Welfare solidarity in multi-ethnic societies: can social investment reduce the anti-immigrant bias?

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Abstract

Migration flows have diversified western societies, challenging the political viability of the generous welfare states built during the postwar years. This is very clear in research on perceptions of deservingness to social benefits, which consistently shows that immigrants are considered as less deserving of collective help than natives. At the same time, welfare states are being reoriented towards social investment, i.e. they put more emphasis on services that strengthen human capital and improve access to employment rather than on redistribution. In this article we ask whether the shift towards a social investment welfare state is likely to reduce the immigrant deservingness penalty. Theoretically, we rely on two perspectives: social trust and identity theory. While the first suggests that the inclination to exclude immigrants from benefits aims to prevent free-riding behavior, the latter relies on in-group favoritism. Following the literature on social trust, we expect the reorientation of welfare states towards social investment to reduce the negative impact of diversity on solidarity, as those interventions are to an extent immune to free-riding. Alternatively, according to social identity theory, we expect a similar in-group bias independent of the intervention. We rely on vignette experiments conducted in Denmark, Sweden, Germany, Switzerland, the UK, and the US to compare the immigrant deservingness penalty between one consumption and social investment interventions. Results show no difference between the immigrant deservingness penalty across the social intervention types, suggesting exclusionary attitudes are driven by in-group favoritism.

Key words: solidarity; multi-ethnic societies; deservingness; welfare state; social investment; migrant penalty.

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Introduction

As migration flows increasingly diversify European societies, the challenge of ensuring public support for strong welfare states becomes increasingly pressing. While national labor markets and welfare institutions have mediating effects (Banting, 2017; Burgoon, 2014; Crepaz, 2008; Larsen, 2020), welfare state scholars have shown that immigration and increasing diversity can have negative consequences for welfare solidarity (Alesina & Glaser, 2004; Burgoon, 2014; Eger, 2010; Faist, 1995; Suroka et al., 2016). One explanation for this result is the negative impact of diversity on social trust, which is a fundamental element of states' extractive capacity (Alesina & LaFerrara, 2002; Dinesen et al., 2020; Kumlin et al 2017; Putnam, 2007; Uslaner, 2002; Suroka et al., 2006). When individuals distrust members of the community to pay their fair share, financing expensive welfare states becomes politically difficult (Crepaz, 2008). The social psychology literature on identity theory provides another potential explanation for the negative association between ethnic diversity and solidarity, suggesting that group formation based on ethnicity, or any other salient shared identity promotes in-group cooperation and favoritism and fosters out-group hostility (Sherif et al., 1961; Tajfel & Turner, 1986).

Research on perceptions of deservingness provides substantial micro-level evidence of why it is difficult to sustain high levels of redistribution in ethnically diverse societies. A key finding within this vibrant strand of research is that "identity"—that is, the degree of ethnic or cultural proximity between the contributor to and the recipient of collective help—is a key determinant of solidarity. Typically operationalized with nationality or ethnicity, a distant identity is consistently associated with lower levels of perceived deservingness (e.g., Knotz et al., 2021; Kootstra, 2016; Reskeens & van der Meer, 2019; van Oorschot, 2000).

The literature on welfare deservingness, however, is based chiefly on perceptions in relation to social compensation policies—in most cases, unemployment benefits or social assistance. We are aware of only a few studies that have focused on deservingness to public services, with their focus being mostly on health care (van der Aa et al 2017; Gandenberger et al. 2022; Jensen and Petersen 2017). Very little is known with regard to deservingness perceptions in relation to so-called "social investment" policies.

The notion of social investment has been influential in shaping recent and current debates on welfare state reform in Europe (see e.g. Garritzman et al., 2022; Hemerijck, 2017; Morel et al., 2012; Jenson & Saint-Martin 2006). It refers to policies that fight inequality and disadvantage by investing in the human capital of those who need help. An investment-based

approach in social policy emphasizes interventions that strengthen the capacity of the beneficiaries to become financially independent from collective help, essentially by promoting access to the labor market and to high quality employment. Among the key policy areas that go under the rubric of social investment are subsidized childcare, active labor market policies, equal opportunity interventions in the field of education, vocational training for disadvantaged groups, lifelong learning policies, and so forth.

When it comes to deservingness perceptions, there are reasons to believe that social investment polices operate under a different logic than other forms of social policy and that they could find more support in ethnically diverse societies. Social investment policies require an active involvement of the beneficiaries, and this makes these policies to a large extent immune to suspicions of moral hazard or free riding and to a rhetoric of "welfare dependence". As a result, issues of social trust can be expected to be less relevant than in the case of compensation policies (Eick & Larsen, 2022; Petersen et al., 2010). Moreover, these policies may be perceived to generate higher positive externalities for society, for example in terms of additional tax revenues. This may facilitate the inclusion of outsiders among the "deserving" (Eick & Larsen, 2022).

If, as implied by the social trust literature (e.g. Putnam 2007; Crepaz 2008), negative deservingness perceptions are driven by lack of trust in multiethnic societies, the fact that social investment policies are largely immune to free riding and generate returns for society should result in a lower or inexistent immigrant deservingness penalty. However, while the social trust literature suggests that social investment policies may enjoy more support in ethnically diverse societies, insights from social psychology, and particularly the literature on identity theory, provide a competing hypothesis. On this basis, we would expect respondents be equally negative about foreigners' access to social investment and compensation policies. Identity theory suggests that the intergroup differences will remain at play, and that individuals with exclusive ethnic group boundaries are expected to have a predisposition to favoring their in-groups regardless of the social policy in question, or more generally independently of any other relevant considerations or rational calculations (Lee & Ottati, 2002).

To test these two competing expectations, this study examines whether residents have different perceptions of foreigners' deservingness to social investment interventions and compensation policies and explores the determinants of selective solidarity with immigrants in these two cases. We rely on vignette survey experiments to compare residents' perceptions of foreigners' deservingness of a standard compensation policy (unemployment insurance) and two typical social investment interventions, namely a training program for the unemployed and

subsidized childcare. This survey was conducted in 2021 in Denmark, Sweden, Germany, Switzerland, the UK, and the US, which represent the main types of welfare state (Esping-Andersen, 1990) and varieties of social investment policy (Garritzman et al., 2022).

Our findings indicate a consistently negative perception of immigrant deservingness across all policy areas. Moreover, in line with expectations drawn from the social psychology literature on identity theory, we find no statistically significant difference between perceptions of foreigners' deservingness to social investment and compensation policies. This finding is valid independently of the welfare regime and of the extent to which respondents support social investment. Overall, our results suggest that the challenge of sustaining a strong welfare state in multi-ethic societies will persist, even in the context of a transition towards social investment.

The article begins by positioning our research question in the relevant literatures: welfare deservingness, social trust, and identity theory. On this basis, we formulate two initial hypotheses regarding differences in the importance of identity as a deservingness criterion for cash benefits and social investment policies. Next, we develop additional hypotheses assuming variation across welfare states and sub-groups of respondents. We then present our methodology and main results. In the final section, we discuss the significance of our findings for both welfare deservingness theory and welfare state research.

Theory

To compare welfare solidarity towards immigrants' access to compensation and social investment policies, we rely on the deservingness perception framework, which postulates that welfare solidarity is conditional to welfare claimants' fulfillment of a number of criteria that determine perceptions of deservingness for welfare benefits: *control*, *attitude*, *effort*, *reciprocity*, *identity*, and *need (*van Oorschot, 2000, 2006; van Oorschot *et al.*, 2017; Knotz et al., 2022;). In short, those who are generally considered the most deserving of social services and benefits are those who are seen as not responsible for their needs (*control*), are grateful for receiving help (*attitude*), attempt to end their need (*effort*), have contributed to society (*reciprocity*), are regarded as 'one of us' (*identity*), and have greater *need* (Knotz et al., 2022; van Oorschot, 2000, 2006; van Oorschot *et al.*, 2017).

These criteria reflect the idea that access to the welfare state should be conditional on the fulfillment of mutual obligations. The "control" criterion limits the degree to which solidarity is extended to those whose situation of need is determined by their choices (e.g., someone who is unemployed after voluntarily resigning their previous job). The "reciprocity" criterion tends to exclude those from collective help who have not shown willingness to

contribute in the past, or who are not making efforts to limit the cost to the group while in a situation of need. And finally, the "need" criterion ensures that solidarity is limited to those who would not be able to cope on their own. These three criteria are clearly functional to the limitation of free-riding opportunities on collective help.

Empirical studies have also consistently observed an adverse effect of the "identity" criterion on welfare solidarity, or an immigrant deservingness penalty (Reeskens & Van der Meer, 2019; Kootstra 2016). As we argue next, this result may be driven by two competing mechanisms. First, the immigrant deservingness penalty may be due to a wish to limit free riding opportunities by restricting access to a group that is regarded with distrust and seen as less likely to follow local societal norms of reciprocity. Alternatively, the limited solidarity towards immigrants may be related to an in-group bias, which is independent of considerations about this out-group assumed tendency to respect societal norms.

Protecting groups from free riders

The legitimacy of generous welfare provision is conditional on the collective respect of norms of reciprocity (Bowels & Gintis, 2000). Those norms are deeply seated moral dispositions that human groups have developed in order to protect themselves from free riders, i.e., individuals who profit from the group without contributing their fair share to the community (Petersen et al., 2010; Petersen et al., 2012; Aarøe & Petersen, 2014). While welfare systems have institutionalized mechanisms to prevent "abuse," social trust, understood as general trust in members of the society (Dinesen et al., 2020), is seen as a key element in determining individual wiliness to share with other members of the community.

