The political economy of immigration and welfare state reform: a collection of comparative political and economic essays on human mobility and social protection

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Aknowledgements

Over the last nine years that I have been writing this dissertation, I have seen first-hand the way that globalisation, and the ever-increasing interdependence of people across national boundaries, is transforming the way we live, work, and communicate. I can live in the Netherlands with my British passport, work and communicate with researchers across Europe, and keep up to date with my friends and family around the globe. What's more, as the pandemic struck and Brexit began to function in earnest, I was cut-off from family in the United Kingdom and it became clearer to me that returning to a world without cross-border movement was not a future I was interested in. However, human mobility comes with both opportunities and challenges, and I hope this dissertation goes some way to addressing one such challenge – the effect of immigration on the welfare state – and in some small way, contributes to the future I hope to live in.

This dissertation would not have been possible without the support of a great many people. First, I would like to thank my supervisor Olaf van Vliet for his support and guidance during the PhD process and for undoubtably strengthening the quality of my work, as well as Kees Goudswaard, my second supervisor, for his many thoughtful and helpful comments throughout. I would also like to thank the members of the reading committee for taking their time to read and comment on this dissertation, ensuring that it is a piece of research worth defending.

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1 Introduction

1.1 Setting the Scene: the dissertation in context

In most developed nations immigration has become a defining characteristic of open, interconnected, and interdependent economies. The European Union (EU) is one particular example of this in action, where the widening and deepening of European integration has created a unique system of mobility for its citizens. European citizens have the right to live and work in any Member State of the Union, and under EU law, mobile citizens have a range of rights afforded to them under the rules governing freedom of movement, such as equal access to the tax and benefit systems in which they reside. However, the extent to which European Union (EU) mobile citizens[1] can or should be able to access the welfare systems of their host Member State is a controversial and highly sensitive political issue, one that has sparked heated public debates concerning the sustainability of increasing immigration and generous welfare states. While freedom of movement was broadly supported in the past and is widely considered the most important achievement of European integration (Vasilopoulou and Talving, 2018; Lutz, 2020; Sojka et al., 2023), following the financial crisis of 2008 and mounting fiscal pressures on states, arguments of who should be included and who should be excluded in order to preserve the advantages of the welfare state have come to the fore (Mulligan, 2017).

Deciding on the specific boundaries to identify who is 'in' and who is 'out' continues to be a major point of political contention and is typically defined by polarised viewpoints, to the extent that freedom of movement has become a critical source of tension across the EU and is arguably one of the key drivers of increasing Euroscepticism (Lutz, 2020; Blauberger et al., 2021). For example, the governments of three EU member states and one former – the United Kingdom (UK), Germany, the Netherlands, and Austria – wrote a joint letter to express concerns over 'welfare tourism' and called

1 European citizens who move across borders but within EU member states or European Free Trade Association (EFTA) countries are typically referred to by EU Institutions as 'mobile citizens' rather than migrants. However, an immigrant is merely a person who moves from one geographical region to another, and the vast majority of migration never actually takes place across a border but rather internally within a country (McAuliffe and Triandafyllidou, 2021). For the purpose of this dissertation therefore, I use terms such as mobile citizen, intra-EU labour migrant, and immigrant somewhat interchangeably depending on the chapter and the context in which 'human mobility' is being discussed.

on the EU to revise freedom of movement rules in order to make it more difficult for EU mobile citizens to access welfare in other EU countries[2]. The letter argued that the EU members with more generous welfare systems attract larger numbers of EU citizens from those EU members where the standard of living may be lower and benefits less generous, thereby affecting the sustainability of Western welfare states. In 2016, concerns regarding immigration and the welfare state played a critical role in the UK's EU referendum campaign (Heath et al., 2020). At times, the politicisation of EU citizens' rights appeared to follow traditional cleavages between left and right, but between the choice for a "hard Brexit" over a "soft Brexit" in order to ensure barriers are in place to stop the free movement of people from the EU and the fall of the "red wall" in the 2018 British general elections (traditional Labour voters switching their vote to the Conservative Party), it has become clear that it is no longer such a straightforward division. Those who traditionally supported the left and greater socio-economic redistribution were voting for the right in order to express their desires for greater border controls and restrictions on immigration (Goodwin et al., 2022). Furthermore, this concern is not isolated to the UK. There has been a much wider, general increase in Euroscepticism alongside the rise of Eurosceptic politicians, public figures and political parties such as Marine Le Pen (National Rally – France), Geert Wilders (PVV – Netherlands), Heinz-Christian Strache (FPÖ – Austria), and the Alternative für Deutschland (Germany) who have garnered support from across the political spectrum.

The rapid transformation of our societies brought about through globalisation seems to be a key trigger, with individuals on both left and right, working class or elite, taking either an anti-globalisation (protectionist) or pro-globalisation (open) stance. On the one hand, the removal of barriers to trade, capital, and mobility have been economically vital and enabled the European Union to become progressively more interconnected, interdependent, and to grow in economic power. On the other hand, it is becoming more and more apparent that despite this increase in overall wealth, it has not been shared equally, with certain segments of society left behind through increasing inequality and rising costs of living. As a result, more and more political battles have been won and lost on platforms that support or oppose one or more of the facets of globalisation. In particular, and especially since the economic crisis of 2008, these public and political debates have increasingly intertwined globalisation and migration as nation states find their labour markets and social security systems under pressure and with fewer options at hand to address inequality within its borders. So perhaps it is of no surprise that immigration and intra-EU mobility are challenging the way we govern.

2 Austrian Federal Ministry of the Interior, German Federal Ministry of the Interior, Dutch Ministry of Security and Justice, UK Home Office (2013), 'Letter to the Irish presidency', available at: http://docs.dpaq.de/3604-130415_letter_to_presidency_final_1_2.pdf

Alongside these key public debates, the globalisation of movement and its relationship with the welfare state has also become a central focus of academic debate. While, increasing openness for flows of trade and capital on the transformation of the boundaries of the welfare state has been an important theme within the literature on the evolution of the welfare state, it has not been until more recently that the study of globalisation has started to incorporate increasingly open borders and how migration shapes the way the welfare state is organised. In 1986, Freeman published the article 'Migration and the Political Economy of the Welfare State', one of the earliest contributions to this particular stream of literature. He opens the debate by arguing that increasing inflows of labour fundamentally challenge the viability of the welfare state. Freeman presents the idea that as labour mobility and globalisation are in general open systems, while the welfare state must be a closed system in order to survive, that ultimately, the free movement of labour and the welfare state cannot coexist. Later, Alesina et al. 's (2001) influential article 'Why Doesn't the United States Have a European-Style Welfare State?' and Alesina and Glaeser's (2004) follow-up article present evidence to support Freeman's argument and provide the foundations for much of the subsequent research on this topic. Both articles aim to explain the lack of a developed welfare state in the United States (US) and show that the high ethnic fractionalisation of the population in the US is a crucial factor limiting the development of a welfare state. They determine that European nations were able to develop mature welfare states thanks to the relatively homogenous nature of their populations and the shared solidarity between peoples of a similar race, language, and culture. Based on their findings, they reason that an increase in the movement of people or an increase in the ethnic diversity of European nations will ultimately diminish the generosity of European welfare states. However, despite this argument, the empirical evidence is not rooted in an analysis of European data on European welfare systems and immigration regimes. As such, the overarching research question that this dissertation seeks to answer is: to what extent does immigration structurally and conceptually challenge the boundaries of welfare states in Europe?

To answer this question, this dissertation draws on a wide range of theory and empirical evidence that comes before it. There are a number of competing theories that endeavour to explain how immigration, and/or globalisation more broadly, may affect national welfare states in Europe. At the macro-level, the efficiency hypothesis and 'Embedded Liberalism' are two central but opposing theories. The former argues that increasing globalisation will force governments to retrench social protection schemes in order to keep taxes low, stay globally competitive, and reduce the fiscal burden of migrants (Gaston & Rajaguru, 2013). The latter argues that governments in open economies must expand the welfare state in order to insure citizens against the risks posed by globalisation if they wish to ensure continued support for policies of openness (Ruggie, 1982). While Ruggie's theory of

embedded liberalism originally intended to be applied to the openness of trade and capital, it is also generalisable to the increasing openness of migration regimes. If immigration is perceived as an economic risk by natives and those who benefit from open borders wish to maintain support for immigration, then the same deal meant for trade and capital could be struck for immigration. The current empirical evidence on these macro-theories is mixed and existing research provides reasons as to why we can expect immigration to in some ways increase and in other ways decrease the generosity of the welfare state (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Nannestad, 2007; Soroka et al., 2006; 2016; Stichnoth & Van der Straeten, 2013; Römer, 2023). However, perhaps the prevailing view is that immigration puts a strain on tax and benefit systems, which spells bad news for welfare state generosity and thus the ability to address economic inequalities.

Both macro-level theories discussed above focus on the 'supply-side' of social policy, they emphasise a government's potential policy response to global changes and are perhaps less studied than the 'demand-side', which focuses on the way that individuals within societies demand social policy change as a result of global changes. Key theories at the micro-level are the compensation hypothesis, the anti-solidarity hypothesis, and welfare chauvinism.

The compensation hypothesis theorises that in light of increasing economic insecurity from greater competition on the labour market, natives will demand greater compensation and consequently welfare state expansion (Brady & Finnigan, 2014; Fenwick, 2019; Marx, 2014; Paskov & Koster, 2014; Rodrik, 1998; Römer, 2023; Vlandas & Halikiopoulou, 2021; Walter, 2010, 2017). If immigration is (perceived) to lead to reductions in wages, increase the likelihood of becoming unemployed, or decrease the likelihood of securing a job, then this increased risk is what could lead to individuals seeking increased security through a more comprehensive social security net. The anti-solidarity hypothesis theorises that because support for the welfare state is grounded in solidarity between citizens, a desire to pool and share risk across individuals, then anything that may challenge this solidarity such as changing the ethnic, linguistic and cultural make-up of society as a result of increasing ethnic heterogeneity, can thus erode citizens' support for the welfare state (Burgoon & Rooduijn, 2021; Heath & Richards, 2020; van Oorschot, 2008). Welfare chauvinism theorises that rather than retrenching or expanding the welfare state as a whole, native-born residents may wish to ring-fence benefits from foreign-born residents in order to maintain more generous benefits for themselves (Brady & Finnigan, 2014; Cappelen & Peters, 2017; Eger, 2010; Eger & Breznau, 2017; Eick & Larsen, 2022; Hjorth, 2016; Larsen, 2011, 2020; van der Meer & Reeskens, 2021; Negash & van Vliet, 2024; van Oorschot, 2000; van der Waal et al., 2013). This could happen because an individual may consider an immigrant as

more "undeserving" of welfare support in comparison with the elderly, sick and disabled people, and the unemployed, also known as the immigrant deservingness penalty, (Bonoli et al., 2024; Ford, 2015; van Oorschot, 2008) or because they may consider migrants over-represented in their receipt of benefits, thus placing too much pressure on public services and questioning the sustainability of the welfare state (Magni, 2021).

Again, the evidence base for these explanatory theories is mixed, likely because of the differences in the data used, the time periods and countries under study, and the methods utilised. Moreover, these relationships are typically moderated by national contexts such as levels of immigration and economic stability or institutional structures such as welfare regime or programme type (Burgoon & Rooduijn, 2021; Eick & Larsen, 2022; Mau & Burkhardt, 2009), as well as individual level contexts such as economic and cultural insecurity, as individuals respond to the circumstances in which they find themselves (Hays et al., 2005). It is the detail in which these preferences are shaped and how social policy may be affected in these varied contexts, which provides the many avenues for research to explore and understand.

Nonetheless, despite the expanding body of literature, several important gaps remain theoretically, empirically, and methodologically that this dissertation aims to fill. With regards to theory, this dissertation is embedded not only within the literature on migration and the welfare state, but it also fits within the broader literature on globalisation. First, I question the persistent assumption that free immigration always spells bad news for generous welfare states (e.g. Freeman, 1986; Friedman, 1999; Alesina et al., 2001) and provide the alternative perspective that under certain circumstances, this does not seem to hold true. Instead, I hypothesise that dependent on the type of social welfare programme or type of mobility under study, we can expect to find the opposite effect and that immigration and free movement of labour in the EU could be positively associated with welfare state generosity.

Second, much of the research mentioned above predominantly relies on aggregate social spending as the primary measure of welfare state generosity. Welfare spending (typically measured as a percentage of GDP) alone cannot adequately capture aspects such as benefit access, benefit conditionality, benefit adequacy. It is sensitive to demographic factors such as an aging population or rising unemployment and may also simply fluctuate based on changes to the denominator (rising or shrinking GDP) rather than changes in spending. However, it provides excellent cross-national comparability over time as it is well-recorded, widely available and regularly updated. As such, it provides an excellent indicator for both overall fiscal effect and disaggregated across multiple policy domains. To account for this so-called 'dependent variable problem', this dissertation incorporates alter-

native measures of generosity, such as the generosity index from Scruggs et al. (2014) in Chapter 2 and replacement rates in Chapter 4, providing a more holistic approach to measuring welfare state generosity. Moreover, my research disentangles welfare state expenditures in Chapter 4 to provide a more detailed picture of how specific social policies may be influenced by immigration.

In addition, previous research typically relies on broad indicators for immigration, in particular 'foreign-born population as a percentage of the total population', which identifies individuals born elsewhere than their current country of residence as migrants. While this approach provides a useful overview, it fails to capture the nuances of different types of mobility, such as the distinct impacts of labour migrants, refugees, or EU mobile citizens. These distinctions can be crucial, as different migrant groups may have varying degrees of access to welfare services, contribute differently to national economies, and be perceived (negatively or positively) in different ways. My thesis addresses this gap by developing more precise indicators for intra-EU labour mobility (EU citizens who reside in another EU country other than the one of their country of birth) in Chapter 3 and then testing this specific type of mobility, thus offering a more precise analysis of how different migrant populations interact with the welfare state in Chapters 4 and 5.

In terms of methodology, this thesis uses a number of quantitative techniques to answer its research question. I follow the broader literature and use typical methods for working with cross-sectional, time-series analysis such as panel corrected standard errors and multilevel models for survey data and public opinion, but I also provide robustness checks utilising lesser-used methods in the political economy literature on migration, such as an instrumental variable approach and error correction models.

By addressing these gaps, this dissertation complements and advances the current literature, thereby offering a detailed and comprehensive analysis of the relationship between migration and welfare states in Europe. Moreover, it embraces the macro- and micro-level mechanisms that may be transforming the welfare state as a result of changing levels of immigration. Having addressed the gap in the literature, the rest of this introduction now focuses on providing a more detailed description of each chapter.

1.2 A Reader's Guide

This thesis is structured around a collection of four independent, yet interconnected articles that intend to provide insight into the way mobility and immigration influence the structural and conceptual boundaries of the welfare state. They aim to contribute to the comparative political economy

literature on the welfare state by analysing the effects of immigration on both social policies and social policy preferences. While the chapters can be read independently, they are closely related and have a continuous red thread that is outlined in this introduction.

Following the introductory chapter, Chapter 2 of this dissertation is a sole-authored, published article and provides an overview of the macro-level relationship between the stock of immigrants across 16 European countries and the generosity of the welfare state. This article extends previous research (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Soroka et al., 2006; 2016) by taking into account arguments from Scruggs and Allan (2006) and Starke (2006) that studies researching welfare policy change should complement expenditure data with additional quantitative measures. Consequently, specific attention is paid to the 'dependent variable problem' and operationalising the 'generosity' of the welfare state through two different indicators of welfare state effort: (1) social spending as a percentage of gross domestic product and (2) an index of welfare state generosity (Scruggs et al. 2014). I find that immigration is positive and significantly associated with social spending and has no significant association with the generosity index. As a result, I argue that there is no evidence to support the idea that increasing immigration has led to the erosion of welfare state effort in Europe. Immigration in this chapter is operationalised as 'foreign-born as a percentage of the population', a broad measure that is indicative of the stock of immigrants in a country. A key reason this indicator is used is because it is one of the best reported, cross-country comparative indicators for levels of immigration. The drawback is that it lacks depth and cannot provide a more detailed insight into the relationship between types of immigration and the welfare state. Accordingly, the next chapter of this dissertation is assigned to developing more specific indicators for immigration to be utilised in later chapters.

Chapter 3 is sole-authored and takes a closer look at data on migration and explores what existing migration data has to offer researchers studying migration related research questions in Europe. The chapter considers the main limitations of currently available migration data, and the solutions employed by other researchers to overcome those constraints. In addition, it presents how I have sought to fill one specific gap in migration data, and consequently the migration-welfare state literature, through the creation of an innovative operationalisation for intra-EU labour mobility using the EU-LFS. I create two indicators to help identify two different sub-flows of

immigration – EU15[3] + EFTA[4] labour migration and EU13[5] labour migration. These two particular sub-sections of European movement previously had been invisible in the macro-level statistics for international comparison. This chapter explains the creation of these indicators, their limitations, and provides descriptive statistics to showcase both their suitability and accuracy as useful indicators, as well as to present some key trends in intra-EU labour migration that were previously assumed but not adequately supported by the data. It is following this chapter that the thesis narrows its scope to the effects of post-2004 EU expansion mobility on European welfare states.

Chapter 4 is coauthored with Olaf van Vliet and specifically builds upon Chapter 2. We utilise the indicators created in the third chapter to provide a more specific analysis of the relationship between immigration and the welfare state. While we continue to observe the macro-level relationship between the generosity of the welfare state and the level of immigration in 16 European countries using pooled time-series, cross-sectional data and panel corrected standard error models, just as I do in Chapter 2, the aim of this chapter is to provide a more detailed picture of these associations through breaking down social welfare generosity and immigration into more specific component parts. Thus, this chapter expands upon previous literature by analysing a previously 'missing' population of interest (intra-EU labour migration) and by disaggregating social welfare spending into separate subdomains capturing specific programme-related changes across countries. Moreover, we complement spending data with two replacement rates, unemployment from the OECD and original data on social assistance, in order to provide a more holistic approach to operationalising welfare state generosity. Again, this chapter finds no evidence of a negative relationship between immigration and European welfare states, indeed we find the opposite. In particular, we find positive associations between intra-EU labour mobility and unemployment spending and unemployment replacements rates, again indicating support for the compensation hypothesis.

Chapter 5 is sole-authored and aims to examine at the micro-level mechanisms that under-pin the macro-level relationships we see in the earlier chapters. This paper explores how Central and Eastern European (CEE) labour mobility, a particular type of migration, affects attitudes towards the welfare state. Through the use of multilevel models and the European Social

3 The pre-2004 expansion member states: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, The Netherlands, Portugal, Spain, Sweden, United Kingdom.

4 European Free Trade Association (EFTA) members: Iceland, Liechtenstein, Norway, Switzerland

5 The post-2004 expansion member states: Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia

Survey (ESS), I test attitudes towards redistribution in light of increasing CEE labour mobility and aim to further understanding regarding the processes and mechanisms that may be leading to the adjustment of EU welfare systems and their changing boundaries as EU mobility intensifies. The mechanisms behind this specific relationship and the possible moderating effects remain unknown because indicators for intra-EU labour migration have not been available up until this point. Consequently, Chapter 5 takes advantage of the indicator created in Chapter 3 for CEE labour mobility and tests the validity of the compensation hypothesis in this particular context. Through the use of this more detailed indicator and in combination with foreign-born, I find that there is some evidence to support the compensation hypothesis, and I do not find significant negative associations between CEE labour mobility and social policy preferences except in the context of high immigration and high unemployment combined. The results provide a greater understanding of the way intra-EU labour mobility is linked to the changing boundaries of welfare states in Europe. Crucially, as attitudes towards redistribution are not being significantly eroded then I argue the legitimacy of European welfare states has not been undermined.

Finally, Chapter 6 ends this dissertation through reflecting on how it contributes to the academic literature, providing a summary of the main results from the previous chapters, and by drawing together its overarching conclusions. Moreover, it touches on the societal relevance of my findings, some limitations of the dissertation, and discusses future avenues for research. Ultimately, this dissertation argues that there is reason to be optimistic regarding the coexistence of national welfare states and immigration in Europe. It is not as simple as to suggest that increasing immigration undermines the solidarity that welfare states are built on as there are multiple other complex mechanisms at work, and this dissertation attempts to explore several avenues through which changes in the boundaries of the welfare state may take place.

2 The Political Economy of Immigration and Welfare State Effort: Evidence from Europe

Abstract

This chapter explores whether immigration plays a role in determining national welfare state effort in 16 European countries. It examines the relationship between stocks of migrants, the foreign-born population, on two different indicators of welfare state effort – social welfare spending as a percentage of gross domestic product (GDP) and a welfare generosity index. The nexus between immigration and welfare is a controversial and highly sensitive political issue, and as such it typically divides opinion. Traditionally, it has been argued that increases in immigration create pressures for governments to reduce levels of social welfare provision. By building on theories and results from the political economy literature, this article provides further evidence on the debate through using a fresh approach to operationalise welfare state effort. The empirical results show that the foreign-born population has a positive and statistically significant relationship with social welfare spending and no statistically significant association with the welfare generosity index. The findings provide no evidence to support the hypothesis that higher levels of immigration lead to reduced levels of social welfare provision. On the contrary, these findings lend support to the view that increasing immigration leads to welfare state expansion rather than retrenchment, and that European welfare states remain resilient in the face of the globalisation of migration.

Keywords: social protection; welfare state; immigration; Europe

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2.1 Introduction

Milton Friedman famously once said "You cannot simultaneously have free immigration and a welfare state" (1999). He argued that a country with open borders and access to generous welfare provisions would become a haven for poorer migrants which would place a significant fiscal burden on the host country. Consequently, increasing immigration may present serious challenges to Europe's relatively generous welfare states by exposing tensions between the inherently closed system of the welfare state and the relatively open economies of developed nations. Indeed, some authors have gone so far as to argue that increasing immigration in Europe will eventually lead to the Americanisation of European welfare states and politics (Alesina & Glaeser, 2004; Alesina, Glaeser, & Sacerdote, 2001).

On the other hand, current empirical evidence on the topic in Europe is mixed (Lipsmeyer & Zhu, 2011; Nannestad, 2007; Soroka, Johnston, & Banting, 2006; Stichnoth & Van der Straeten, 2013). In the political economy literature, there are two key competing theories that attempt to explain how immigration, or globalisation more generally, may affect national welfare states. They are known as the efficiency hypothesis and the compensation hypothesis. The former is linked to the arguments above and argues that increasing globalisation will alter the supply-side of social protection through forcing governments to retrench social protection schemes in order to stay globally competitive and reduce the fiscal burden of migrants (Gaston & Rajaguru, 2013). The latter argument focuses on how the demand-side for social protection is altered by globalisation, leaving governments in open economies no choice but to expand the welfare state in order to insure citizens against the risks posed by globalisation, such as the job insecurity brought about by increased labour migration (Walter, 2010).

In light of these arguments, this article fits within a larger theoretical debate regarding the influence of globalisation and growing economic openness on national welfare states in Europe, in particular concerning the increasing movement of people. This article extends previous research (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Soroka et al., 2006; Soroka, Johnston, Kevins, Banting, & Kymlicka, 2016) by taking into account arguments from Scruggs and Allan (2006) and Starke (2006) that studies researching welfare policy change should complement expenditure data with additional quantitative measures. Social spending only provides one dimension of welfare state effort, the size of the budget, and so this article augments social spending data with the welfare generosity index developed by Scruggs et al. (2014). Through the use of both indicators, this article contributes to the ongoing dichotomy by illustrating that there is a lack of evidence to support the conclusion that increasing immigration is detrimental to or incompatible with European welfare states. Alternatively, increasing immigration may lead policymakers to actually increase welfare state effort.

For the analysis, pooled time-series cross-sectional analysis is used to explore the association between stocks of migrants, the foreign-born population, on the two different indicators for welfare state effort, social welfare spending as a percentage of gross domestic product (GDP) and the total welfare generosity index. The empirical analysis shows that increases in the foreign-born population are positively and statistically significantly associated with social welfare spending, while there is no significant relationship with the generosity index. The results survive a number of robustness checks and provide no evidence for the efficiency hypothesis. Instead, the findings are in line with researchers who argue that the compensation hypothesis is the prevailing mechanism between globalisation and welfare state effort (Brian Burgoon, 2001; Gaston & Rajaguru, 2013; Walter, 2010).

In the following section, the political economy literature surrounding immigration and welfare state effort in the context of globalisation is examined. This section includes the formulation of hypotheses on immigration's role in the retrenchment or expansion of the welfare state. Section 3 focuses on the research design and contains the data and method used to approach the research question. The results and a discussion are presented in section 4, which is followed by a sensitivity analysis. Finally, Section 5 presents the conclusions and suggests areas for future research.

2.2 Literature review and hypotheses

2.2.1 The theoretical relationship between immigration and the welfare state

In 1981, Meltzer and Richard developed a political economy model to express how demand for redistribution by voters is dependent on levels of economic inequality. Assuming voters act rationally and with economic self-interest, the model predicts that when mean income rises relative to median income, those with an income lower than the median will choose candidates who favour higher taxes and greater redistribution – thus taxes will rise and redistribution will increase, and vice versa (Meltzer & Richard, 1981). Magni-Berton (2014) builds on this model to illustrate how immigration reduces demand for redistribution through closing the gap between the mean and median income. The model demonstrates that while low-skilled immigrants lower the mean income of the entire population, an absence of voting rights means the income level of the median voter stays the same. This suggests that in light of increasing immigration, in particular low-skilled immigration, voters would prefer lower taxes and less redistribution. In practice, however, voters do not always act rationally and when casting votes individuals must choose between policy bundles and therefore may vote on a preference for reduced immigration rather than a preference for reduced spending.

Razin et al. (2002) also use political economy theory to show how immigration can lead to preferences for lower taxes and less redistribution. They argue that as the foreign-born population increases, a larger proportion of tax revenues go to low-skilled migrants, thus redistribution becomes costlier for the native-born population. As a result, this 'fiscal leakage' from native to immigrant population leads to a shift in attitudes where the median voter will now support lower taxes. However, this relies on the assumption that immigrants are a net drain on public expenditures, of which the evidence is mixed (Boeri, 2010). Following the same logic means that if immigrants are net contributors, then the median voter would shift in favour of increasing welfare state effort (Gaston & Rajaguru, 2013).

