



REMINDER

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS
IN NARRATIVES, DEBATES AND EU REFORMS

Reciprocity in welfare institutions and attitudes to free movement in EU receiving countries

WORKING PAPER

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Abstract

This paper analyses the determinants of public attitudes to the “free movement” of workers in the European Union. We add to the small but growing research literature on this issue by focusing on how the characteristics of national welfare institutions affect public attitudes to intra-EU labour mobility. More specifically, we explore the role of what we see as the degree of “institutional reciprocity” in national systems of social protection in explaining variations of attitudes to free movement across 12 EU Member States. We do not find evidence of a direct effect of institutional reciprocity on attitudes to free movement. However, we identify an interaction effect which suggests that higher degrees of institutional reciprocity in national social protection systems in general, and in unemployment insurance systems in particular, are associated with lower levels of opposition to free movement among unemployed people.

Keywords:

European Union, public attitudes, free movement, social protection systems, reciprocity



1. Introduction

The free movement of workers has in recent years become a highly contested issue in the European Union (EU), generating political debates and conflicts both between and within EU Member States (cf. Ruhs and Palme 2018; Roos 2018). Under the current rules surrounding free movement, EU citizens can move and take up employment in any other EU country and – as long as they are “workers” – enjoy full and equal access to the host country’s welfare state. This means that EU Member States have an obligation to give migrant workers from other EU countries unrestricted access to their national labour markets and full access to their social protection systems, treating them equally with national workers.

The political leaders of a number of EU Member States have in recent years called for changes to the rules for free movement. The United Kingdom, where free movement played a major role in the referendum vote to leave the EU (cf. Hobolt 2016; Goodwin and Milazzo 2017) has been the only EU country that has proposed restricting the free movement of workers as such (Cameron 2013). There have, however, been other leaders of EU Member States (including in Denmark, the Netherlands, Austria, and the UK, cf. Ruhs and Palme 2018) who have called for more restricted access for EU workers to national welfare states. The political leaderships of many other EU countries appear to have been opposed to fundamental and permanent reform of the current rules, directly or indirectly supporting the view that the current policy of unrestricted access to labour markets *and* full and equal access to welfare states for EU workers should continue.

Views about free movement have not only varied between political leaders but also among the public in and across different EU Member States. The populations of EU countries differ in their support of and opposition to free movement (e.g. Blinder and Markaki 2018a; Lutz et al. 2018), but the differences appear to be partly dependent on how the survey questions are phrased and while opposition has declined in most countries there are no clear signs of convergence (Mårtensson and Uba 2018). Recent research has shown that attitudes to free movement differ depending on whether it is about inward or outward mobility (e.g. Lutz 2019), where respondents tend to be more positive to hypothetical outward mobility than to inward mobility (also see Mårtensson and Uba 2018). EU Member States show substantial



differences in the public attitudes to free movement, also among the countries that are typically net-receiving countries of EU-workers (Mårtensson and Uba 2018).

How can we explain these variations in public attitudes to free movement across EU countries? The large research literature on the determinants of attitudes to immigration (in general) has shown that attitudes are affected by both individual factors and a range of contextual factors such as local socio-economic conditions (e.g. Markaki and Longhi 2013; Hoxhaj and Zuccotti 2019), ethnic concentration (e.g. Weber 2015), and prevailing institutions including welfare systems (e.g. Facchini and Mayda 2009). The emerging and still much smaller research literature on attitudes toward European free movement in particular has also found that socio-economic context matters (e.g. GDP per capita, see Vasilopoulou and Talving 2018), but it has not yet investigated the role of institutional factors in explaining cross-country variations in people’s attitudes to intra-EU labour mobility and to whether EU migrants should be able to access welfare benefits. This paper aims to start filling this gap by exploring the relevance of reciprocity in social protection systems, a factor, which in relation to normative attitudes to how social protection systems should be designed (Mårtensson, Palme and Ruhs 2019) as well as to public attitudes about how to give migrants rights to benefits (Reeskens and van Oorschot 2012) stands out as being of significant importance.

The aim of the paper is to explore whether and how public attitudes to free movement relate to the level of reciprocity embodied in national social protection (or insurance) systems – that is, the degree to which there is a reciprocal relationship between the insured person and “the system” based on the contributiveness and/or earnings-relatedness of the social insurance. We call this “institutional reciprocity”. The paper analyses how the institutional reciprocity of social protection systems is related to attitudes to free movement in 12 EU countries that are net-receivers of EU migrants. Our primary source of data on attitudes toward free movement is the European Social Survey (ESS). We also use a range of other sources to construct our indicator of institutional reciprocity and some of the control variables used in the analysis.

The results of our analysis in this paper do not provide evidence that the institutional reciprocity of social protection systems directly affects attitudes to free movement.



However, we find a conditional effect of reciprocity on attitudes towards free movement among the unemployed. This effect suggests that higher degrees of institutional reciprocity in national social protection systems are associated with lower levels of opposition to free movement among unemployed people.

2. Theorising the link between reciprocity in welfare institutions and attitudes to free movement

In any study of public attitudes to immigrants, or specific sub-groups of immigrants, it is important to ask who the public is likely to “have in mind” when answering survey questions about that group (Blinder 2015). This paper focuses on the intra-EU labour mobility of “EU workers”, i.e. EU citizens who have left their home country to work in another EU Member State. EU workers make up the vast majority of EU citizens who move from one EU country to another. However, it is important to emphasise that free movement may also include, and may in some people’s minds be associated with, the intra-EU mobility of other groups of EU citizens, such as family members of EU workers, pensioners, students or beggars. Non-EU citizens with permanent residence status (including some recognised refugees) and/or naturalised EU citizens also benefit from free movement. Under EU regulations, the employment and welfare rights of some of these groups differ from those of “workers”. There may, nevertheless, be some “spill-over effects” when it comes to public attitudes to free movement which may relate to a range of different groups, not just workers.

Migration and the welfare state

There is a long-standing research literature that investigates the relationship between immigration and welfare states. Gary Freeman was one of the first to argue that large-scale immigration challenges the fiscal and political stability of the welfare state, concluding that “... the relatively free movement of labour across national frontiers exposes the tension between closed welfare states and open economies and that, ultimately, national welfare states cannot coexist with the free movement of labour.” (Freeman 1986). One prominent off-shoot of this perspective has developed under the conceptual umbrella of “welfare state chauvinism” (Andersen and Bjørklund 1990), i.e. the idea that citizens in a country want to exclude migrants and other non-citizens from getting access to “their” welfare rights.



Welfare state chauvinism can be related to values, i.e., to ideas and norms about fairness or deservingness of welfare recipients. It can also stem from self-interest, i.e., from concerns about migrants being a burden on tax payers. Whatever its source, the general argument behind welfare state chauvinism is that workers in affluent parts of the world consider their welfare states to be threatened by migrants, and thus mobilise politically against both immigration and giving immigrants (“outsiders”) access to welfare benefits. Following this line of reasoning, we could expect that more generous welfare states generate more popular resistance to immigration and social rights for migrants simply because there is “more to lose”. There are, however, also other perspectives that predict the opposite, namely, that the most generous and universalistic welfare state will generate the most inclusive and tolerant attitudes to migrants (Crepaz and Damron 2009) and more admmissive policies with regard to refugees (Boräng 2018). The positive effects of generous welfare states on immigration are interpreted as outcomes of processes whereby these more inclusive institutions generate inclusive norms vis-a-vis “outsiders”, including immigrants. This line of argument is similar to what has been observed about the relationships between different social policy regimes and the generosity towards poor people, that those living within more inclusive national social policy systems tend to be more generous towards “the poor”, which is part of what has been called the “paradox of redistribution” (cf. Korpi and Palme 1998).

The role of welfare in institutions in explaining attitudes to immigration

The empirical research literature on the determinants of public attitudes to immigration and the social rights of migrants has found some support for the idea that welfare institutions, and fiscal policies more generally, matter. A key finding that is relatively common across a range of different studies is that institutions often matter in interaction with labour markets and other individual characteristics. For example, Hanson, Scheve, and Slaughter (2007) analyse how fiscal policies influence voter attitudes to immigration across different US States. They find that what they call “high exposure to immigrant fiscal pressures” (mainly measures based on the different magnitude of welfare spending per person across states) reduces public support for immigration among US citizens, especially among skilled people.



Facchini and Mayda (2009) show that public attitudes to immigration in high-income countries are affected by the specific ways in which national welfare states adjust to an inflow of immigrants, distinguishing between a “tax adjustment model” and a “benefit adjustment model”. Their results suggest that the attitudes of high- and low-income individuals are affected differently by immigration across the two adjustment models.

In a more recent paper that also highlights interaction effects, Huber and Oberdabernig (2016) analyse how the utilization of different types of welfare benefits by both immigrants and natives affects attitudes to immigration in twenty-four European countries. They find important interaction effects suggesting that the ways in which education and age shape attitudes to immigration depend on the take-up of benefits by immigrants relative to that of natives. Their results indicate that, in countries with higher benefit take-up rates by immigrants relative to natives, pro-immigration attitudes increase more strongly with increasing educational attainment and decline more strongly with the age of natives.