Studies however have found that ethnic diversity has a negative effect on social trust (Alesina & LaFerrara, 2002; Dinesen et al., 2020; Putnam, 2007; Uslaner, 2002; Suruoka et al., 2006). Explanations for this relationship include negative stereotypes of immigrants as having deviant behavior (Gilens,1999), statistical information about immigrants' overrepresentation among social policy recipients (Guryan & Charles, 2013), or simply distrust of those who do not share a similar culture (Butz & Kehrberg, 2015). The refusal to share with perceived free riders thus leads natives to seek to exclude immigrants from the redistributive arrangements or even to withdraw their support for the welfare state altogether.

Based on this reasoning, we can expect that the ongoing process of welfare states' recalibration from compensation towards social investment (Garritzmann et al., 2022; Hemerijck, 2017; Morel et al., 2012) will reduce the negative impact of ethnic diversity on welfare solidarity. The very nature of social investments makes free riding more difficult (Eick

& Larsen, 2022), rendering moral hazard questions less salient than in the case of compensation benefits. First, these interventions generally require an effort on the part of the recipient. Second, social investment policies can be expected to generate returns for society through lower dependence on benefits and higher levels of immigrant integration (this is the case especially for childcare). The latter point should be particularly important for natives who are concerned about migrant cultural integration in the host society. Migrant children would be socialized to the values of the host society through participation in childcare, an outcome that could alleviate such concerns.

Initial empirical evidence suggests that deservingness perceptions concerning immigrants' access to social investment interventions may indeed differ from those referring to compensation social policies. Heuer and Zimmermann's (2020) qualitative study, based on focus groups, found that participants are reluctant to support recently arrived immigrants (such as refugees) with cash benefits but are willing to support them by providing publicly funded vocational training. The support for the latter policy solution was motivated precisely by its "investment" quality, as, thanks to training, the beneficiaries could find jobs and become financially independent. Moreover, comparing public preferences for services and cash benefits, Eick and Larsen (2022) show that respondents were more inclined to grant newly arrived immigrants' access to social investment services (such as education and childcare) than to cash benefits (social assistance, child cash benefits).

These findings suggest that the limited welfare solidarity towards immigrants is based on some form of reasoning which assumes a higher prevalence of free riders among them. If the policy solution adopted is immune to suspicions of moral hazard, as is the case with social investment interventions, natives will consider immigrants as deserving as other members of the community. Thus, we expect:

> **H1:** The immigrant deservingness penalty will be smaller in social investment than in compensation-type social policies.

A preference for the in-group

The social psychology literature also shows that (ethnic) diversity is associated with limited solidarity. Based on identity theory, this strand of research shows that in-group bias leads individuals to regard immigrants as less deserving of access to welfare benefits. In this perspective, the greater inclination to share with those who are socially closer stems from an

in-group preference rather than a distrust of strangers or out-group members (Brewer, 1999, 2007; Tajfel & Turner, 1979, 1986). According to social identity theory (Tajfel & Turner, 1979), in-group members differentiate out-group from in-group members to create or protect their own status and satisfy their need for positive self-esteem.

In this context, in-group members are preferred because they share certain characteristics and behaviors. As a consequence, in-group members benefit from contingent altruism. Group identification, based on the optimal distinctiveness model of social identity (Brewer, 1991), depends on both the need for the inclusion of the individual and the need for differentiation from others. In-group loyalty, then, is "most effectively engaged by relatively small, distinctive groups or social categories" (Brewer, 1999, p. 434). At the same time, in-group / out-group boundaries may be fuzzy and social identification can take the form of "concentric loyalties" (Allport, 1954, p. 44) where loyalties with more inclusive groups such as nations are compatible with that towards smaller exclusive groups such as a family or profession.

Social experiments investigating resource allocations have consistently demonstrated the existence of in-group favoritism (Cadsby et al., 2016; Jetten et al., 1992; Mullen et al., 1992; Turner et al., 1979). These studies reveal that individuals choose the pursuit of group differentiation, even if it comes at the expense of individual and collective monetary gains (Turner et al., 1979). Subsequent investigations have brought nuance to these findings by highlighting the influence of mediating factors such, group salience, group status, and personal values as moderating variables (Bettencourt et al., 2001; Hertel & Kerr, 2001; Platow et al, 1997).

This second set of explanations, unlike the first one, is not based on a desire to protect the group from potential free riders, or any other rational consideration. It is based on psychologically grounded preferences to favor in-group members. This mechanism resembles the concept of "taste discrimination" developed by economists in the study of discrimination (Becker, 1957; Guryan & Charles, 2013). Whether the taste for discrimination originates from a deep-seated psychological disposition or depends on personal values, its impact will depend on the characteristics of the person being helped and giving help, and not so much on the type of social policy provided. In other words, we would expect individuals to display a similar level of solidarity towards claimants of compensation and social investment-type social benefits. Thus, we put forward a competing hypothesis:

H2: The immigrant deservingness penalty in relation to social investment interventions will not differ from that of compensation-type social policies.

The impact of welfare institutions

Our cross-national comparative design allows us to test hypotheses concerning the possible impact that welfare state institutions may have on perceptions of deservingness. More specifically we are interested in cross-national differences in the putative gap between social investment and social consumption policies in relation to the immigrant deservingness penalty.

Extensive research has shown that the institutional context matters for public attitudes towards redistribution (e.g., Larsen 2008; Brooks & Manza, 2007; Svallfors, 1997, 2003; Taylor-Gooby, 1995) and fostering social trust (Crepaz & Damron, 2009; Kumlin & Rothstein, 2005; van Oorschot & Arts, 2005). Institutions generate perceptions of appropriateness with regard to the role of the state in helping disadvantaged individuals (Rothstein 1998) that are likely to affect the way respondents position themselves in relation to deservingness assessments.

Building on the work of Larsen (2008) we expect the difference in the immigrant deservingness gap between social investment and compensation policies to be strongest in the liberal and conservative welfare regimes and weakest in the universal welfare states of Northern Europe. Universal institutions foster social trust and reduce concerns for free riding, as everybody is entitled to social benefits and services. Such concerns are likely to be more pronounced in the selective liberal welfare states, where entitlement depends on need, and in the conservative welfare states, where entitlement depends on past reciprocity (payment of contributions). As argued above, the "advantage" of social investment over compensation polices is the fact that they are to an extent "free rider proof". This quality of social investment policies should maximize its effect in the welfare states were concern for free riders is strongest.

H3: In universal welfare regimes the difference in the immigrant deservingness gap between social investment and social consumption will be smaller than in conservative or liberal welfare states.

Respondent level variation

In our main hypothesis (H1), which suggests that the immigrant deservingness penalty will be in general lower in social investment policies relative to compensation ones, we assume that respondents accept the logic of social investment as acting as a protection against free riding

and as a set on interventions that can benefit society as a whole. These two assumptions cannot be directly tested with our data, and it would admittedly be difficult to design questions that do this without eliciting socially desirable answers. However, we can still investigate this issue by examining possible differences in response patterns depending on how attractive respondents find social investment. Our hypothesis here is that the effect hypothesised in H1 will be strongest among respondents who support social investment as an important component the welfare state.

We identify (likely) supporters of social investment in two different ways. First, we rely on the literature on policy preferences and social investment, which has shown consistently that support for social investment is higher among individuals with higher education (Garritzman et al 2018), hence our first cross-level interaction is with the respondent's education level (tertiary versus all else). On this basis, we assume that respondents with higher education are more likely to believe that social investment interventions can have a positive societal impact.

Second, we rely on a question included in our survey on beliefs about the primary purpose of the welfare state. In this question one possible answer reflects well the logic of social investment: "To support people to get better education and new jobs".[1] For the respondent level we therefore expect:

H4: The difference in the immigrant deservingness gap between social investment and consumption policies will be strongest among respondents with tertiary education.

H5: The difference in the immigrant deservingness gap between social investment and consumption policies will be strongest among respondents who believe that the primary role of the welfare state is social investment.

Data and Methods

To test these hypotheses, we conducted three factorial survey experiments, also called vignette experiments, on deservingness to three welfare state services: unemployment benefits, training for unemployed people, and subsidized childcare. The experiments were embedded in a larger survey on welfare state and migration preferences fielded in the summer/fall of 2021

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[1] Other alternatives were "To provide a safety net when people become ill, old or unemployed"; "to redistribute money from the rich to the poor"; "None of these"; "Don't know". The question was taken from the INVEDUC project (https://www.polver.uni-konstanz.de/en/busemeyer/projects/current-projects/erc-project-investing-in-education-in-europe-inveduc/).

by means of an incentivised online panel provided by a European market research firm.[2] Our data comprise approximately 1450 respondents from Denmark, Sweden, Switzerland respectively and the United Kingdom and approximately 2700 respondents from both Germany and the United States resulting in approximately 11200 respondents overall.[3] We introduced quotas for age (18 – 29, 30 – 39, 40 – 49, 50 – 59, over 60 years), gender, education (low, middle, high) and region (urban or rural).[4]

In vignette experiments, respondents are presented with brief descriptions (here of fictitious individuals) in which certain characteristics are systematically varied. As our designs are rather complex, we follow Auspurg and Hinz (2015) and use a D-efficient design, that groups vignettes into blocks, which are then attributed randomly to respondents.[5] These experiments offer an opportunity to understand both "socially shared judgment principles and subgroup differences" (Auspurg & Hinz, 2015, p. 9). Additionally, by changing several characteristics at the same time this method can diffuse attention away from the main subject of interested and reduce the risk of social desirability bias.