In 1982, Ruggie presented an alternative explanation regarding increasing openness and welfare state effort. He proposed that in order to maintain an open international economic order, then governments would have to deliver a level of social protection that safeguards citizens from the risks brought by internationalisation (Ruggie, 1982). While Ruggie's theory of 'Embedded Liberalism' was intended for the globalisation of trade and capital, it is generalisable to the globalisation of labour. If immigration is perceived as an economic risk by natives and those who benefit from open borders wish to maintain support for immigration, then the same deal meant for trade and capital could be struck for immigration. Similarly, the compensation hypothesis argues that in light of increasing economic insecurity, natives will demand greater compensation and these policy preferences will shape the response from political elites (Walter, 2010, 2017). There is considerable research supporting the idea that an individual's economic situation strongly affects their policy preferences (Hays, Ehrlich, & Peinhardt, 2005), providing the theoretical micro-foundations for the expansion of the welfare state in light of increasing immigration.

2.2.2 The empirical relationship between immigration and the welfare state

Despite the importance of the subject, remarkably few studies have empirically examined immigration and its role in shaping contemporary welfare state effort. There is, however, significant research on immigration and welfare preferences[1] that may provide an indication regarding what to expect for welfare effort in Europe. In a study comparing 21 European countries, Finseraas (2008) finds evidence to support opposing effects of immigration on welfare attitudes depending on the risk perceived from immigration. The results presented show that those who are opposed to equal rights for immigrants are less likely to support redistribution, whereas those who believe that immigration reduces average wages or immigrants take jobs away are more likely to support redistribution. Moreover, through analys-

1 See Stichnoth and Van der Straeten (2013) for a review of the empirical literature

ing survey data from 17 European countries, Burgoon et al. (2012) report that exposure to increasing immigration at the occupational-level raises individual economic uncertainties and leads to greater support for government redistribution.

In contrast, Alesina et al. (2001) argue that ethnic diversity is a crucial factor for explaining why the US does not have a welfare state similar to those in Europe. They find that if the probability of two people drawn at random from a population will belong to different ethnic groups increases by just one percentage point, then social spending as a percentage of GDP is expected to reduce by 7.5 percentage points. Consequently, they reason that as Europe's heterogeneity increases, rising ethnic divisions will be used to challenge generous welfare states. Alesina and Glaeser (2004) extend their previous research through expanding their analysis to 54 countries worldwide. They find a negative correlation between ethnic fractionalisation and social spending. They propose that generous welfare states are contingent on a homogeneous society because support for the welfare state depends on solidarity between citizens which is fostered through common linkages such as culture and language. Alesina and Glaeser (2004) state that increasing immigration in Europe will challenge Europe's comparatively generous welfare states.

Soroka et al. (2006) combine two Organisation for Economic Co-operation and Development (OECD) social spending databases covering 18 OECD countries over the period 1960-2000. They investigate changes in stocks of foreign-born on changes in social welfare spending and show that in countries with higher rates of immigration, welfare spending grows less than in countries with limited migration. Soroka et al. (2016) build on this previous research through separating social spending into nine different sub-categories and find that there are different effects in different spending programmes and provide further evidence for their assertion that increases in immigration lead to smaller increases in social welfare spending. In a qualitative study looking specifically at the EU, Kvist (2004) examines whether EU enlargement leads to member states adjusting their social policy benefits. He argues that EU-15 member states do engage in strategic interactions and that the member states most actively adjusting their social policies are the ones that put in place fewer restrictions on the labour market access of citizens from new member states. In light of recent EU enlargements, it is possible that these interactions may have continued.

However, using a sample of European OECD Countries in a quantitative study, Mau and Burkhardt (2009) contend the conclusion that migration poses a threat to European welfare states. They reason that the claim is overexaggerated and show only a weak, negative influence of ethnic diversity on support for the welfare state, which is mediated when controlling for certain factors such as GDP and unemployment. Moreover, in a compara-

tive study across 15 European countries from 1971-2007, Lipsmeyer and Zhu (2011) find that domestic political pressures, such as the strength of left parties and trade unions, can mediate the relationship between unemployment compensation and migration. Using changes in net migration and levels of unemployment replacement rates, they show that when labour unions are strong and left parties hold more parliamentary seats, then higher net migration rates are associated with higher levels of benefits. Finally, using data on levels of social expenditures and the foreign-born population for 25 OECD countries for the years 1980-2008, Gaston and Rajaguru (2013) find no negative relationship between migration and social spending in a sample. Instead, they determine that depending on the countries included in the sample, immigration can have a positive effect on social welfare spending.

As evidenced by the mixed results and conclusions in the literature, the association between immigration and welfare state effort is complex and likely to be influenced and mediated by a number of factors. It is entirely possible that immigration creates opposing pressures on the welfare state and that one effect may simply dominate over another. As the analysis takes into account two dependent variables, which represent two different operationalisations of welfare state effort, then different effects may materialise. This could be a result of substantive reasons such as the inclusion of different programmes in each aggregate indictor. Nonetheless, it would be surprising to find completely opposing effects in the two indicators.

2.2.3 Hypotheses

This analysis is based on a European sample, subsequently it is possible that a higher proportion of immigrants are low-skilled and work in lower-paid jobs[2] (UN-DESA & OECD, 2013), in which case the theoretical models would predict that increasing immigration leads to reductions in welfare state effort. The empirical work of Alesina et al. (2001); Alesina and Glaeser (2004); and Soroka et al. (2006; 2016) would generally support this. On the other hand, should those immigrants increase perceptions of economic risk for the native labour force through increasing the competitiveness of the labour market, then increasing immigration could alternatively lead to increases in welfare state effort. The recent empirical results from Gaston and Rajaguru (2013) and Lipsmeyer and Zhu (2011) lean towards this expectation. Considering the literature and the competing mechanisms, two hypotheses are proposed:

H1: Retrenchment: increasing immigration is associated with reductions in welfare state effort – reflected in decreases in spending and/or generosity.

2 In 2015, 23.8% of working age (15-64) foreign-born labour in the EU was tertiary educated (Eurostat 2025) and immigrants earn on average about 30% lower wages than natives (Dossche et. al., 2022)

H2: Expansion: increasing immigration is associated with increases in welfare state effort – reflected in increases in spending and/or generosity.

2.3 Research Design: Data and Methods

To test the hypotheses, data spanning 16 European countries[3] for the years 1990-2010 has been collected. The countries in the sample chosen are European countries in the OECD because the more economically developed European countries simultaneously tend to be typical migrant destinations and the ones with traditional, advanced welfare states. However, some European OECD countries are excluded[4] despite accessible spending data as no 'total generosity' measure is available for these countries in the Comparative Welfare Entitlements Dataset (CWED). For our two dependent variables – social spending and the generosity index – the aggregate measures are used. While this can mask programme specific changes, it provides a useful overview of general associations which has yet to be done in this specific context for the generosity index.

2.3.1 Dependent Variable: operationalising welfare state effort

The commonly used indicator to depict welfare state effort is social spending as a percentage of GDP (Allan & Scruggs, 2004). There are clear advantages to this measure – it provides a good indication of the overall generosity of a welfare state as it captures the size of the budget, there is no need to correct for inflation and exchanges rates, and it is well recorded so data is readily available for most European countries over an extended period of time. However, this measure has been criticised for a number of reasons, such as not adequately capturing changes in legislation regarding entitlement criteria, coverage, and duration (Scruggs, 2007). Subsequently, there has been extensive debate over spending's suitability as an indicator of welfare state effort because it may not adequately reflect policy change (Allan & Scruggs, 2004; Caminada, Goudswaard, & Van Vliet, 2010; Clasen & Siegel, 2007; Green-Pedersen, 2004; Jensen, 2011; Starke, 2006; van Oorschot, 2013; Wang & van Vliet, 2016).

To account for the 'dependent variable problem', this article uses two different indicators to explore how immigration influences welfare state effort. As is common convention, social welfare spending as a percentage of GDP from the OECD's Social Expenditure (SOCX) Database (2017d) is used, which is then compared with the welfare generosity index from the

3 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.

4 Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia.

CWED developed by Scruggs et al. (2014)[5]. While social spending can sufficiently capture developments in the size of the budget once the appropriate controls for social need are included, the generosity index should be able to better capture other elements of welfare state effort such as changes in entitlement criteria and benefit duration (Scruggs, 2006). However, a limitation of this index is the exclusion of particular social protection programmes – such as certain types of unemployment schemes, maternity leave benefits, child/family benefits, and publicly provided health insurance/universal healthcare. Furthermore, the generosity index does not solve problems such as the 'gradual manifestation' of policy decisions in welfare state effort and concerns about the reliability of data[6].

Table 2.1 shows social spending as an average over the period 1990-2015 for each country[7]. France tops the table with on average 29 percent of its GDP spent on social welfare. Unsurprisingly, the Scandinavian countries also have high levels of social spending. Notably, however, Norway is somewhat lower with 22 percent of its GDP spent on social welfare on average – this could be because Norway spends considerably less on pensions, which usually make up a large proportion of social expenditures. Overall, it appears that Western European countries have higher levels of social spending than Eastern or Southern European countries, which links to the welfare state typologies developed by Esping-Andersen (1990). Overall, Social Democratic and Conservative welfare state typologies dominate the top half of the table and in contrast, the post-Soviet and Liberal welfare states spend a much lower percentage of GDP on welfare. When social spending is com-

5 The welfare generosity index from the CWED contains information on the generosity of social benefits through combing data on benefit replacement rates, qualifying conditions, waiting period, indexation, benefit duration, and elements of insurance coverage. Each of these aspects is normalised and combined into a program-specific generosity score for unemployment insurance, sick pay insurance, and public pensions. To form an overall generosity score, the scores for the three programmes are averaged to create a composite generosity index. This gives a standardised score on a continuous scale reflecting the overall generosity of benefit entitlements. Shortcomings of the indicator include that unemployment insurance only covers national insurance provisions that are earned without income testing and so excludes programmes such as the UK's income-based Jobseeker's Allowance or Germany's unemployment assistance. Sick pay insurance covers the benefits that are paid in the instance of short-term non-occupational illness or injury. Public pensions covers only mandatory public programmes (Scruggs et al., 2014) The index closely resembles Esping-Andersen's 'decommodification index' in *The Three Worlds of Welfare Capitalism* (Esping-Andersen, 1990; Scruggs & Allan, 2006).

6 Spending is measured as a percentage of GDP and the average production worker wage is used for the replacement rates in the construction of the generosity index. Thus, these indicators can change because GDP grows, or average wages increase rather than because of an actual change in the generosity of a benefit.

7 There is a different set of countries and a longer time period covered in Table 1 than in the main sample as the OECD provides more data than the CWED. In the sensitivity analysis for spending, the sample in the IV model is expanded to include the additional European countries and the most recent years.

pared to the Welfare Generosity Index in Table 2.2, we can see that they do not exactly correspond (the correlation is 0.4). Interestingly, Norway leaps from 9th place to 1st – it is possible that because Norway is a particularly rich country, it can spend relatively less on social welfare while still maintaining the generosity of its benefits.

Table 2.1: Social welfare spending as a percentage of GDP

Country	*Mean*	*Country*	*Mean*	*Country*	*Mean*
France	29	Luxembourg	22	Czech Republic	18
Sweden	28	Spain	22	Switzerland	17
Finland	27	Hungary	22	Slovakia	17
Belgium	26	Greece	20	Ireland	17
Austria	26	Netherlands	21	Iceland	15
Denmark	26	Poland	21	Estonia	15
Germany	25	Slovenia	21		
Italy	24	Portugal	20		
Norway	22	United Kingdom	19		
				Average	22

Table 2.2: Total generosity index

Country	*Mean*	*Country*	*Mean*	*Country*	*Mean*
Norway	42	Denmark	36	Portugal	31
Belgium	41	Finland	35	Italy	28
Sweden	41	Germany	35	Greece	28
France	38	Spain	34	United Kingdom	27
Netherlands	37	Austria	33		
Switzerland	36	Ireland	31		
				Average	35

2.3.2 Explanatory Variable

Following the example of previous researchers (Soroka et al., 2006; Gaston & Rajaguru, 2013; Mau & Burkhardt, 2009) the main explanatory variable is foreign-born as a percentage of the population (OECD, 2017b), which serves as an indicator of the stock of migrants in a country. The standard definition of foreign-born is "all persons who have ever migrated from their country of birth to their current country of residence" (OECD, 2017b).

Table 2.3 displays the average foreign-born population in 24 European countries between 1990 and 2015[8]. To start, there is considerable variation. As expected, countries that are typically considered countries of immigration such as Sweden, Germany, and Austria have high foreign-born populations. Luxembourg and Switzerland are exceptional, with high numbers of EU workers in particular. Countries traditionally considered countries of emigration, such as Poland, have on average smaller foreign-born populations. Estonia's high foreign-born population is somewhat of an outlier. It is high because of the large number of recognised non-citizens – they are mainly former Soviet-Union citizens who are permanent residents, but have not acquired any other citizenship (Eurostat, 2017b).

Table 2.3: Foreign-born as a percentage of the total population

Country	*Mean*	*Country*	*Mean*	*Country*	*Mean*
Luxembourg	36	France	11	Norway	9
Switzerland	24	Slovenia	11	Portugal	7
Estonia	17	Spain	10	Czech Republic	6
Austria	14	Greece	10	Denmark	6
Ireland	13	Netherlands	10	Finland	4
Belgium	12	Iceland	9	Slovakia	4
Germany	12	Italy	9	Hungary	3
Sweden	12	United Kingdom	9	Poland	2
				Average	11

2.3.3 Control Variables

In this section, the control variables are discussed. They cover population demographics, domestic economic conditions, political institutions, economic globalisation, and deindustrialisation. The variables are all drawn from the previous, relevant empirical literature (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Soroka et al., 2006; 2016).

Population Demographics. Certain population demographics are controlled for by including the population under 15 and the population over 64 in the model specification (OECD, 2017b). It is reasonable to assume that spending increases as a larger proportion of the population becomes dependent on working age tax payers (Soroka et al., 2006).

8 Over time, most Western European countries have seen a steady increase in their foreign-born populations. For a graphical representation of the changes over time for social spending, the generosity index, and foreign-born see Appendix A.

Economic Controls. The effect that a country's domestic economic status may have on welfare state effort is controlled for using three key variables: GDP growth, the national unemployment rate, and female labour force participation. First, Gaston and Rajaguru (2013) find that GDP growth has a significant and negative association with social spending because "this reflects the fact that the denominator (GDP) grows more slowly than the numerator (SOCX) when the economy slows" (2013, p.95). For generosity, as the index is not constructed as a proportion of GDP, the effect may be different. Second, the unemployment rate is included as a control for the domestic labour market (OECD, 2017b). Higher unemployment would indicate more spending on unemployment benefits, but the fiscal cost may put pressure on generosity. Third, female labour force participation (OECD, 2017b), which is thought to affect welfare effort through increased public childcare infrastructure to support working mothers.

Political Institutions. "One of the strongest generalisations that can be made about the origins and growth of the welfare state is that where trade unions and social democratic parties are strong, the welfare state has thrived" (Freeman, 1986, p. 61). It is generally thought that left-leaning governments, who traditionally have electoral ties to the working-class and unions, will support greater redistribution (Armingeon & Giger, 2008), although the importance of partisan politics is still debated (Pierson, 1996; Starke, Kaasch, & Van Hooren, 2014). Moreover, some authors find that a strong left or strong trade unions can counteract the potential negative effects of diversity on welfare generosity (Lipsmeyer & Zhu, 2011; Taylor-Gooby, 2005). As a result, the ideology of the government in power is controlled for by including the percentage of cabinet posts held by social democratic and other left-wing parties, weighted by the number of days in office in a given year (Armingeon et al., 2017). Additionally, trade union density, measured as net union membership as a share of wage and salary earners in employment, is used as a control for the bargaining power of domestic labour (Visser, 2016).

Economic Globalisation and Deindustrialisation. Globalisation has been argued to both reduce public spending and increase it (Cerny, 1995; Rodrik, 1998). As Soroka et al. (2006, 2016) do not account for globalisation in their specification, then the example set by Gaston and Rajaguru (2013) is followed and the KOF economic globalisation indicator is used (Dreher, 2006). Conversely, Iversen and Cusack (2000) argue that it is deindustrialisation that leads to economic uncertainty and demand for compensation, not globalisation. Therefore, deindustrialisation is also accounted for.

2.3.4 Method and Model Specification

This article uses pooled time-series cross-sectional analysis – a common practice is to use the de facto Beck-Katz standard, which combines fixed

effects with a lagged dependant variable (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Soroka et al., 2006, 2016). However, the lagged dependent variable can be a considerable source of bias, known as Nickell bias (Nickell, 1981), as it is highly correlated with the dependent variable and thus causes an upward bias in the standard errors. Subsequently, the estimation model does not provide an accurate coefficient for the key explanatory variable. Accordingly, panel-corrected standard errors with the Prais-Winsten correction for serial correlation – argued for as more appropriate by Plümper et al (2005) – are used for the analysis. The main model specification is presented in levels, as a change from year to year is not as drastic as a five-year change, such as Soroka et. al. (2016) use in their analysis. Hence the overall volume (level) of migration from year-to-year may be more noticeable to natives. Notably, when testing the dependent variables for stationarity, a number of panels have a unit root but not all[9]. As a result, a model using changes is included as a robustness check.

The explanatory variable and all controls are lagged by one year – Gaston and Rajaguru (2013) do the same, while Lipsmeyer and Zhu (2011) and Soroka et al. (2006; 2016) lag a selection. The reasoning is that in the case of certain variables, it makes theoretical sense – policy decisions can take time to be reflected in spending levels. Plus, lagging can help mitigate endogeneity issues arising from reverse causality. However, as reverse causality is an important methodological consideration[10], an instrumental variable regression using lags of foreign-born as instruments is provided as an additional robustness check.

Finally, country fixed effects are used in order to account for cross-sectional heterogeneity of the intercepts and omitted variable bias. By using country fixed effects, the aim is to ensure that time-invariant, country-specific aspects such as cultural influences that influence welfare state effort are accounted for. By doing so, all between-unit variation is eliminated, which narrows the analysis (Mummolo & Peterson, 2018). In addition, external, temporal shocks such as the expansion of the EU and the 2008 financial crisis may affect the results and so a two-way fixed effects model is provided as a robustness check. It is not provided as the main model specification as a two-way fixed effects model makes strong assumptions about pooled time-series cross-sectional datasets and requires a separate interpretation that can be difficult to conceptualise (Kropko & Kubinec, 2018).

9 Appendix B provides the p-values for each panel and both dependent variables.

10 To test for possible reverse causality, the lagged level of spending was regressed on the level of foreign-born and a positive statistically significant relationship was found. No such relationship was found for changes.

2.4 Results and Discussion

2.4.1 Welfare State Effort

Table 2.4 presents the results of social spending and the generosity index in Column 1 and Column 2, respectively. The estimate in column 1 of Table 2.4 indicates that higher levels of foreign-born are positively and significantly associated with higher levels of social spending, a 1 percentage point increase in foreign-born as a percentage of the population over time is associated with a 0.27 percentage point increase in social welfare spending as a percentage of GDP. The estimate in column 2 of Table 2.4 shows that the relationship between the foreign-born population and the generosity index is not statistically different from zero.

The results point to possible expansion of the welfare state in light of increasing migration. With regard to the mechanism, other studies have shown that exposure to globalisation increases individual risk, especially for low-skilled workers' perceived labour market risks (Walter, 2010, 2017). Moreover, research that has focused on immigration and welfare preferences have shown that if natives feel economically insecure when exposed to increasing movement of labour, particularly at an occupational level, then they support more compensation and greater redistribution from the government (Burgoon et al., 2012; Finseraas, 2008). The results in this article suggest that this may be reflected in voter preferences, and for vote-seeking politicians, voter-demand could outweigh budgetary pressure (stemming from increased global competition) to cut taxes and reduce the supply-side of social welfare.

Differing effects between spending and generosity are also found for a number of the control variables. The size of the population over 64 years old has a significant and positive impact on social spending as the number of beneficiaries will be an important predictor of spending, especially considering spending on pensions usually takes up a large proportion of overall public spending. However, there is no statistically significant effect of over 64s on the generosity index, likewise for those under the age of 15 and for the unemployment rate. The results show that, as expected, GDP growth is significant and negatively associated with social spending as in an economic downturn, the denominator (GDP) will grow more slowly than the numerator (social spending), while for the generosity index, there is no statistically significant relationship with GDP growth.

Table 2.4: Results for the main model specification, spending and generosity

Variable	*(1)* *Spending*	*(2)* *Generosity*
Foreign-born$_{t-1}$	0.272***	0.050
	(0.102)	(0.074)
Population under 15$_{t-1}$	0.596***	–0.184
	(0.219)	(0.215)
Population over 64$_{t-1}$	0.378*	–0.202
	(0.199)	(0.134)
Unemployment rate$_{t-1}$	0.129*	–0.047
	(0.072)	(0.051)
GDP growth$_{t-1}$	–0.234***	–0.006
	(0.084)	(0.021)
Female labour force participation$_{t-1}$	0.222***	0.249***
	(0.074)	(0.050)
Left Seats$_{t-1}$	0.002	0.003
	(0.003)	(0.002)
Union Density$_{t-1}$	0.063	0.187***
	(0.050)	(0.044)
KOF – economic$_{t-1}$	0.002	–0.013
	(0.067)	(0.027)
Deindustrialisation$_{t-1}$	0.022	0.034
	(0.101)	(0.086)
Intercept	–8.664	18.799*
	(10.788)	(9.809)
Country Dummies	*Yes*	*Yes*
Year Dummies	*No*	*No*
N	196	196
Adj R^2	0.914	0.982
Rho	0.340	0.617

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

Female labour force participation has a positive and statistically significant effect on both spending and the generosity index. It is likely that female labour force participation increases welfare state effort through the need for improved child-care infrastructure. Soroka et al. (2016) also suggest that increased spending may be linked to increased costs from supporting a larger work force, e.g. training, insurance, and leave. Furthermore, the findings indicate that union membership and support may be more important for determining welfare state effort than the strength of left parties. Union density is positively and significantly associated with the generosity index, while the proportion of left cabinet seats is not significantly associated with either indicator. For unions, the difference in results is quite likely to be related to the programmes that are included in the generosity index; pensions, sickness, and unemployment benefits are closely linked to labour market participation and tend to insure workers from labour market risks. Plus, this is similar to the results found by Lipsmeyer and Zhu (2011) who argue that domestic political pressures are important for explaining higher unemployment compensation in an age of increasing immigration. For left cabinet seats, there is considerable debate about the importance of partisan politics on the expansion and retrenchment of the welfare state (Allan & Scruggs, 2004; Pierson, 1996; Rueda, 2006), the results here would support Pierson (1996) and the 'new politics of the welfare state'.

Finally, in contrast to Gaston and Rajaguru (2013) who find a statistically significant, negative relationship between economic globalisation and social spending, there is no significant impact of the KOF economic globalisation indicator on either social spending or the generosity index. Similarly, in contrast to Iversen and Cusack (2000) there is no significant association between deindustrialisation and either social spending or the generosity index.

Overall, the analysis provides no evidence for the first hypothesis proposed – that increasing immigration leads to welfare state retrenchment. Rather, the positive association between foreign-born and spending, and the neutral association between foreign-born and generosity, provide some evidence for the alternative hypothesis – that increasing immigration leads to welfare state expansion, although, the two dependent variables do not show identical outcomes. In order to explain the difference between spending and generosity, it is important to note that they provide slightly different operationalisations of welfare state effort – budget size versus benefit type and entitlement criteria, and they are constructed in different ways. As a consequence, the differences between the two indicators could be down to modelling or substantive reasons.

In the case of modelling, for example, it may be that for one indicator there is an omitted variable but not for the other, or that the appropriate model specification may be slightly different for each dependent variable. How-

ever, the difference is more likely to be the result of a substantive reason, such as the two indicators measure slightly different aspects of welfare state effort. Arguably, the generosity index is a better indicator for policy changes and how politicians aim to redistribute social risk, but it excludes a large number of social programmes such as family benefits, certain types of unemployment insurance, and healthcare. As aggregate indicators have been used, there could be specific programmes driving the changes in spending that are not included within the generosity index. Moreover, the generosity index combines the three welfare programmes it covers equally. For social spending, however, the budget is not equally split between its component programmes and that different weighting could lead to slightly differing effects. Another possibility is that because the generosity index is created through combining replacement rates and benefit rule changes, there could be opposing effects happening on these constituent parts of the indicator leading to a neutral result. Finally, it may be that different mechanisms apply to the different programmes included in the generosity index; hence the net effect is neutral. An area for future research could be to untangle these different associations for specific programmes outside of spending, which would complement this article and the research conducted by Soroka et. al. (2016). Largely, however, neither measure indicates that any retrenchment of the welfare state is taking place as a result of immigration.

2.4.2 Sensitivity Analysis

In order to check the robustness of the results, three main tests were undertaken. First, because of the mixed results regarding panel stationarity, a first-differences model has been estimated in Table 2.5. Second, Table 2.6 shows the results of the two-way fixed effects model and third, Table 2.7 presents the results of an instrumental variable (IV) regression. Overall, the effect of foreign-born on spending and generosity remains stable across the various models employed.

Table 2.5 shows the results for spending and generosity as a lagged first-differences model. In this model the number of observations drops, and the explanatory power of the model reduces, but the foreign-born population remains statistically significant and positively associated with social spending, while there is still no relationship with the generosity index. Moreover, the magnitude of the coefficient for foreign-born is similar to the original model of lagged levels. Table 2.6 then shows the original specification but with the inclusion of two-way fixed effects. Again, the results for foreign-born hold for both dependent variables, although the magnitude of the effect for social spending reduces.