Largely due to scarcity of relevant data, there are relatively few studies that analyse how welfare institutions are linked to attitudes regarding migrants’ access to the welfare state. Van der Waal, De Koster, and van Oorschot (2013) analyse how welfare chauvinism varies across different welfare regimes. Their results provide empirical support for the relevance of welfare regimes to such attitudes, although the regime effects they find can be fully attributed to regime differences in income inequality.

Some studies have explored the role of normative attitudes to welfare, i.e. a type of informal institution, as a determinant of public attitudes to giving welfare rights to migrants. For example, in an important analysis that has partly inspired our paper, Reeskens and van Oorschot (2012) analyse the relationship between, on the one hand, normative attitudes to social protection systems among populations in 24 EU countries, and on the other the normative attitude they express in relation to how immigrants should be awarded benefits. They find that most Europeans prefer conditional access to welfare benefits for migrant workers, and that the most commonly held/preferred principle for regulating migrants’ access to social rights is “reciprocity” (defined by them as “prior contribution”). Reeskens and van Oorschot also find that people who believe that welfare benefits should be provided based on the principle of “need” (rather than “equality” or “reciprocity”) are



significantly more likely to support restrictions on the welfare benefits of newly arrived migrants.

Reeskens and van Oorschot (2012) also consider the role of formal welfare institutions by analysing the effects of social protection expenditure. They find that high levels of social protection expenditure (as a share of GDP) tend to decrease welfare chauvinism, a result that is also found in a different study by Mewes and Mau (2013).¹

Considered as a whole, it is fair to say that the existing research on the role of welfare institutions in shaping public attitudes to immigration has identified some significant effects, but that the impacts identified are sometimes small and also dependent on methodological choices. While it is possible that this might reflect the fact that welfare institutions play a relatively minor role in shaping attitudes to immigration, it is also possible that it is the result of the well-known difficulties involved in measuring relevant institutions adequately, and because empirical models have been incorrectly specified in terms of how they affect public attitudes.

Because of the considerable methodological challenges involved, it is perhaps not surprising that the available studies that explore the role of welfare institutions in shaping attitudes to immigration and access to social rights for migrants are still far fewer than the studies that focus on other explanatory factors. A much larger body of research has explored the role of labour market competition, i.e. the perceived consequences and “threats” of immigration for the wages and employment of citizens (e.g. Scheve and Slaughter 2001). Despite a large number of studies on this particular issue, however, the evidence and empirical support for the idea that personal economic circumstances are a major driving force behind attitudes (especially negative attitudes) to immigration is still relatively weak. Instead, much of the existing research suggests that sociotropic concerns, especially about identity and the cultural impacts of migrants on the country as a whole, are the core drivers of negative attitudes towards immigration (Hainmueller and Hopkins 2014).

¹ This finding would perhaps appear to contradict the results of Hanson et al. (2007) but that study was focused on fiscal pressures rather than expenditures and only included one country (the US).



Explaining attitudes to free movement in the European Union

The migration and welfare issues that arise in the context of the specific case of the free movement of workers in the European Union cut across many of the issues analysed in the broader literature on migration and the welfare state. These include the fiscal and other costs and benefits of immigration; the costs and perceived fairness of granting migrants access to welfare benefits; competition in the labour market; perceived cultural issues and threats; as well as more specifically European themes such as “social dumping”² and the regulation of the rights of mobile EU-workers. This implies that our analyses of attitudes to free movement should be seen as an attempt to explore some questions with more precision than previous research in terms of dependent and independent variables, as well as in the selection of countries to analyse (see below). This notwithstanding, it will of course not be possible to provide full answers to the broader questions around migration and the welfare state.

There are very few papers that have analysed the determinants of attitudes to free movement in the European Union. In the first paper on this specific issue, Vasilopoulou and Talving (2018) use data from the Eurobarometer to explore the role of both individual and contextual variables in shaping attitudes to free movement. They find that people’s support for free movement is strongly and negatively related to country affluence, measured by GDP per capita. Citizens in poorer EU Member States are more likely to support free movement. Importantly, and mirroring the findings of the role of some of the contextual/institutional factors analysed in the studies of attitudes to immigration reviewed above, the economic context (GDP per capita) also interacts with, and thus influences, the effects of other determinants such as human capital and identity. Although Vasilopoulou and Talving (2018) include contextual factors such as GDP and Eurozone membership in their analysis, there is no explicit consideration or analysis of the role of welfare institutions.

Lutz (2019) asks why over 80 percent of EU citizens are in favour of free movement when, at the same time, it has become a major driver of Euro-scepticism in many European countries.

² Whereby wages and social conditions deteriorate as a consequences of companies using the freedom of movement for capital to make workers in different countries compete and lower their demands.



He explains this puzzle by highlighting the double-sided nature of free movement, which means that people can value their own rights to outward mobility without necessarily supporting the inward-mobility of citizens of other EU countries. The analyses in Lutz (2019) and Vasilopoulou and Talving (2018) suggest that attitudes to free movement very much depend on whether they are viewed primarily through an immigration or emigration lens.

Two recent papers by Scott Blinder and Yvonne Markaki, prepared as part of the REMINDER project, explore different aspects of the perceived fiscal effects of immigration from within and outside the EU. Blinder and Markaki (2018) analyse how the perceived fiscal (and other) effects of EU and non-EU migrants are related to public attitudes to immigration. They find that EU citizens who think that immigrants have a negative fiscal impact on the welfare state are much more likely to support restrictions on immigration.

In a related study, Blinder and Markaki (2019) raise and explore the important question of what determines Europeans' perceptions of the fiscal effects of immigration, from within and outside the EU. Their particular and novel focus is on whether and how the estimated fiscal effects of immigration (based on data from Nyman and Ahlskog 2018) are related to perceived effects. The study finds that perceptions of welfare effects are only weakly related to estimated material effects but identifies a larger significant relation to the number of working-age migrants receiving benefits compared to natives, what the authors call the "demographic fiscal exposure to immigration". The study finds that people who live in countries where more immigrants receive benefits relative to all natives have more negative perceptions of welfare impacts compared to people in countries with lower demographic fiscal exposure. The paper thus suggests that *how many* immigrants in relative terms receive benefits is a more important determinant of perceptions than *how much* each immigrant receives. The conclusion holds for the perceived effects of both EU migrants and non-EU migrants. The negative impact of demographic fiscal exposure to EU migrants is actually found to be larger than that of exposure to non-EU migrants. Thus, in different ways the existing research points to the importance of contextual and institutional factors for understanding the differences in views on free movement among European countries. But our brief review of key examples of relevant existing research makes clear that it is far from



self-evident how welfare institutions are a significant determinant of attitudes to free movement. It is also clear that institutional effects are difficult to measure and analyse.

Hypotheses about the relationship between institutional reciprocity and attitudes to free movement

We consider the question of whether and how national institutions are related to, and shape, attitudes to free movement a very important area of research, not least in the context of highly contested policy debates about the causes of the apparent disagreements between people and political elites within and across EU countries, and about the implications for whether and how the current rules for free movement need to be reformed.

In the following, we focus on the reciprocity of welfare institutions as a feature that may be of crucial importance for attitudes to free movement. A social protection system with a high degree of reciprocity is based on a strong link between an individual's payments to the welfare state and the benefits that he or she receives in return. Our previous work has explained how reciprocity in welfare institutions can influence policy attitude toward free movement (Ruhs and Palme 2018): there is a popular and widespread view across EU member states that “reciprocity” should be a guiding principle in the provision of welfare benefits for new migrants,³ which suggests that contributory or “merit” based entitlements appear to be more accepted as legitimate than benefits given on the basis of “need” or “universal rights” based on citizenship/residence (also see Reeskens and van Oorschot 2012).

³ As shown in Appendix Table A1, when asked at what point newcomers should get access to the same social benefits and services as citizens of the host country, the most common answer among respondents across 15 European countries is “after having worked and paid taxes at least a year” (42 percent of respondents), followed by “once they have become a citizen” (29 percent). Only nine percent of respondents across countries said that newcomers should get access to the same social rights “immediately on arrival”, and only 11 percent said “after a year, whether or not they have worked”.



Different welfare systems can be expected to be associated with different underlying principles of benefit provision (e.g., contribution based, universal and needs based), with variable degrees of (in)consistency with the idea of reciprocity. Indeed, our previous work has shown that there are considerable variations across EU countries in terms of both the “institutional reciprocity” built into national social protection systems and people’s normative attitudes to reciprocity as a general principle of redistribution. We have also shown that there is a positive association between these two types of institutional and normative reciprocity (Martensson, Palme, and Ruhs 2019). We argue that these cross-country differences in institutional (and normative) reciprocity of national welfare institutions may be an important reason for variation in people’s (and political elites’) attitudes to the immigration and/or welfare rights of new EU migrants.