Respondents were asked to evaluate three vignettes for each experiment and experiments were assigned in a random order. For each experiment, the characteristics of the claimants varied along the dimensions summarized in Table 1 below. The unemployment benefits and training/ active labor market policies (ALMP) experiments share all dimensions and levels. The dimensions for the childcare services experiment have been adapted to the somewhat different context of childcare. The rating task was adapted to the type of help provided: a replacement rate for unemployment benefit, and priority in access assuming insufficient supply for ALMPs and childcare. For all three experiments we used a 0-100 scale. Figure 1 below shows an example vignette for the unemployment benefits experiment, examples for the other two experiments can be found in the supplementary material (see Figure S1 and S2).

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[2] This survey was originally scheduled for the spring of 2020, however, due to the outbreak of the COVID-19 pandemic, fieldwork was postponed until mid-2021 a relatively calm period of the pandemic. Control questions to ascertain if and how respondents were affected personally and professionally by the pandemic were included in the survey. All respondents evaluated four separate, randomly assigned, experiments concerning access to different welfare state services with three vignettes each before answering a range of questions concerning their labour market situation, attitudes towards migration and the welfare state, their political opinion and personal situation, and statement batteries on ethnocentrism and authoritarianism.

[3] In Germany and the US, respondents were randomly divided into two groups of 1350. One completed an Implicit Association test (IAT) before evaluating the experiments, the other proceeded directly to the experiments.

[4] For the Swiss survey an additional quota for the French or German speaking regions was included.

[5] For D-efficiency scores above 90 are recommended (Auspurg & Hinz, 2015). The unemployment benefits and training/ALPM experiment design achieves a D-efficiency of 94.7903; the childcare services experiment a D-efficiency of 96.2639. We did not exclude any implausible combinations.

For the analysis we combined the data from all countries into one dataset and excluded vignette evaluations that were done unreasonably fast (less than 5 seconds) or took too long (more than 180 seconds). This resulted in 30,500 evaluations retained for the unemployment benefits experiment, 30,420 for the training/ALMP experiment, and 30,520 for the childcare services experiment. Due to the multi-level nature of vignette evaluations nested in respondents, we use multi-level models with random intercepts. We also add random slopes for respondents' characteristics when they interact with vignette dimensions. We control for basic demographic characteristics of respondents (age, gender, education, rural/urban, born in country).

Figure 1: Example vignette (Unemployment benefits vignette, US version)

You probably know that workers who become unemployed can receive unemployment benefits.

For each fictional unemployment benefit claimant presented below, please indicate on the scales shown below each description **how much in percent of their former income** you think a given person would deserve to **receive as unemployment benefits**.
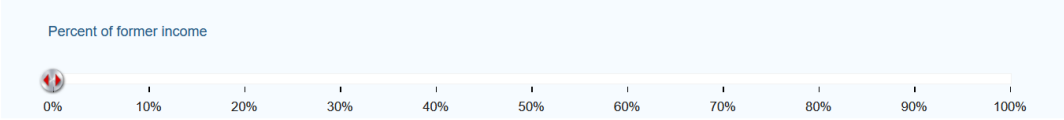
There are no wrong or right answers, therefore please just follow your own opinion!

Next

new screen

A 25-year-old man has resigned from his job as a cleaner because of excessive overtime. He is a Ukrainian citizen who has lived the US for five years. He has contributed to unemployment insurance for the past four years, is currently looking for a job, and manages to send out one to two applications per week. He could live up to three months on his savings.

Percent of former income

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

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**Table 1:** Vignette dimensions and levels for experiments

Dimension	Levels	
Need	Unemployment benefits / ALMP	Childcare
Financial need	could live up to 1 month on savings could live up to 3 months of savings could live up to 6 months on savings could live up to 1 year on savings	trouble making ends meet more or less manage are comfortable and able to save
Conciliation need	-	works full time works part-time is not working is unemployed and looking for a job
Identity		
Gender	Male Female	
Age	25 40 55	25 40
Marital status	-	single married [spouse is working full time]
Residency	Born in country [double citizenship for US] lives in country 10 years lives in country 5 years lives in country 2 years	
Nationality[6]	Swiss [/German/Swedish/Danish/British/US] / German [/Austrian/Norwegian/Swedish/Irish/Canadian] / Ukrainian / Afghan / Nigerian	
Occupation	cleaner lab technician food engineer accountant	
Control	work contradictory to religious values commute too long (3hrs/day) excessive overtime closure due to COVID	-
Effort	not looking for a job currently looking for a job, 1-2 application per week looking for a job, 3-4 applications per week looking for a job, 5-6 applications per week	has applied for a childcare place and is waiting to hear back. Has applied for a childcare place and in the meantime, has organised a temporary arrangement with the neighbours.
Reciprocity	contributed 1 year contributed 2 years contributed 4 years [in respective country of residency] contributed 8 years [in respective country of residency]	

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[6] We included nationalities based on increasing social/cultural and geographic distance. Therefore, we include one neighbouring country, an Eastern-European country (Ukraine), a Middle-Eastern country (Afghanistan), and a West-African country (Nigeria). We chose nationalities with an immigrant presence in all six countries. We do not find an effect of withdrawal of US troops from Afghanistan in our results. The survey was ^fielded before the currently on-going war in Ukraine.

Results

We first calculate separate multi-level models with random intercepts for each experiment (unemployment benefit, training, and subsidized childcare) for the six countries studied. For ease of interpretation, we group all foreign vignette persons into one category, resulting in a binary category of nationality ("0" country national and "1" foreign). The breakdown analysis by country of origin of the vignette persons is provided in the supplementary material (see Figure S3, Figure S4 and Figure S5) and is in line with the results presented here. Figure 2 shows the immigrant deservingness penalty, which corresponds to the unstandardized coefficient associated with foreign nationality relative to nationality of the country.

Figure 2: Size of the immigrant penalty (unstandardized coefficient of "Foreign national" relative to "Country national") for unemployment benefit, training, and subsidized childcare
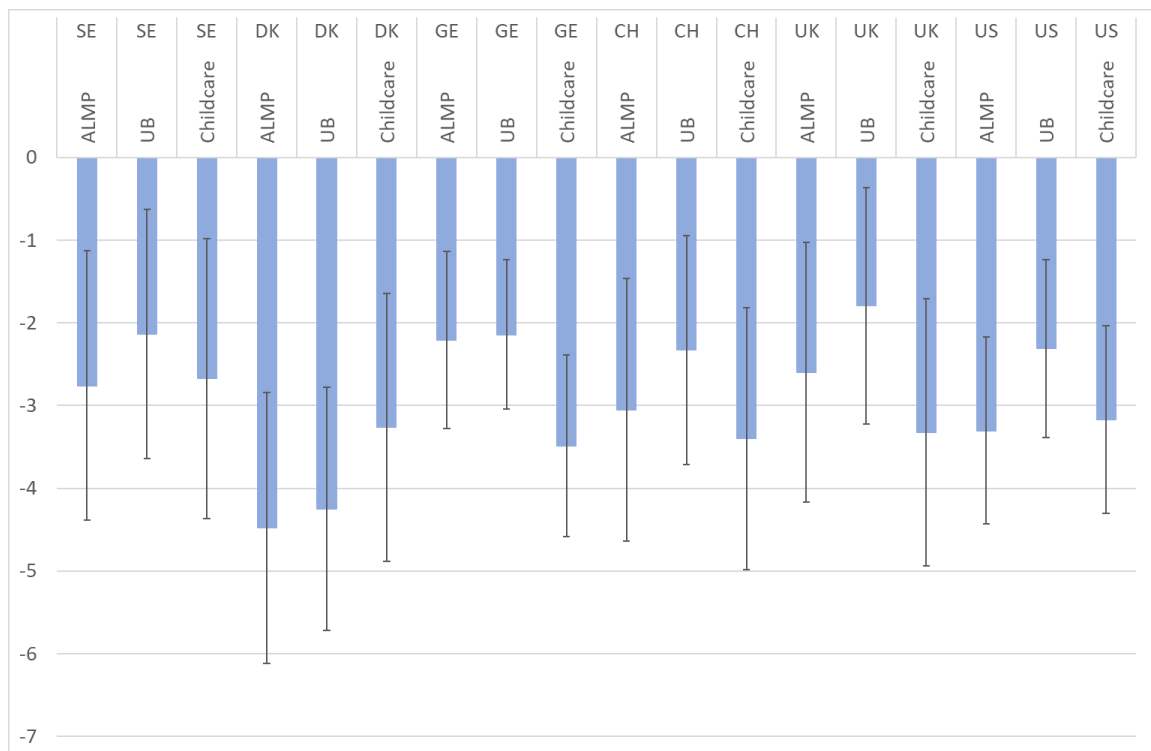
Note: vertical bars represent a 95% CI

In line with previous research, we found a sizeable immigrant deservingness penalty across countries and social policy interventions. Moreover, Figure 2 shows that, in all six countries, the immigrant penalty is not statistically different across the three policy areas,

leading us to reject H1 and accept H2[7]. Response patterns are also similar across countries, which suggests that differences in welfare institutions play a limited role in mediating welfare generosity toward immigrants' access to benefits and services. Hence, we can also reject H3 which hypothesizes a difference between universal welfare states on the one hand, and conservative and liberal ones on the other.