Table 2.5: Results for the first-differences model

Variable	*(1)* *Spending*	*(2)* *Generosity*
ΔForeign-born$_{t-1}$	0.251*	–0.014
	(0.142)	(0.100)
ΔPopulation under 15$_{t-1}$	0.882	–0.209
	(0.829)	(0.364)
ΔPopulation over 64$_{t-1}$	0.882	–0.209
	(0.829)	(0.364)
ΔUnemployment rate$_{t-1}$	–0.170	–0.049
	(0.142)	(0.056)
GDP growth$_{t-1}$	–0.047	–0.016
	(0.092)	(0.023)
ΔFemale labour force participation$_{t-1}$	0.272	0.126
	(0.191)	(0.081)
ΔLeft Seats$_{t-1}$	–0.002	0.002
	(0.004)	(0.002)
ΔUnion Density$_{t-1}$	0.054	0.080*
	(0.055)	(0.044)
ΔKOF – economic$_{t-1}$	–0.093	–0.025
	(0.095)	(0.027)
ΔDeindustrialisation$_{t-1}$	0.221	0.001
	(0.147)	(0.094)
Intercept	0.140	0.058
	(0.274)	(0.092)
Country Dummies	*No*	*No*
Year Dummies	*No*	*No*
N	176	176
Adj R^2	0.069	–0.019
Rho	0.032	0.107

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

Table 2.6: Results for the two-way FE model

Variable	*(1)* *Spending*	*(2)* *Generosity*
Foreign-born$_{t-1}$	0.152**	0.039
	(0.072)	(0.092)
Population under 15$_{t-1}$	0.555**	–0.177
	(0.222)	(0.297)
Population over 64$_{t-1}$	0.164	–0.214
	(0.160)	(0.166)
Unemployment rate$_{t-1}$	0.237***	–0.016
	(0.065)	(0.099)
GDP growth$_{t-1}$	–0.196***	–0.008
	(0.050)	(0.054)
Female labour force participation$_{t-1}$	0.167**	0.228***
	(0.071)	(0.082)
Left Seats$_{t-1}$	0.004*	0.003
	(0.002)	(0.003)
Union Density$_{t-1}$	0.115***	0.217***
	(0.044)	(0.065)
KOF – economic$_{t-1}$	0.064	0.006
	(0.051)	(0.054)
Deindustrialisation$_{t-1}$	–0.177*	–0.064
	(0.104)	(0.200)
Intercept	4.227	22.706
	(12.612)	(19.732)
Country Dummies	*Yes*	*Yes*
Year Dummies	*Yes*	*Yes*
N	196	196
Adj R^2	0.964	0.980
Rho	0.617	0.569

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

For Table 2.7, the instruments that are used are 7- and 8-year lags of the foreign-born population. For an IV regression it is not uncommon to use earlier years of the independent variable as instruments. The logic is that previous years' levels of the foreign-born population provide a strong predictor of future years' levels of the foreign-born population and thus satisfy the relevance criteria[11]. Next, the years are considered to be far enough back in time that the levels in those years are highly unlikely to directly influence current levels of social spending and generosity, thus satisfying the exogeneity criteria[12]. Columns 1 and 2 in Table 2.7 show the IV regressions for the original model specifications. The results hold, the foreign-born population is positive and statistically significant, while there is no association with the generosity index. The crucial change is that the magnitude of the coefficient for foreign-born is larger.

However, taking lagged levels of the foreign-born variable as instruments means that the number of observations greatly reduces. For spending though, a much larger sample is available as the OECD provides spending and migration data for more European countries over a longer period of time. In the original spending estimation, the sample is restricted to the countries and date range found in CWED in order to directly compare spending and generosity. Subsequently for the IV regression, the sample for spending is expanded to include more years in column 3, and then more countries[13] in Column 4. This expansion means that the results incorporate observations following the last round of EU enlargement and the last of the labour market restrictions on Bulgarians and Romanians have been lifted. In light of an expanded sample, the results for foreign-born remain statistically significant and positively associated with social welfare spending and provide support to the theory that the globalisation of migration is associated with compensatory effects.

11 The first stage F-statistic is 43.45.

12 The Sargan-Hansen test of over-identifying restrictions confirms the validity of the instruments.

13 Czech Republic, Estonia, Hungary, Iceland, and Luxembourg.

Table 2.7: Results for the IV models

Fixed-effects IV model	*16 European OECD countries (1990-2010)*	*16 European OECD countries (1990-2010)*	*16 European OECD countries (1990-2015)*	*21 European OECD countries (1990-2015)*
	(1) Spending	*(2) Generosity*	*(3) Spending*	*(4) Spending*
Foreign-born$_{t-1}$	0.92**	–0.43	0.38*	0.71***
	(0.40)	(0.30)	(0.22)	(0.17)
Population under 15$_{t-1}$	1.33***	0.17	0.77**	0.91***
	(0.41)	(0.30)	(0.32)	(0.26)
Population over 64$_{t-1}$	1.05**	–0.34	0.93***	1.29***
	(0.47)	(0.35)	(0.26)	(0.17)
Unemployment rate$_{t-1}$	–0.14	–0.15*	–0.20***	–0.07
	(0.10)	(0.08)	(0.07)	(0.05)
GDP growth$_{t-1}$	–0.29***	–0.03	–0.25***	–0.22***
	(0.05)	(0.04)	(0.04)	(0.03)
Female labour force participation$_{t-1}$	0.09	0.48***	0.13	0.02
	(0.18)	(0.13)	(0.09)	(0.07)
Left Seats$_{t-1}$	–0.00	0.01***	–0.00	–0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Union Density$_{t-1}$	0.29***	0.21***	0.23***	0.29***
	(0.11)	(0.08)	(0.07)	(0.07)
KOF – economic$_{t-1}$	0.10	–0.08	0.07	0.11**
	(0.08)	(0.06)	(0.07)	(0.05)
Deindustrialisation$_{t-1}$	0.08	0.24*	0.42***	0.08
	(0.18)	(0.13)	(0.14)	(0.05)
Intercept	–56.16***	–5.14	–62.84***	–48.58***
	(16.89)	(12.61)	(13.29)	(11.07)
N	120	120	177	223
First stage F-statistic	43.45	43.45	59.20	70.23
Sargan-Hansen p-value	0.62	0.17	0.60	0.22

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

2.5 Concluding Remarks

This article set out to examine the role that immigration has to play in determining welfare state effort in Europe through empirically testing the relationship between stocks of immigrants, as measured by the proportion of the population that is foreign-born, and welfare state effort, as measured by social welfare spending as percentage of GDP and a welfare generosity index. The results indicate that immigration has a positive impact on welfare state effort. Social welfare spending is positively and significantly associated with foreign-born and when social welfare spending is exchanged for a welfare generosity index then there is still no negative relationship between foreign-born and welfare generosity found. Moreover, after a number of tests were taken to check the robustness of the results, the headline findings remain stable. Consequently, there is no evidence to suggest that increasing immigration leads to the retrenchment of the welfare state. The results using the two indicators to express social welfare effort provide comparable results to authors who find support for the compensation hypothesis, thus providing an important contribution to existing knowledge on the political economy of immigration and welfare, as well as the wider political debate.

Nevertheless, by using macro-level aggregate indicators it is difficult to pinpoint the causal relationship and future studies should be conducted in order to test the micro-level foundations of the compensation hypothesis for the 'human face' of globalisation. In addition, while other studies have made efforts to disaggregate welfare spending into its component programmes, the independent variable foreign-born should also be disaggregated into different types of migration, e.g. labour migration, family migration or asylum, in order to determine if different kinds of migration have different effects on social welfare effort. Finally, several theories suggest the importance of the skill-level of migrants for having divergent influences on welfare state effort, steps should be taken to test this empirically in a macro-level study. However, there are practical limitations concerning the availability of data to take into consideration in order to make such an analysis possible. These areas for further research highlight certain limitations to this study. Also important is to note that the main analysis in this article is based on 16 European countries, over the time period 1990-2010. Therefore, outside of the sensitivity analysis already conducted, the results may not be generalisable to other parts of the world, other selections of countries or other time periods.

For policy makers, these results should help shed some light on a topic troubled by xenophobia, racism, and discrimination. The results that have been laid out here should contribute towards evidence-based policy making in the field of immigration and social policy. It is important to note that immigration does not seem to be leading to a 'race-to-the-bottom' in

Europe, nor should increasing immigration mean that policy makers need to look at benefits in neighbouring countries when drawing up their own welfare policies. Policy makers should aim to continue delivering welfare benefits and social protection schemes that work for improving social inequality and inclusion. This is particularly crucial for the successful integration of migrants into society, and as immigration numbers do not appear to be relenting, this will be fundamental for improving solidarity between diverse populations.

2.6 Appendix A – Supporting figures

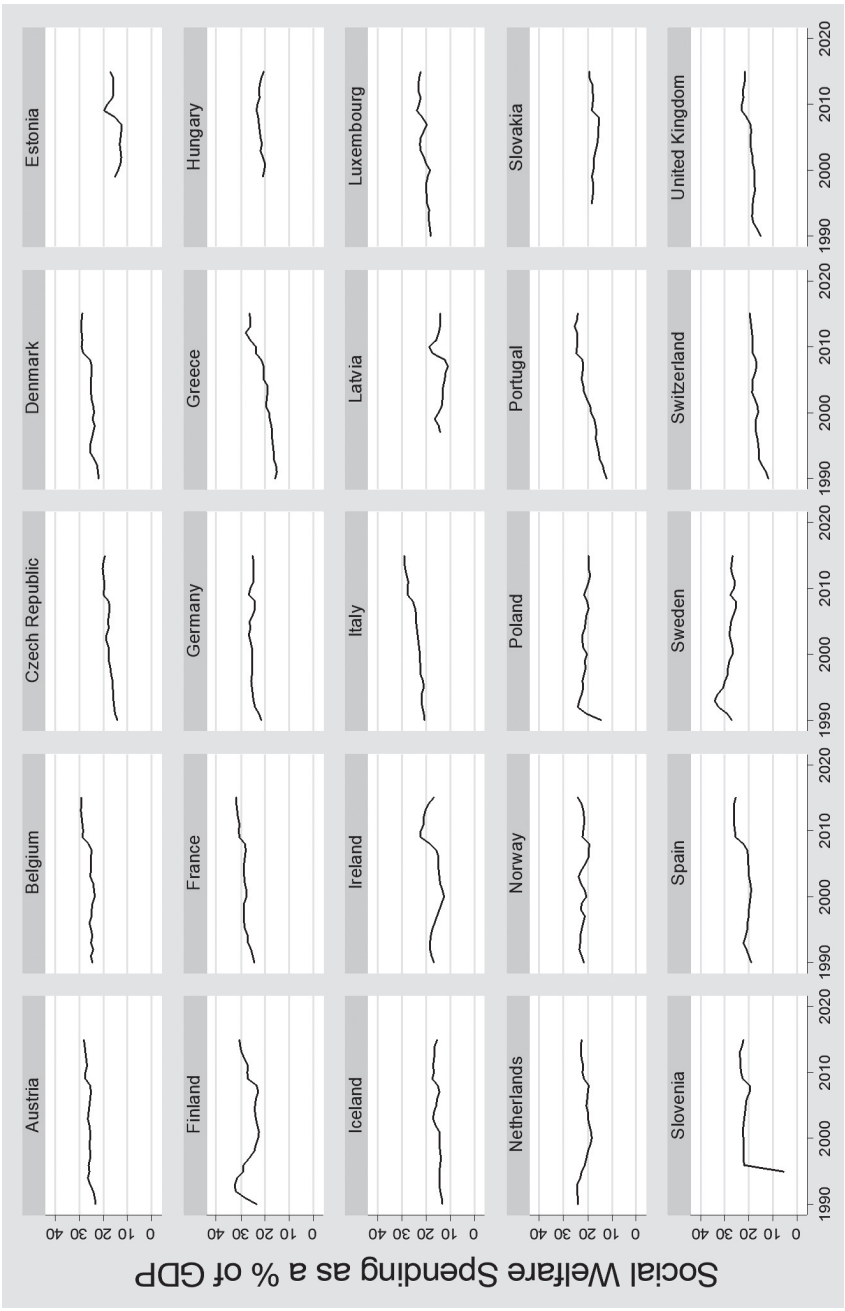

Figure A1. Social welfare spending as a percentage of GDP, over time.

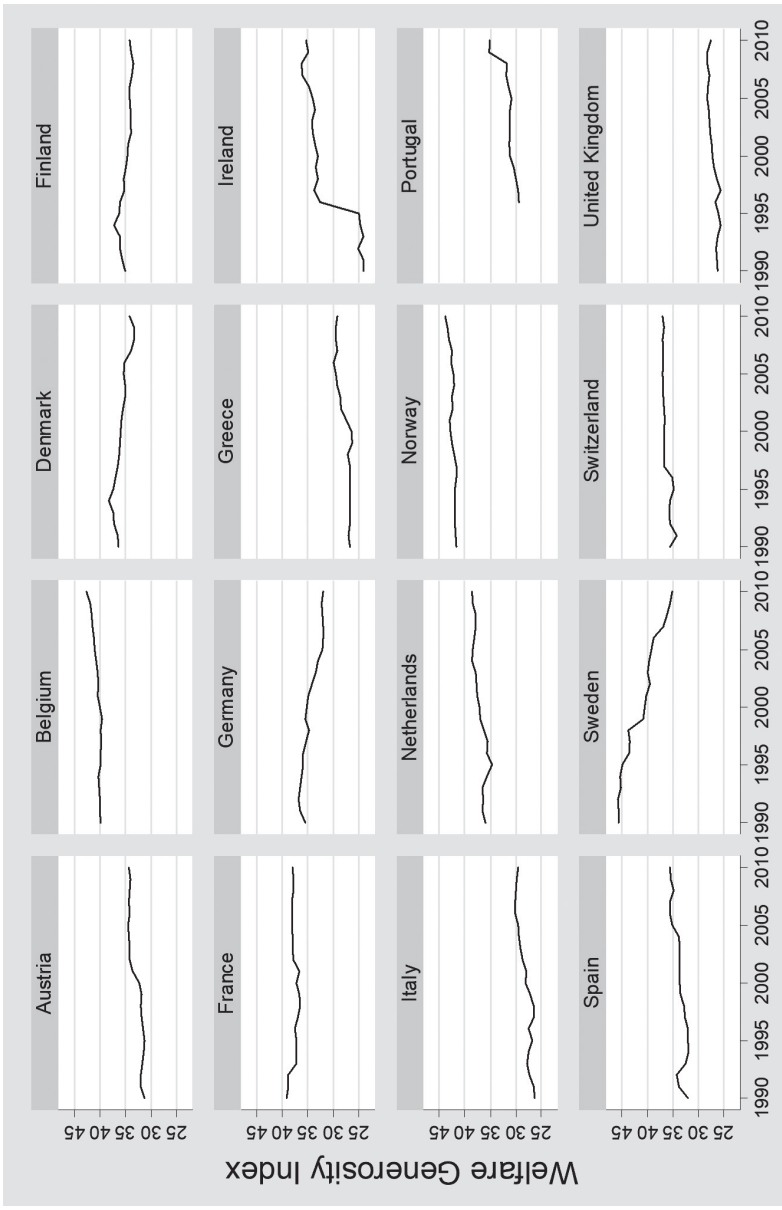

Figure A2: Total generosity index, over time.

Figure A3. Foreign-born as a percentage of the total population, over time.

2.7 Appendix B – Phillips-Perron test

Table B1: Results of the Phillips-Perron test for spending

Country	*P-value*	*Result*
Austria	0.26	Fail to reject the null of a unit root
Belgium	0.86	Fail to reject the null of a unit root
Denmark	0.84	Fail to reject the null of a unit root
Finland	0.39	Fail to reject the null of a unit root
France	0.34	Fail to reject the null of a unit root
Germany	0.003	Reject the null of a unit root
Greece	0.51	Fail to reject the null of a unit root
Ireland	0.996	Fail to reject the null of a unit root
Italy	0.995	Fail to reject the null of a unit root
Netherlands	0.51	Fail to reject the null of a unit root
Norway	0.15	Fail to reject the null of a unit root
Portugal	0.22	Fail to reject the null of a unit root
Spain	0.96	Fail to reject the null of a unit root
Sweden	0.10	Fail to reject the null of a unit root
Switzerland	0.03	Reject the null of a unit root
United Kingdom	0.78	Fail to reject the null of a unit root

Table B2: Results of the Phillips-Perron test for generosity

Country	*P-value*	*Result*
Austria	0.78	Fail to reject the null of a unit root
Belgium	0.999	Fail to reject the null of a unit root
Denmark	0.17	Fail to reject the null of a unit root
Finland	0.15	Fail to reject the null of a unit root
France	0.14	Fail to reject the null of a unit root
Germany	0.005	Reject the null of a unit root
Greece	0.83	Fail to reject the null of a unit root
Ireland	0.57	Fail to reject the null of a unit root
Italy	0.69	Fail to reject the null of a unit root
Netherlands	0.81	Fail to reject the null of a unit root
Norway	0.93	Fail to reject the null of a unit root
Portugal	0.97	Fail to reject the null of a unit root
Spain	0.63	Fail to reject the null of a unit root
Sweden	0.16	Fail to reject the null of a unit root
Switzerland	0.12	Fail to reject the null of a unit root
United Kingdom	0.69	Fail to reject the null of a unit root

3 The Devil Is in the Detail: Measuring Intra-EU Labour Migration

Abstract

Freedom of movement is a fundamental principle of the European Union (EU) and yet this key pillar of European integration has become a topic of controversy as member states find their labour markets under pressure. This article examines key trends in intra-EU labour migration and explores what existing migration data has to offer researchers studying EU migration related research questions. Furthermore, it aims to communicate the main limitations of currently available data, with a focus on the lack of quality, disaggregated statistics on the 'category of movement' for intra-EU mobile citizens. Subsequently, this article presents one way in which we have sought to fill this particular gap in migration data. We create two intra-EU labour migration indicators using the European Union Labour Force Survey (EU-LFS) to support researchers aiming to analyse this 'missing' population of interest more effectively. This article explains and presents these labour migration indicators, the method used to produce them, and provides descriptive statistics to show the different trends and patterns between the two groups. Finally, these original indicators are made available for others to make use of in their own research explorations should they wish.

Keywords: labour migration, migration data, free movement, mobile citizens, European Union

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Disclaimer:
This study is based on data from Eurostat, *the European Union Labour force Survey (EU-LFS)*, 2017. The responsibility for all conclusions drawn from the data lies entirely with the author.

3.1 Introduction

Migration has long been a prominent feature of European integration (Castles, de Haas, & Miller, 2014) and in today's European Union (EU), around 17 million citizens have chosen to make another EU country their home (Eurostat, 2017a). The free movement of people is a fundamental principle of the EU, enshrined under Article 45 of the Treaty on the Functioning of the European Union (Eurostat, 2017a). Under EU law, citizens of EU member states and of the European Free Trade Association (EFTA) are able to reside and participate in the labour market of another EU or EFTA country[1] on an equal footing with natives (Cappelen & Midtbø, 2016; Schmidt, Blauberger, & Martinsen, 2018). This aims to ensure that EU[2] labour migrants have equal access to employment, working conditions, and various social and tax advantages. However, successive EU enlargements have increased the economic heterogeneity within the single market and created challenges for Member States seeking to reconcile their national labour markets with the protection of rights for all EU citizens. In view of that, the free movement of people has become increasingly politicised and controversial, which is problematic for future European integration.

Despite the depth of the political debate on freedom of movement and its economic importance, there is a lack of readily available, detailed, and accurate data for cross-country comparison. While this may seem surprising at first, there are several real-world challenges that face the collection of migration data which in practice means that the currently available data has a number of limitations. For example, there is still considerable variation in the way countries choose to identify and define international migrants for statistical purposes, which affects the comparability of aggregate national migration statistics (Fassmann, 2009). International organisations, such as Eurostat and the OECD, aim to present internationally standardised and harmonised statistics, but despite attempts to ensure members use internationally accepted definitions and collection methods, this is not always the case in reality.

High quality migration data is essential for facilitating more complex migration research because when more precise research questions are considered, then more precise definitions of the population under study are required. Additionally, more comprehensive research can be used to better understand intra-EU migration and enable national and supra-national governments to deliver effective, evidence-based migration policies. Recently, there have been increasing efforts to construct unique and original datasets on migration that fill certain research gaps and enable authors to answer

1 From this point on, for simplicity, the abbreviation 'EU' will also be used to refer to and include the EFTA countries.

2 Who are often referred to as EU mobile citizens in official documents rather than 'immigrants' or 'migrants'.

specific research questions that were previously unanswerable (e.g. Fitzgerald et al., 2014; de Haas et al., 2015; Beine et al., 2015). However, one area of EU migration data that is still missing is on 'category of movement' – for example, whether a person is moving for work, study, or family reasons. In order to contribute to this gap in migration data, we have created specific indicators for intra-EU labour migration using the European Union Labour Force Survey (EU-LFS). This data is essential for contributing to the evaluation and development of EU and national labour migration policy.

In this paper we aim to first highlight key trends in intra-EU labour migration and explore what existing migration data has to offer researchers looking to study migration related research questions. Second, we detail the labour migration indicators that we have created and the method we used to produce them. Finally, we provide those indicators for other researchers to make use of if they wish. This paper thus proceeds as follows; the next section explores the key trends in EU labour migration and highlights what existing researchers have done. Section 3 notes some of the most extensive and useful migration databases and highlights a few of the newer innovations in migration data. Section 4 then discusses the limitations of currently available data and why there was a need to create new indicators for intra-EU labour migration. Section 5 explains my approach and method for generating the EU labour migration indicators and section 6 provides descriptive statistics for those indicators. Finally, section 7 concludes the paper.

3.2 Exploring intra-EU labour migration

Within the last two decades, 13 Central and Eastern European (CEE) countries have joined the EU over three successive rounds of enlargement encompassing around 100 million new citizens. In principle, EU accession grants these citizens the right of free movement and all its associated benefits. In practice, the application of this right has not been so clear cut. The 2003 Treaty of Accession made a provision to enable current member states to restrict the labour market access of new member state citizens for up to seven years (known as the 2-3-2 rule). At one point or another, all of the pre-2004 member states have chosen to introduce transitional labour market restrictions for a number of the post-2004 member states on the grounds of limiting disruption to native citizens' employment and labour market opportunities (Dustmann, Frattini, & Halls, 2010).

Today, there are approximately 17 million EU citizens living in an EU member state with the citizenship of another EU Member State and approximately 20.4 million EU citizens are residing in an EU Member State different to the one they were born in (Eurostat, 2017c). Germany receives the largest number of EU citizens, followed by the United Kingdom (UK) and Spain. However, in relative terms, Luxembourg and Switzerland have

the highest proportions of EU citizens living and working within their borders. Concerning emigration, the largest groups of mobile citizens in absolute numbers are Romanian, Polish, Italian, Portuguese, and German. Although, as a share of the respective country of origin's resident population – Romanians, Lithuanians, Croatians, Portuguese, and Latvians are the most mobile. These five countries each have between 10 and 20 percent of their resident population abroad (Eurostat, 2017c). EU mobile citizens have, on average, higher employment rates than their respective non-mobile counterparts (Eurostat, 2017a). Hence, searching for work abroad may present more opportunities than at home.

Favell (2008) argues that EU enlargement and freedom of movement has enabled a distinctly European migration system characterised by temporary, opportunistic, and circular movements which are "governed by the ebb and flow of economic demand, [rather] than by long-term permanent immigration" (Favell, 2008, p. 703). Although in a case study of the Netherlands, Strockmeijer, de Beer and Dagevos (2019) find that only a very small proportion of Central and Eastern European (CEE) migration can be considered circular and that a larger number actually engage in permanent settlement. Perhaps this suggests a shift in decision making over the long run, from short-term opportunistic movements to long-term settlement as EU freedom of movement matures. Unfortunately, there is also a trend of inefficient allocation of labour and skills across EU borders because EU10 migrants tend to have, on average, higher educational attainment than the native population, yet often accept lower-skilled jobs contributing to considerable skill mismatch, underemployment, and wasted human capital across the EU (Galgóczi & Leschke, 2012). Moreover, many CEE labour migrants are in precarious employment or face exclusion and exploitation in the country of destination's labour market (Favell, 2008; Favell & Hansen, 2010).

Unfortunately, none of these studies are able to draw on any specific statistics to identify the size and scale of stocks and flows of intra-EU labour migration despite calling for politicians to base their policy on demographic trends and dynamics. Where figures do exist, proxies such as total foreign population from CEE countries is used to represent 'labour flows', despite it capturing more than just labour migrants. However, there is no single data source that adequately captures intra-EU labour migration for international, cross-country comparison. A number of newspaper articles, scholarly articles, and reports from various sources rely on total migration statistics, such as total number of EU10 citizens resident in a certain EU15 host nation, to support their arguments when discussing intra-EU labour mobility or CEE workers (e.g. Grabbe, 2001; D'Auria, Mc Morrow & Pichelmann, 2008; Koikkalainen, 2011; Galgóczi & Leschke, 2012; O'Brennan, 2013). The assumption is that total migration is an appropriate proxy for labour migration. A study by Cappelen and Midtbø (2016) explores how EU mobile citizens to Norway have affected public support for the welfare state and argue

that intra-EU labour immigration is associated with chauvinistic attitudes towards welfare state spending, particularly amongst women. However, the study is unable to directly measure labour migration and so uses the terms intra-EU immigration, intra-EU migrant workers, and intra-EU labour immigration interchangeably even though there is a difference between family and labour migrants, between asylum seekers and students, for example. By providing more detailed indicators for these groups, authors should be better equipped to draw conclusions about them without having to assume that all intra-EU movement is labour migration.

In the cases where data specifically on labour migrants is used, it is usually only for a single country or for a single year, and the data has often been collected specially. For example, in Galgóczi, Leschke and Watt (2009) the chapters all deal with individual, country-specific case studies, and each use a variety of different sources to construct their information on labour migration (e.g. national statistics, work permits, and the EU-LFS). In the case of Engbersen et al. (2013), they conducted face-to-face surveys of 654 labour migrants in the Netherlands from Poland, Bulgaria and Romania. Crucially, these papers all study the intended population of labour migrants, but they may have issues of external validity.

Details regarding who is a mobile citizen are useful for countries looking to take a balanced approach towards discussing and managing intra-EU migration. Various social and economic outcomes of EU mobile citizens in different EU member states could be partially explained by the labour market outcomes of these groups and their different distributions and variations across the EU (Lemaitre et al., 2007). For the EU, a comprehensive evidence base is important because of the potential heterogeneous impact intra-EU movement has on Member States and its ability to undermine solidarity. Data that cannot be broken down only has a limited number of uses (Santamaria & Vespe, 2018) and the ability to disaggregate by these categories of migration is useful for both researchers and policy-makers. Moreover, for researchers aiming to draw conclusions on intra-EU labour migration, the use of the currently available overall flow and stock statistics could lead to over-simplification.