Our understanding of reciprocity is built on the assumption that both the financing side and the benefits side may contribute to the reciprocity of a social protection system but that the link between the two sides is not necessarily very strong. The Beveridge system that was introduced in the United Kingdom after World War II was, for example, built on contributory financing where the insured person made a substantial contribution (originally flat rate and later earnings related) to the system. However, benefits were flat rate, and thus not necessarily determined by the size of the insured person’s contributions. Likewise, the old-age pension system in The Netherlands is based on contributions from insured persons, but benefits are of a flat-rate character. We assume that the “contributiveness” of a system is especially strong if contributions are paid by the insured person her/himself. We therefore construct an index of contributiveness in the financing of the major social insurance programs. Reciprocity in a social protection system can also be fostered by relying on strong “earnings-relatedness”, i.e., the extent to which social insurance benefits replace previous earnings. The logic here is that earnings-relatedness supports the norm that that you “earn” your rights and those who have earned more also deserve higher benefits because they have contributed more to the system in the form of taxes and/or social security contributions. This is why we treat contributiveness and earnings-relatedness as at least partly separate aspects of the same underlying reciprocity factor. Through the mechanism of reciprocity in the social protection system, there is a potential to create and sustain



support for giving migrant EU-workers access to the welfare state because their benefits will have to be “earned” and not just “received”.

This theoretical reasoning results in the following hypothesis about the links between the degree of reciprocity built into a country’s welfare institutions and public attitudes to free movement:

H1: The more institutional reciprocity in the national social protection system, the lower the opposition to free movement.

Considering the key findings of the existing research reviewed above, we are also interested in exploring if institutional reciprocity conditions attitudes to free movement differently for different groups within a country. More specifically, we follow a line of reasoning developed by Mewes and Mau (2009), wherein they identify the risks that globalization entails for lower economic strata in society. We argue that EU mobility is something that first and foremost challenges vulnerable groups in society and particularly those with a weak standing on the labour market and/or a dependence on the social insurance system as their main source of income. Being unemployed is a manifest form of vulnerability that may be associated with concerns that free movement leads to increased competition in the labor market. Moreover, a vast majority of the unemployed rely on social insurance as a main source of income. In this vulnerable group in particular, a high degree of institutional reciprocity may mitigate the perception of welfare policy as a struggle for scarce common resources where domestic and EU workers are pitted against one another. Reciprocity implies that social benefits are “earned” by domestic and EU workers alike. Following this logic, we expect reciprocity to lower the resistance to free movement among the unemployed in the receiving countries. This reasoning underpins our second hypothesis:

H2: The greater the institutional reciprocity in the national social protection system, the lower the opposition to free movement among unemployed people.

In other words, we expect the degree of institutional reciprocity in a country’s social insurance system to condition attitudes to free movement among vulnerable groups, such as the unemployed.



3. Method, data and measures

The analytical strategy that we pursue in this paper is guided by a number of observations. First, it is clear that the character of free movement differs between sending and receiving countries, as does its salience as a political issue (Vasilopoulou and Talving 2018). In “sending countries” (i.e. countries that experience net-emigration of EU and citizen workers), there is an ongoing discussion about the risks of “brain drain” and population decline. In receiving countries, by contrast, governments face demands to restrict EU workers’ access to the labour market and welfare state benefits. Prior cross-country and individual level analyses suggest that those who associate free movement with their own mobility (emigration) are more positive towards it, while those who associate it with the free movement of “others” (immigration) are more negative towards it (e.g. Lutz 2019). These contrasting experiences are likely to necessitate different explanatory models for attitudes in sending and receiving countries. Our focus in this paper is exclusively on the tensions that arise around free movement in receiving countries (i.e. countries that experience net-immigration of EU and citizen workers). What is more, attitudes to free movement within the EU and EFTA differ from attitudes to immigration from third countries (Mårtensson and Uba 2018). Against this background, we delimit our analysis to twelve EU and EFTA receiving countries for which we have high-quality data on attitudes to free movement specifically.

Second, while we expect the institutional design of welfare states to matter for attitudes to free movement, we recognize the methodological challenges involved in capturing such institutional differences empirically. Most prior works in the field employ either indirect measures of institutional configurations, such as social expenditure (e.g. Vasilopoulou and Talving 2018), or broad welfare regime classifications (e.g. van der Waal et al. 2013) to represent the varying commitments that countries make to social welfare. In contrast to this, we use a “variables-based” approach which draws on institutional data developed in an earlier working paper for the REMINDER project (Palme and Ruhs 2018). In this earlier working paper we introduced a new database (the Social Protection in Europe Database, SPEUDA) and laid the ground for an analysis of both regime categories and a set of underlying variables that capture differences in welfare state and labour market institutions



across nations and over time. Given our theoretical focus on the specific factor of reciprocity, we do not use a regime approach in our analysis. This is because aggregate welfare regimes are defined by many different aspects of their social policy programmes that go beyond the degree of reciprocity in benefit provision. The analysis in this paper thus relies on a variables-based approach focused specifically on the issue of institutional reciprocity, i.e., instead of broad regime groupings we include a numerical indicator.

Table 1 provides an overview of the dependent and independent variables included in our analysis. The subsections that follow will describe and explain our selection of variables more thoroughly.



Table 1. Dependent and independent variables

Variable	Year	Min	Max	Mean	SD	N
<i>Dependent variable</i>						
Opposition to free movement	2014	1	4	2.31	0.94	11 547
<i>Independent variables, country level</i>						
Reciprocity in the social insurance system	2010	0.31	0.73	0.54	0.13	12
Reciprocity in unemployment insurance	2010	0.28	0.77	0.50	0.15	12
LME	-	0	1	0.17	0.39	12
CME	-	0	1	0.67	0.49	12
MME	-	0	1	0.17	0.39	12
Log GDP per capita	2010	1.12	2.20	1.59	0.27	12
<i>Independent variables, individual level</i>						
Professionals (experimental dummy)	2014	0	1	0.51	0.50	11 814
Unemployed	2014	0	1	0.06	0.23	69 223
Low education	2014	0	1	0.61	0.49	60 724
Retired	2014	0	1	0.25	0.43	69 223
Gender	2014	1	2	1.51	0.50	69 212
Age	2014	14	123	49.1	18.7	69 014
Left-Right	2014	0	10	5.03	2.09	64 106

Dependent variable

To measure public attitudes towards free movement, we rely on survey data from the immigration module of the 2014 European Social Survey (ESS). Our dependent variable, *Opposition to free movement*, is drawn from an ESS survey experiment that was designed to measure and compare normative attitudes to different types of immigration. In the experiment, the respondents were randomly assigned to answer one of the four items shown in Table 2. The questions ask to what extent workers from other countries should be allowed to work and live in the respondent's home country. All four items are identically

worded, except in two regards: the skill level and country of origin of the migrant worker are set to vary systematically. The specific sending country mentioned to each respondent is that European or non-European country which sends the largest number of migrants to the respondent’s home country (see Mårtensson and Uba 2018, Table A.6 in the Appendix for a list of the selected reference countries). Together, the four items allow researchers to evaluate how opposition to immigration is conditioned by the type of sending country (European vs. non-European) and the migrants’ skill level (professionals vs. unskilled workers).

Table 2. Survey experiment design in ESS 2014

	European sending country	Non-European sending country (not used in our analysis)
Professionals	Please tell me to what extent you think [country] should allow professionals from [poor European country providing largest number of migrants] to come to live in [country]? (N= 5 843)	Please tell me to what extent you think [country] should allow professionals from [poor country outside Europe providing largest number of migrants] to come to live in [country]? (N= 5 750)
Unskilled labourers	Please tell me to what extent you think [country] should allow unskilled labourers from [poor European country providing largest number of migrants] to come to live in [country]? (N= 5 704)	Please tell me to what extent you think [country] should allow unskilled labourers from [poor country outside Europe providing largest number of migrants] to come to live in [country]? (N= 5 713)

Source: Adapted from Heath et al. (2014)

In order to capture attitudes to free movement, we started out with the two items that measure attitudes to migrant workers coming from European countries. We then delimited our sample further, to the 12 receiving countries where the sending country referred to in the survey questions is an EU member state. Our variable *Opposition to free movement* was created by adding up responses to the two separate items that tap attitudes to the free movement of “professionals” and “unskilled workers” respectively. Like the original variables our aggregated variable has four values: 1 “Allow many to come and live here”; 2 “Allow some”; 3 “Allow a few” to 4 “Allow none.” Higher values thus reflect more



opposition to free movement, without regard to the skill level of the migrants. To be able to distinguish how attitudes to free movement are affected by perceptions of the migrants' skill level, we also include an experimental dummy that we call *Professionals*. This variable takes on the value 1 if the respondent was assigned to the question that casts EU workers as "professionals" rather than "unskilled labourers."