To test H4 and H5, which hypothesize heterogeneous effects among respondents with different education levels and perceptions regarding the key role of the welfare state, we include in our models a cross-level interaction between the vignette attribute (nationality) and respondent characteristics (education level or perceptions regarding the key role of the welfare state). Given the previous conclusion that welfare state institutions have little role in mediating solidarity toward immigrants, we rely on the aggregated respondent sample of the six countries with country-fixed effects.

With regard to education level, as we can see in Figure 3, respondents with tertiary education rated vignette-persons as more deserving than respondents with a lower education level. However, the immigrant deservingness penalty is similar among tertiary and non-tertiary educated respondents, and, most importantly, does not change when moving from social consumption to social investment interventions. The models underlying the interactions presented in Figure 3 are provided in the supplementary material (see Figure S6, Figure S7 and Figure S8).

Let us now turn to H5, which hypothesized a stronger difference in the immigrant deservingness gap between social investment and consumption policies among respondents who believed that the main role of the welfare state is social investment. It is important to highlight that approximately 12% of the respondents considered the main purpose of the welfare state to be supporting people in obtaining better education and new job opportunities, which aligns with the social investment paradigm. On the other hand, the vast majority of respondents, accounting for 71%, believe that its primary function is to provide a safety net for the ill, unemployed, and elderly.[8]

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[7] The coefficients (and CIs) reported were calculated on different models. We therefore checked for differences of interest in the coefficients using the approach developed by Paternoster et al 1998. For each country, we calculated Z-scores for the difference between the coefficient for unemployment benefit on the one hand, and training or childcare on the other. None of the Z-scores reaches significance at the 95% level (see table S1 in supplementary material)

[8] Approximately 5% believe the main purpose of the welfare state is to distribute money from the rich to the poor, while the remaining respondents either hold a different belief about its purpose or are unsure.

Figure 3: Deservingness rating for three different types of social interventions, by nationality of vignette person and by education level of respondent.
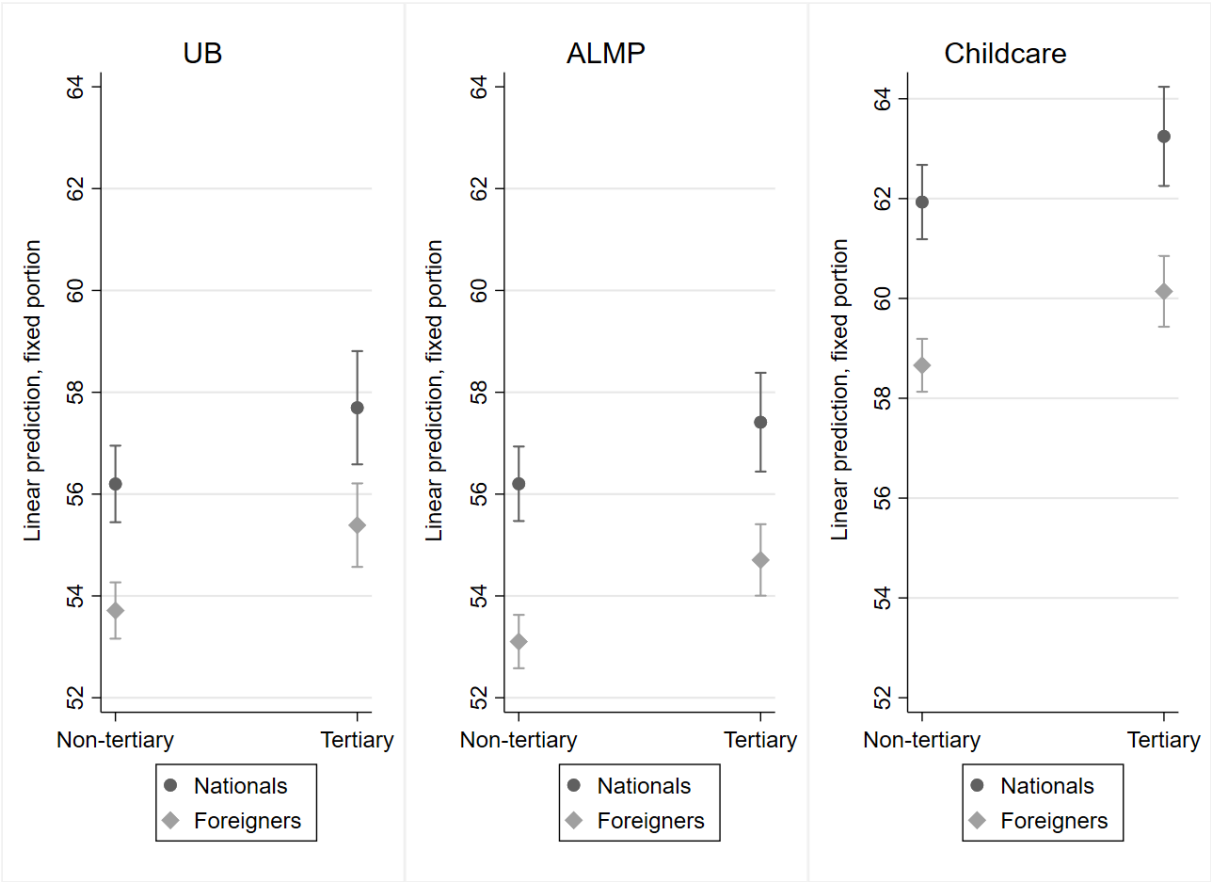
As can be seen in Figure 4, respondents who share the basic idea of social investment are less inclined to discriminate against foreigners than those who chose other options. The models underlying the interactions presented in Figure 4 are provided in the supplementary material (see Figure S9, Figure S10 and Figure S11). However, the pattern is very similar across policy areas, meaning that this outcome was not driven by a rationalization regarding the nature of the intervention and its social outcome but rather a predisposition to not discriminate against foreign claimants. Therefore, like in the previous analysis, we do not see any evidence that the immigrant deservingness penalty is lower or disappears when moving from compensation to investment policies.

Figure 4: Deservingness rating for three different types of social interventions, by nationality of vignette person and belief on the primary purpose of the welfare state of the respondent.
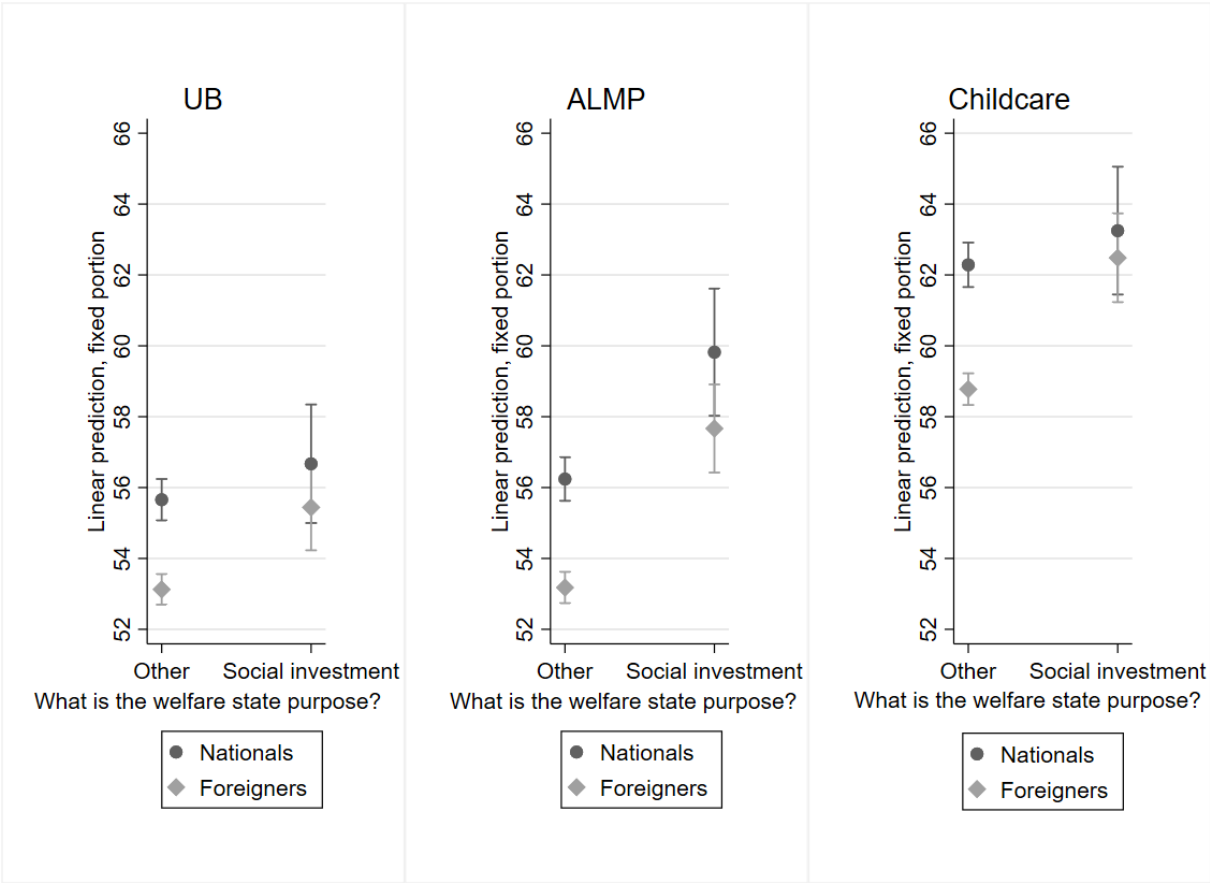
These results leave little doubt with regard to the fact that respondents' solidarity towards immigrants is driven by a very similar logic in the three policy areas, regardless of their social investment or social consumption orientation. Furthermore, our results indicate that the immigrant penalty is unlikely to be associated with some sort of rational strategy that aims to protect society from potential free riders. On the contrary, the results suggest that decisions concerning deservingness are based on a psychological disposition for in-group favoritism. Of the two theoretical perspectives that were considered in this study, our results lend support to social psychology view represented by identity theory.