3.3 Current migration datasets

A key source of European migration data for scholars is Eurostat where key international migration statistics are available over a number of years. EU member states are expected to provide Eurostat with data on the number of immigrants disaggregated by citizenship, country of birth, previous usual residence, age, and sex. Eurostat data is mostly provided by EU member states' National Statistical Institutes (NSIs) and estimated from a number of large household sample surveys, such as the European Union Labour

Force Survey (EU-LFS) and the European Union Statistics on Income and Living Conditions (EU-SILC). Besides Eurostat, there are a number of useful sources for aggregate and individual level data on migration that can provide insights into key trends in international migration. To start, the OECD has three comprehensive databases on migration; (1) OECD: International Migration database, (2) Database on Immigrants in OECD countries 'DIOC', and (3) Database on Immigrants in OECD countries and non-OECD Countries 'DIOC-E' – which between them provide comparative information on migration stocks and flows, as well as a broad range of demographic and labour market characteristics of immigrants. Other good sources for macro-level indicators on migration are the World Bank's DataBank, the UN Global Migration Database by UNDESA, the UN Statistics Division: International Migration data, the UNHCR Population Statistics database, and the publicly available Community Demographic Model International Migration (CDM-IM) dataset (Nawrotzki & Jiang, 2014). More specific databases include the Asylum Support Office (EASO) for data on asylum seekers, the IOM Displacement Tracking Matrix (DTM) for displaced persons, FRONTEX: Irregular Migration Research Database for irregular migration, and for migrants who have gone missing in the process of migration there is the IOM Missing Migrants Project.

In addition, there have been increasing efforts to construct unique datasets on patterns of migration and national migration policies that fill particular research gaps, however these are not always open access and can be quite specific. Notable efforts by researchers include Fitzgerald et al. (2014) who constructed an extensive database on bilateral migration flows for their paper 'Defying the Law of Gravity' and the research project *Determinants of International Migration* (DEMIG) that compiled data on migration flows, policies, and visas to track migration policy changes around the world (de Haas et al., 2015). There is also the International Migration Policy And Law Analysis (IMPALA) Database, which is a is a cross-national and cross-institutional project on comparative immigration policy (Beine et al., 2015). Additionally, the Migrant Integration Policy Index (MIPEX) records and codes policies on the integration of international migrants (Huddleston et al., 2015) and (de Haas et al., 2015) code the restrictiveness of immigration policies. However, there are still a number of limitations to currently available migration data ensuring a number of 'black boxes' in migration research still exist.

3.4 Limitations of current data on migration

3.4.1 Who is a migrant?

In 1998, the *United Nations Recommendations on Statistics of International Migration* broadly defined an international migrant as "any person who changes his or her country of usual residence" (UN-DESA, 2015, p. 1), which encompasses a wide variety of international movements. The UN also adopted a time criterion to distinguish between long-term and short-

term: "an international migrant who changes his or her place of usual residence for at least one year is defined as a long-term migrant, while a person who changes his or her place of usual residence for more than three months but less than one year is considered to be a short-term migrant" (UN-DESA, 2015, p. 1). Despite this standardised definition, considerable variation in the way countries choose to identify international migrants for statistical purposes still exists. For example, while many EU countries use 'duration of stay' as the de facto approach for identifying immigrants, the qualifying length of the stay varies between countries (Fassmann, 2009).

The majority of EU countries define a migrant as someone who intends to stay between 3 months and 1 year. A number of countries use intended duration of stay because waiting on a measure of actual duration would mean that the data is quickly outdated. However, self-reporting is problematic because many migrants may not know or be prepared to state their intentions (Fassmann, 2009). Furthermore, countries that adhere to the one-year rule (Cyprus, Finland, Sweden, and the UK) do not always separately identify short-term migrants, which has the disadvantage of not capturing seasonal migration. In Germany, any person taking up residence is considered a migrant, which captures virtually all types of movement. Poland and Slovakia, on the other hand, use a very restrictive measure for immigration and define a migrant as someone who carries out a 'permanent' change of residence. Very narrow or broad definitions can result in lower or higher levels of migration in relation to other countries (de Beer et al., 2010).[3] This is further complicated because the method a country uses to define or measure the length of stay can also vary. For example, by taking into account the length of the permit granted or by using the date an individual first registered in the destination country (de Beer et al., 2010; Laczko, 2015). Likewise, the definition of an emigrant can also vary. In Austria an individual must leave the country for more than three months, in Belgium it is six months, Finland one year, and in Romania an individual must indicate that they are planning on leaving for good (DeWaard, Kim, & Raymer, 2012; Fassmann, 2009; Koikkalainen, 2011).

Furthermore, because of 'rights to resettle' individuals with certain ethnic backgrounds settling in particular countries are not considered immigrants but returning nationals. For example, more than 2 million ethnic Germans returned to Germany between 1991 and 2005 (Fassmann, 2009)[4]. Consequently, publicly available data on international migration can be inconsistent ensuring limitations regarding cross-country comparability. While the solution would be to require countries to apply uniform duration criteria, such as the UN definition, the reality is not so straightforward. National Statistical

3 Discrepancies also arise because some countries include international students in their statistics and others do not.

4 This is also the case for Romanians of Hungarian origin wishing to return and resettle in Hungary, as well as Moldovans originally of Romanian origin returning to Romania.

Offices tend to assemble data from population registers that was originally gathered at the municipal level and various historical and administrative contexts are then reflected in the way countries choose to collect and record their migration data. Essentially, national data sources tend to reflect national regulatory frameworks in the respective reporting country (Lemaitre, 2005). Plus, there is little incentive to change because the data that is collected and the methods used are usually considered adequate for the administrative, fiscal, and planning needs of the local authority. Consequently, harmonising population register criteria according to international guidelines has been exceedingly difficult (Kraler, Reichel, & Entzinger, 2015; Lemaitre, 2005).

3.4.2 Stock versus flow measures of migration

The most reliable data sources tend to be on stocks of migrants, e.g. foreign-born as a percentage of the population, rather than flows of immigration. Most EU countries identify the foreign-born population in their censuses making it possible to compare the size of migrant populations (Lemaitre, 2005). However, even for an indicator as simple as the foreign-born population there are still problems regarding definitions and measurement methods. For example, persons who are nationals of their current country of residence but were born abroad are included in the foreign-born data. Moreover, some countries – such as Germany – do not always collect data on foreign-born residents but rather base national statistics on their foreign-population (individuals with a foreign passport) (de Beer et al., 2010; Laczko, 2015; Lemaitre, 2005). This means that once a person has naturalised in their host country, they are no longer considered an immigrant. This can change the size of the reported stock and introduce bias if certain groups with certain characteristics are more likely to naturalise than others.

Data on flows of migrants are more problematic as measurement is difficult ensuring that many countries do not possess reliable statistics. For emigration in particular, outflows of people tend to be unregulated or unchecked and there is little incentive for a migrant to report their movements to the country they have left, thus it is not uncommon for emigrants to still be registered in their country of origin even after living abroad for several years (de Beer et al., 2010). As a result the numbers of emigrants reported by a sending country often differ from the corresponding receiving country's reported number of immigrants (DeWaard et al., 2012). Moreover, the recording of national immigration (individuals holding a passport of the country they are immigrating to) is often supressed by the receiving country (de Beer et al., 2010). Consequently, immigration, emigration, and net migration are measures that are subject to a degree of uncertainty.

These difficulties are further compounded in an area of free movement as there are no border checks, no need for to apply for a work or residence permits, and no incentive to register one's movements. Hence, data on intra-EU

labour migration is particularly difficult to collect, record, and disseminate because of the complex nature of human movement and the nature of the single market. The result is that many types of intra-EU mobility are miscounted or not even counted at all by official statistics creating an invisible population (de Beer et al., 2010). This reality means that migration statistics are fallible and consequently operationalising migration as a dependent or independent variable can be complicated (de Beer et al., 2010; Eurostat, 2017c; Lemaitre, 2005). As a result, many studies looking to answer research questions about various facets of intra-EU labour migration may use the aggregate measure of intra-EU migration as a proxy for labour migration instead, reshape the research question to avoid directly discussing labour migration specifically, or analyse the topic qualitatively.

3.4.3 Disaggregating migration statistics

The ability to disaggregate international migration statistics depends on where the comes from. Statistics such as those provided by the OECD and Eurostat are gathered from a variety of sources depending on the reporting country. Most EU countries base their migration statistics on census data and various administrative sources such as population registers, temporary or permanent residence permits, work permits, health insurance registers, and tax registers. Some also use household sample surveys such as the EU-LFS, mirror statistics or particular estimation methods (Eurostat, 2017c; Lemaitre, 2005). In Germany and the Netherlands, statistics on immigrants are generated from population registers collected at the municipal level. Whereas the UK relies on a passenger survey because there is no official system of local registration (DeWaard et al., 2012). Each source has its own advantages and disadvantages. Producing migration statistics in the EU based upon work permits would exclude mobile citizens from the official numbers as they have free labour market access in other EU member states. Moreover, work permits may have little relation to real numbers if they include renewals or if there is a significant backlog. In the case of a census, while it is the most comprehensive way to estimate the number of immigrants, it only happens once every ten years.

Acquiring detailed data on immigration beyond basic age and sex descriptors is incredibly difficult. In particular, if you wish to expand your research into types/categories of movement there is little publicly available data. One exception is inflow of asylum seekers, which is reasonably well recorded by most OECD countries. An asylum seeker is easier to define and record – the 1950 Geneva Convention that provides an international, legal definition of a refugee and the number of asylum applicants is straightforward to count because an asylum seeker must interact with the authorities in their host nation. However, even this can vary between country, some asylum seekers are only counted once they receive refugee status while others are counted earlier in the process (de Beer et al., 2010).

The OECD has endeavoured to deliver statistics on migrant categories and provides some data on migrant workers, freedom of movement, accompanying family of workers, family migration, and humanitarian migration from 2003-2014. Lemaitre (2005) uses data on permanent migration inflows (identified through permanent or indefinitely renewable residence permits) in order to distinguish between different migration flows. However, as with all migration data there is a trade-off – while the method used[5] provides a gain in cross-country compatibility and an improvement in the detail of information, the data is incomplete because the sources of the information deviate from the standard and issues arise from under-estimation (as it is only permanent-type migration). Furthermore, this source cannot be used for studying categories of migration within the EU because it all falls under 'freedom of movement'. This category encompasses all individuals moving within the EU and Schengen zone, whether they moved for labour or family reasons, and regardless of nationality.

For intra-EU mobility, there is no single perfect data source because of the administrative problems that arise from attempting to track individuals with no incentive to register their cross-border movements and the varying definitions of an immigrant across EU countries. Datasets such as the EU-LFS and EU-SILC have a strong advantage as both surveys are highly harmonised and optimised for comparability (Eurostat, 2019b). The disadvantage is that because migrants make up only a very small proportion of the entire population, household surveys can underrepresent specific migrant groups unless the sample size is very large[6]. On the other hand, census and survey data can capture a share of the irregular population who are inevitably excluded from population registers and permit systems.

3.5 The European Union Labour Force Survey (EU-LFS): creating intra-EU labour migration indicators

3.5.1 The EU-LFS

The EU-LFS is the largest, micro-level sample survey that provides information on the labour force participation of residents in private households aged 15 and over. In 2016, the sample size was approximately 4,500,000 individuals

5 See Lemaitre (2005) and Lemaitre *et al.* (2007).

6 This can be due to a number of reasons. Migrants tend to have a much higher non-response rate than the overall population due to language difficulties understanding the interviewer or survey or an unwillingness to provide information because of a desire to remain 'under the radar'. Non-response rates are expected to be higher when the migrant is poorly integrated and has fewer socio-economic interactions with wider society. However, as intra-EU labour migrants or mobile citizens have the legal right to live and work in the other member states, the issue that may realistically cause a problem is language difficulties.

across 35 European countries (GESIS, 2019). The sampling units are dwellings, household or individuals depending on the country-specific sampling frames and it provides an important source of statistics regarding trends in the EU labour market and cross-border labour mobility (Eurostat, 2017c)[7]. The EU-LFS is conducted by National Statistical Institutes across Europe and is then processed centrally by Eurostat. The data is collected mainly through direct interviews, although proxy interviews are also possible, and some of the data can be supplied through alternative sources such as administration registers. In some countries, participation in the survey is compulsory (GESIS, 2019). This all ensures that the EU-LFS is a valuable resource for analysing the movement of labour as it uses comparative methodology across all countries, it is regularly conducted, and it provides information on employment, nationality and broad country of birth in a large sample size. The EU-LFS enables us to analyse intra-EU labour migration as it identifies both country of birth and labour force status for individuals, plus it includes population weights. There are two methods for identifying migrants, either country of birth or country of citizenship. Nevertheless, data on the place of birth is the preferred source as there is a large degree of variance in citizenship policy across countries and thus citizenship is often considered an unreliable method for measuring mobility (Eurostat, 2018). For example, in order to naturalise in Austria, 10 years of residency is required whereas Belgium requires only three years.

There are three main limitations for using of the EU-LFS to construct indicators for intra-EU labour migration:

1. Short-term migration such as seasonal migration is unlikely to be captured in the survey because these groups stay for a limited amount of time in their host country (Galgóczi et al., 2009).
2. The possibility that intra-EU labour migrants are underrepresented in the survey.
3. The possible bias arising from dropping missing values – if groups that share the same characteristics are systematically dropped.

For the database, I create intra-EU labour migration indicators for 16 European countries[8], from 2004 up until 2016. These countries were selected because they participate in the EU's area of free movement, and they consist of key destination countries for intra-EU labour migrants. I would have included Norway, as it has similar characteristics to the countries chosen but the data on migrants on Norway was withheld from the EU-LFS on the basis that the sample of migrants was not considered representative. Moreover, that sample sizes of intra-EU labour migrants in the EU-13 are very small and more likely to be subject to bias.

7 More detailed information can be found on the Eurostat website or in the EU-LFS explanatory notes (Eurostat, 2017b).

8 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom.

3.5.2 Identifying migrants

The initial step for creating intra-EU labour migration indicators was to identify migrants. I categorise migrants as persons born outside their current country of residence (foreign-born). When data on country of birth is not available then data on foreign citizens – those with a different nationality than the country they reside in – is used[9]. The labour migration indicators created start in 2004 because of the way the data is presented in the EU-LFS. Prior to 2004, country of birth is labelled as either EU-28 or non-EU due to the anonymisation process undertaken by each reporting country for every individual in the survey. From 2004 onwards, the data for country of birth is presented as broad country groupings under the variable 'COUNTRYB'. The most common groups are: 'Native', 'EU15' (pre-2004 expansion countries), 'NMS10' (2004 expansion countries), 'NMS3' (Bulgaria, Romania, and Croatia), 'EFTA' (European Free Trade Association), 'Other Europe', 'North Africa', 'Other Africa', 'Near and Middle East', 'East Asia', 'South and South East Asia', 'North America', 'Central America and the Caribbean', 'South America', 'Australia and Oceania'. Some countries reduce these groups into even broader categories because of concerns regarding anonymisation. For example, 'NMS10' and 'NMS3' are combined together under the category 'NMS13'. For the indicators, if 'NMS13' is not available then we combine the two separate figures for 'NMS10' and 'NMS3' to create an indicator for Central and Eastern European migration (EU13). In this case, the two intra-EU labour migration indicators are not affected by the groupings. However, for two countries one change in the groupings does have a slight bearing, in Finland and France, the EFTA countries (Switzerland, Norway, Iceland, and Liechtenstein) are counted in 'Other Europe'. Thus, for Finland and France, EFTA migration is missing from the EU-15 & EFTA labour migration indicator.

3.5.3 Identifying labour migrants

I identify labour migrants through selecting those who are both foreign-born and whose employment status is either employed or unemployed using the variable 'ILOSTAT'[10]. Using the broad country groups noted earlier, we then create intra-EU labour migration indicators for 16 European countries (EU-15 and Switzerland). I use the information on country of birth and labour force status (employed and unemployed) to identify labour migrants from the EU-15 & EFTA and EU-13 countries. The variable ILOSTAT provides the labour force status of the individual observations. It is split into five categories; employed, unemployed, inactive, compulsory

9 This is the case for Germany only as it withholds data on country of birth.

10 Regarding employment status, there are three mutually exclusive and exhaustive groups – employed, unemployed, and economically inactive – we exclude the category 'inactive' as they are neither employed nor searching for work.

military service, and persons under 15. I provide the indicators expressed both as a percentage of the population and as a percentage of the labour force. Table 3.1 explains the key variables that were created and the method that was used in order to produce them in more detail.

Table 3.1: Definition and method for indicators created using the EU-LFS

Indicator	*Definition*	*Method*
Foreign-born	A dummy variable to indicate whether the individual is born in a foreign country.	Created to identify who is or is not a migrant using the variable COUNTRYB (country of birth). An exception is Germany which chose to suppress this information. Instead, the variable 'NATIONAL' (nationality) is used. Thus, for Germany, the aggregate indicator represents the foreign population not foreign-born.
EU–15 & EFTA labour migration (% of the total population)	Migrants from the EU–15 and EFTA (Switzerland, Norway, Iceland, and Liechtenstein) who are classed as either employed or unemployed, as a percentage of the total population of the destination country.	This indicator was created using COUNTRYB (country of birth) and ILOSTAT (labour force status). First, all observations with ILOSTAT missing were dropped. Then individuals who are born in an EU–15 or EFTA country and 'employed' or 'unemployed'.
EU–13 labour migration (% of the total population)	Migrants from the 13 newest member states who are classed as either employed or unemployed, as a percentage of the total population of the destination country.	The same method as above, but using individuals born in the EU–13.
EU–15 & EFTA labour migration (% of the labour force)	Migrants from the EU–15 and EFTA who are classed as either employed or unemployed, as a percentage of the labour force	First, an absolute number for EU–15 & EFTA labour migration was created using the percentage derived above and population data from the OECD. Then, this absolute number and data on the size of the labour force from the OECD were used in order to provide the statistic as a percentage of the labour force.
EU–13 labour migration (% of the labour force)	Migrants from the 13 new member states, who are classed as either employed or unemployed, as a percentage of the labour force	The same method as above, but using individuals born in the EU–13.

3.6 Descriptive and Comparison Statistics

This section aims to provide key descriptive statistics for the intra-EU labour migration indicators generated, as well as offer various comparison statistics – where possible – in order to see how the indicators compare to those provided by international organisations. Table 3.2 displays basic descriptive statistics (mean, standard deviation, minimums, and maximums) for the various variables that were created in the process of developing intra-EU labour migration indicators. The table shows that between countries there is larger variation in the sizes of stocks of EU-15 and EFTA mobile citizens than EU-13 mobile citizens.

Table 3.2: Descriptive statistics for 16 European countries (EU-15 plus Switzerland) – from 2004 to 2016

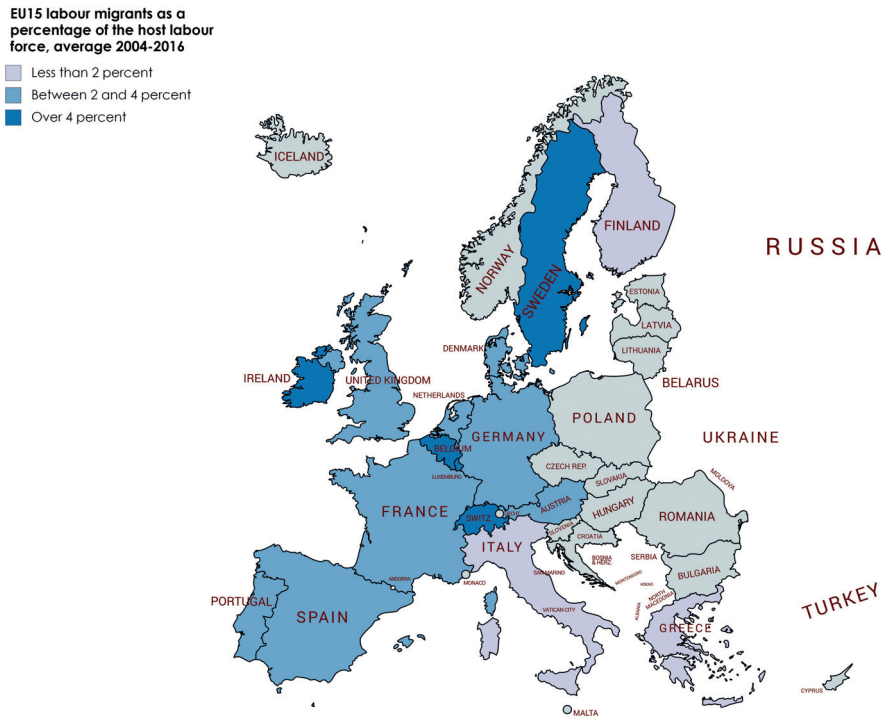
Variable	*Mean*	*S.D.*	*Min*	*Max*
Foreign-born	13.13	8.70	2.07	48.44
EU–15 & EFTA labour migration (absolute number)	419922	387431	30568	1470945
EU–15 & EFTA labour migration (percentage of the population)	3.60	5.58	0.27	25.07
EU–15 & EFTA labour migration (percentage of the labour force)	7.26	11.59	0.61	51.29
EU–13 labour migration (absolute number)	255272	346311	1581	1809736
EU–13 labour migration (percentage of the population)	1.13	1.03	0.08	5.21
EU–13 labour migration (percentage of the labour force)	2.30	2.12	0.15	10.33

Figure 3.1 displays on a map the average EU-15 & EFTA labour migration as a percentage of the labour force (2004-2016) for the 16 countries. Three countries – Finland, Greece, and Italy – have an average of less than two percent of their labour force made up of EU-15 & EFTA labour migration. The majority of countries have an average level of between two and four percent of their labour force made up of EU-15 & EFTA mobile citizens. While a few countries – Belgium, Ireland, Luxembourg, Sweden, and Switzerland – have over four percent of their labour force consist of EU-15 & EFTA mobile citizens. In the case of Luxembourg, this is exceptionally high and the average between 2004 and 2016 hovers around 48 percent. Switzerland is another exception, and that figure is between 15 and 20 percent.

Figure 3.2 provides the same representation but for EU-13 labour migration. The highest levels of Central and Eastern European labour migration are found in Ireland and Austria, with over four percent of the labour force from CEE countries. This is followed by Italy, Spain, Sweden, and the UK with between two and four percent of the labour force from CEE countries, and the rest have under two percent. On average, over the time period chosen, levels of EU-15 & EFTA migration are higher than CEE countries. However, when we look at the data over time (Figures 3 and 4) there has been a greater increase in CEE labour migration whereas EU-15 has stayed relatively stable over time – an exception is Portugal. For a number of countries – Austria, Italy, Luxembourg, Netherlands, Spain, and United Kingdom – central and eastern European labour migration is on the rise and each year makes up a larger proportion of the labour force. The United Kingdom in particular has seen a dramatic increase in labour migration from the newer member states. A likely reason is because the UK was one of three countries

that decided to not impose labour market restrictions (the 2-3-2 rule) on the new member states from the 2004 EU round of enlargement.

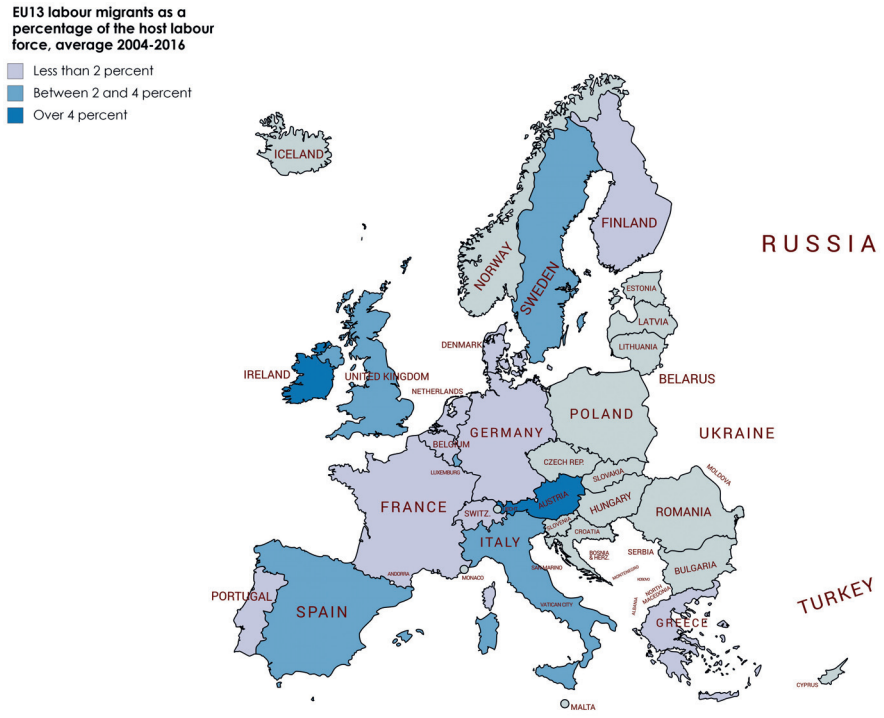
Figure 3.1: Western European labour migration as a percentage of the labour force, average 2004-2016



Source: own elaboration based on EU-LFS data
Note: countries displayed in a colour not included in the legend indicate no data available

Figures 3.3 and 3.4 present the percentage point change in the two labour migration indicators, for EU15 & EFTA and CEE mobile citizens respectively, from 2005 to 2016. The year 2005 was used because Ireland and Italy do not have the correct data available in the EU-LFS for the year 2004. Thus, for consistency, I have chosen to present the change between 2005 and 2016. When comparing the two figures, it becomes evident how CEE labour migration has increased more rapidly over time than Western European migration. This could be for a few reasons, such as because they were mostly new member states in 2004 (some even later) they are just starting to exercise their rights as EU citizens. Perhaps if we compared the increase in migration of the EU-15 from the point of joining we would see something similar. Also, there are differences in levels of unemployment, wealth, and development which may also play a role in driving push-pull migration.