Using the high quality questions in the ESS survey experiment is advantageous, because they are concrete, contextualized and relate to what free movement means in the real world. As noted by the researchers who designed the survey experiment, the questions avoid "vague and hard-to-interpret categories" (Heath et al. 2014). In the selected countries, the questions make the respondents consider specific target groups that are salient in relation to free movement (the largest group of EU workers present in their country). Moreover, they refer specifically to "professionals" and "labourers", and thereby evoke the idea of labour mobility rather than other forms of immigration. Being concrete and avoiding fuzzy words brings the additional advantage that respondents can provide rather precise answers without being on top of the current EU regulations concerning free movement. In fact, recent Eurobarometer data suggests that many EU citizens lack such knowledge and would like to know more about their rights as EU citizens (see Mårtensson and Uba 2018, 39-40). The questions employed here nevertheless give the respondents a basic idea of what free movement entails.

Figure 1 provides an overview of the variation in attitudes to free movement across the 12 countries in our sample, and displays attitudes to professionals and unskilled labourers separately. Attitudes towards the free movement of professionals are consistently more positive than those towards the free movement of unskilled workers, across the whole range of countries.



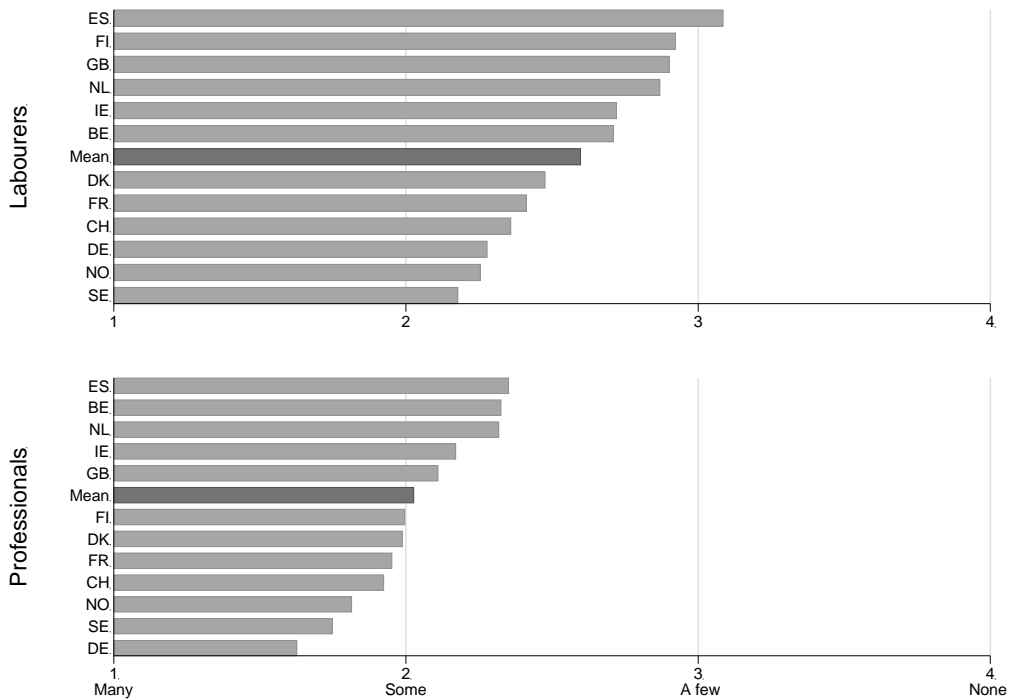


Figure 1. Opposition to the free movement of labourers and professionals in 12 EU and EFTA receiving countries, 2014

Note: Countries are sorted by mean preference in 2014.

Source: European Social Survey 2014

Germany, Norway and Sweden top the list of countries that support the free movement of professionals and unskilled workers alike, whereas Spain is most opposed (also in relation to both categories of EU workers). Save for Finland, the same groups of countries can be found above and below the mean in the top panel (unskilled labourers) and bottom panel (professionals) in Figure 1, indicating that some receiving countries are consistently more supportive of the free movement scheme than others.

Independent variables at the country level

We construct and use an index to capture the degree of reciprocity in social insurance systems across the 12 countries in our sample. The index relates to both the financing side of the system and the benefit side of it. We describe briefly how we constructed our indices below.

On the financing side, we have chosen to capture reciprocity by using the proportion of financing that formally comes from the insured person, with the other two contributors being the employers and the state (taxation). We have focused on the formal rules considering contributions from these three sources. The reason for not including the employer's contribution is based on our understanding of reciprocity in terms of a visible connection between contributions and benefit entitlements. Arguably, in many cases employers' contributions are seen as a tax that becomes part of the general revenue. The financing is measured for the following three social insurance programs separately: pensions, unemployment insurance, and sickness cash benefits. With few exceptions, work accident insurance programs are exclusively funded by employers' contributions, which is why we did not include them in our analysis. We first calculated three variables expressing the proportion of financing by the insured person for pensions, sickness insurance, and unemployment insurance, respectively. We then calculated the *Financing index* as an average of the three programme-specific financing variables (pensions, sickness, and unemployment).

On the benefit side, we use two different indicators for the following four social insurance programs: pensions, unemployment insurance, sickness insurance, and work accident insurance. The first indicator is the net replacement rate (social insurance benefit net of taxes divided by wage net of taxes) for what we have labelled a "full worker", i.e. someone who fulfils all contribution requirements and earns an average wage. The second indicator is the replacement rate for the maximum benefits possible as a proportion of the average wage. We have applied a ceiling of 1.5 in order to avoid problems arising from outliers and influential cases caused by the fact that a few countries have very high ceilings for benefit purposes (or no ceiling at all). The benefit index was calculated in a stepwise procedure. We first take the mean of the two replacement variables by program. In a second step, we take the mean of the four program indices (pensions, unemployment, sickness, work accident) to attain the *Benefits index*.

We then calculated a general *Reciprocity index*, calculated as an average of the *Benefits index* and the *Financing index*. We have used the same procedure to calculate a separate reciprocity index for unemployment insurance, *Reciprocity_Ue*. The choice of an additive



index (of the financing and benefits indices) is guided by our understanding of that reciprocity as about both contributiveness and earnings-relatedness. On the financing side we aim to measure the contributiveness. What we measure on the benefit side is the earnings-relatedness. Here it important to recognise that a social security system or program can be contributory without being earnings-related, and the other way around. We do not include employer contributions, meaning that the financing side is only capturing part of the contributiveness of the financing, but we do this in order to reflect the most visible part of the contributions. In addition, we want to avoid an overestimation of the contributiveness of social protection systems (notably in the Nordic countries) that rely almost exclusively on employers' contributions where the difference to a (payroll) tax is not big. When it comes to the benefit side, the index captures two aspects of earnings-relatedness. The full worker replacement measures the degree of earnings-relatedness, which is an important aspect of reciprocity, and the maximum benefits indicates how high up in the earnings distribution this principle applies. Hence, an additive approach also makes sense with this index.

Figure 2 displays country-scores on the institutional reciprocity index, for the years 2010 and 2015. Since we can expect a lagged effect of the institutional variables, we use the 2010 scores because they precede the year (2014) when the dependent variables were measured. It can be noted that the country rankings are reasonably stable between 2010 and 2015, with only a couple of changes in terms of rank ordering of countries. Higher scores indicate greater degrees of reciprocity. We focus our analysis of "institutional reciprocity" on welfare institutions in the 12 receiving countries for which we have data from the European Social Survey (ESS). Some countries score high on the financing dimension but not on the benefit dimension, whereas other countries score high on benefit dimension but not on the financing dimension. In other words, the empirical correlation between the two components in our reciprocity index is low ($\alpha=0.27$). However, our motive for adding the two components is not based on the empirical correlation but on the theoretical argument that they capture different parts of the same underlying variable (reciprocity).