Discussion and conclusion

The increase in ethnic diversity in Western democracies challenges the political viability of generous redistributive schemes, as shown by the literature on the effects of immigration on support for welfare state generosity. The vast literature on deservingness perceptions gives us important insights into the micro-foundations of this relationship, by consistently showing that immigrants are perceived as less deserving of public support in comparison to natives.

Following the literature on social trust, we hypothesized that the reorientation of welfare states towards social investment would be associated with a reduction in the immigrant deservingness penalty and thus result in welfare states that could find more support in ethnically diverse societies.

We found no evidence of any difference whatsoever in the immigrant deservingness gap between social consumption and social investment policies. This result thus goes against the claim that the deservingness immigrant penalty fulfils the function of protecting groups form free riders. It however supports our alternative hypothesis, derived from identity theory, which suggests that preferences for excluding immigrants from social policies stem from in-group bias. This motivation is not a result of rational considerations and is thus independent of the social policy intervention.

We also did not find variation across welfare state types. Following a social trust-based explanation, we would have expected this difference to be larger in those welfare states where concerns about free riding is likely to be strongest, i.e., conservative and, especially, liberal welfare states. The strong focus on contributory principles and needs-based provision in these welfare states invites divisive conceptions of deservingness. Our results contradict this expectation too, by showing very similar patterns across the six countries. In this respect, our results are in line with other studies that find limited evidence on the impact of levels of social trust on perceptions of immigrant deservingness for social benefits (Kumlin et al 2017). This finding, however, does not challenge previous research showing that institutions influence welfare attitudes and perceptions of immigrants' deservingness to collective help, as our focus concerns only a possible difference in the immigrant deservingness gap between social consumption and social investment policies.

Demonstrating the absence of an effect or a null result is difficult because this can be a consequence of the method chosen. In this case, we are rather confident that our method would have allowed us to see an effect if it were there. First, our hypotheses were tested in a vignette experiment, i.e. a design that is known to limit socially desirable answers and has a high level of reliability for exploring sensitive societal values, including perceptions of members of out-groups (Auspurg and Hinz 2015; Hainmueller et al 2015). Second, we have relatively large samples (1400+ per country), which gives us a fair level of statistical power. Third, the experiment was fielded in six different countries representing a high degree of variation in welfare regimes, and the results are consistent across our entire sample. Fourth, we considered and tested the possibility that the effect we assumed in our hypothesis would be confirmed only among a subgroup of respondents. Fifth, we considered the possible existence of a difference

in immigrant deservingness gap in two different and typical social investment policies, which means that our results are not limited to a single component of the social investment welfare state. Of course, we cannot rule out that other research designs will yield different outcomes, but the consistency of our results across countries, policies, and sub-groups of respondents makes it difficult to imagine radically different results with a different specification. The null result we obtain is thus rather plausible.

Our results contradict previous findings obtained with totally different methods: a qualitative study based on focus groups (Heurer and Zimmermann 2020) and a study based on item-based questions (Eick and Larsen 2022). Both studies provided suggestive evidence that the migrant deservingness penalty may be lower or inexistent when shifting from social consumption to social investment policies. There may be multiple reasons for this divergence in results. First, both previous studies use methods (focus groups and item-based questions) that may be prone to social desirability. Second, discussions within a focus group can be influenced by group dynamics. During the process of deliberation, rationalization often occurs, leading respondents to consider the social consequences of different social policy options. On the contrary, our method elicits some sort of instinctive gut reaction, and it may be the case that the assumed difference in the scope for free riding is not immediately visible for non-expert respondents. We leave to future research to provide a more thorough explanation of why different methods yields different answers to the question of the immigrant deservingness gap in social investment interventions.

Nevertheless, it is crucial to emphasize that this automatic psychological mechanism holds significance in predicting political behavior. Research has shown that political elites exploit these gut feelings by employing the deservingness heuristic to gain political advantages (Petersen et al., 2011; Petersen et al., 2013). This process aligns with recent theories on how democracy functions, indicating that political parties primarily mobilize voters based on their social identity and by fostering a sense of "us" versus "them" (Achen & Bartels, 2017; Huddy et al., 2015).

These conclusions should not be taken to imply that the reorientation of western welfare states towards social investment is not a suitable strategy for multi-ethnic societies. On the contrary, there are many reasons to believe that social investment may bring optimal societal outcomes, not least in terms of the potential for immigrant integration (Bonoli 2020). However, they imply that this reorientation alone will not result in a reduction of the tensions that are generated around redistributive policies in multi-ethnic societies.

In conclusion, while we do not dispute the adequacy of a social investment strategy as a reform program for European welfare states, we believe that it is unlikely that this re-orientation alone will result in a sharp reduction of the tensions that are generated around redistributive policies. Deservingness perceptions are the micro-mechanism that explains the difficulties multi-ethnic societies have in running extensive and redistributive welfare states. They are unlikely to change significantly as we move toward more social investment policies.

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Supplementary Material - Welfare solidarity in multi-ethnic societies: can social investment reduce the anti-immigrant bias?

You probably know that unemployed workers can be allowed to participate in training programs to improve their chances of finding employment. Often, however, **the places in such programs are limited** and not all unemployed can participate.

We would like to know from you to what extent you think each of the following fictional jobseekers should be **prioritized** when it comes to **participation in these training programs**.

There are no right or wrong answers, we are interested in your opinion on this topic.

Next

new screen

A 55-year-old man has resigned from his job as a lab technician because the work was contradictory to his religious values. He is an American citizen who has lived the US for two years. He has contributed to unemployment insurance in his respective country of residence for the past four years, is currently looking for a job, and manages to send out one to two applications per week. He could live up to six months on his savings.

Lowest priority   Highest priority

0   10   20   30   40   50   60   70   80   90   100

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Figure S1 Introductory text and example vignette (Training/ALMP vignette, US version)

In some places, there is **shortage of childcare places** that are **subsidized** by the government, and decisions must be made regarding who should have **priority in obtaining a subsidized childcare** place.

Let us assume that all the following individuals seek childcare. All of them are 35 years old and have two children.

Please tell us if you think that they should be given a low (0) or a high priority (100).

There are no right or wrong answers, we are interested in your opinion on this topic.

Next

new screen

A single mother has applied for a childcare place and is waiting to hear back. She is an American citizen who was born in the US and has lived there all her life. Financially, she and her family more or less manage on their current income. She worked as a food engineer and has paid taxes for the past eight years but is currently unemployed and looking for a job.