Figure 3.2: Central and Eastern European labour migration as a percentage of the labour force, average 2004-2016

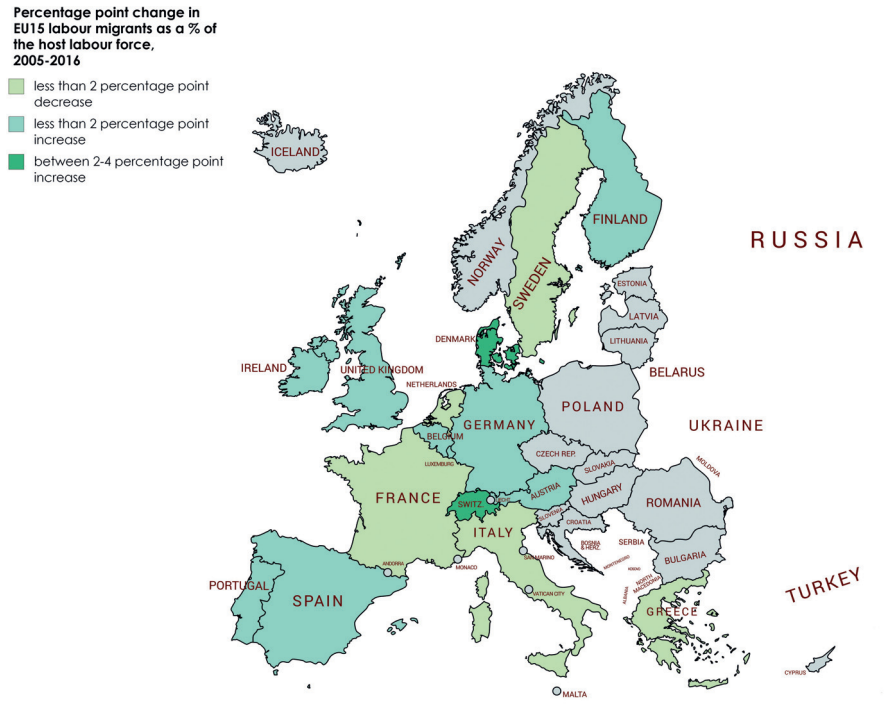


Source: own elaboration based on EU-LFS data

Note: countries displayed in a colour not included in the legend indicate no data available

As I have created two new indicators, these statistics cannot be cross-checked with other available statistics. In order to provide an idea as to the reliability and accuracy of our indicators for intra-EU labour migration, we also created a foreign-born indicator which is able to be compared with other readily available migration statistics. In Table 3.3, the figure derived from the EU-LFS is compared with data on the percentage of foreign-born from the OECD and Eurostat. Table 3.3 also presents the correlation statistics between the OECD's foreign-born indicator (2017b) with the one derived from EU-LFS data in the period 2004 to 2016. Eurostat reports slightly smaller estimates for the size of the migrant population versus the OECD. Both Eurostat and the OECD use similar sources for data collection. Eurostat collects information from the national statistics offices of member states who base their statistics on either administrative data, sample survey data, census data, mirror data, mathematical methods or a combination of these data sources (Eurostat, 2019a). The OECD uses four types of sources; these are population registers, residence permits, labour force surveys and censuses.

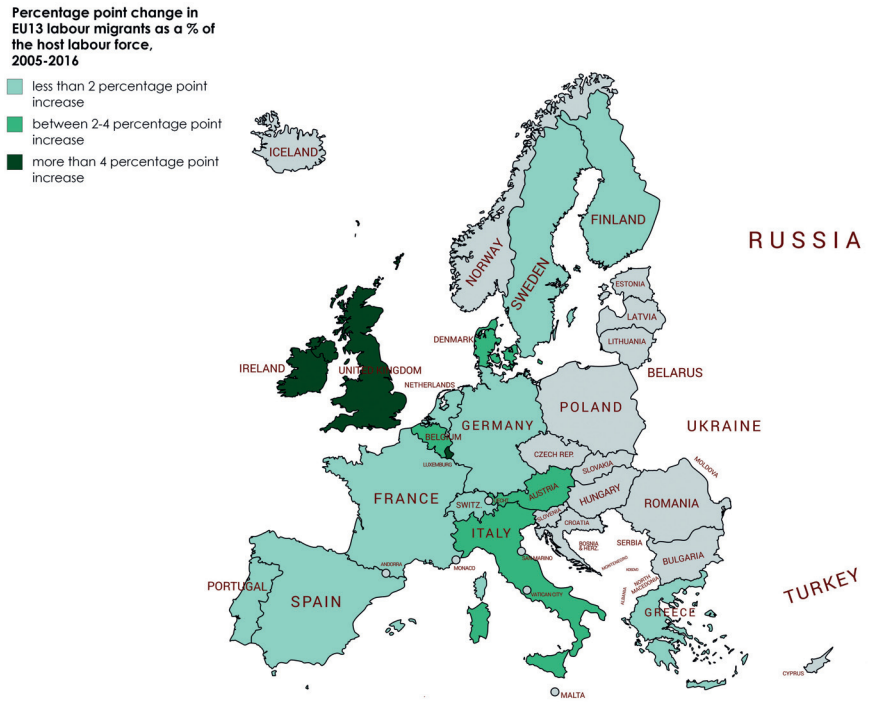
Figure 3.3: The percentage point change in Western European labour migration as a percentage of the labour force, from 2005-2016



Source: own elaboration based on EU-LFS data
Note: countries displayed in a colour not included in the legend indicate no data available

In comparison with the OECD, the EU-LFS provides a lower estimation for the foreign-born population. This could be because migrant populations are hard to reach and are consequently underrepresented, although the weights provided in the survey should adjust for this. Certain countries such as Austria, Switzerland, and the United Kingdom, have EU-LFS estimations of their foreign-born population that are very close to the OECD's official statistics. In other countries the gap in the statistics noted in the year 2004 data rapidly closed by 2013. It is possible that sampling methods for the EU-LFS in these countries are more effective than in other countries and that for some countries sampling methods have improved over time. For example, in 2008 several countries (Czech Republic, Denmark, Estonia, Greece, Norway, Poland, Slovenia and United Kingdom) changed their methods, data sources and definitions in order to improve and harmonise data on migration flows.

Figure 3.4: The percentage point change in Central and Eastern European (CEE) labour migration as a percentage of the labour force, from 2005-2016



Source: own elaboration based on EU-LFS data

Note: countries displayed in a colour not included in the legend indicate no data available

In light of the OECD statistics, Finland and Portugal both appear to underestimate the size of their migrant populations in the EU-LFS. In the project's copy of the EU-LFS, Finland appears to be missing weights for some observations which may explain this gap. For the Netherlands, the large diversion is caused by drops in the migrant population from outside the EU in the EU-LFS. It could be a problem with the survey design in The Netherlands or the OECD may have not correctly estimated the reduction in this particular migration category. The intra-EU indicators follow the same trend as the OECD's total foreign-born indicator for The Netherlands. Overall, the statistics mostly follow the same trends as the OECD, and they are similar to Eurostat's own estimations of the foreign-born population. The relationships described above can be clearly seen in Figure 3.5, which provides a graphical comparison between the two figures.

*Table 3.3: Foreign-born comparison statistics**

	EU-LFS		*OECD*		*Eurostat***		*Correlation****
	2004	*2013*	*2004*	*2013*	*2004*±	*2013*	*2004-2016*
Austria	11.26	15.47	14.14	16.7		16.12	0.8702
Belgium	10.98	14.15	11.71	15.51		15.46	0.8994
Denmark	6.21	9.5	6.35	8.48		9.79	0.9386
Finland	2.07	3.3	3.18	5.59		5.15	0.9562
France	9.87	11.04	11.11	12.04		11.50	0.8991
Germany¥	8.55 (2005)	8.34	12.61 (2005)	12.78		11.74	0.7927
Greece	7.84 (2010)	6.74 (2012)	7.427 (2010)	6.58 (2012)	11.88 (2010)	11.84 (2012)	0.9943
Ireland	8.92 (2005)	16.37	12.598 (2005)	16.42		16.04	0.9678
Italy	6.81 (2008)	8.93	9.8 (2008)	9.46		9.54	–0.9551
Luxembourg	32.65	41.06	32.81	43.75		42.35	0.9349
Netherlands	10.58	9.83	10.66	11.63		11.49	–0.8274
Portugal	5.37	6.86	7.39	8.2		8.40	0.8395
Spain	7.92	12.11	10.25	13.44	8.34	13.21	0.9890
Sweden	13.05	18	12.23	15.98		15.41	0.9715
Switzerland	24.41	28.95	23.52	28.3		26.16	0.9738
United Kingdom	8.73	12.86	8.9	12.26		12.40	0.9899

* There are a number of countries with missing data, consequently for some countries data for the years 2004 or 2013 are not available. In these instances, the next closest year is used.
** foreign-born as a percentage of the population has been calculated using Eurostat immigration and population data
*** the correlations presented are my own calculations between the OECD and the EU-LFS.
± Data not available for most countries until 2009
¥ foreign population in EU-LFS, no data for foreign-born is available
Source: Eurostat (2017c, 2017b); OECD (2017b)

3.7 Conclusion

The three most recent rounds of EU enlargement have incorporated 13 new member states and around 100 million new citizens into the Union. One of the most important outcomes of this expansion has been the gradual opening up of the EU-15's national labour markets to include this new group of mobile citizens. Importantly, open borders within the EU appear to have created new and more diverse patterns of movement, such as circular labour movements driven by economic demand and changing patterns of settlement (Favell, 2008; Strockmeijer et al., 2019). However, across the EU many of these movements remain somewhat invisible as open borders

mean there is no need for individuals to apply for a work permit and there is a lack of incentives to register and deregister in the places mobile citizens move between. Thus, despite the high economic importance of intra-EU labour migration, high quality and detailed data on stocks and flows of this movement is lacking, hindering research on this particular subject.

This paper has set out to highlight key trends in intra-EU labour migration and provide a detailed overview of the currently available data on intra-EU labour migration. Moreover, it has sought to explain how I have attempted to fill one particular gap in the statistics with the creation of two novel indicators for use in research. In particular, I created specific indicators for intra-EU labour migration for 16 European countries, from 2004 up until 2016, using the European Union Labour Force Survey (EU-LFS). The EU-LFS is a valuable resource for analysing the movement of labour as it uses comparative methodology across all countries, it is regularly conducted, and it provides information on employment, nationality, and broad country of birth in a large sample size. The EU-LFS enables the analysis of intra-EU labour migration as it identifies both country of birth and labour force status for individuals.

There are three main limitations in the usuage of the EU-LFS to construct indicators for intra-EU labour migration. First, short-term migration such as seasonal migration is hard to capture in the survey because these groups stay for a limited amount of time in their host country (Galgóczi et al., 2009) and the data is only collected on an annual basis. Second, there is the possibility that intra-EU labour migrants are underrepresented due to the likelihood of non-response. Third, in creating the indicators, there could be a possible bias arising from dropping missing values if those that are dropped are from groups that share similar characteristics. In our comparisons with what data is publicly available, however, they are mostly closely correlated and follow the same trends.

By untangling intra-EU labour migrants from pre-2004 member states and post-2004 member states, this article shows that there are currently different trends between the two groups. This data is essential for contributing to the evaluation and development of EU and national labour migration policy. Future research should look to improve our current understanding of intra-EU labour migration and continue delivering new ways of filling the ever-decreasing gaps in migration data. Especially as debates and policy on intra-EU movements could benefit from having a clearer evidence-base in this topic. The full set of indicators on intra-EU labour mobility can be found in the appendix for other researchers to make use of if they wish.

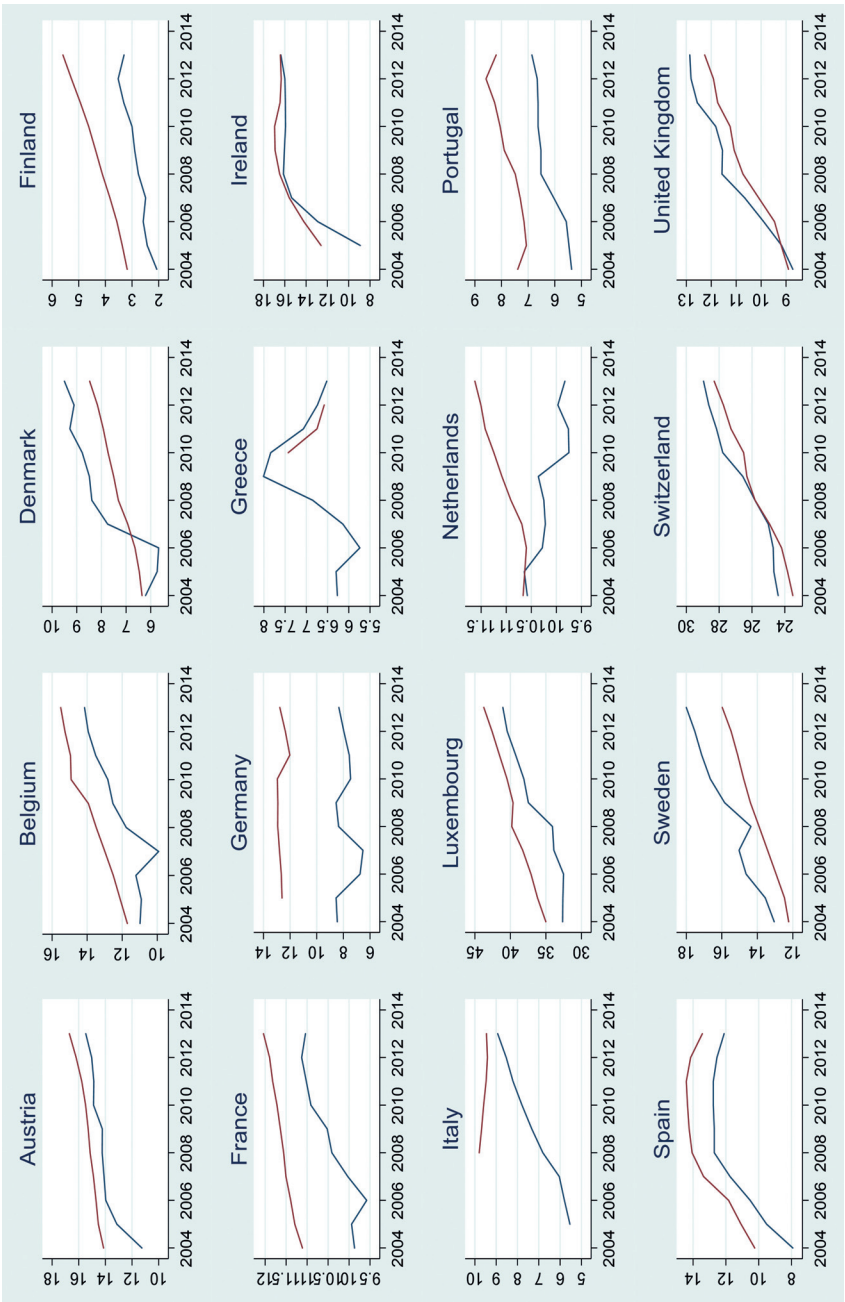


Figure 3.5: OECD foreign-born (red) vs EU-LFS generated foreign-born (blue)

Table C1: Foreign-born (as a percentage of the population)

	2004	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Austria	11.26	13.14	13.97	14.10	14.24	14.23	14.89	14.87	15.03	15.47	16.14	16.90	17.70
Belgium	10.98	10.91	11.22	9.92	11.77	12.53	12.82	13.51	13.94	14.15	14.08	14.74	15.17
Denmark	6.21	5.74	5.68	7.75	8.39	8.49	8.78	9.28	9.11	9.50	9.93	10.39	10.87
Finland	2.07	2.43	2.58	2.49	2.76	2.90	3.00	3.31	3.52	3.30	4.07	4.40	4.68
France	9.87	9.94	9.58	10.03	10.41	10.52	10.91	11.02	11.13	11.04	11.21	11.59	11.66
Germany*	8.46	8.55	6.75	6.53	8.36	8.55	7.46	7.56	7.97	8.34	8.76	9.36	10.68
Greece	6.27	6.30	5.74	6.14	6.85	8.01	7.84	7.07	6.74	6.52	6.54	6.16	6.08
Ireland	.	8.92	12.91	15.36	16.13	16.04	15.93	15.95	15.99	16.37	16.59	16.71	16.85
Italy	.	5.54	5.80	6.04	6.81	7.33	7.79	8.21	8.53	8.93	9.27	9.50	9.74
Luxembourg	32.65	32.61	32.52	33.88	34.08	37.47	38.11	39.26	40.45	41.06	41.34	48.44	47.75
Netherlands	10.58	10.64	10.28	10.22	10.25	10.36	9.75	9.76	9.97	9.83	9.69	10.11	10.09
Portugal	5.37	5.47	5.57	6.04	6.52	6.52	6.63	6.63	6.66	6.86	6.79	6.83	6.68
Spain	7.92	9.52	10.52	11.75	12.71	12.71	12.77	12.77	12.55	12.11	11.46	11.7	11.75
Sweden	13.05	13.55	14.63	15.03	14.36	15.84	16.65	17.13	17.52	18	18.6	19.24	19.98
Switzerland	24.41	24.67	24.71	25.01	25.82	26.56	27.78	28.16	28.63	28.95	29.69	30.24	30.27
United Kingdom	8.73	9.18	9.90	10.66	11.57	11.55	11.82	12.56	12.81	12.86	13.37	13.70	14.61

* Germany's indicator is based on the foreign population – those with a non-German passport. No place of birth data is available in the EU-LFS due to Germany's anonymisa process. The result is a percentage that is potentially lower than what we would expect.

Source: own computations based on EU-LFS data

Table C2: EU-13 labour migration (as a percentage of the population)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Austria	1.63	1.85	1.96	2.05	2.04	1.89	2.2	2.16	2.29	2.48	2.9	3.06	3.18
Belgium	0.19	0.25	0.28	0.33	0.46	0.56	0.75	0.84	0.86	0.97	1.06	1.16	1.17
Denmark	0.19	0.24	0.24	0.32	0.38	0.48	0.56	0.67	0.9	0.99	1.16	1.3	1.3
Finland	0.31	0.18	0.18	0.22	0.23	0.24	0.3	0.38	0.38	0.42	0.55	0.64	0.67
France	0.13	0.15	0.16	0.17	0.21	0.2	0.26	0.26	0.25	0.21	0.26	0.24	0.3
Germany	0.47	0.62	0.42	0.5	0.8	0.68	0.65	0.67	0.84	0.93	1.09	1.26	1.53
Greece	0.51	0.64	0.6	0.63	0.7	0.87	0.83	0.79	0.72	0.77	0.76	0.62	0.63
Ireland	.	1.64	3.51	4.96	5.21	4.81	4.41	4.35	4.35	4.37	4.39	4.4	4.44
Italy	.	0.51	0.65	0.73	1.03	1.25	1.38	1.45	1.5	1.63	1.67	1.72	1.78
Luxembourg	0.35	0.36	0.82	0.92	1.01	1.15	1.19	1.45	1.61	1.78	1.87	2.26	2.43
Netherlands	0.22	0.22	0.26	0.26	0.3	0.35	0.4	0.42	0.5	0.55	0.62	0.52	0.71
Portugal	0.08	0.11	0.14	0.16	0.17	0.14	0.2	0.19	0.2	0.21	0.2	0.16	0.14
Spain	0.83	1.13	1.38	1.48	1.54	1.52	1.8	1.81	1.62	1.63	1.7	1.62	1.75
Sweden	0.67	0.8	0.85	0.85	0.91	0.98	1.04	1.14	1.26	1.37	1.41	1.4	1.4
Switzerland	0.87	0.89	0.84	0.83	0.93	1.03	1.07	1.17	1.24	1.26	1.33	1.4	1.51
United Kingdom	0.3	0.52	0.78	1.15	1.35	1.33	1.65	1.77	1.76	1.91	2.27	2.43	2.75

Source: own computations based on EU-LFS data

Table C3: EU-15 labour migration (as a percentage of the population)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Austria	2	1.57	1.53	1.71	1.75	1.96	2.05	2.04	2.13	2.25	2.3	2.43	2.49
Belgium	2.94	2.83	2.91	2.33	2.98	2.85	2.94	2.84	2.85	2.96	2.95	3.02	2.91
Denmark	1.36	1.25	1.25	1.55	1.79	1.87	1.91	1.97	1.91	1.94	2.05	2.04	2.26
Finland	0.61	0.61	0.69	0.71	0.81	0.77	0.66	0.66	0.75	0.83	0.83	0.71	0.83
France	1.99	1.67	1.56	1.64	1.73	1.66	1.78	1.67	1.62	1.75	1.56	1.44	1.54
Germany	1.58	1.67	1.22	1.22	1.63	1.5	1.43	1.38	1.56	1.64	1.64	1.66	1.79
Greece	0.35	0.36	0.29	0.27	0.33	0.38	0.36	0.33	0.29	0.27	0.32	0.31	0.29
Ireland	.	3.8	4.61	4.62	4.61	4.62	4.54	4.57	4.47	4.5	4.29	3.99	4.03
Italy	.	0.79	0.79	0.78	0.77	0.73	0.73	0.75	0.76	0.75	0.79	0.77	0.75
Luxembourg	21.09	21.34	20.76	21.89	22.17	22.91	23.54	23.85	24.43	24.78	25.07	25.01	24.24
Netherlands	1.45	1.46	1.37	1.47	1.43	1.44	1.31	1.33	1.37	1.33	1.33	1.43	1.37
Portugal	0.88	0.89	0.93	0.83	0.95	1.09	1.1	1.11	1.17	1.31	1.45	1.45	1.41
Spain	1.09	1.08	1.15	1.23	1.3	1.23	1.41	1.42	1.43	1.38	1.37	1.35	1.3
Sweden	2.88	3.1	2.99	2.88	2.86	2.86	2.91	2.79	2.75	2.74	2.79	2.8	2.79
Switzerland	8.93	8.90	8.85	8.86	9.35	10.01	9.74	10.15	10.43	10.84	11.29	11.62	11.51
United Kingdom	1.45	1.38	1.39	1.49	1.49	1.46	1.4	1.55	1.61	1.68	1.58	1.76	1.85

Source: own computations based on EU-LFS data

Table C4: EU-13 labour migration (as a percentage of the labour force)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Austria	3.35	3.75	3.91	4.02	3.98	3.67	4.27	4.20	4.44	4.80	5.68	5.95	6.12
Belgium	0.45	0.57	0.64	0.74	1.04	1.27	1.67	1.89	1.92	2.17	2.38	2.61	2.63
Denmark	0.35	0.45	0.45	0.60	0.71	0.90	1.06	1.28	1.73	1.93	2.26	2.52	2.50
Finland	0.62	0.36	0.35	0.43	0.46	0.47	0.60	0.75	0.76	0.85	1.12	1.31	1.37
France	0.28	0.32	0.34	0.36	0.46	1.42	0.55	0.56	0.53	0.45	0.56	0.52	0.67
Germany	0.94	1.22	0.82	0.97	1.55	1.31	1.25	1.30	1.63	1.79	2.09	2.40	2.90
Greece	1.16	1.46	1.36	1.43	1.59	1.96	1.86	1.80	1.65	1.78	1.78	1.46	1.43
Ireland	.	3.33	6.99	9.74	10.33	9.81	9.22	9.25	9.34	9.35	9.42	9.42	9.41
Italy	.	1.23	1.57	1.77	2.48	3.04	3.37	3.54	3.59	3.88	3.92	4.04	4.27
Luxembourg	0.79	0.79	1.79	2.02	2.22	2.44	2.54	3.10	3.36	3.68	3.80	4.55	4.88
Netherlands	0.42	0.42	0.49	0.49	0.56	0.64	0.75	0.79	0.93	1.03	1.16	0.98	1.33
Portugal	0.15	0.21	0.27	0.31	0.33	0.27	0.39	0.37	0.39	0.42	0.40	0.32	0.28
Spain	1.75	2.34	2.81	2.98	3.06	3.02	3.57	3.60	3.21	3.26	3.41	3.26	3.53
Sweden	1.30	1.52	1.61	1.61	1.71	1.85	1.96	2.14	2.36	2.56	2.63	2.61	2.62
Switzerland	1.54	1.58	1.48	1.46	1.61	1.78	1.86	2.03	2.15	2.18	2.28	2.40	2.57
United Kingdom	0.59	1.02	1.52	2.25	2.64	2.62	3.26	3.50	3.47	3.74	4.43	4.73	5.35

Source: own computations based on EU-LFS data

Table C5: EU-15 labour migration (as a percentage of the labour force)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Austria	4.11	3.18	3.05	3.35	3.41	3.80	3.99	3.97	4.13	4.36	4.50	4.73	4.79
Belgium	6.80	6.43	6.63	5.25	6.71	6.44	6.56	6.40	6.41	6.63	6.63	6.79	6.53
Denmark	2.53	2.34	2.32	2.89	3.32	3.50	3.62	3.76	3.68	3.78	3.99	3.96	4.35
Finland	1.22	1.21	1.36	1.39	1.58	1.52	1.31	1.31	1.49	1.68	1.69	1.45	1.70
France	4.26	3.56	3.33	3.49	3.68	3.52	3.79	3.57	3.45	3.74	3.34	3.10	3.43
Germany	3.16	3.30	2.39	2.37	3.15	2.89	2.75	2.68	3.02	3.16	3.14	3.16	3.39
Greece	0.80	0.82	0.66	0.61	0.75	0.86	0.81	0.75	0.67	0.62	0.75	0.73	0.66
Ireland	.	7.71	9.19	9.08	9.14	9.42	9.50	9.72	9.60	9.62	9.20	8.54	8.54
Italy	.	1.90	1.91	1.89	1.85	1.77	1.78	1.83	1.82	1.79	1.85	1.81	1.80
Luxembourg	47.31	47.10	45.34	48.15	48.79	48.52	50.26	50.94	50.97	51.29	50.98	50.34	48.67
Netherlands	2.76	2.78	2.60	2.75	2.65	2.65	2.47	2.51	2.56	2.48	2.50	2.68	2.57
Portugal	1.70	1.71	1.78	1.59	1.82	2.12	2.14	2.17	2.30	2.61	2.90	2.90	2.81
Spain	2.30	2.24	2.34	2.48	2.58	2.44	2.80	2.82	2.84	2.76	2.75	2.71	2.62
Sweden	5.59	5.90	5.67	5.44	5.38	5.41	5.49	5.24	5.15	5.11	5.21	5.23	5.22
Switzerland	15.82	15.81	15.63	15.55	16.21	17.29	16.91	17.57	18.05	18.72	19.37	19.95	19.61
United Kingdom	2.86	2.71	2.71	2.92	2.91	2.87	2.76	3.07	3.17	3.29	3.08	3.43	3.60

Source: own computations based on EU-LFS data

4 Intra-EU Labour Mobility and the Welfare State: An Empirical Analysis of Embedded Liberalism in the Context of Free Movement

Abstract

Freedom of movement is a fundamental principle of the European Union (EU) and yet this key pillar of European integration has become a topic of controversy as member states find their labour markets and social security systems under pressure. Despite heated public debates, empirical insight into the role of immigration in shaping contemporary welfare systems at the macro-level is rather limited, and so this article explores the extent to which intra-EU labour mobility leads to changes in social welfare provision. A key reason why this question remains unanswered is that a lack of specific indicators on intra-EU labour migration renders the relationship difficult to study. Thus, this article expands upon previous literature by utilising data from the EU-LFS in order to analyse this previously 'missing' population of interest. For the welfare state, we disaggregate social welfare effort into separate subdomains allowing us to capture specific programme-related changes across countries. Additionally, we complement spending data with replacement rates data on unemployment benefits and social assistance benefits. Our results show that intra-EU labour migration, in particular from Central and Eastern European (CEE) member states, is positively associated with several subdomains of social spending. This positive association is also represented in the unemployment and social assistance replacement rates, suggesting that CEE labour migration is linked with increasing generosity of welfare states across 16 European countries. We find evidence to support Embedded Liberalism, that governments in open economies expand the welfare state in order to insure citizens against the labour market risks incurred and conclude that European welfare states seem to be resilient in the face of increasing intra-EU labour migration.