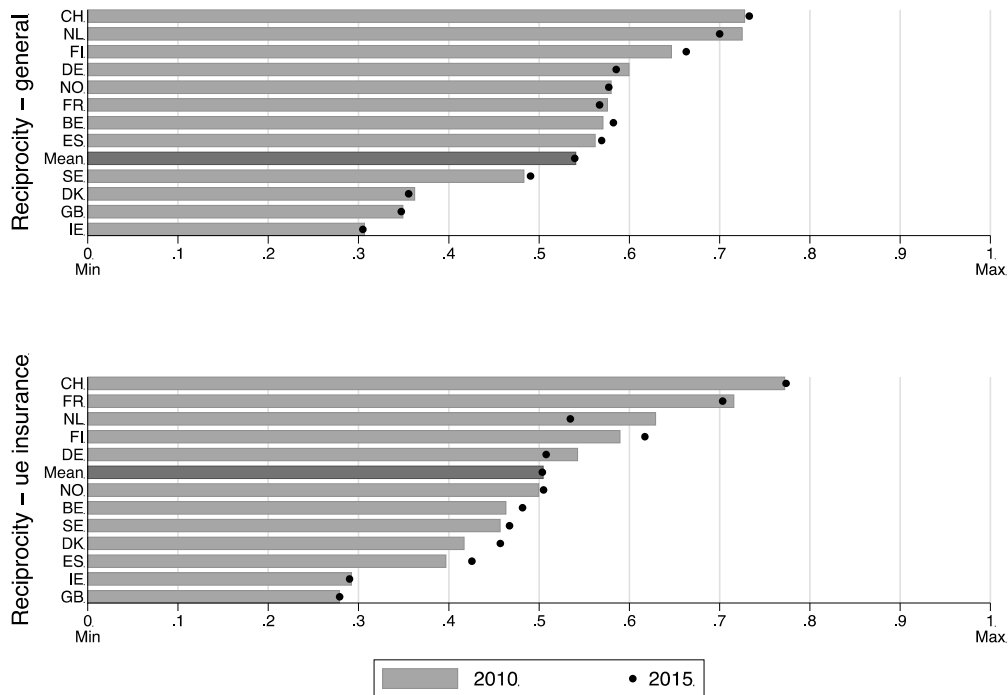


Figure 2. Institutional reciprocity in the social insurance system generally, and unemployment benefits specifically, in 12 EU and EFTA receiving countries, 2010 and 2015

Source: SPEUDA (Palme and Ruhs 2018)

In addition to our main independent variable, we include two country-level control variables. Our dataset covers 12 out of the 15 EU receiving countries. Although this provides a satisfactory coverage of the available cases, it leaves us with a very small number of observations. We therefore strive to include a limited number of country-level control variables. Following Vasilopoulou and Talving (2018), we expect that the wealth of a country may influence both its choice of welfare policy and public attitudes to immigration, and therefore include *GDP per capita* as our first control variable. Moreover, the countries in our sample exhibit important differences from a “varieties of capitalism” perspective. Liberal market economies have more fluid and accessible labour markets with lower levels of employment protection, whereas labour markets in coordinated market economies tend to invest in individual workers’ skills and provide higher levels of employment protection (Hall and Soskice 2001; Hall and Gingerich 2009). Such basic institutional differences stemming from the workings of the labour market appear likely to impact welfare state design as well as attitudes to labour immigration. We thus include variety of capitalism as a second control

variable at the country level. Following Hall and Gingerich (2009), we classify the United Kingdom and Ireland as Liberal Market Economies (*LMEs*), Belgium, Finland, Germany, Denmark, Netherlands, Norway, Sweden and Switzerland as Coordinated Market Economies (*CMEs*), and Spain and France as Mixed Market Economies (*MMEs*). *MMEs* constitute the reference category in our analysis.

Independent variables at the individual level

Our key independent variable at the individual level indicates whether the respondent self identify as unemployed or not, and is based on two items from the 2014 ESS. The first of these indicates if the respondent was unemployed and actively looking for a job in the last seven days. The second indicates if the respondent was unemployed, wanting a job, but *not* actively looking for a job – all in the past seven days. Combined into the new variable *Unemployed*, these items simply reflect if the respondents were unemployed or not over the past seven days (without any regard to job seeking activities). We also include a set of standard individual-level control variables (e.g. Vasilopoulou and Talving 2018), all taken from the ESS and reflecting the respondents' *Age, Gender and Left-Right* placement, and if the respondent is *Retired or has Low education*. We consider *Low education* to be a central control variable because it is a much-used indicator of socioeconomic status; a factor that could be expected to affect individuals' risk of being unemployed as well as their attitudes to free movement. It is constructed as a dummy variable where "low education" indicates that the respondent's highest level of education is primary or secondary education. In contrast, "high education" indicates that the respondent's highest level of education is post-secondary or tertiary education.

Empirical model

Our data imply some challenges for the specification of the empirical model. Our main constraint is that we have cross-sectional data for no more than 12 countries and therefore clearly limited variation at the macro-level. This means that we can only apply very few macro-level variables. A common model for data with a combination of country-level and individual-level variables is a multi-level model (also referred to as hierarchical model). However, even though these models are popular they offer "no panacea" (Bryan and



Jenkins 2015) to issues of limited upper-level variation. Quite the opposite, multi-level models are vulnerable for a small number of upper-levels units, and using such models for fewer than 25-30 upper-level units is likely to result in unreliable and biased estimates (Bryan and Jenkins 2015). This is particularly the case with more complex models including cross-level interactions. Exploring such interactions is one of our central aims in this paper. In addition, with as few as 12 upper-level observations it is effectively not possible to include a sufficient number of upper-level variables to adequately model the macro-level variation to avoid the risk of omitted variable bias (Möhring 2012).

Against this backdrop we have chosen another method, using standard OLS with country fixed effects in our more rigid specifications. To account for the clustered nature of our data we apply country-clustered robust standard errors.⁴ Country fixed effects absorb all of the average differences in the dependent variable across countries and lessen issues of omitted variables bias on the country-level (Brunello and Checci 2007). Such models therefore offer an attractive alternative for the study of cross-level interactions where limited upper-level variation makes the use of multi-level models less attractive (Möhring 2012). However, applying country fixed effects means that it is impossible to estimate any direct effects of institutions since there is no macro-level variation left. We therefore also include some models without country fixed effects to allow an exploration of the role of country-level institutions but these models should be interpreted cautiously considering the small number of countries and limited number of country-level controls.

4. Results and discussion

The following sections evaluate our hypotheses. We start by assessing if reciprocity in the social insurance system at large (i.e. general reciprocity) is associated with less opposition to free movement in our sample of 12 receiving countries. Motivated by our second hypothesis, we then move on to consider if general reciprocity is associated with less opposition to free movement among the unemployed. Finally, we turn our attention to the

⁴Analysing only 12 countries (clusters) could also be an issue for the application of clustered robust standard errors (Angrist and Pischke 2009), although this depends on the characteristics of the data (Cameron et al. 2015). We calculate the degrees of freedom for the T-distribution as the number of countries (clusters) minus one, $T(G-1)$, in accordance with the recommendation by Cameron et al. 2015.



role of reciprocity in unemployment insurance. Does reciprocity in unemployment insurance matter for attitudes to free movement among the public at large, and/or among the unemployed?

General reciprocity and attitudes to free movement

The scatter plot in Figure 3 provides a basic indication of the bivariate relationship between general reciprocity and attitudes to free movement across our 12 receiving countries. While the fitted line suggests that there is a weak negative relationship between general reciprocity and opposition to free movement, the coefficient estimate is very small and lacks statistical significance. Motivated by our theoretical reasoning and expectations, we will continue with a more in-depth assessment of the role that country- and individual-level factors might play in attitudes to free movement.

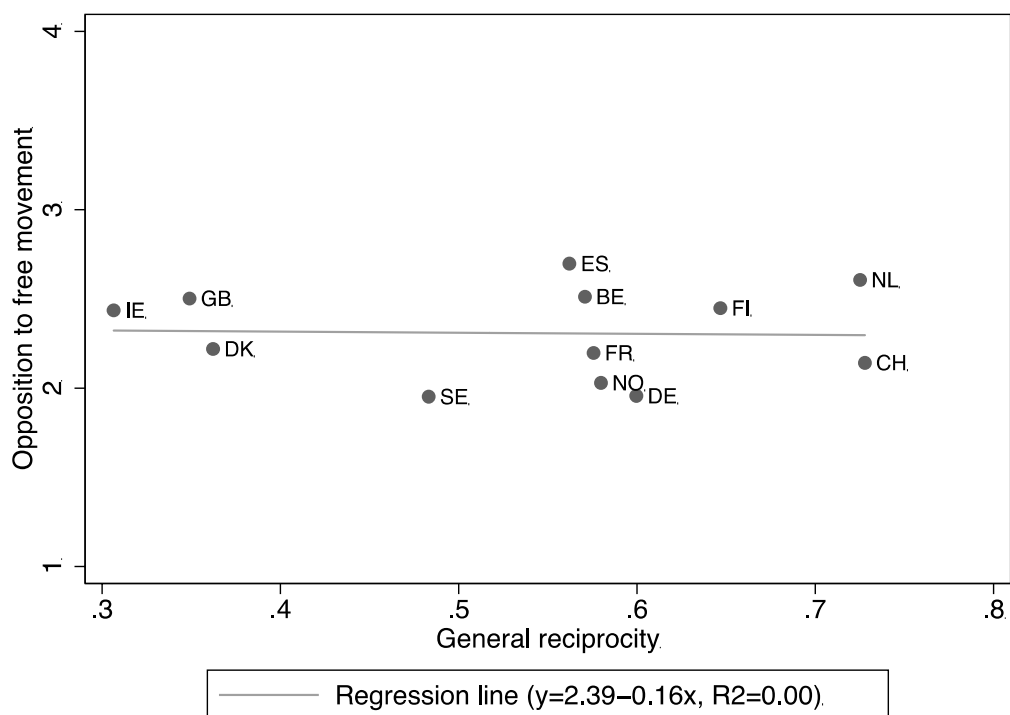


Figure 3. General reciprocity and opposition to free movement in 12 receiving countries, 2010/2014

Our regression results in Table 3 allow a more thorough consideration of how reciprocity in the social protection system is related to attitudes to free movement. All models in the

table include the experimental dummy *Professionals* that indicates if a respondent answered the item that casts EU workers as “professionals” as opposed to “unskilled labourers”. Since the dependent variable represents opposition towards free movement, positive effects imply an increase in opposition towards free movement whereas negative effects imply a decrease in opposition towards free movement.