Lowest priority										Highest priority
0	10	20	30	40	50	60	70	80	90	100

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Next

Figure S2 Introductory text and example vignette (Childcare vignette, US version)
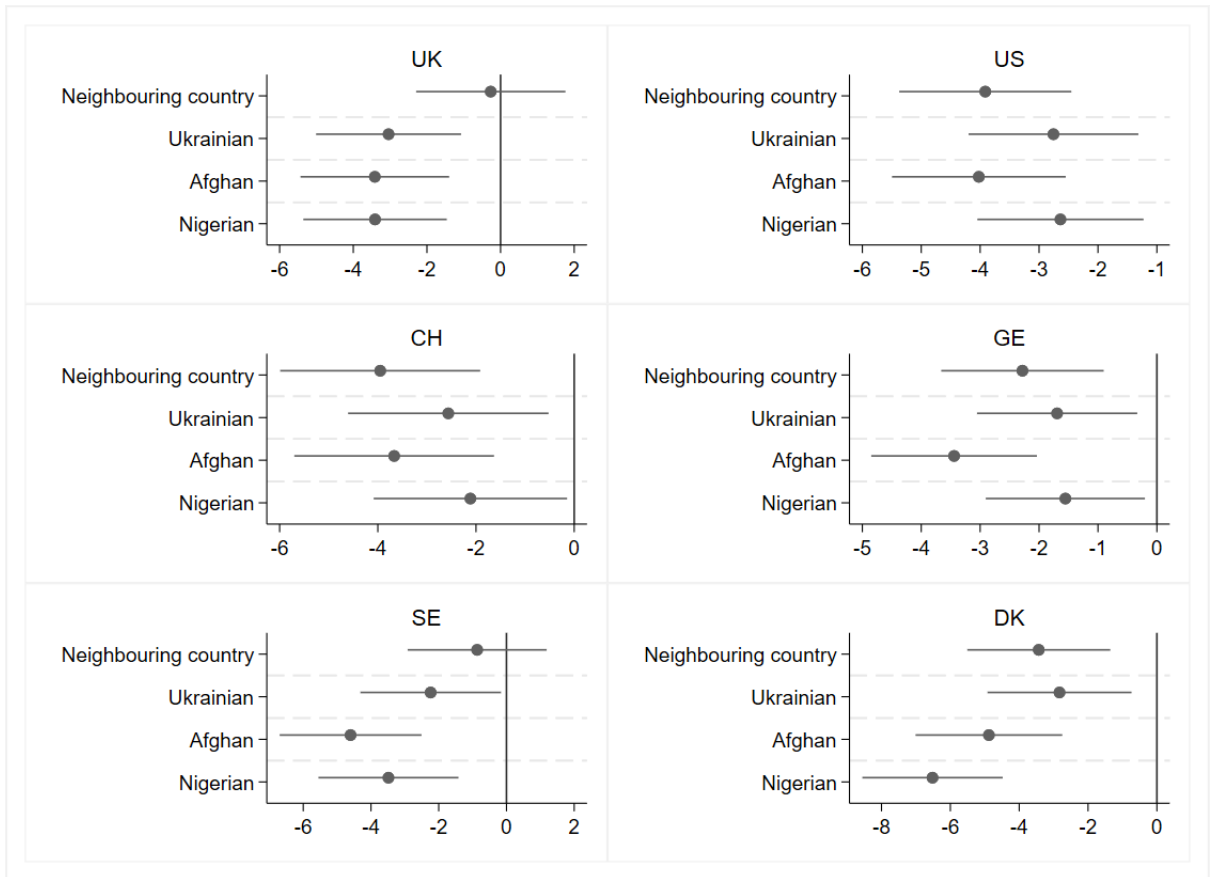
Figure S3 Breakdown analysis by country of origin of the vignette person for the ALMP vignette
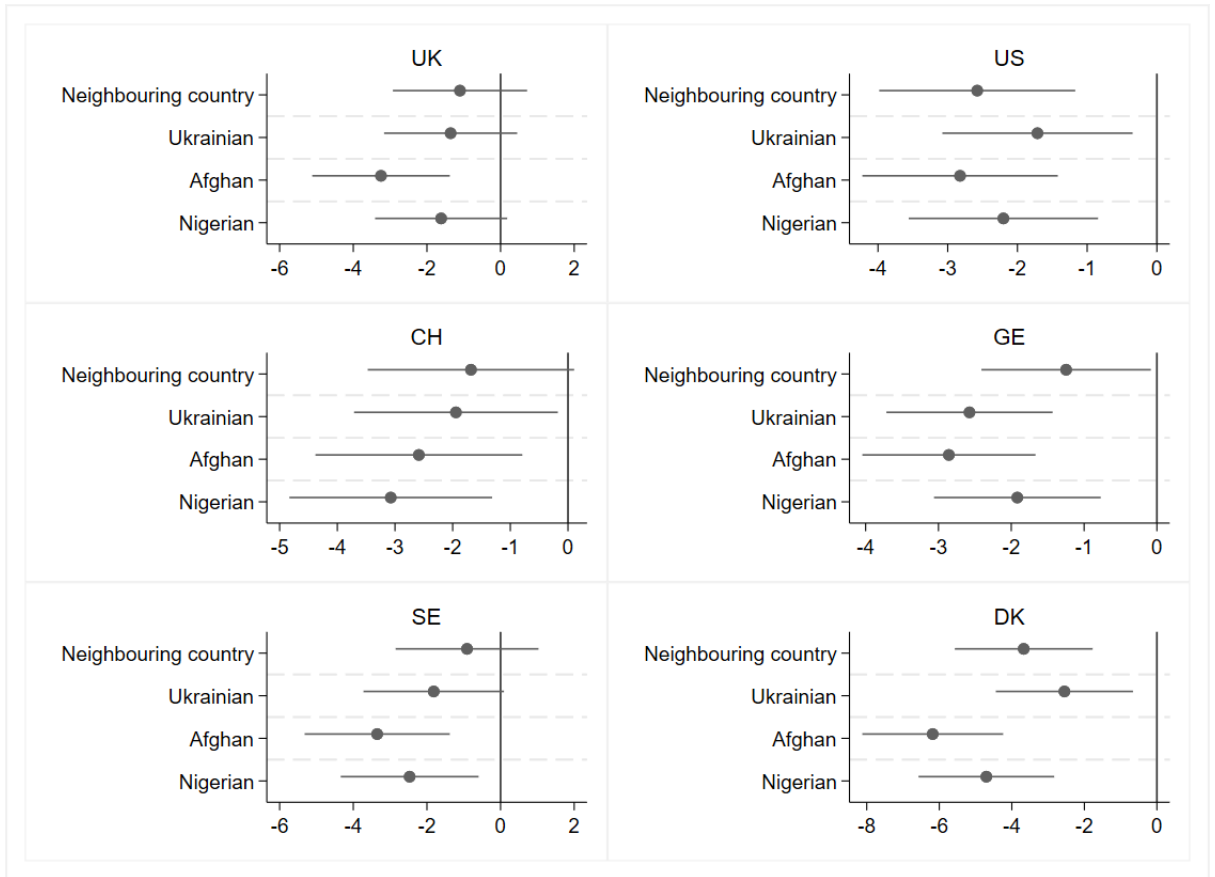
Figure S4 Breakdown analysis by country of origin of the vignette person for the unemployment benefit vignette
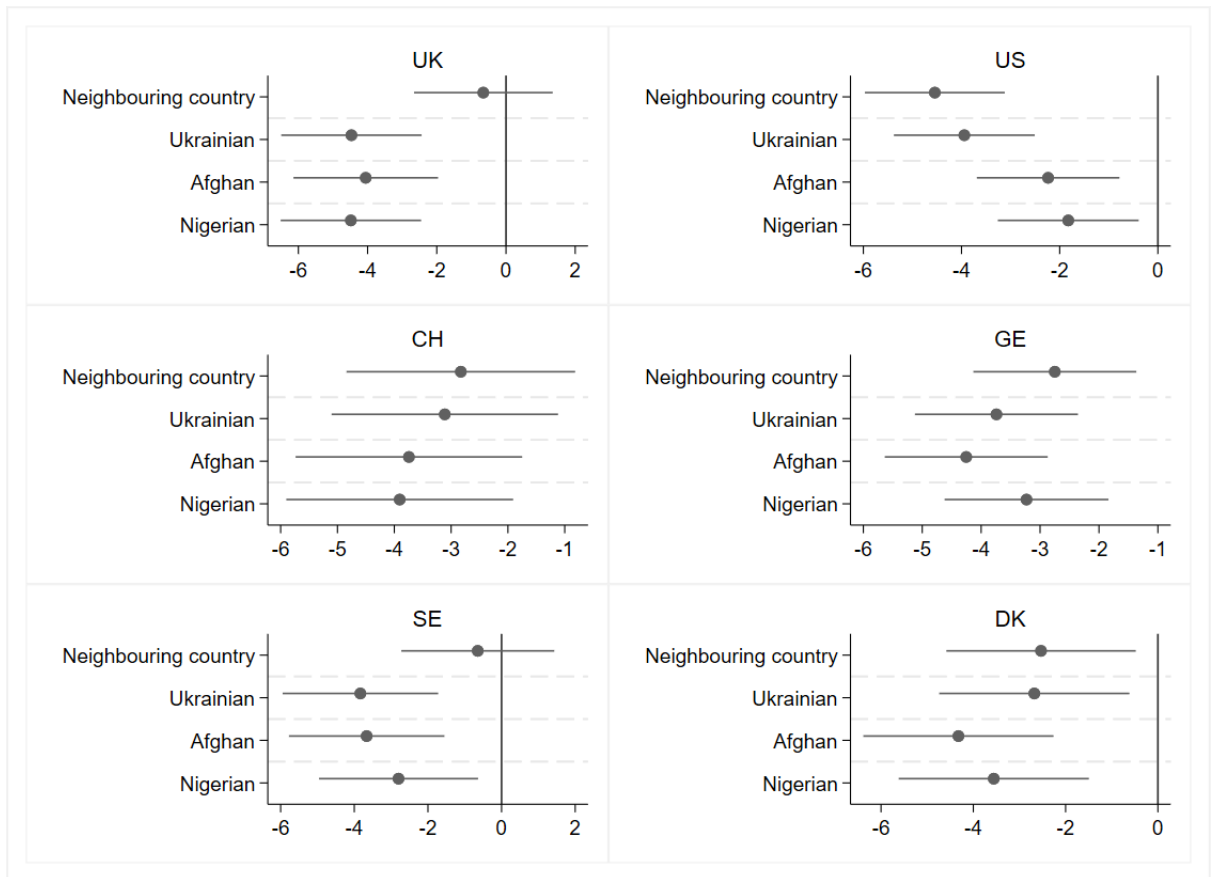
Figure S5 Breakdown analysis by country of origin of the vignette person for the childcare vignette

	Training	Childcare
Denmark	0.20245	-0.8846
Sweden	0.549545	-1.07738
Germany	-0.09386	1.861081
Switzerland	0.673889	0.996518
UK	0.744817	1.393266
US	1.243546	1.076426