Keywords: free movement, labour migration, welfare state, social policy, European Union

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Disclaimer

This study is based on data from Eurostat, *the European Union Labour force Survey (EU-LFS)*, 2017. The responsibility for all conclusions drawn from the data lies entirely with the authors.

4.1 Introduction

A long-standing assertion concerning immigration and the welfare state is that 'ultimately, national welfare states cannot coexist with the free movement of labour' (Freeman, 1986, p. 51). Nevertheless, under current European Union (EU) law, not only are EU citizens able to freely reside and work in other EU member states, but they are also entitled to equal treatment in their residing country's tax and benefit systems. Crucially, intra-EU workers (the focus of this article) are typically included in the social protection systems of their host nations from their first day of employment (Blauberger & Schmidt, 2014).[1] As a result, the argument that immigration is an important consideration in the development of contemporary European welfare states has become increasingly relevant in academic research. However, while the jury is still out on how immigration impacts the welfare state (Burgoon & Rooduijn, 2021; Finseraas, 2008; Gaston & Rajaguru, 2013; Soroka et al., 2016), the topic continues to become ever more politicised and polarised.

Part of the controversy is linked to a more general backlash against globalisation and everything that it entails. For example, as nations become increasingly connected through migration and trade, this raises fears around the erosion of longstanding traditions, cultural norms and values within the nation or of being economically 'left-behind' as labour markets change rapidly in light of increasing global competition. Intra-EU labour migration is tied up in the process of globalisation, as trade and capital flow more easily across borders, so do the migrants who fill the resulting gaps in European labour markets. By thinking of migration as the third key facet of globalisation, we borrow two key theories from the globalisation literature to better understand how immigration might affect the welfare state at the macro-level. First, the embedded liberalism thesis argues that in order for elites to maintain an open international economic order, governments need to provide a certain level of social protection to safeguard citizens from the risks brought about by globalisation (Ruggie, 1982).[2] Whereas, the efficacy hypothesis argues that due to fiscal pressures arising from globalisation, governments seek to reduce welfare state effort in order to reduce the fiscal burden and stay competitive globally. With these arguments in mind, we aim to examine how intra-EU labour mobility has affected welfare state effort and welfare generosity across European countries.

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1 EU citizens' cross-border access to social benefits and the welfare systems of their country of employment or residence are governed by a highly complex set of rules from various treaty agreements, secondary legislation, and case law that in certain cases can condition this access by requirements such as length of residence, work, and contributions etc.

2 While Ruggie's theory of 'Embedded Liberalism' was intended for the internationalisation of trade and capital, we argue it is generalisable to the globalisation of labour – i.e., international migration.

The increase in intra-EU labour mobility, in particular from Central and Eastern European (CEE) countries, might be seen as one of the most substantial structural changes in European welfare states in the past 20 years, but to the best of our knowledge, the association between intra-EU labour migration and welfare state effort has not yet been analysed. The current evidence on the association between migration and welfare state efforts is rather mixed (Fenwick, 2019; Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Römer, 2023; Soroka et al., 2016; Taschwer, 2021) and this paper seeks to contribute theoretically and empirically to this comparative political economy literature on migration and welfare states. We do so by building on evidence from Fenwick (2019) through narrowing the scope of this article to focus on intra-EU labour mobility and by disaggregating welfare state effort further. Specifically, we distinguish between Western European labour mobility[3] and Central and Eastern European (CEE) labour mobility[4], two previously unmeasured categories of movement, in order to ask: do these two groups of labour migrants[5] have differing effects on welfare state effort? In addition, welfare state spending is disaggregated into five component parts (old age, incapacity, family, active labour market policies, and unemployment spending) and complemented with two replacement rates (unemployment and social assistance). Our findings indicate that the type of movement is important for better understanding how immigration and mobility shape the boundaries of the welfare state. In particular, we find evidence in support of a compensatory effect in light of increasing mobility across the EU.

The rest of this paper is organised as follows. In the next section, we review the relevant literature and draw hypotheses regarding the effect of the two types of labour migration on the welfare state to test in the analysis. The third section presents our data and methodology for the empirical analysis, which is then followed by a discussion of the results. The final section concludes and reflects upon the implications of our findings.

3 For simplicity, we use the term Western European to refer to the original EU-15 member states plus European Free Trade Association (EFTA) countries.

4 For simplicity, we use the term Central and Eastern European to refer to the member states incorporated in the three successive enlargements of the EU (2004, 2007, and 2008).

5 We use the terms labour migration and labour mobility interchangeably in this article, as those moving internally within the EU can be both a mobile citizen as recognised by the EU and a migrant as recognised by their host nations.

4.2 Literature and Hypotheses

4.2.1 Embedded Liberalism, immigration, and the welfare state

Against a backdrop of increasing immigration and generous social policies, a crucial question in contemporary European countries is: does immigration lead to changes in social welfare provision? A significant body of research indicates that it may be difficult to reconcile generous welfare provision with a more open immigration regime because immigration can lead to pressure for retrenchment from concerns about fiscal viability at the macro-level, but also from reduced solidarity between citizens at the micro-level (Brady & Finnigan, 2014; van Oorschot, 2008; Schmidt-Catran & Spies, 2016). This challenge is often referred to as the "Progressive's Dilemma" (Goodhart, 2004), which argues that racial diversity and/or immigration undermines the welfare state through challenging the foundations of solidarity that a risk-pooling system – such as the welfare state – relies on, necessitating that progressives are faced with a trade-off of either supporting greater diversity or providing generous benefits.

In their seminal study, Alesina at. al. (2001) show that in the United States (US) a one percentage point increase in the probability of drawing two people who belong to different ethnic groups from a population is associated with a decrease of 7.5 percentage points in social spending as a percentage of GDP. Alesina and Glaeser (2004) expand their earlier study to 54 countries worldwide and reason that the countries with the most generous welfare states are also the most homogeneous, such as those found in Scandinavia. They argue that generous welfare states require a homogeneous society because they depend on solidarity between citizens, which comes from common linkages such as origin, language, and culture. Hence, Alesina and Glaeser state "if Europe becomes more heterogeneous due to immigration, ethnic divisions will be used to challenge the generous welfare state" (2004, p. 11) and that increasing immigration in Europe should be considered problematic for the future of European welfare states.

However, while it might be reasoned that ethnic diversity is a contributing factor to the lack of a developed welfare state in the US, these findings cannot necessarily be generalised to assert that increasing ethnic diversity in well-established welfare states will lead to their retrenchment. As Pierson (1996) argued in his discussion on the new politics of the welfare state, expanding and retrenching the welfare state are profoundly different processes and that by developing a welfare state, the politics around social policy is transformed. Evidence in Europe that immigration is detrimental to the sustainability of welfare states mostly relies on individual-level data that examines the attitudinal effects of increasing immigration on support for the welfare state (Burgoon, 2014; Burgoon & Rooduijn, 2021; Cappelen et al., 2025; Cappelen & Peters, 2018; Mau & Burkhardt, 2009) and not on

whether these changes in support involve changes in policy responses and thus necessary spending consequences at the country-level. Furthermore, while micro-level theories on attitudes may explain why anti-immigration attitudes and support for welfare state retrenchment are linked, most macro-level studies do not find evidence of clear reductions in social spending or the generosity of welfare states in Europe (Fenwick, 2019; Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Römer, 2023; Soroka et al., 2016).

A crucial theory at the macro-level is the embedded liberalism hypothesis which argues that governments will compensate citizens for accepting extra risk in the face of more open markets. It was initially coined by Ruggie (1982) to explain why governments committed to free trade would need to provide greater social protection to their citizens. However, the explanation can be extrapolated to also explain why governments may consider compensating those who are exposed to greater labour market risk as a result of increasing immigration and labour mobility. Rodrik (1998, 2011) follows this argument and argues that the only way to preserve the legitimacy of markets is to protect citizens from the risks that comes with them. Stating "if you want markets to expand, you need governments to do the same" (2011, p. 18). For immigration and supporters of more open or more liberal borders, these internationalist principles can arguably then be resolved through a commitment to greater redistribution and other social policies. In line with this reasoning, Naumann and Stoetzer (2018) found that people who are exposed to more labour market competition from immigrants also have stronger preferences for redistribution.

For European and other OECD countries, a few studies have sought to analyse this link between immigration and welfare state effort at the macro-level. These studies provide somewhat conflicting evidence, likely because they use different measures for welfare state effort and for immigration. The studies by Soroka et al. (2006) and Gaston and Rajaguru (2013) rely on total social expenditures. In an updated article, Soroka et al. (2016) go a step further and disaggregate expenditures into various welfare state programmes, likewise Röth et al. (2022) use spending on different programmes as their dependent variables. Fenwick (2019) takes a broader approach and uses two different measures to express welfare state effort, total social expenditures and a welfare state generosity index, and Römer (2023) adopts a similar approach by analysing both total social expenditures and generosity indices for unemployment benefits and pensions. In contrast, Lipsmeyer and Zhu (2011) provide a more specific analysis and focus solely on unemployment replacement rates, as does Taschwer (2021) who exclusively examines minimum income benefit replacement rates. Common ground in this group of studies is, however, that they all use aggregate indicators of migration even though different types of movement yield different economic, societal, and political impacts and can therefore be expected to contribute to welfare state reform in different ways.

In a comparative study of 18 OECD countries, Soroka et al. (2006) explore the effect of changes in stocks of foreign-born on changes in social welfare spending. They find that welfare spending grows less in countries with increasing immigration than in countries with smaller changes in immigration. In contrast, Gaston and Rajaguru (2013) find no evidence to suggest a negative association between immigration and social spending. Instead, they show that depending on the sample of countries chosen, immigration can increase social welfare spending. This resonates with Fenwick (2019), who shows that the proportion of foreign-born is positively associated with social spending. In contrast, Römer (2023) finds a negative association between net migration and social spending in the short term. On the other hand, she also finds a positive association between net migration and the generosity of unemployment benefits and pensions, concluding that there is little evidence that migration is undermining the generosity of the welfare state. Moreover, Lipsmeyer and Zhu (2011) show that domestic political pressures play a larger role than immigration for explaining variation in unemployment benefits and that the impact of immigration is conditional on union density and/or left-party strength. However, this may not be the case for minimum income benefits. Taschwer (2021) finds that migration is negatively associated with minimum income benefit levels and that this association is not affected by partisan politics.

In addition, the type of social protection programme – and whether it is contributory or non-contributory, targeted or universal – may also be relevant for assessing immigration's impact on welfare state effort. Theoretically, different types of programmes are built on different principles, and these principles can influence the way individuals may respond to immigration and redistribution (Boeri, 2010; Muñoz & Pardos-Prado, 2017). Based on previous research, it is probable that any association with welfare state effort could be programme specific. Boeri (2010) finds that immigrants, on average, tend to rely more on non-contributory social policies, such as social assistance, than their native counterparts. Whereas he finds the opposite for contributory benefits, such as pensions, and notes that immigrants are less likely to receive sickness and unemployment benefits than natives. Boeri (2010) argues that this 'residual dependency' depends on the skill composition of migrants and that migrants with lower educational attainment are associated with a higher fiscal cost to the welfare state. As such, programmes that migrants are expected to more heavily rely on may be more likely to be targets for retrenchment or welfare chauvinism. Likewise, in the case of contributory benefits for example, the relationship between contributions paid and benefits received is clearer and thus potentially less controversial as immigrants have arguably paid for their own benefits (Eick & Larson, 2022). However, as contributory benefits are based on prior contributions, this also makes them more vulnerable to welfare chauvinism as individuals are easier to exclude through measures such as a minimum number of years of contributions required.

Muñoz & Pardos-Prado (2017) find that targeted and means-tested social programmes exacerbate the negative association between immigration and public support for redistribution. Previous research supports this finding and argues that by defining boundaries and categories regarding who can and cannot benefit, a targeted programme becomes more vulnerable to controversy and conflict between groups than a universal one that benefits everyone (Crepaz, 2007; Afonso, 2015; Soroka et al., 2016; Jorgensen & Thomsen, 2016). Thus, a universal programme, or one with a broad base of support and buy-in across the income distribution, is less likely to face opposition and potential retrenchment. On the other hand, when looking at the difference between social compensation and social investment interventions, Bonoli et al. (2024) find that there is no difference between social programme types when it comes to whether or not natives believe that immigrants are deserving of welfare and argue that general exclusionary attitudes towards the out-group (migrants) are driven by in-group (natives) favouritism.

Taken together, these findings show that the association between immigration and welfare state effort is complex, and the results underline the relevance of including various programmes in the analysis.

4.2.2 Welfare state effort and differentiating between types of mobility

Another aspect which could explain the mixed results and conclusions in the existing literature is the way researchers choose to operationalise migration. Depending on the definition and data chosen to represent mobility, this can influence the results and interpretations of studies. Moreover, studies that use more general indicators such as 'foreign-born as a percentage of the population' or 'net migration' may miss some key nuances in the way immigration can reshape the boundaries of the welfare state. As such, we focus on two specific immigration indicators in this chapter – EU13 and EU15 intra-EU labour mobility – to help understand the evolution of welfare state effort within the EU in light of a very particular change in patterns of mobility within its borders.

Following research on how narratives around particular categories of mobility can alter public attitudes towards those specific groups, it is thus reasonable to expect that different groups may affect the welfare state in diverse ways (Blinder, 2015; Hellwig & Sinno, 2017; Hjorth, 2016; Jørgensen & Thomsen, 2016). Based on a survey experiment conducted in Germany, Norway, and Sweden, Goerres et al. (2020) find that respondents who were primed to think about costs generated by immigration are more concerned about the affordability of the welfare state than respondents who were part of a control group. This effect is significant for both non-western immigration and for intra-EU labour mobility, but the effect is less strong for intra-EU labour mobility. Hjorth (2016) undertakes a study to understand solidarity across borders within the EU in order to assess

if there is support for the development of a cross-border welfare rights. Using survey data from Sweden, they show that when a welfare recipient is mentioned as Bulgarian (an EU13 member state) vs Dutch (an EU15 member state), an individual's opposition to cross-border welfare rights increases by 6 percentage points. Similarly, Hellwig and Sinno (2017) argue that the public have group-specific concerns and associate different types of migrants with different types of threats. Using survey data from the United Kingdom (UK), they find that Muslim immigrants are more likely to trigger concerns regarding cultural change and security, while Eastern Europeans are more likely to prompt economic and crime related concerns. Jørgensen and Thomsen (2016) argue that "immigrant groups are positioned differently according to their status and perceived value for society" (p. 332) and as such we expect that the nationality of a welfare recipient could play a role in shaping public support for the welfare state and ultimately alter its previous levels of generosity by, for example, seeking to ring-fence benefits from certain groups (welfare chauvinism) or even overall retrenchment if this is not possible. However, EU labour migrants' right to equal treatment and non-discrimination in their host country is protected under EU law – Directive 2004/38/EC[6] – which enables EU mobile citizens access to the same social advantages as natives (Blauberger & Schmidt, 2014; European Commission, 2018a)[7].

In a macro-level analysis of the association between immigration and welfare state effort, the estimated association is ultimately a net effect of the positive and negative mechanisms which might play a role. To recall, a negative impact from immigration on welfare state effort can be expected because of concerns about fiscal pressure on the welfare state or because of reduced solidarity between groups or individuals. At the same time, a positive impact may be expected because higher job insecurity stemming from increased labour market competition results in a higher demand for compensation via welfare state programmes. For two reasons, we expect that the net effect of intra-EU labour mobility we will be more positive when compared to the net effect for immigration in general. First, because labour migration increases labour market competition more directly than migration in general, the demand for compensation through increased welfare state effort will be larger in the case of labour migration. In addition to the increase in regular labour market competition, intra-EU labour mobility could also create issues such as social dumping, i.e. when employers undermine collective agreements made with the native labour force by exploiting foreign labourers who are often willing to work longer hours for

6 Also known as 'The Citizens' Rights Directive'.

7 However, certain caveats and ambiguous concepts provide room for interpretation and member states aim to minimise the domestic impact of the law – for example, by increasing the burden of proof for EU citizens' rights to reside and access social protection (Blauberger & Schmidt, 2014).

lower wages (Brady & Finnigan, 2014; Jørgensen & Thomsen, 2016) thus also increasing the demand for a stronger social security net. Second, since labour market participation is higher among labour migrants than among migrants in general, the concerns among natives and policymakers about the pressure from labour migrants on the government's budget for social security will be lower. A recent study by Boffi et al. (2024) shows that in many European countries, the net fiscal position of intra-EU mobile citizens is greater than that of non-EU migrants. Based on our considerations regarding higher labour market competition and lower concerns about fiscal pressure, we expect that the net association between immigration and welfare state effort will be more positive in the case of intra-EU labour mobility than in the case of migration in general. However, it can be expected that this differential effect will be more pronounced in the case of benefit generosity than in the case of social expenditure, because of a mechanical effect in the latter case. Since the net fiscal position of non-EU migrants is relatively more negative, non-EU migrants may increase social expenditure because they receive more social transfers.

Finally, we explore whether the association between immigration and welfare state effort differs between migration from Central and Eastern European countries[8] and migration from Western-European countries[9]. Since the enlargement of the EU in 2004, the stock of labour migrants from CEE countries to WE countries has increased rapidly (see Table 4.2), unlike the stock of immigrants from Western European countries which has remained relatively stable (see Table 4.3). Therefore, it could be expected that increasing migration in recent years, especially from CEE countries, is responsible for perceived or observed increased labour market competition and subsequently the perceived labour market risk of individuals. As a result, we would expect that increasing CEE labour migration has increased the demand or the need for compensation through welfare state effort more than migration from Western European countries (as the stock of these migrants has remained more or less the same since 2004).

4.2.3 Economic, political, and institutional factors

Alongside the effects of EU labour migration, we expect a range of other factors to play a role in determining levels of social protection. First, the degree of economic openness of a country. Previous literature tends to argue in favour of one of two leading concepts, either the efficiency hypothesis

8 Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

9 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland, UK. This includes the 15 pre-2004 expansion countries. Plus, EFTA countries minus Norway as Norway was excluded from the EU-LFS data provided to us.

(governments reduce the tax burdens of domestic producers in light of international competition and the resulting budgetary pressure leads to reductions in social protection) or the compensation hypothesis (individuals demand compensation for the increased risks incurred by economic openness) (Rodrik, 1998; Swank & Steinmo, 2002). However, Iversen and Cusack (2000) reason that deindustrialisation rather than globalisation leads to economic insecurity and subsequently demand for greater compensation. We account for both globalisation and deindustrialisation in our model and expect that globalisation will have a larger influence because the sample covers the time period 2004-2013 when large-scale deindustrialisation is no longer prominent in Europe, but the economies of several countries become increasingly more open.

Second, domestic political and institutional factors are also expected to play a role. It is generally thought that left-wing governments favour more generous social protection programmes than governments that lean to the right (Allan & Scruggs, 2004). While this has been debated (Pierson, 1996), recent work shows that partisan theory is still often relevant (Swank, 2020). Similarly, strong trade unions are expected to be positively associated with welfare state effort as they tend to be key supporters of social insurance programmes (Afonso et al., 2020; Rueda, 2007; van Vliet & Wang, 2019). Finally, socioeconomic conditions such as the level of unemployment or GDP of a country are likely to affect the demand for social protection and a country's ability to provide extensive social protection schemes.

4.3 Data and Methods

4.3.1 Sample

The sample includes 16 European countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, Switzerland, the Netherlands, and the United Kingdom (UK). Thus, the study includes the original EU15, plus Switzerland for the time period 2004-2017 during which the UK was still a member of the EU. The sample was selected because these states have experienced inflows of intra-EU labour migration and have well-established welfare states. Furthermore, the sample sizes that the created migration indicators are based on are large enough to be considered representative in these countries. Switzerland is included because it is a member of the Schengen Area, has a comparable economy and welfare state to the EU15, and is traditionally considered a country of immigration.[10] In the ideal case, our sample would

10 Under these criteria, we would have included Norway – however, the country was withheld from EU-LFS data on the grounds that the data on migrants in Norway is unreliable due to a large number of non-responses.

cover a longer period. However, the data is restricted for two reasons. First, the variables we created to express EU labour migration cannot precede 2004 because the anonymisation process of the EU-LFS prior to 2004 restricts access to information regarding the country of birth of migrants. Even if we had data before this period, theoretically, it would not make sense to include it because EU13 migration under the legal conditions of nominally equal access to the labour market only commenced following this date. Second, the EU-LFS data provided for the creation of the migration indicators end in 2016 and consequently we cannot extend the time frame beyond this point. A final point regarding the sample is that the social assistance replacement rate ends in 2013.

4.3.2 Dependent Variables

The "Dependent Variable Problem" has been a debated issue in the welfare state literature for some time now (Allan & Scruggs, 2004; Clasen & Siegel, 2007; Starke, 2006). In particular, Green-Pedersen (2004) argues that depending on how you theoretically conceptualise the welfare state, then the data chosen in order to operationalise it will impact the evaluation of welfare state change. With this in mind, we complement welfare state spending from the OECD's Social Expenditure (SOCX) Database (OECD, 2024b) – a traditional indicator used to measure 'welfare state effort' – with the OECD's unemployment replacement rate (OECD, 2024a) and a social assistance replacement rate updated from Wang and van Vliet (2016a; 2016b). Even though we control for the number of benefit recipients in the models of social expenditure, as will be discussed below, replacement rates are arguably better indicators of generosity than spending as they are not directly related to the number of beneficiaries, amongst other reasons (Iversen, 2001; Scruggs, 2006). In studies on migration, this might be even more relevant than in other welfare state research because according to the fiscal pressure argument, there might also be a mechanical link between immigration and social expenditure (Römer, 2023). Whether or not this is the case, and the extent to which migrants are net contributors to the welfare state, are debated in the literature (Boeri, 2010). Thus, the use of replacement rates to remove the direct link with number of recipients is useful additional tool. Additionally, Iversen (2001) argues that replacement rates are a good indicator of the extent to which risks in the labour market, such as becoming unemployed, are redistributed. By using a variety of dependent variables in order to operationalise welfare state effort, we aim to capture more dimensions of the welfare state and thus provide a more nuanced view of how immigration influences the welfare states of 16 European countries.

For welfare state spending we disaggregate it into five subdomains: old age, incapacity, family, active labour market policies, and unemployment.[11] Each category is measured as a percentage of gross domestic product (GDP). The data on replacement rates comes from two different sources. First, we use a net minimum income replacement rate from the Social Assistance and Minimum Income Levels and Replacement Rates Dataset (Wang & van Vliet, 2016a; 2016b). The indicator is based on data from the 'Social Assistance and Minimum Income Protection Dataset' (Nelson, 2013) and elaborates on the concept of net income replacement rates as used in the Unemployment Replacement Rates Dataset (van Vliet & Caminada, 2012). The replacement rate is an average of three household types (single person households, lone parent households with two children, and two parent households with two children).

The second replacement rate is a net unemployment benefit replacement rate, developed from the OECD's Tax-Benefit Models (OECD, 2017a, 2018) and updated data from the OECD (2024a). We use the initial period of unemployment and average across single person households and lone parent households with two children. Both replacement rates use the net average wage (AW) for the denominator. The sample time frame in which this study takes place (2004 – 2017), means that the AW is more appropriate as the methodology has been updated to represent a more modern average worker. For almost all countries, the unemployment replacement rate is greater than the social assistance replacement rate. The trends for replacement rates are more heterogeneous between countries than spending. Switzerland has the highest unemployment replacement rate, but the lowest social assistance replacement rate, while the United Kingdom has low levels for both, and Denmark has relatively high levels for both, Sweden has seen a considerable decrease in both replacement rates. Finally, Greece does not provide social assistance. Table 4.1 provides some descriptive statistics for the seven dependent variables.

11 Due to the re-categorisation of Denmark's unemployment spending from public to voluntary private by the OECD meaning public spending on unemployment appears as 0, we used spending data on unemployment from the 'Comparative Political Data Set 1960-2015' (Armingeon et al. 2017) and the Nordic Health and Welfare Statistics (NHWSTAT) (2024) for Denmark.

Table 4.1: Dependent Variables, European Countries, 2004-2017

Variable	*Measure*	*N*	*Mean*	*SD*	*Source*
Old Age Spending	Public spending on pensions, early retirement pensions, home-help and residential services as a percentage of GDP	224	8.65	2.76	OECD (2024b)
Incapacity Spending	Public spending on care services, disability benefits, benefits accruing from occupational injury and accident legislation, and employee sickness payments as a percentage of GDP	159	2.57	1.03	OECD (2024b)
Family Spending	Public spending on child allowances and credits, childcare support, income support during leave, and single parent payments as a percentage of GDP	224	2.38	0.92	OECD (2024b)
ALMP Spending	Public spending on employment services, training, employment incentives, integration of persons with disabilities, direct job creation, and start-up incentives as a percentage of GDP	224	0.75	0.37	OECD (2024b)
Unemployment Spending	Public spending on unemployment compensation and early retirement for labour market reasons as a percentage of GDP	224	1.34	0.80	OECD (2024b), Armingeon et al. (2017), NHWSTAT (2024)
Social Assistance Replacement Rate	Net social assistance benefits as a percentage of the net average wage	146	40.25	11.12	Wang & van Vliet (2016a, 2016b), Nelson (2013), OECD (2017a)
Unemployment Replacement Rate	Net unemployment benefits as a percentage of the net average wage	224	56.82	21.03	OECD (2024a)

4.3.3 Explanatory Variables – Measuring Intra-EU Labour Migration

In this study we aim to compare the effects of two types of labour mobility to 16 European countries:

1. Stock of EU15 & European Free Trade Association (EFTA) labour migration (as a prcentage of the labour force)
2. Stock of EU13 labour migration (as a percentage of the labour force)

A traditional indicator for immigration is 'foreign-born as a percentage of the population' (Burgoon et al., 2012; Burgoon, 2014; Gaston & Rajaguru, 2013; Fenwick, 2019; Mau & Burkhardt, 2009; Soroka et al., 2006; 2016) because it is easily defined, data on stocks of migrants tend to be more reliable than flows of migrants, and there is good cross-country coverage for a long period of time (de Beer et al., 2010; Fenwick, 2021). However, we use these two new indicators for immigration to build further on the arguments of previous researchers and provide a more nuanced view of migration and social protection.

