>
<th>Split 4: (Treatment 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The government should increase spending on old-age pensions.</td>
<td>The government should increase spending on old-age pensions, even if that implies lower spending on unemployment benefits.</td>
<td>The government should increase spending on old-age pensions, even if that implies lower spending on childcare services.</td>
<td>The government should increase spending on old-age pensions, even if that implies lower spending on training schemes for the unemployed.</td>
</tr>
<tr>
<td>The government should increase spending on education.</td>
<td>The government should increase spending on education, even if that implies lower spending on training schemes for the unemployed.</td>
<td>The government should increase spending on education, even if that implies lower spending on unemployment benefits.</td>
<td>The government should increase spending on education, even if that implies lower spending on childcare services.</td>
</tr>
<tr>
<td>The government should increase spending on training schemes for the unemployed.</td>
<td>The government should increase spending on training schemes for the unemployed, even if that implies lower spending on old-age pensions.</td>
<td>The government should increase spending on training schemes for the unemployed, even if that implies lower spending on childcare services.</td>
<td>The government should increase spending on training schemes for the unemployed, even if that implies lower spending on unemployment benefits.</td>
</tr>
<tr>
<td>The government should increase spending on unemployment benefits.</td>
<td>The government should increase spending on unemployment benefits, even if that implies lower spending on childcare services.</td>
<td>The government should increase spending on unemployment benefits, even if that implies lower spending on training schemes for the unemployed.</td>
<td>The government should increase spending on unemployment benefits, even if that implies lower spending on old-age pensions.</td>
</tr>
<tr>
<td>The government should increase spending on childcare services.</td>
<td>The government should increase spending on childcare services, even if that implies lower spending on child benefits.</td>
<td>The government should increase spending on childcare services, even if that implies lower spending on old-age pensions.</td>
<td>The government should increase spending on childcare services, even if that implies lower spending on unemployment benefits.</td>
</tr>
<tr>
<td>The government should increase spending on child benefits.</td>
<td>The government should increase spending on child benefits, even if that implies lower spending on old-age pensions.</td>
<td>The government should increase spending on child benefits, even if that implies lower spending on training schemes for the unemployed.</td>
<td>The government should increase spending on child benefits, even if that implies lower spending on childcare services.</td>
</tr>
</tbody>
</table>
Robustness Tests

To check the robustness of the results, we will perform a number of tests. First, we will check whether the random assignment worked and the control and treatment groups are balanced, i.e. we will check that there are no significant differences across the groups with regard to the most relevant variable. Second, we will change the operationalization of the dependent variables and test different regression models including OLS, logit, and ordered logit. Third, we will run the analysis for each country individually to account for cross-country differences.
References