Table S1: Z-scores of differences between coefficients for foreign nationality in deservingness to training or childcare relative to deservingness to unemployment benefit. Z-scores calculated following Paternoster et al 1998. None of the scores reaches the critical value of ± 1.96.
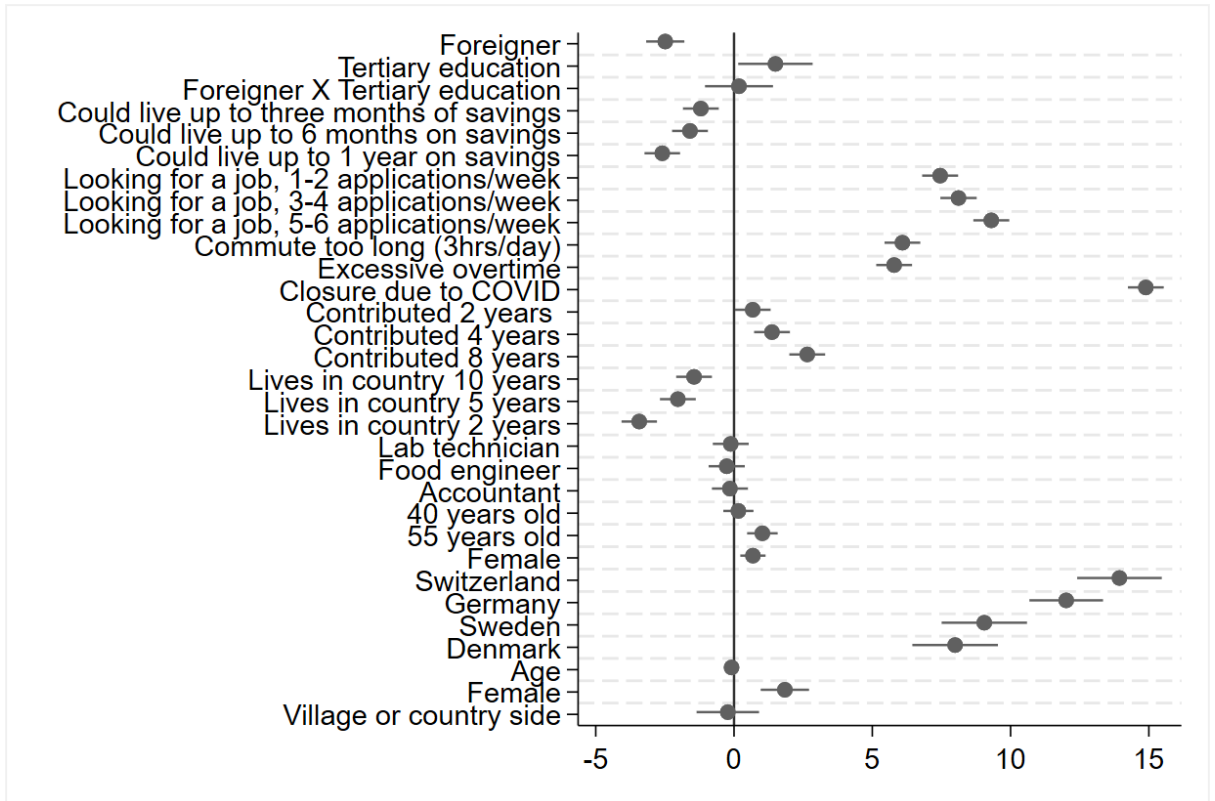
Figure S6 Model underlying Figure 3 for the unemployment benefit vignette
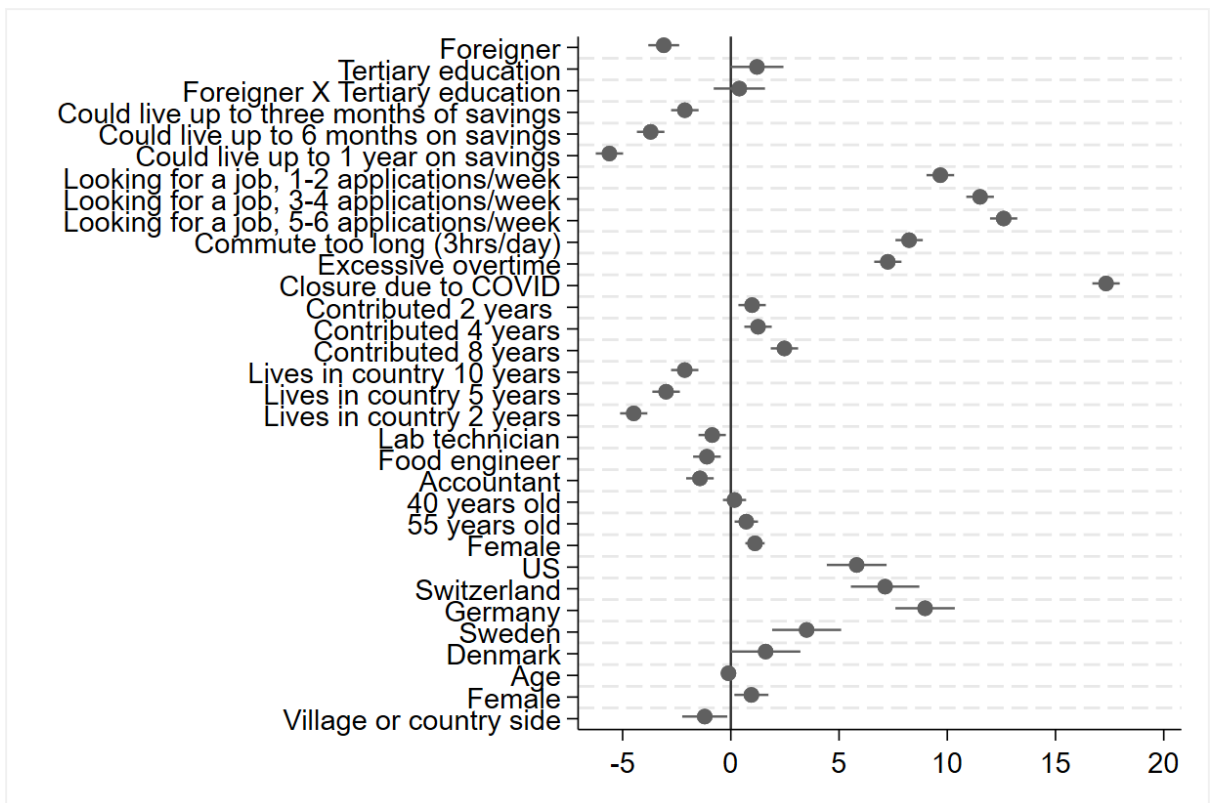
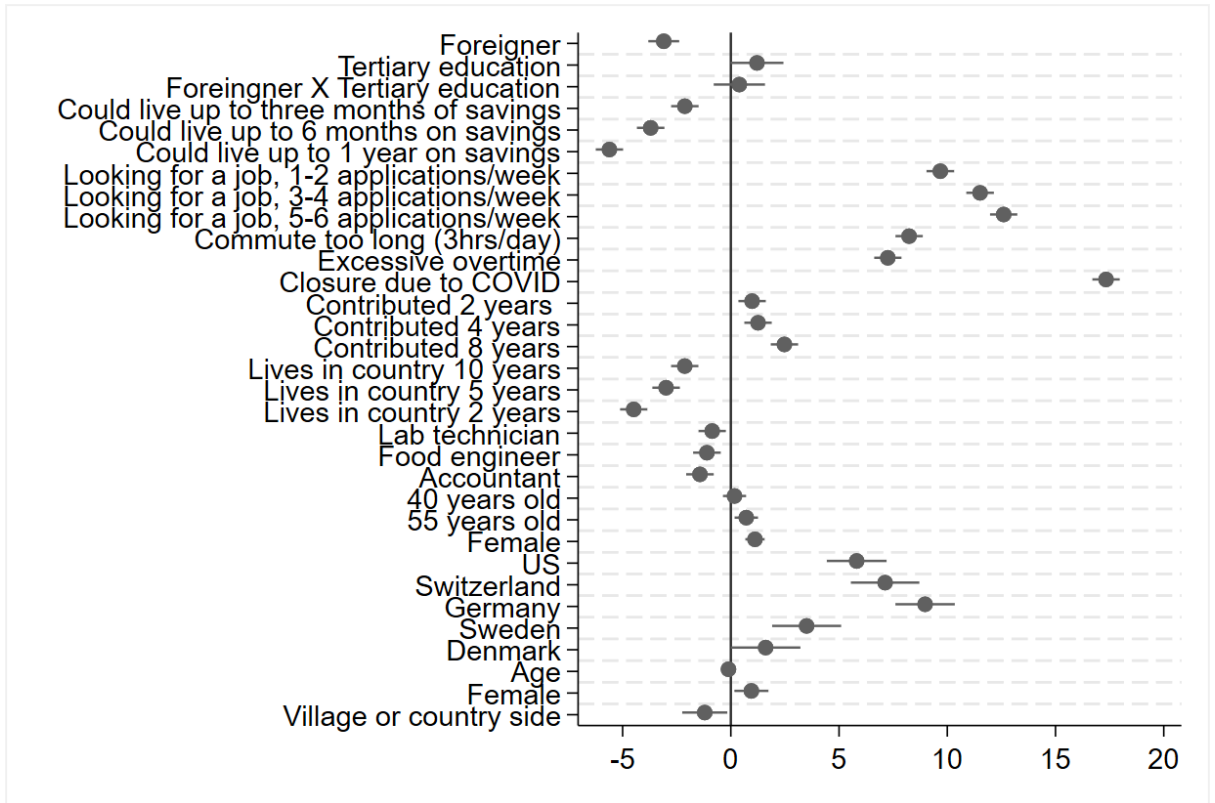*Figure S7 Model underlying Figure 3 for the ALMP vignette*