The two indicators have been created using EU-LFS data. We use information on country of birth[12] and labour force status[13] to identify labour migrants from Western European and CEE countries. Weights provided in the survey data are used to make the sample nationally representative and population data is used to construct an absolute value, which in combination with data on the size of the labour force is then transformed into a percentage. We construct the variables as a percentage of the labour force for theoretical reasons; as we are interested in labour migration and its effects on labour insecurity, this is more clearly expressed by constructing labour migration as a percentage of the labour force. More detail on the development of these indicators can be found in Fenwick (2021).

Tables 4.2 and 4.3 provide the developments in EU13 and EU15 labour migration across countries and over time. The volume of migration varies quite considerably from country to country, however in most countries, stocks of Western European labour migrants stay reasonably stable – an exception is Portugal. For a number of countries, this type of labour migration is actually greater than CEE labour migration. Luxembourg and Switzerland should also be highlighted because of the exceptional size of the stock of labour migrants, which for both countries is over 20 percent of the labour force. In several countries, CEE labour migration is on the rise and each year makes up a larger proportion of the labour force. The United Kingdom especially has seen a steep increase in labour migration from CEE member states, most likely because the UK was one of only three EU countries that decided not to impose labour market restrictions on citizens from the 2004 EU enlargement countries.

There are some limitations to the indicators we have created. Unfortunately, we cannot extend the indicators before 2004 as the required data on country of birth is not available. As a result, the years available to us are from 2004 to 2016. Other restrictions are as a result of limitations of the EU-LFS and household survey data in general, e.g., the underrepresentation and non-response of migrants.

12 Country of birth is coded into broad regions – e.g. EU-15, EU-13, North America, Middle East, etc.

13 We use those who are recorded as either employed or unemployed in the EU-LFS.

Table 4.2: EU13 labour migration (as a percentage of the labour force)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2004-2016*
Austria	3.35	3.75	3.91	4.02	3.98	3.67	4.27	4.20	4.44	4.80	5.68	5.95	6.12	2.77
Belgium	0.45	0.57	0.64	0.74	1.04	1.27	1.67	1.89	1.92	2.17	2.38	2.61	2.63	2.18
Denmark	0.35	0.45	0.45	0.60	0.71	0.90	1.06	1.28	1.73	1.93	2.26	2.52	2.50	2.15
Finland	0.62	0.36	0.35	0.43	0.46	0.47	0.60	0.75	0.76	0.85	1.12	1.31	1.37	0.75
France	0.28	0.32	0.34	0.36	0.46	1.42	0.55	0.56	0.53	0.45	0.56	0.52	0.67	0.39
Germany	0.94	1.22	0.82	0.97	1.55	1.31	1.25	1.30	1.63	1.79	2.09	2.40	2.90	1.96
Greece	1.16	1.46	1.36	1.43	1.59	1.96	1.86	1.80	1.65	1.78	1.78	1.46	1.43	0.27
Ireland	.	3.33	6.99	9.74	10.33	9.81	9.22	9.25	9.34	9.35	9.42	9.42	9.41	6.08
Italy	.	1.23	1.57	1.77	2.48	3.04	3.37	3.54	3.59	3.88	3.92	4.04	4.27	3.04
Luxembourg	0.79	0.79	1.79	2.02	2.22	2.44	2.54	3.10	3.36	3.68	3.80	4.55	4.88	4.09
Netherlands	0.42	0.42	0.49	0.49	0.56	0.64	0.75	0.79	0.93	1.03	1.16	0.98	1.33	0.91
Portugal	0.15	0.21	0.27	0.31	0.33	0.27	0.39	0.37	0.39	0.42	0.40	0.32	0.28	0.13
Spain	1.75	2.34	2.81	2.98	3.06	3.02	3.57	3.60	3.21	3.26	3.41	3.26	3.53	1.78
Sweden	1.30	1.52	1.61	1.61	1.71	1.85	1.96	2.14	2.36	2.56	2.63	2.61	2.62	1.32
Switzerland	1.54	1.58	1.48	1.46	1.61	1.78	1.86	2.03	2.15	2.18	2.28	2.40	2.57	1.03
United Kingdom	0.59	1.02	1.52	2.25	2.64	2.62	3.26	3.50	3.47	3.74	4.43	4.73	5.35	4.76
Average	0.98	1.29	1.65	1.95	2.17	2.28	2.39	2.51	2.59	2.74	2.96	3.07	3.24	2.26

Table 4.3: EU15 labour migration (as a percentage of the labour force)

Country	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2004-2016*
Austria	4.11	3.18	3.05	3.35	3.41	3.80	3.99	3.97	4.13	4.36	4.50	4.73	4.79	0.68
Belgium	6.80	6.43	6.63	5.25	6.71	6.44	6.56	6.40	6.41	6.63	6.63	6.79	6.53	–0.27
Denmark	2.53	2.34	2.32	2.89	3.32	3.50	3.62	3.76	3.68	3.78	3.99	3.96	4.35	1.82
Finland	1.22	1.21	1.36	1.39	1.58	1.52	1.31	1.31	1.49	1.68	1.69	1.45	1.70	0.48
France	4.26	3.56	3.33	3.49	3.68	3.52	3.79	3.57	3.45	3.74	3.34	3.10	3.43	–0.83
Germany	3.16	3.30	2.39	2.37	3.15	2.89	2.75	2.68	3.02	3.16	3.14	3.16	3.39	0.23
Greece	0.80	0.82	0.66	0.61	0.75	0.86	0.81	0.75	0.67	0.62	0.75	0.73	0.66	–0.14
Ireland	.	7.71	9.19	9.08	9.14	9.42	9.50	9.72	9.60	9.62	9.20	8.54	8.54	0.83
Italy	.	1.90	1.91	1.89	1.85	1.77	1.78	1.83	1.82	1.79	1.85	1.81	1.80	–0.1
Luxembourg	47.31	47.10	45.34	48.15	48.79	48.52	50.26	50.94	50.97	51.29	50.98	50.34	48.67	1.36
Netherlands	2.76	2.78	2.60	2.75	2.65	2.65	2.47	2.51	2.56	2.48	2.50	2.68	2.57	–0.19
Portugal	1.70	1.71	1.78	1.59	1.82	2.12	2.14	2.17	2.30	2.61	2.90	2.90	2.81	1.11
Spain	2.30	2.24	2.34	2.48	2.58	2.44	2.80	2.82	2.84	2.76	2.75	2.71	2.62	0.32
Sweden	5.59	5.90	5.67	5.44	5.38	5.41	5.49	5.24	5.15	5.11	5.21	5.23	5.22	–0.37
Switzerland	15.82	15.81	15.63	15.55	16.21	17.29	16.91	17.57	18.05	18.72	19.37	19.95	19.61	3.79
United Kingdom	2.86	2.71	2.71	2.92	2.91	2.87	2.76	3.07	3.17	3.29	3.08	3.43	3.60	0.74
Average	7.23	6.79	6.68	6.83	7.12	7.19	7.31	7.39	7.46	7.60	7.62	7.59	7.52	0.29
*Average**	4.15	4.11	4.10	4.07	4.34	4.43	4.45	4.49	4.56	4.69	4.73	4.74	4.77	0.62

**excluding Luxembourg*

4.3.4 Other Explanatory Variables

Table 4.4: Independent Variables, European Countries, 2004-2013

Variable	*Measure*	*N*	*Mean*	*SD*	*Source*
EU13 labour migration	Labour migrants from EU13 countries as a percentage of the labour force	206	2.29	2.11	EU-LFS, 2017
EU15 labour migration	Labour migrants from EU15 countries as a percentage of the labour force	206	7.27	11.65	EU-LFS, 2017
Foreign-born	Foreign-born (those born abroad) as a percentage of the labour force	199	14.47	8.91	OECD (2017b)
Trade openness	Sum of exports and imports of goods and services as a share of GDP (divided by 100)	207	1.08	0.72	World Bank (2017)
Capital openness	Sum of net inflows and outflows of foreign direct investment as a share of GDP (divided by 100)	208	0.19	0.38	World Bank (2017)
Left-wing governments	Seat share in parliament of social democratic and other left parties in government, measured in percentage of the total parliamentary seat share of all governing parties, weighted by the number of days in office in a given year (divided by 100)	224	0.36	0.35	Armingeon et al. (2023a, 2023b)
Union density	Net union membership as a proportion of wage and salary earners in employment	218	33.97	19.59	Armingeon et al. (2023a, 2023b)
Deindustrialisation	100 minus the sum of manufacturing and agricultural employment as a percentage of the working age population	205	81.69	4.08	OECD (2017c)
Log of GDP per capita	GDP per capita, constant prices & OECD base year – 2010	208	10.61	0.27	OECD (2017c)
Unemployment rate	The share of the labour force that is without work but available for and seeking employment	208	8.41	4.74	World Bank (2017)
Old dependency ratio	The ratio of people older than 64 to the working-age population	208	26.26	4.05	World Bank (2017)
Disability rate	Persons who identify as suffering from sickness or disability as a percentage of the population	156	6.45	5.25	EU-LFS (2017) & Been and van Vliet (2017)
Young dependency ratio	The ratio of people younger than 15 to the working-age population	208	24.79	3.05	World Bank (2017)

The key measures and data sources of all other variables are presented in Table 4.4. The controls chosen are traditional variables used by previous comparative studies on welfare state reform (e.g. Brady & Young Lee, 2014; Iversen & Cusack, 2000; Wang & van Vliet, 2019). We use two variables to express two key facets of globalisation, trade openness and capital openness. To account for the role of partisan politics we use government composition operationalised as the relative power position of social

democratic and other left parties in government based on their seat share in parliament, measured in percentage of the total parliamentary seat share of all governing parties, weighted by the number of days in office in a given year (Armingeon et al., 2023a, 2023b). Also included is trade union density as a control for the bargaining power of domestic labour (Armingeon et al., 2023a; Visser, 2016). For deindustrialisation, we follow the method proposed by Iversen and Cusack (2000). The study accounts for differing GDP per capita and the fiscal pressure that can stem from unemployment. Finally, we account for the number of beneficiaries for each spending category using the unemployment rate, old and young dependency ratios, and the disability rate. As we only have data until 2013 for the disability rate, the time period for incapacity spending is limited to 2004 – 2014.

4.3.5 Method

To examine the relationship between immigration and welfare, this study utilises pooled time-series cross-sectional data for the analysis. The model employs panel-corrected standard errors (PCSE) with a Prais-Winsten correction for serial correlation and country fixed effects. Previous studies typically rely on the de facto Beck-Katz standard, which combines fixed effects with a lagged dependant variable, to account for serial correlation (Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Soroka et al., 2006; 2016). However, the lagged dependent variable, which is used to correct for serial correlation, can be a source of considerable bias known as Nickell bias (Nickell, 1981). The lagged dependent variable is highly correlated with the dependent variable and consequently causes bias in the standard errors. This is especially prevalent when t is smaller than 20, which it is in our study. Thus, we use PCSE with the Prais-Winsten correction to correct for panel-heteroscedasticity and contemporaneous spatial correlation, which is argued as the more appropriate method by Plümper et al. (2005). However, in our robustness section, we present the results of an error correction model for comparison, which does include a lagged dependent variable as well as the lagged level and change of each variable included in the main model specifications. As is conventional, we lag the explanatory variables by one year as it is theoretically reasonable to expect that changes in certain independent variables can take time to affect the dependent variable. For example, the policy process is often slow, and policy decisions will not be immediately reflected in levels of welfare spending. Methodologically, lagging the explanatory and control variables can help to mitigate endogeneity issues arising from reverse causality.

In addition to country fixed effects to address cross-sectional heterogeneity of the intercepts and omitted variable bias, we use three specific time dummies to control for when different EU countries lifted labour market restrictions on EU migrant citizens from the new member states. Consequently, we do not include additional time dummies, however we believe

the potential shock each country may undergo from the lifting of labour market restrictions is more important to account for in our model. Table 4.5 presents the years in which labour migration restrictions for each group of new member state countries were lifted by each EU country in our sample. Following the 2004 enlargement, the UK, Ireland, and Sweden were the only EU15 countries to immediately allow unrestricted labour market access to the new EU8 countries. Sweden is the only EU15 country to have allowed immediate labour market access to new member states following all three expansions. Switzerland, as an EFTA country, follows the same rules as the EU15.

Table 4.5: Lifting of Labour Market Restrictions

Country	*2004 EU enlargement: EU8*	*2007 EU enlargement: EU2*	*2013 EU enlargement: EU1*
Austria	May 2011	January 2014	1 July 2022
Belgium	May 2009	January 2014	July 2015
Denmark	May 2009	May 2009	July 2013
Finland	May 2006	January 2007	July 2013
France	July 2008	January 2014	July 2015
Germany	May 2011	January 2014	July 2015
Greece	May 2006	January 2009	July 2015
Ireland	May 2004	January 2014	July 2013
Italy	July 2006	January 2012	July 2015
Luxembourg	November 2007	January 2014	July 2015
Netherlands	May 2007	January 2014	1 July 2018
Portugal	May 2006	January 2009	July 2013
Spain	May 2006	January 2009¥	July 2015
Sweden	May 2004	January 2007	July 2013
Switzerland	May 2011	January 2014	1 January 2022
United Kingdom*	May 2004	January 2014	30 June 2018

Notes: * The United Kingdom officially left the EU on January 31, 2020.
¥ restrictions for Romania until August 2011
Source: European Commission (2018) and Kahanec et al. (2014)

4.4 Empirical Analysis

In this section, we present the results for the seven dependent variables, across 16 European countries for the period 2004-2017, as described in the previous section. We group together the results for spending and EU13 labour migration in Table 4.6 and the results for spending and EU15 & EFTA labour migration in Table 4.7. In Table 4.8, we show the results for the two replacements rates for both EU13 and EU15 labour migration. These tables include all control variables, including a control for foreign-born as a percentage of the labour force to ensure that our more specific labour migration variables are not acting as a proxy for general levels of immigration.

Table 4.6: EU13 Labour migration and Disaggregated Social Spending

Disaggregated Social Welfare Spending	*Old Age*	*Incapacity*	*Family*	*ALMP*	*Unemployment*
CEE labour migration$_{t-1}$	–0.01	0.08***	0.08**	0.01	0.05**
	(0.06)	(0.02)	(0.04)	(0.01)	(0.02)
Foreign-born $_{t-1}$	0.20***	0.01	0.04*	0.04***	0.12***
	(0.07)	(0.02)	(0.02)	(0.01)	(0.03)
Trade openness$_{t-1}$ (x10^{-2})	0.48	0.22	–0.31	–0.12	–0.02
	(0.42)	(0.20)	(0.20)	(0.09)	(0.19)
Capital openness$_{t-1}$ (x10^{-2})	–0.06	–0.08*	–0.02	–0.01	0.02
	(0.06)	(0.04)	(0.05)	(0.01)	(0.02)
Deindustrialisation$_{t-1}$	0.02	0.00	–0.03**	–0.00	–0.01
	(0.02)	(0.01)	(0.01)	(0.00)	(0.01)
Left seats$_{t-1}$ (x10^{-2})	–0.14	0.02	–0.05	0.16***	0.15**
	(0.14)	(0.06)	(0.04)	(0.04)	(0.05)
Union density$_{t-1}$	0.03	0.05***	–0.01	–0.01	0.05***
	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)
Log of GDP per Capita$_{t-1}$	–1.57	–1.43*	–0.40	–2.01***	–3.14***
	(2.40)	(0.82)	(0.93)	(0.43)	(0.99)
Unemployment$_{t-1}$	0.02	–0.03***	0.01	–0.01**	–0.00
	(0.03)	(0.01)	(0.01)	(0.00)	(0.02)
Old dependency ratio$_{t-1}$	0.23***				
	(0.05)				
Disability rate$_{t-1}$		0.02*			
		(0.01)			
Young dependency ratio$_{t-1}$			–0.01		
			(0.02)		
2004 expansion restrictions lifted	–0.03	–0.01	–0.06	–0.00	–0.02
	(0.11)	(0.04)	(0.04)	(0.02)	(0.05)
2007 expansion restrictions lifted	0.02	–0.00	0.01	–0.00	0.06
	(0.10)	(0.05)	(0.05)	(0.02)	(0.04)
2013 expansion restrictions lifted	0.18	–0.01	–0.01	–0.01	–0.02
	(0.12)	(0.08)	(0.06)	(0.04)	(0.05)
Constant	15.40	15.59*	8.86	22.45***	31.26***
	(26.03)	(8.98)	(9.96)	(4.74)	(10.89)
Country fixed effects	YES	YES	YES	YES	YES
N	167	123	167	167	167
adj. R^2	0.95	0.96	0.95	0.88	0.85
Rho	0.52	0.35	0.31	0.35	0.33
RMSE	0.37	0.15	0.16	0.09	0.24

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

Table 4.7: EU15 labour migration and disaggregated social spending

Disaggregated Social Welfare Spending	*Old Age*	*Incapacity*	*Family*	*ALMP*	*Unemployment*
WE labour migration$_{t-1}$	–0.00	0.03	0.05*	0.02	0.01
	(0.05)	(0.04)	(0.03)	(0.01)	(0.02)
Foreign-born $_{t-1}$	0.19***	0.04**	0.06***	0.04***	0.14***
	(0.06)	(0.02)	(0.02)	(0.01)	(0.04)
Trade openness$_{t-1}$ (x10^{-2})	0.46	0.21	–0.30	–0.12	–0.04
	(0.41)	(0.23)	(0.20)	(0.09)	(0.18)
Capital openness$_{t-1}$ (x10^{-2})	–0.06	–0.09*	–0.02	–0.01	0.02
	(0.06)	(0.05)	(0.05)	(0.01)	(0.02)
Deindustrialisation$_{t-1}$	0.02	–0.00	–0.03**	–0.00	–0.01
	(0.02)	(0.01)	(0.01)	(0.00)	(0.01)
Left seats$_{t-1}$ (x10^{-2})	–0.13	0.03	–0.05	0.14***	0.15**
	(0.13)	(0.06)	(0.04)	(0.03)	(0.05)
Union density$_{t-1}$	0.03	0.05***	–0.01	–0.01	0.05***
	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)
Log of GDP per Capita$_{t-1}$	–1.58	–1.39	–0.35	–1.96***	–3.11**
	(2.38)	(0.88)	(0.97)	(0.42)	(1.34)
Unemployment$_{t-1}$	0.02	–0.03***	0.01	–0.01*	–0.00
	(0.03)	(0.01)	(0.01)	(0.01)	(0.02)
Old dependency ratio$_{t-1}$	0.23***				
	(0.05)				
Disability rate$_{t-1}$		0.02			
		(0.01)			
Young dependency ratio$_{t-1}$			0.01		
			(0.03)		
2004 expansion restrictions lifted	–0.03	0.01	–0.04	–0.00	–0.01
	(0.12)	(0.04)	(0.04)	(0.02)	(0.07)
2007 expansion restrictions lifted	0.02	0.00	0.00	–0.01	0.06
	(0.10)	(0.05)	(0.05)	(0.02)	(0.07)
2013 expansion restrictions lifted	0.18	–0.01	–0.00	–0.01	–0.01
	(0.12)	(0.09)	(0.06)	(0.04)	(0.11)
Constant	29.48	27.20**	1.91	12.14**	38.10***
	(20.64)	(6.02)	(8.50)	(5.61)	(8.43)
Country fixed effects	YES	YES	YES	YES	YES
N	130	126	130	126	128
adj. R^2	0.95	0.96	0.94	0.88	0.85
Rho	0.51	0.35	0.31	0.35	0.31
RMSE	0.37	0.15	0.15	0.08	0.20

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

The results presented in Table 4.6 show that the association between migration and welfare state effort varies according to the social welfare programme and type of mobility. First, in line with our expectations, CEE labour migration is positively and significantly associated with the social spending subdomains of incapacity, family, and unemployment benefits. The coefficients range from an increase of 0.05 percentage points on unemployment spending to a 0.08 percentage point increase in family spending and incapacity as the percentage of CEE labour migrants in the labour force increases by one percent. The coefficients for old age and ALMP spending are not significant. For Western European labour migrants (Table 4.7), we do not find any significant results, except for family spending but this is only at the 10 percent level of significance. For other immigrants (Table 4.6 and 4.7), measured as foreign-born people, we find positive and significant results across almost all spending categories. This is consistent with Fenwick (2019). Overall, the results tend to indicate that immigration is predominantly positively associated with welfare state effort. This provides tentative evidence in favour of the compensation hypothesis as the prevailing mechanism, that is, native workers are compensated through certain social security programmes for the job insecurity labour migration. However, an important alternative explanation for this positive association could be a mechanical effect if migrants drive up social expenditures as beneficiaries of welfare state programmes.

Aside from the migration indicators, the results suggest that other structural economic changes have not played a substantial role in European welfare state developments since 2004. For trade openness, we do not find any significant results, for capital openness, there is only a statistically significant and negative association with incapacity spending, and deindustrialisation has only a negative association with family spending. Regarding the political variables, the results show that left-wing governments are positively associated with expenditures on ALMP spending and unemployment benefits, which is in line with classical expectations about partisan politics. However, for the other programmes, the results do not show significant coefficients for left-wing governments. As expected, union density is positively associated with incapacity and unemployment spending. It is likely that domestic institutions aim to prevent reductions in benefit levels of particular programmes, depending on their resources or agenda, and for unions that means focusing on work-related benefits for those already in employment.

GDP per capita is negatively and statistically significantly associated with predominately ALMP and unemployment spending, suggesting that as the economy grows there is relatively less spending on these particular welfare state programmes. Gaston and Rajaguru (2013) also find that GDP growth has a significant and negative association with social spending because in an economic downturn, the denominator (GDP) tends to grow more

slowly than the numerator (social expenditure). The unemployment rate is negatively associated with incapacity spending and ALMPs but is otherwise insignificant. The disability rate, our control for the number of beneficiaries for incapacity spending, is (weakly) positively associated with incapacity spending in Table 6. Finally, the young dependency ratio, the control for family spending, is not statistically significant in either model.

Table 4.8 presents the headline results for both indicators of intra-EU mobility on the unemployment and the social assistance replacement rates while Table 10 in the Appendix provides the full regression results. The results show that a one percentage point increase in the labour force of labour migrants from CEE member states is associated with a 1.73 point increase in the unemployment replacement rate and a 1.13 point increase in the social assistance replacement rate. In contrast, for Western European labour migrants there is no statistically significant effect on either the unemployment replacement rate or the social assistance replacement rate. Furthermore, foreign-born in general are only positively and significantly associated with social assistance replacement rates.[14] Overall, these results are in line with our expectations. Labour migration from CEE member states spurs the demand for compensation in the form of unemployment benefits and social assistance benefits more than labour migration from Western Europe and migration in general. Furthermore, in contrast to the results for social expenditure, these results for replacement rates cannot be driven by a mechanical effect from migrant-beneficiaries.

In addition, while we find variations across social programmes (neutral and/or positive effects), we do not find any particular patterns regarding programme design (contributory or non-contributory and targeted or universal). For example, we find positive associations between CEE labour migration and both unemployment spending and the unemployment replacement rate, which is typically a contributory benefit, but no association between either types of mobility with old age spending, a typical contributory benefit. In addition, for family spending, typically a universal benefit (for those with children) has a small, positive association, and social assistance, which is typically means-tested rather than universal, also has a positive association with CEE labour mobility. As such, the programme design does not appear to be systematically associated with EU labour migration. However, the main focus of this paper was not to assess programme design but rather the differences between types of mobility, this is a limitation of this particular analysis and would make a good avenue for future research.

14 Tables 11 and 12 in Appendix 2 show the same replacement rate regressions but for disaggregated family types. The results are driven by changes in lone person households and two parent, two children households.

Table 4.8: Immigration and the Welfare State- replacement rates

	Unemployment replacement rate	*Unemployment replacement rate*	*Social assistance replacement rate*	*Social assistance replacement rate*
CEE labour migration$_{t-1}$	1.73**		1.13***	
	(0.68)		(0.40)	
WE labour migration$_{t-1}$		0.36		–0.15
		(0.31)		(0.84)
Foreign-born $_{t-1}$	–0.33	0.51	0.13	0.78**
	(0.48)	(0.41)	(0.64)	(0.40)
Trade openness$_{t-1}$ (x10^{-2})	2.56	2.95	6.70*	6.66*
	(2.48)	(2.32)	(3.93)	(3.64)
Capital openness$_{t-1}$ (x10^{-2})	0.18	0.09	–0.76	–0.90
	(0.38)	(0.37)	(1.60)	(1.42)
Left seats$_{t-1}$ (x10^{-2})	4.89***	5.03***	1.61***	1.76***
	(1.26)	(1.26)	(0.59)	(0.58)
Union density$_{t-1}$	0.17	0.18	–0.03	–0.01
	(0.24)	(0.22)	(0.17)	(0.17)
Deindustrialisation$_{t-1}$	–0.29**	–0.36***	0.08	0.07
	(0.14)	(0.13)	(0.40)	(0.38)
Log of GDP per Capita$_{t-1}$	–37.91**	–41.31***	–23.83	–22.47
	(16.84)	(15.91)	(15.52)	(14.63)
Unemployment$_{t-1}$	–0.19	–0.18	–0.36	–0.35
	(0.22)	(0.22)	(0.23)	(0.23)
2004 expansion "restrictions lifted"	0.14	0.38	–0.00	0.07
	(0.47)	(0.51)	(0.49)	(0.34)
2007 expansion "restrictions lifted"	–0.46	–0.63	–0.48	–0.47
	(0.82)	(0.88)	(0.50)	(0.45)
2013 expansion "restrictions lifted"	2.12	2.20	–1.55***	–1.50***
	(1.30)	(1.35)	(0.44)	(0.39)
Constant	471.07**	504.77**	275.23	255.94
	(184.39)	(175.05)	(176.07)	(163.61)
Country fixed effects	YES	YES	YES	YES
N	167	167	121	121
adj. R^2	0.86	0.87	0.96	0.96
Rho	0.45	0.38	0.50	0.49
RMSE	5.05	5.20	1.67	1.75

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

For the rest of the results in Table 4.8, the explanatory variables are reasonably similar between the two labour migration variables. Trade openness is insignificant for unemployment spending but positively and weakly statistically significant for social assistance and capital openness is insignificant in both models. Left-wing governments are positively and significantly associated with both the unemployment and social assistance replacement rates, as hypothesised. Union density is insignificant in both models, while deindustrialisation is significant and negatively associated with unemployment spending. Finally, unemployment has no statistically significant relationship with either social protection programme.