Our first model (Model 1) only includes two independent variables; the country-level variable *Reciprocity* and the experimental dummy *Professionals*. In this specification, the effect of reciprocity is negative, which is in line with our expectations in H1, but it is far from statistically significant. The coefficient estimate for the *Professionals* dummy is larger, negative and clearly significant at the 99 percent level, confirming that there is less opposition towards the free movement of professionals than that of unskilled labourers.



Table 3. Regression analysis of opposition to free movement in 12 EU and EFTA receiving countries on institutional reciprocity etc., 2014

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Country level								
Reciprocity	-0.19 (0.43)	0.74 (0.64)	0.76 (0.64)	0.69 (0.60)	0.66 (0.56)		0.22 (0.83)	
Professionals (experimental dummy)	-0.58*** (0.05)	-0.58*** (0.05)	-0.58*** (0.05)	-0.58*** (0.05)	-0.59*** (0.05)	-0.59*** (0.05)	-0.59*** (0.05)	-0.59*** (0.05)
Log GDP per capita		-0.33 (0.31)	-0.33 (0.31)	-0.32 (0.31)	-0.35 (0.29)		-0.35 (0.29)	
LME		0.29 (0.24)	0.29 (0.24)	0.31 (0.23)	0.28 (0.22)		0.28 (0.22)	
CME		-0.08 (0.26)	-0.08 (0.26)	-0.05 (0.25)	-0.05 (0.25)		-0.05 (0.25)	
Individual level								
Unemployed		0.18*** (0.05)	0.32* (0.17)	0.33* (0.16)	0.36** (0.13)	0.35*** (0.10)	0.36** (0.15)	0.36** (0.12)
Low education				0.35*** (0.02)	0.35*** (0.02)	0.33*** (0.02)	0.36*** (0.09)	0.35*** (0.09)
Retired				-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.03)	0.08 (0.20)	0.05 (0.19)
Gender (Female)				0.05* (0.02)	0.06** (0.02)	0.05* (0.03)	-0.03 (0.08)	-0.01 (0.08)
Age				0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.01)
Left-Right					0.05*** (0.01)	0.04*** (0.00)	0.03 (0.02)	0.03 (0.02)
Cross-level interactions								
Reciprocity * Unemployed			-0.26 (0.34)	-0.29 (0.32)	-0.34 (0.28)	-0.41* (0.22)	-0.34 (0.31)	-0.43 (0.25)
Reciprocity * Low education							-0.02 (0.18)	-0.04 (0.18)
Reciprocity * Retired							-0.20 (0.33)	-0.14 (0.31)
Reciprocity * Gender							0.15 (0.14)	0.11 (0.14)
Reciprocity * Age							0.00 (0.01)	-0.00 (0.01)
Reciprocity * Left-Right							0.04 (0.04)	0.02 (0.04)
_cons	2.71*** (0.21)	2.70*** (0.52)	2.70*** (0.52)	2.30*** (0.47)	2.13*** (0.46)	2.24*** (0.09)	2.36*** (0.54)	2.23*** (0.09)
Adj. R2	0.098	0.12	0.12	0.16	0.17	0.22	0.17	0.22
Observations	11547	11547	11547	11446	10640	10640	10640	10640
Country FEs	No	No	No	No	No	Yes	No	Yes

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$



In the second column (Model 2) we add our country-level controls and our main explanatory variable at the individual level, *Unemployed*. Contrary to our expectations in H1, the effect of reciprocity becomes positive (and somewhat more sizable), but it remains statistically insignificant. At the individual level, the unemployed are more sceptical towards free movement, and this relationship is significant at the 95 percent level. The following model (Model 3) then adds an interaction between unemployment and reciprocity, to explore how reciprocity conditions the effect of unemployment on attitudes to free movement. In line with our expectations in H2, we find that reciprocity mitigates opposition to free movement among the unemployed, as indicated by the negative coefficient estimate of the interaction term. In other words, the unemployed are less opposed to free movement in countries where there is a higher degree of reciprocity in the social protection system. The coefficient estimate of the interaction term is not significant, but it is important to keep in mind that the significance of interaction effects should not only be assessed on the basis of the coefficient alone (Brambor et al. 2005). Further below, we complement the regression results with a marginal effects plot to facilitate interpretation.

Next, we add a set of individual-level controls for level of education, retirement, gender and age (in Model 4) and, in a following step, a control for left-right placement, where higher values imply that the respondent is more oriented to the right of the political spectrum (Model 5). We find that those with lower education, females and those leaning to the right are significantly more opposed to free movement. However, the effects of our main independent variables – *Reciprocity*, *Unemployed* and the interaction between the two – are not substantially affected by these additional variables. If anything, the interaction coefficient becomes slightly larger and somewhat more precise, but it is still below conventional levels of statistical significance.

The following model (Model 6) uses country fixed effects. These absorb all average cross-country differences related to the country-level variables included in our previous models, as well as any other country-level variables that are not included. This entails that the coefficients for the country-level variables no longer can be estimated. At the same time, the fixed effects model represents a stricter robustness test of the coefficient estimate of the cross-level interaction between unemployment and reciprocity. In spite of this, the



results suggest support for our second hypothesis (H2), which states that a greater degree of reciprocity in the overall social protection system should lower the opposition to free movement among unemployed people. The coefficient estimate for the interaction between reciprocity and unemployment becomes slightly larger than in the previous models, and is statistically significant at the 90 percent level.

Finally, the two last columns (Model 7 and 8) are devoted to testing whether the cross-level interaction between unemployment and reciprocity is sensitive to the addition of controls at the interaction level. In these models, we thus interact reciprocity with all of the other individual-level controls, with and without country-fixed effects. That way, we are able to explore whether the conditional effect of reciprocity on the impact of unemployment could be a result of a relationship on the interaction-level with any of these controls. Reassuringly, the point estimate of the interaction coefficient is barely affected by this addition. However, adding a number of interactions with the same macro-level variable really puts a strain on the available variation. The estimates therefore become imprecise and statistically insignificant. The fixed effects in Model 8 have a similar effect on the interaction between reciprocity and unemployment as in Model 6, resulting in a somewhat larger coefficient, if still insignificant.

A closer look at our main result is offered in the marginal effects plot presented in Figure 4. Based on our final regression model (Model 8) the plot highlights our findings in relation to H2. The negative slope shows that being unemployed has a more negative effect on individuals' attitudes to free movement in contexts where there is a lower degree of reciprocity in the social insurance system. In our sample of countries, the degree of reciprocity is lowest in Ireland (0.31), the UK (0.35) and Denmark (0.36), whereas it is highest in the Netherlands (0.73), Switzerland (0.73) and Finland (0.65). In a minimally reciprocal country such as Ireland, being unemployed is quite strongly associated with opposition to free movement (the point estimate for the effect of unemployment would equal 0.23, significant at the 99 percent level). In a maximally reciprocal context such as the Netherlands or Switzerland, in contrast, unemployment has no significant effect on attitudes to free movement (point estimate 0.05, not statistically significant).