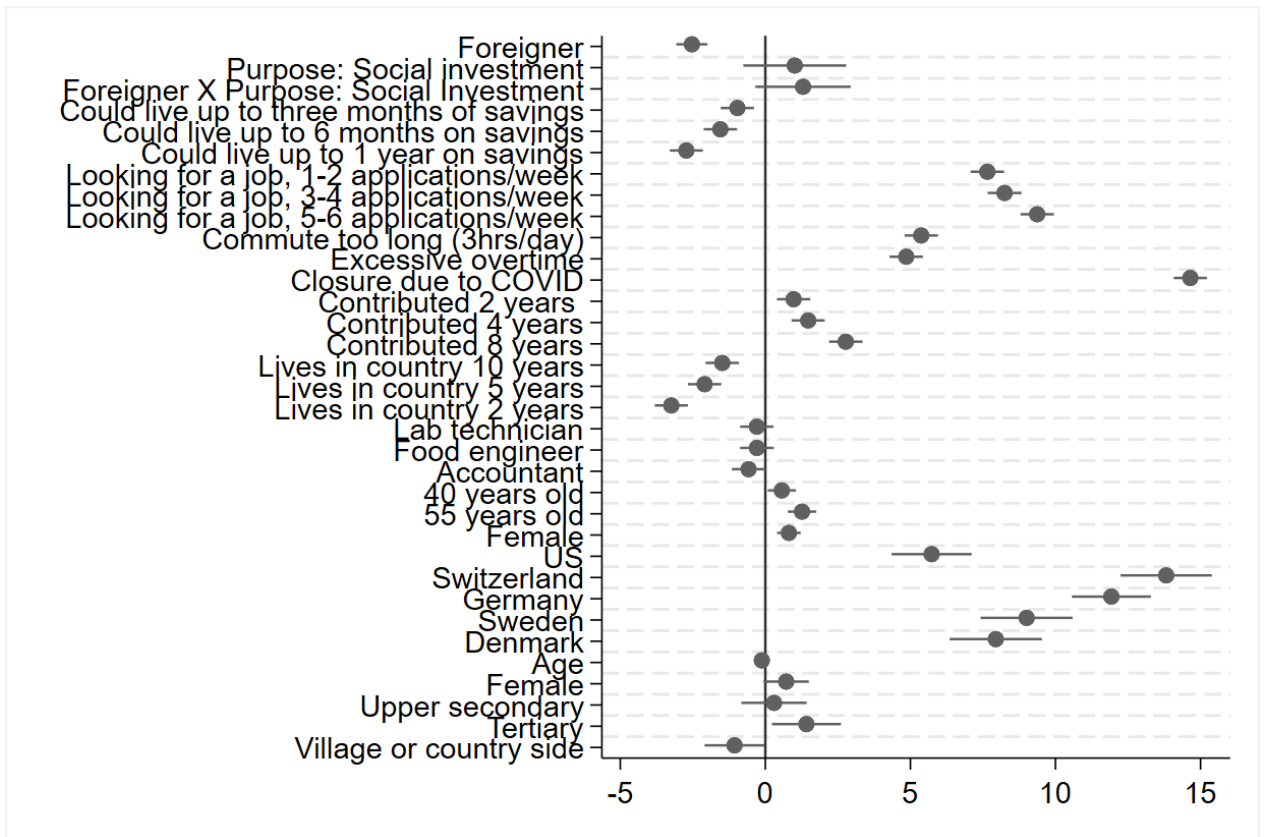*Figure S8 Model underlying Figure 3 for the childcare vignette*

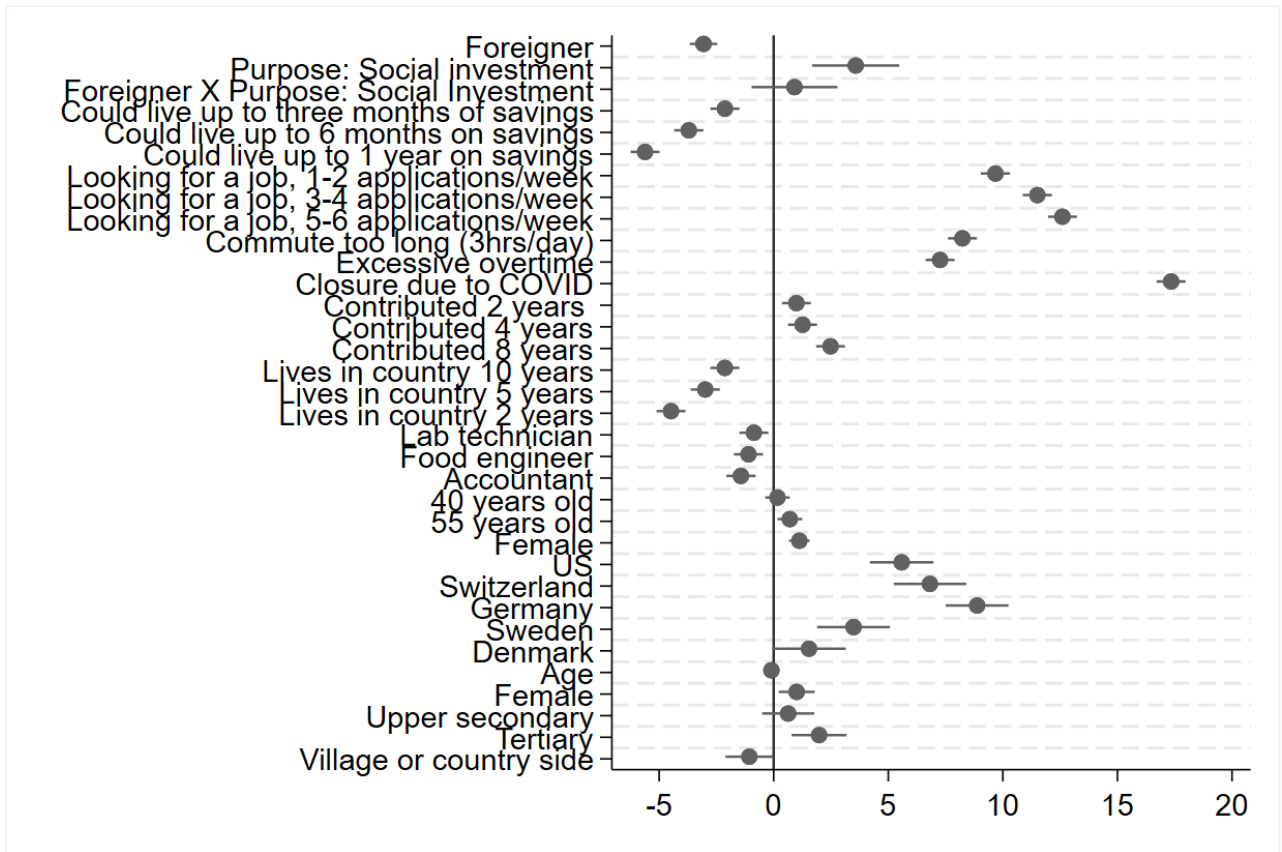*Figure S9 Model underlying Figure 4 for the unemployment benefit vignette*
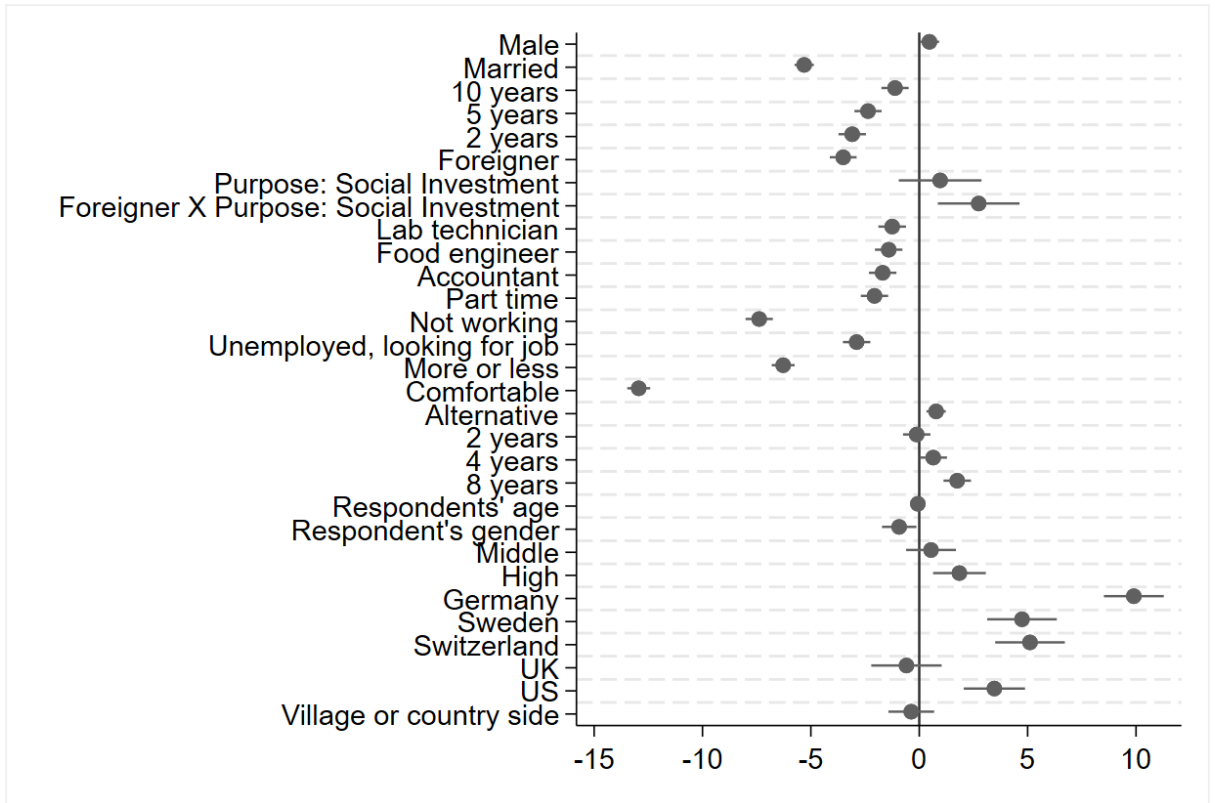
29

Figure S10 Model underlying Figure 4 for the ALMP vignette

Figure S11 Model underlying Figure 4 for the Childcare vignette