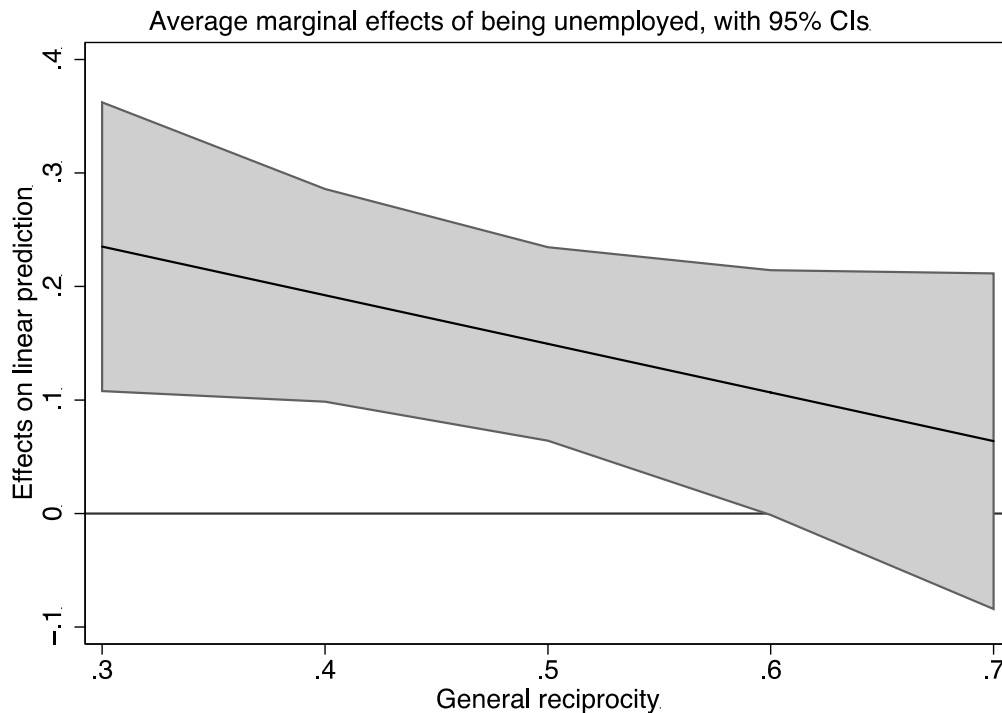


Figure 4. Marginal effects being unemployed on attitudes to free movement, at different levels of general reciprocity

This result supports H2 and our reasoning that reciprocity may work against the perception of welfare policy as an area where natives and EU workers are pitted against one another in a struggle for societal resources. While the unemployed on average are more opposed to free movement, they appear to perceive EU workers as less of a threat in countries where social benefits have to be “earned” by natives and EU workers alike.

Reciprocity in unemployment insurance and attitudes to free movement

Our finding that unemployed individuals are more opposed to free movement in low-reciprocity contexts warrants some further investigation. In line with our previous reasoning in relation to H2, economically vulnerable groups such as the unemployed are more likely to perceive EU workers as a threat in low-reciprocity contexts where social rights are “received” rather than “earned” by natives and EU citizens alike. It is conceivable, moreover, that the design of unemployment insurance will be especially salient for the unemployed, as it is their current source of income. To explore this idea empirically, we shift our focus from the impact of reciprocity in the social insurance system as a whole, to that of

reciprocity in unemployment insurance specifically. With such a specification, we could expect a greater impact on attitudes to free movement among the unemployed specifically. On the other hand, unemployment insurance is a key aspect of the social protection system, with high political salience among the entire working population, and could influence attitudes in society at large. Will a greater degree of reciprocity in unemployment insurance alone make a difference for attitudes to free movement, and if so, for whom and how?

Table 4 presents the results from a regression analysis where the main independent variable is reciprocity in the unemployment insurance, *Reciprocity_ue*, rather than general reciprocity. In all other respects, the model specifications in Table 4 remain identical to those in Table 3. Starting out with the bivariate relationship between *Reciprocity_ue* and attitudes to free movement in the first column (Model 1), we note that the effect of reciprocity in unemployment insurance on attitudes to free movement is quite large, negative and statistically significant at the 90 percent level. This alternative specification thus lends support to H1, which states that reciprocity in the social protection system is likely to be associated with less opposition to free movement among the population at large. As in the previous analysis, the coefficient estimate for the *Professionals* dummy is negative and clearly significant at the 99 percent level.

Adding our country-level controls and the key individual-level variable *Unemployed* in Model 2, the effect of *Reciprocity_ue* remains negative in line with our expectations in H1, but becomes smaller and loses its statistical significance. Like our previous analysis, this model also indicates that the unemployed are more opposed to free movement at the individual level; the coefficient estimate for *Unemployed* is statistically significant at the 99 percent level.

To explore if reciprocity conditions the effect of unemployment on attitudes to free movement, the following column (Model 3) then adds the interaction between *Unemployed* and *Reciprocity_ue*. As in the case of general reciprocity, we find that reciprocity in the unemployment insurance is associated with less opposition to free movement among the unemployed, but the coefficient estimate lacks statistical significance.



Table 4. Regression analysis of opposition to free movement on institutional reciprocity in the unemployment insurance etc., in 12 EU and EFTA receiving countries, 2014

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Country level								
Reciprocity_ue	-0.59 [*] (0.28)	-0.21 (0.55)	-0.19 (0.56)	-0.23 (0.52)	-0.25 (0.51)		-0.20 (0.58)	
Professionals (experimental dummy)	-0.59 ^{***} (0.05)	-0.59 ^{***} (0.05)	-0.58 ^{***} (0.05)	-0.58 ^{***} (0.05)	-0.59 ^{***} (0.05)	-0.59 ^{***} (0.05)	-0.59 ^{***} (0.05)	-0.59 ^{***} (0.05)
Log GDP per capita		-0.30 (0.33)	-0.30 (0.33)	-0.28 (0.32)	-0.31 (0.30)		-0.31 (0.30)	
LME		0.05 (0.24)	0.05 (0.24)	0.07 (0.22)	0.05 (0.22)		0.05 (0.22)	
CME		-0.08 (0.26)	-0.08 (0.26)	-0.06 (0.25)	-0.06 (0.24)		-0.06 (0.24)	
Individual level								
Unemployed		0.18 ^{***} (0.05)	0.33 ^{**} (0.13)	0.34 ^{**} (0.12)	0.38 ^{***} (0.10)	0.28 ^{**} (0.10)	0.40 ^{***} (0.11)	0.32 ^{***} (0.10)
Low education				0.35 ^{***} (0.03)	0.35 ^{***} (0.03)	0.33 ^{***} (0.02)	0.37 ^{***} (0.06)	0.34 ^{***} (0.06)
Retired				-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.03)	0.01 (0.11)	0.00 (0.11)
Gender (Female)				0.05 [*] (0.03)	0.06 ^{**} (0.03)	0.05 [*] (0.03)	0.07 (0.09)	0.07 (0.09)
Age				0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.00)
Left-Right					0.05 ^{***} (0.01)	0.04 ^{***} (0.00)	0.02 (0.01)	0.03 [*] (0.02)
Cross-level interactions								
Reciprocity_ue * Unemployed			-0.33 (0.25)	-0.36 (0.23)	-0.42 [*] (0.20)	-0.29 (0.18)	-0.46 [*] (0.21)	-0.36 [*] (0.19)
Reciprocity_ue * Low educ.							-0.05 (0.13)	-0.01 (0.12)
Reciprocity_ue * Retired							-0.07 (0.18)	-0.04 (0.18)
Reciprocity_ue * Gender							-0.02 (0.15)	-0.03 (0.15)
Reciprocity_ue * Age							-0.00 (0.01)	-0.01 (0.01)
Reciprocity_ue * Left-Right							0.05 (0.03)	0.02 (0.03)
_cons	2.89 ^{***} (0.15)	3.21 ^{***} (0.42)	3.20 ^{***} (0.42)	2.76 ^{***} (0.33)	2.58 ^{***} (0.34)	2.24 ^{***} (0.09)	2.55 ^{***} (0.33)	2.22 ^{***} (0.09)
Adj. R2	0.11	0.12	0.12	0.16	0.17	0.22	0.17	0.22
Observations	11547	11547	11547	11446	10640	10640	10640	10640
Country FEs	No	No	No	No	No	Yes	No	Yes

Standard errors in parentheses
^{*} $p < 0.10$, ^{**} $p < 0.05$, ^{***} $p < 0.01$



Introducing individual-level controls (in Model 4) and a control for left-right placement (in Model 5), we find that those with lower education are significantly more opposed to free movement, as are females and those leaning towards the political right. These findings closely mirror those in Table 3. More importantly, the effects of our main independent variables – *Reciprocity_ue*, *Unemployed* and the interaction between the two – changes with the addition of these variables. In model 5, the coefficient estimate of the interaction between *Reciprocity_ue* and unemployment grows larger and gains statistical significance at the 90 percent level. This suggests that left-right placement previously acted as a suppressor variable that held back the negative reciprocity-related effect of unemployment on opposition to free movement.

Finally, the three last columns (Model 6-8) allow us to assess whether the cross-level interaction between unemployment and *Reciprocity_ue* is sensitive to the addition of controls at the interaction level. By adding country-fixed effects, Model 6 and Model 8 also subject the cross-level interaction between unemployment and *Reciprocity_ue* to a tougher test than the previous models. Just adding country fixed effects in Model 6 makes the interaction coefficient somewhat smaller than in the previous models, and it falls below statistical significance. In contrast to this, the two last models (Model 7 and 8) that include all control variables at the interaction level indicate support for our second hypothesis, H2. Adding the controls at the interaction-level boosts the size of the interaction between reciprocity and unemployment, supporting the hypothesis that reciprocity conditions the effect of unemployment on attitudes to free movement. In summary, we cannot substantiate that reciprocity in unemployment insurance affects attitudes to free movement among the general population. However, among those that are most exposed/vulnerable to the workings of the unemployment insurance – i.e. the unemployed – reciprocity in this specific part of the social protection system significantly lowers the opposition to free movement.

We examine this main result more closely in the marginal effects plot presented in Figure 5. The plot highlights our findings in relation to H2, based on our final regression model in Table 4 (Model 8). It shows that being unemployed has a quite substantial effect on attitudes to free movement in contexts where the degree of reciprocity in the



unemployment insurance is low. In our sample, the degree of reciprocity in the unemployment insurance is lowest in the UK (0.28) and Ireland (0.29), whereas it is highest in Switzerland (0.77) and France (0.72). Being unemployed is quite strongly associated with opposition to free movement in a minimally reciprocal country such as the UK, (the point estimate equals 0.21, significant at the 99 percent level). By contrast, unemployment has no significant effect on attitudes to free movement in a maximally reciprocal context such as Switzerland (effect equals 0.04, not statistically significant).

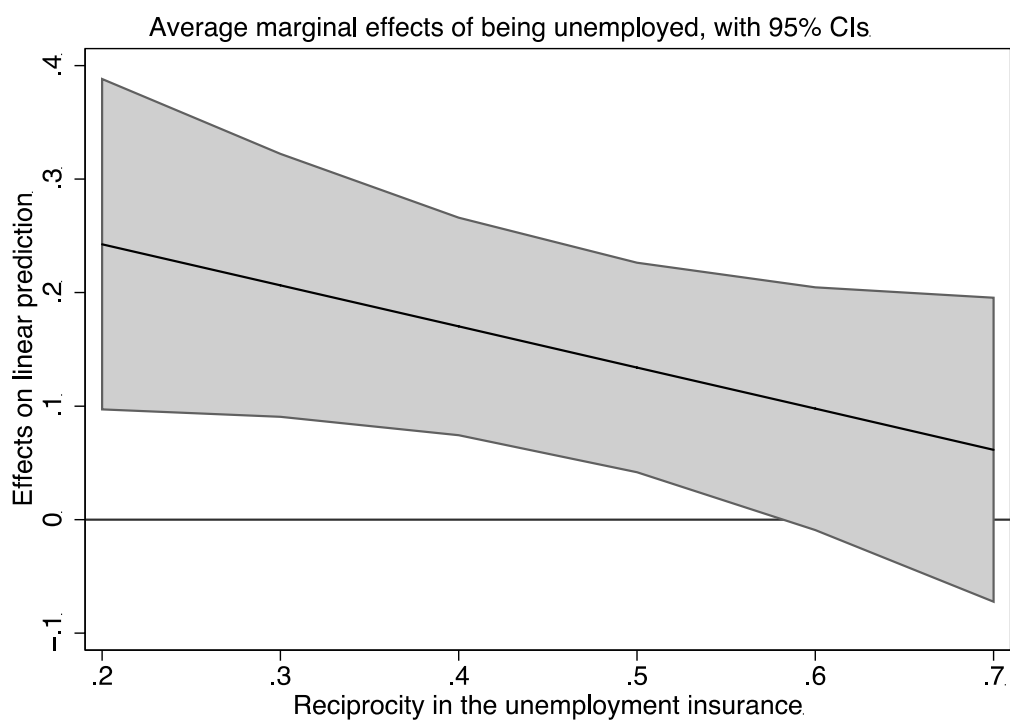


Figure 5. Marginal effects of being unemployed on opposition to free movement at different levels of reciprocity in the unemployment insurance system

Taken together, our findings from the second regression analysis lend further support to our second hypothesis, H2, which states that a greater degree of reciprocity in the social protection system will lower the opposition to free movement among unemployed people. Moreover, our findings suggest that the design of a country's unemployment insurance scheme – in and of itself – plays an important role in the readiness of the unemployed to accept the EU's free movement scheme.

5. Conclusion

For those who see large-scale migration and the sustainability of national welfare states as incompatible, the political tensions around free movement and equal rights for migrant EU-workers should come as no surprise. However, the fact that opposition to free movement varies significantly across EU Member States, also among those who are net receivers of EU workers, raises important questions about the conditions under which unrestricted in-ward mobility and/or equal access to welfare benefits for EU workers are seen as problematic. In particular, is important to ask whether and how the institutional characteristics of national welfare states affect public attitudes to immigration and/or to giving migrants access to welfare benefits.

As we discussed in this paper, comparative research on migration, welfare states, and public attitudes indicates complex relationships between these phenomena, and the results of existing studies seem to be at least partly contradictory. The mixed findings of current research warrant more elaborate analyses of the relationships between welfare states and public attitudes to immigration. The aim of this paper has been to make a contribution in this area by exploring whether opposition to free movement in the EU is related to the degree of institutional reciprocity of national social protection systems. Our expectation was that higher degrees of reciprocity in social protection systems would serve as a protective factor in relation to opposition to free movement, simply because all benefits claimants, including migrants, would be seen as more legitimate and deserving in such systems.

In our analyses of ESS data for 12 EU countries that are net-receivers of EU migrants, we find no significant direct effect of reciprocity in welfare institutions on opposition to free movement. This finding applies to institutional reciprocity in both, national social protection systems in general and national unemployment insurance systems in particular. However, we find a significant interaction effect between the reciprocity of the national social protection systems and the employment status of the respondents, both for general reciprocity and for unemployment insurance reciprocity. Our results suggest that in countries where the social protection systems in general, or the unemployment insurance systems specifically, are based on higher degrees of reciprocity, people who are unemployed are significantly less opposed to free movement.



The novel contribution of the paper is that it says something new about how welfare state institutions may interact with labour market vulnerabilities of workers, in our case unemployment. Our results can be seen in the perspective of recent findings where opposition to migration via support of radical right parties has been explained by the vulnerabilities created by globalization and automation for some groups in society but where social protection systems also appear to play a conditioning role (Dal Bo et al. 2018; Gingrich 2019; Im et al. 2019).

How does the interaction between institutional reciprocity on social protection systems and labour market vulnerability matter for the national politics around free movement in different EU Member States? This is one of the questions that will be explored in our next paper within Work Package 7 of the REMINDER project. The present paper is a stepping stone in our larger project about the tensions between national institutions and the politics of free movement in the European Union. The analysis we have conducted in this paper paves the way for future analyses of the relationships between public attitudes to free movement and the policy positions of political elites and national governments.



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Appendix

Table A1. Public attitudes regarding the point at which new migrants should get access to the same rights to social benefits and services as citizens already living in the country (see precise survey question in note below table), 2016

Country	Responses (%)								Total
	Immediately on arrival	After a year, whether or not have worked	After worked and paid taxes at least a year	Once they have become a citizen	They should never get the same rights	Refusal	Don't know	No answer	
AT	7.8	9.6	38.2	24.6	15.0	1.3	3.6	0.0	100.0
BE	12.1	10.4	50.3	21.1	5.8	0.0	0.4	0.0	100.0
CH	9.3	12.9	51.9	18.8	3.3	0.8	3.1	0.0	100.0
CZ	4.9	3.7	31.5	33.5	22.8	0.3	3.4	0.0	100.0
DE	11.6	13.6	48.6	22.6	2.0	0.4	1.1	0.0	100.0
EE	5.8	5.3	47.1	33.9	6.5	0.1	1.3	0.0	100.0
FI	5.9	15.0	33.6	41.2	2.5	0.1	1.7	0.0	100.0
FR	11.2	10.7	49.1	19.7	6.8	0.4	2.2	0.0	100.0
GB	4.9	7.7	56.6	21.2	6.4	0.5	2.7	0.0	100.0
IE	8.6	15.0	48.3	19.4	5.8	0.6	2.4	0.0	100.0
IS	16.4	19.0	40.7	19.8	0.9	1.1	1.9	0.1	100.0
NL	7.4	8.3	32.7	46.7	2.4	0.1	2.4	0.0	100.0
NO	12.1	14.4	36.3	33.1	1.7	0.1	2.4	0.0	100.0
PL	3.7	4.8	37.4	38.2	7.3	0.3	8.1	0.2	100.0
SE	17.2	17.7	31.4	27.1	0.9	0.3	5.4	0.0	100.0
SI	4.1	7.7	33.1	44.5	7.4	0.2	3.0	0.1	100.0
Total*	8.9	11.0	41.7	29.1	6.1	0.4	2.8	0.0	100.0

Notes: Question posed (“imsclbn”): “Thinking of people coming to live in [country] from other countries, when do you think they should obtain the same rights to social benefits and services as citizens already living here?” Responses were coded on the scale 1 “Immediately on arrival”; 2 “After a year, whether or not have worked”; 3 “After worked and paid taxes at least a year”; 4 “Once they have become a citizen”; 5 “They should never get the same rights.” Design weights (dweight) were applied in the calculations. *Total refers to the between-country mean.

Source: European Social Survey 2016 and own calculations.





REMINDER

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS
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The REMINDER project is exploring the economic, social, institutional and policy factors that have shaped the impacts of free movement in the EU and public debates about it.

The project is coordinated from COMPAS and includes participation from 14 consortium partners in 9 countries across Europe



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