4.5 Robustness

To check the sensitivity of our results to the model specification employed above, we have chosen to run an Error Correction Model as a robustness check. Table 4.9 shows that there are no major changes in the key variables of interest and our assertion that the compensation hypothesis is a potential mechanism for the way that immigration may change the welfare state. However, the overall picture is slightly more mixed. While the lagged variable for CEE labour migration is still significant and positive for the change in unemployment spending, which is very much in line with the idea that increased risk in the labour market increases demand for compensation from the welfare state, we also find a small negative between CEE labour migration and the change in pension spending. For WE labour migration in Table 4.10, we find a negative association with incapacity spending (albeit on the edge of statistical significance), a link not found in our previous model specification in Table 4.7, and a positive one for family spending which is in-line with the previous model (Table 4.7).

Table 4.9: Disaggregated Social Spending and CEE Labour Migration – ECM

	Δ *Old Age*	Δ *Incapacity*	Δ *Family*	Δ *ALMP*	Δ *Unemployment*
Lagged dependent variable	–0.09*** (0.03)	–0.28*** (0.02)	–0.36*** (0.07)	–0.41*** (0.06)	–0.23*** (0.08)
Δ CEE labour migration	–0.04 (0.06)	0.06** (0.03)	–0.08** (0.03)	–0.01 (0.02)	–0.04 (0.04)
CEE labour migration$_{t-1}$	–0.07** (0.03)	0.03 (0.02)	–0.01 (0.02)	0.01 (0.01)	0.03** (0.02)
Δ Foreign-born	–0.08 (0.05)	0.00 (0.02)	0.05* (0.03)	0.01 (0.02)	0.01 (0.03)
Foreign-born$_{t-1}$	0.04 (0.02)	–0.00 (0.01)	0.03** (0.02)	0.03** (0.01)	–0.01 (0.01)
Δ Trade openness (x10^{-2})	–0.17 (0.24)	0.41*** (0.12)	0.21 (0.22)	–0.47*** (0.08)	–0.52** (0.22)
Trade openness$_{t-1}$ (x10^{-2})	0.07 (0.22)	0.14 (0.10)	–0.01 (0.15)	–0.31*** (0.07)	–0.29* (0.16)
Δ Capital openness (x10^{-2})	0.05 (0.04)	–0.05*** (0.02)	–0.03 (0.02)	–0.02** (0.01)	0.05 (0.03)
Capital openness$_{t-1}$ (x10^{-2})	0.05 (0.06)	–0.09*** (0.03)	–0.03 (0.04)	–0.04*** (0.01)	0.08 (0.05)
Δ Left seats (x10^{-2})	–0.09 (0.07)	0.01 (0.02)	–0.02 (0.05)	0.05 (0.03)	0.11* (0.06)
Left seats$_{t-1}$ (x10^{-2})	–0.06 (0.04)	–0.04*** (0.01)	0.00 (0.03)	0.10*** (0.02)	0.09*** (0.03)
Δ Union Density	0.06** (0.02)	0.03*** (0.01)	–0.01 (0.01)	0.01 (0.01)	0.03* (0.02)
Union density$_{t-1}$	0.01 (0.02)	0.03*** (0.00)	–0.01** (0.00)	–0.00 (0.01)	–0.01 (0.01)
Δ Deindustrialisation	–0.01 (0.01)	0.01 (0.01)	–0.01 (0.01)	–0.01*** (0.00)	–0.00 (0.01)
Deindustrialisation$_{t-1}$	0.00 (0.01)	0.01** (0.00)	–0.03*** (0.00)	0.00 (0.00)	0.00 (0.01)
Δ Log of GDP per capita	–8.00*** (0.56)	–2.91*** (0.38)	–4.22*** (0.59)	–0.89* (0.46)	–2.55*** (0.85)
Log of GDP per capita$_{t-1}$	–0.29 (0.47)	0.24 (0.40)	–1.03* (0.59)	–1.76*** (0.26)	–1.98** (0.79)

	Δ *Old Age*	Δ *Incapacity*	Δ *Family*	Δ *ALMP*	Δ *Unemployment*
Δ Unemployment rate	0.02	0.01	–0.02	–0.01	0.10***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment$_{t-1}$	–0.01	–0.02***	0.00	–0.01***	–0.01
	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Δ Old dependency ratio	0.13*				
	(0.08)				
Old dependency ratio$_{t-1}$	0.01				
	(0.01)				
Δ Disability rate		–0.01			
		(0.01)			
Disability rate$_{t-1}$		–0.02**			
		(0.01)			
Δ Young dependency ratio			0.03		
			(0.06)		
Young dependency ratio$_{t-1}$			–0.02*		
			(0.01)		
2004 expansion "restrictions lifted"	0.03	0.08***	–0.07**	–0.02	–0.00
	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)
2007 expansion "restrictions lifted"	0.03	–0.01	0.04*	0.02	0.11***
	(0.05)	(0.03)	(0.02)	(0.03)	(0.04)
2013 expansion "restrictions lifted"	0.14**	0.06**	–0.03	–0.01	0.02
	(0.07)	(0.02)	(0.03)	(0.02)	(0.06)
Constant	3.37	–3.72	14.23**	19.01***	21.95***
	(5.85)	(4.37)	(640)	(3.06)	(8.56)
Country fixed effects	YES	YES	YES	YES	YES
N	162	121	162	162	162
adj. R^2	0.73	0.73	0.55	0.36	0.77
RMSE	0.19	0.08	0.11	0.08	0.12

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

Table 4.10: Disaggregated Social Spending and WE Labour Migration – ECM

	Δ *Old Age*	Δ *Incapacity*	Δ *Family*	Δ *ALMP*	Δ *Unemployment*
Lagged dependent variable	–0.09**	–0.27***	–0.34***	–0.41***	–0.23***
	(0.04)	(0.02)	(0.08)	(0.06)	(0.08)
Δ WE labour migration	0.04	–0.02	0.03*	0.01	0.03
	(0.04)	(0.01)	(0.02)	(0.01)	(0.03)
WE labour migration$_{t-1}$	–0.02	–0.03*	0.04***	0.01	0.01
	(0.03)	(0.02)	(0.01)	(0.01)	(0.03)
Δ Foreign-born	–0.13***	0.03	0.04	0.01	0.02
	(0.04)	(0.02)	(0.03)	(0.02)	(0.03)
Foreign-born$_{t-1}$	0.00	0.02**	0.01	0.03***	0.01
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Δ Trade openness (x10^{-2})	–0.33	0.33***	0.43**	–0.43***	–0.36
	(0.22)	(0.10)	(0.21)	(0.08)	(0.22)
Trade openness$_{t-1}$ (x10^{-2})	0.02	0.07	0.16	–0.29***	–0.18
	(0.19)	(0.07)	(0.15)	(0.08)	(0.17)
Δ Capital openness (x10^{-2})	0.06	–0.04***	–0.04	–0.02**	0.04
	(0.04)	(0.02)	(0.02)	(0.01)	(0.04)
Capital openness$_{t-1}$ (x10^{-2})	0.07	–0.08***	–0.03	–0.04***	0.07
	(0.06)	(0.02)	(0.04)	(0.01)	(0.05)
Δ Left seats (x10^{-2})	–0.09	0.02	–0.03	0.05	0.11*
	(0.06)	(0.02)	(0.05)	(0.03)	(0.06)
Left seats$_{t-1}$ (x10^{-2})	–0.04	–0.02**	0.01	0.10***	0.09***
	(0.05)	(0.02)	(0.03)	(0.03)	(0.03)
Δ Union Density	0.06***	0.02***	–0.01	0.02	0.04**
	(0.02)	(0.00)	(0.01)	(0.01)	(0.01)
Union density$_{t-1}$	0.00	0.03***	–0.01***	–0.00	–0.01
	(0.02)	(0.00)	(0.00)	(0.01)	(0.01)
Δ Deindustrialisation	–0.01	0.01	–0.00	–0.01**	0.00
	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
Deindustrialisation$_{t-1}$	0.00	0.01***	–0.03***	–0.00	–0.00
	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Δ Log of GDP per capita	–7.89***	–3.01***	–4.32***	–0.93**	–2.92***
	(0.54)	(0.38)	(0.61)	(0.46)	(0.82)
Log of GDP per capita$_{t-1}$	–0.39	–0.17	–1.14**	–1.79***	–2.31***
	(0.55)	(0.39)	(0.58)	(0.31)	(0.80)
Δ Unemployment	0.02	0.01	–0.01	–0.01	0.10***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Unemployment$_{t-1}$	–0.01	–0.02***	0.00	–0.01**	–0.01
	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)

	Δ *Old Age*	Δ *Incapacity*	Δ *Family*	Δ *ALMP*	Δ *Unemployment*
Δ Old dependency ratio	0.14 (0.08)				
Old dependency ratio$_{t-1}$	0.00 (0.01)				
Δ Disability rate		–0.00 (0.01)			
Disability rate$_{t-1}$		–0.01 (0.01)			
Δ Young dependency ratio			0.06 (0.05)		
Young dependency ratio$_{t-1}$			0.02 (0.01)		
2004 expansion "restrictions lifted"	0.01 (0.02)	–0.08*** (0.02)	–0.06*** (0.03)	–0.01 (0.02)	0.00 (0.03)
2007 expansion "restrictions lifted"	0.04 (0.05)	–0.01 (0.02)	0.03 (0.02)	0.01 (0.03)	0.11*** (0.03)
2013 expansion "restrictions lifted"	0.13* (0.07)	0.04 (0.03)	0.03 (0.03)	0.01 (0.02)	0.03 (0.06)
Constant	4.96 (6.53)	–3.07 (4.38)	14.79** (6.29)	19.45*** (3.48)	25.27*** (8.68)
Country fixed effects	YES	YES	YES	YES	YES
N	162	121	162	162	162
adj. R^2	0.73	0.73	0.54	0.36	0.76
RMSE	0.19	0.08	0.11	0.08	0.12

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

The ECM models for replacement rates also show similar results to our previous model specification in Table 8. Table 4.11 shows that the lagged variable for CEE labour migration is positive, albeit weakly statistically significant for the change in the unemployment replacement rate and positive, and strongly statistically significant for the change in the social assistance replacement rate. A key change is a weak, negative association between WE labour migration and the social assistance replacement rate. This demonstrates that it is indeed possible that depending on the type of migration under study, the effects on the welfare state may vary.

Table 4.11: Immigration and the Welfare State – replacement rates – ECM

	Δ *Unemployment* replacement *rate*	Δ *Unemployment* replacement *rate*	Δ *Social assistance* replacement *rate*	Δ *Social assistance* replacement *rate*
Lagged dependent variable	–0.21** (0.11)	–0.17* (0.10)	–0.30** (0.09)	–0.29** (0.11)
Δ CEE labour migration	0.66 (0.93)		1.78*** (0.54)	
CEE labour migration$_{t-1}$	1.09* (0.63)		1.23*** (0.30)	
Δ WE labour migration$_{t-1}$		0.30 (0.42)		–0.45*** (0.12)
WE labour migration$_{t-1}$		0.26 (0.41)		–0.43** (0.28)
Δ Foreign-born	0.50 (0.84)	1.11 (0.81)	–0.30 (0.28)	0.49 (0.31)
Foreign-born $_{t-1}$	0.24 (0.30)	0.72** (0.29)	–0.39*** (0.09)	0.32*** (0.18)
Δ Trade openness (x10^{-2})	–0.26 (4.44)	1.37 (4.72)	1.26 (2.42)	0.55 (3.03)
Trade openness$_{t-1}$ (x10^{-2})	–3.65 (2.84)	–3.36 (3.16)	1.32 (0,82)	0.03 (1.06)
Δ Capital openness (x10^{-2})	–0.26 (0.52)	–0.36 (0.51)	–0.52** (0.25)	–0.59* (0.32)
Capital openness$_{t-1}$ (x10^{-2})	0.31 (0.76)	0.01 (0.78)	–1.03*** (0.34)	–1.16** (0.45)
Δ Left seats (x10^{-2})	2.85*** (0.83)	2.96*** (0.82)	0.63* (0.38)	0.73 (0.48)
Left seats$_{t-1}$ (x10–2)	3.42*** (0.66)	3.08*** (0.56)	0.48 (0.30)	0.44 (0.37)
Δ Union Density	–0.90** (0.37)	–0.84** (0.37)	–0.23* (0.13)	–0.33*** (0.12)
Union density$_{t-1}$	–0.17 (0.15)	–0.14 (0.14)	–0.05 (0.10)	–0.02 (0.10)
Δ Deindustrialisation	–0.01 (0.21)	0.05 (0.23)	0.61*** (0.10)	0.59*** (0.14)
Deindustrialisation$_{t-1}$	–0.30** (0.15)	–0.33*** (0.16)	0.13 (0.10)	0.16 (0.10)
Δ Log of GDP per capita	–26.19 (18.46)	–26.96* (17.40)	–2.24 (5.07)	–4.06 (7.44)

	Δ *Unemployment* replacement *rate*	Δ *Unemployment* replacement *rate*	Δ *Social assistance* replacement *rate*	Δ *Social assistance* replacement *rate*
Log of GDP per capita$_{t-1}$	–41.88***	–41.57***	–3.29	–0.45
	(14.32)	(13.85)	(3.22)	(6.26)
Δ Unemployment	–0.45	–0.51	–0.15*	–0.28**
	(0.34)	(0.34)	(0.18)	(0.12)
Unemployment$_{t-1}$	–0.20*	–0.16	–0.09	–0.15
	(0.12)	(0.10)	(0.07)	(0.10)
2004 expansion	0.32	0.35	0.68**	0.78***
"restrictions lifted"	(0.43)	(0.46)	(0.29)	(0.27)
2007 expansion	–0.29	–0.19	–0.22	–0.38
"restrictions lifted"	(1.06)	(1.01)	(0.28)	(0.26)
2013 expansion	5.34***	5.69***	0.90***	0.82*
"restrictions lifted"	(0.80)	(0.76)	(0.34)	(0.45)
Constant	478.76***	471.67***	37.68	1.22
	(157.59)	(152.04)	(35.95)	(63.87)
Country fixed effects	YES	YES	YES	YES
N	162	162	120	120
adj. R^2	0.18	0.19	0.57	0.53
Rho	0.00	–0.03	–0.19	–0.15
RMSE	4.50	4.51	1.31	1.37

4.6 Conclusion

Milton Friedman famously once said: "you cannot simultaneously have free immigration and a welfare state" (1999). However, our results from a cross-country comparison of 16 European countries suggest that it may not be this black and white. All 16 countries are subject to EU freedom of movement laws and the results show predominantly positive associations between intra-EU labour mobility and welfare state effort. Our results show that particular aspects of EU labour migration are positively associated with several subdomains of social welfare spending, as well as for the unemployment and social assistance replacement rates. This indicates that EU freedom of movement and welfare state provision seem to be compatible and that European welfare states are resilient in the face of increasing immigration.

In the existing literature, immigration has been measured as an aggregate measure, the percentage of foreign-born or net migration for example. However, by conflating different immigrant groups, it is not possible to

disentangle how the influence of immigration on social protection may vary depending on who immigrates. Relying on indicators which explicitly measure intra-EU labour mobility, we find larger positive associations for mobile workers from Central and East European countries than for mobile workers from other Western-European countries and for immigration in general. This finding suggests that in the case of labour migration the increased demand for compensating increased labour market risks in the form of more generous unemployment and social assistance benefits is stronger than concerns about how immigrants put pressure on the fiscal sustainability of the welfare state. That this effect is more pronounced for immigration from CEE countries than for immigration from other Western-European countries probably reflects the rapid increase of labour mobility from CEE countries since 2004. Moreover, we do not find any coherent evidence to draw conclusions about whether the programme design of a particular social policy, such as whether a benefit is contributory or non-contributory/targeted or universal, alters the association between labour mobility and welfare state effort.

Moreover, even though our analysis of welfare state effort includes different programme-specific measures to control for the number of beneficiaries and we examine replacement rates in addition to social spending data, one limitation of our study is that we do not focus on other institutional dimensions such as the access to welfare state programmes. These dimensions could be of particular interest in the context of migration as welfare chauvinism mechanisms could play a role (Cappelen et al., 2025; Negash & van Vliet 2024; Röth et al., 2022). This could be an interesting avenue for future research, although the variation in the extent to which intra-EU migrants have access to welfare state programmes is very limited across EU countries. In addition, future research should aim to shed further light on disaggregated groups of immigration and their influence on welfare state reform, particularly as more detailed data on various forms of human mobility becomes available to researchers.

5 Intra-EU Labour Migration and Attitudes Towards the Welfare State

Abstract

This paper seeks to explore how intra-EU labour migration affects attitudes towards the welfare state. Through the use of multilevel models and the European Social Survey, I test attitudes towards welfare state effort in light of increasing intra-EU labour mobility and aim to further understanding regarding the processes that may be leading to the adjustment of EU welfare systems as EU mobility intensifies. The mechanism behind this relationship remains unknown because indicators specifically for intra-EU labour mobility have not previously been available. Using the EU-LFS we create a new indicator for Central and Eastern European labour mobility to test alongside foreign-born, an indicator for the general level of immigration. The results show no direct influence of CEE labour mobility on attitudes towards redistribution, but instead a positive and significant relationship for general levels of immigration, providing some evidence in favour of the compensation hypothesis and intergroup contact theory. Moreover, for CEE labour mobility the unemployment rate is an important interaction, we find that at high levels of CEE labour migration and unemployment that there is a moderating effect on preferences for redistribution suggesting that an individual's desire for compensation may only extend so far.

Keywords: intra-EU labour mobility, immigration, social policy attitudes, welfare state

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Disclaimer:
This study is based on data from Eurostat, the European Union Labour force Survey (EU-LFS), 2017. The responsibility for all conclusions drawn from the data lies entirely with the authors.

5.1 Introduction

Since the 2004 expansion of the European Union (EU) and the two following rounds of enlargement in 2007 and 2013, mobility around the EU has increased considerably in a relatively short period of time. Between 2003 and 2016, the percentage of EU citizens living in an EU Member State other than the one they were born in has almost tripled from 1.3 to 3.8 percent of the EU-28 population (Cappelen & Peters, 2018; Eurostat, 2016). The total foreign-born figure across the EU in 2016 was 10.7 percent up from 8.6 percent in 2005 (Eurostat, 2016; Münz, 2006) indicating that much of the overall growth can be accounted for by increasing intra-EU mobility. However, these averages mask the considerable heterogeneity across Member States. For example, nearly half of Luxembourg's population is foreign-born, whilst Poland's foreign-born make up less than two percent of the total population. Moreover, most of those foreign-born in Luxembourg are made up of other EU citizens, while for Sweden and the United Kingdom the majority of immigration is made up by non-EU nationals (Eurostat, 2016).

These developments in intra-EU mobility are important because a number of scholars have argued that increasing immigration and ethnic diversity undermines the societal legitimacy and sustainability of the welfare state (Alesina, Glaeser, & Sacerdote, 2001; van Oorschot, 2008). As Freeman puts it "the individuals who agree to share according to need have to experience a sense of solidarity that comes from common membership in some human community" (Freeman, 1986, p.52). This anti-solidarity hypothesis, the notion that generous welfare states are challenged by immigration because it erodes the sense of solidarity between citizens, has been largely based on results from the US context and generalised to the European one. However, more recent literature has not necessarily found this to be the case and in certain instances found the opposite effect could also be possible (Fenwick, 2019; Gaston & Rajaguru, 2013). Hence, scholars have started to look to other mechanisms, such as the compensation hypothesis, cultural threat, and welfare chauvinism, to explain the effects noted in Europe (Burgoon, Koster & van Egmond, 2012; Cappelen & Peters, 2017; Heath & Richards, 2020; Lipsmeyer, Philips & Whitten, 2017; Negash & Van Vliet, 2024; Walter, 2017).

This paper seeks to complement that literature through exploring the validity of the compensation hypothesis as an explanation for how immigration, in particular Central and Eastern European labour mobility, might have altered support for the welfare state in European countries traditionally on the receiving end of immigration. It focuses on redistributive preferences in light of deepening and widening EU mobility and consequently furthering understanding on the processes that can lead to the adjustment of EU welfare systems. Moreover, this paper sits within the broader literature

aiming to understand how certain micro- and macro-level factors can cause changes in support for redistribution[1].

First, I test whether intra-EU labour mobility has a direct influence on preferences for redistribution by distinguishing between different categories of immigration and exploring whether or not they affect support for redistribution in different ways. I use the typical indicator of 'foreign-born as percentage of the population' to test the effect of general level of immigration, alongside which I test a more specific type of mobility using an innovative indicator for mobile labour from the post-2004 expansion Member States[2] developed using the EU-LFS (Fenwick, 2021). Uncovering this previously hidden population allows us to directly study the role that increased intra-EU labour mobility post-2004 may have had on social policy preferences. Second, I test the two key assumptions of the compensation hypothesis: (1) that increased mobility increases individual job insecurity and (2) increased job insecurity in turn increases preferences for redistribution. These two mechanisms within the compensation hypothesis are fundamental assumptions to its functioning and can be tested independently in order to augment the analysis alongside the broader argument mentioned above.

This article is structured as follows, first I provide a brief overview of the literature and posit our hypotheses in light of this review. Next, the data and methods are discussed before presenting the results and analysis. Finally, some final remarks are provided and the broader implications of the findings considered.

5.2 Immigration and redistributive preferences

Previous literature is generally split into two camps that argue for opposing directional influences between increasing immigration and individual policy preferences for redistribution, either expansion or retrenchment of the welfare state. In the case of retrenchment, a number of causal mechanisms through which immigration may erode support for social protection are proposed. For example, cultural threat and the anti-solidarity hypothesis theorise that changes in the cultural make-up of society may weaken the solidarity between individuals and thus the support for a risk-pooling mechanism across society (Heath & Richards, 2020; van Oorschot, 2008). The financial threat theory argues that natives may consider migrants overrepresented in their receipt of benefits and thus placing too much pressure on public services so question the sustainability of the welfare state (Magni,

1 e.g., Svallfors (1997), Alesina and Angelitos (2005), Alesina and La Ferrara (2005), Dallinger (2010), Epple and Romer (1991), Moene and Wallerstein (2001).

2 Which, for simplicity, we refer to from this point onwards as Central and Eastern European (CEE) labour mobility.

2021). Similarly, the welfare chauvinism theory posits that if an individual considers migrants as 'undeserving' of welfare support they may wish to ring-fence benefits for natives (van Oorschot, 2000), while keeping benefits generous for the in-group at the exclusion of the out-group (Cappelen & Peters, 2017). Alternatively, other authors have found support for social protection may actually be bolstered due to a desire for increased compensation for the economic threat that migrants pose to a native individual's feeling of job or income security (Fenwick, 2019; Römer, 2023; Walter, 2010; 2017). In the following section, we discuss these micro-mechanisms alongside complementary social psychology theories such as in-group/out-group and contact theory in order to develop our hypotheses.

5.2.1 Societal solidarity and redistributive preferences

The anti-solidarity hypothesis contends that the causal link between immigration and redistributive preferences is grounded in the concept of solidarity. Traditionally, welfare states have been developed over time and built on a foundation of solidarity between citizens who formulate boundaries around shared social identities such as race, ethnicity, or language. As a result, increasing ethnic heterogeneity, which changes this balance, can erode this foundation of solidarity and consequently citizens' support for the welfare state (Burgoon & Rooduijn, 2021; Alesina & Glaeser, 2004; Alesina et al., 2001). In the US context, Alesina and Glaeser convincingly argue that ethnic diversity and lower solidarity relative to Europe is a crucial factor for explaining why the US does not have a welfare state similar to those found in Europe. However, whether or not this means that an increase in a particular sub-set of the population or a reduction in the homogeneity of society leads to an erosion in support for the welfare state is not yet clear.

In Europe, Mau and Burkhardt (2009) examine the anti-solidarity hypothesis and the role of ethnic diversity in determining support for the welfare state and find that increasing ethnic diversity may have a weak, negative association with support for the welfare state but certain contextual controls such as welfare regime, GDP, and unemployment are more important. Similarly, after using three different measurements for immigration and testing a number of different welfare attitudes from the International Social Survey Program (ISSP), Brady and Finnigan (2014) do not find any robust evidence to support the anti-solidarity hypothesis. Rather, they conclude that net migration and changes in the percentage of foreign-born have positive effects on welfare attitudes and that the compensation and welfare chauvinism hypotheses provide greater explanatory potential and should be explored further.

The welfare chauvinism hypothesis is another causal micro-mechanism which argues that solidarity between citizens is important for shaping the boundaries of the welfare state. However, instead of citizens calling for full-scale retrenchment of the welfare state as a result of rising immigration,

as the anti-solidarity hypothesis suggests, that native-born residents may instead call for the ring-fencing of benefits from foreign-born residents in order to maintain generous benefits for native-born residents (Eger, 2010; Eger & Breznau, 2017; Hjorth, 2016; Larsen, 2011, 2020; Negash & van Vliet, 2024; van der Meer & Reeskens, 2021; van der Waal, de Koster, & van Oorschot, 2013). Generally, it is accepted that the public tend to have the least amount of solidarity towards migrants in comparison with the elderly, sick and disabled people, and the unemployed (van Oorschot, 2008), and as a result people often consider immigrants to be less deserving of welfare support than natives (Ford, 2015; Magni, 2021; Cabeza Martínez, 2023).

This is closely linked to social psychology and theories on group membership, social identity, and how individuals in society associate themselves as members of an in-group while assigning those who are 'different' to themselves as part of the out-group (Tajfel & Turner, 1979). One theory is that members of the in-group (the native-born population) seek to exclude those in the out-group (the foreign-born population) (Cappelen & Midtbø, 2016). Moreover, those who are considered 'out' are more likely to be viewed as a threat and as a result tend to be treated less positively (out-group animosity) than those considered to be 'in' (in-group favouritism) (Larsen, 2020; Magni, 2021).

Using ESS data from 2008/09, Cappelen and Peters (2017) test the welfare chauvinism hypothesis and in-group/out-group theory in the context of intra-EU migration. They find evidence that countries with greater intra-EU migration have lower levels of welfare chauvinism and consequently contend that intergroup contact theory may better explain the effect that intra-EU migration may have on attitudes towards the welfare state. Intergroup contact theory proposes that more frequent contact with the out-group can increase tolerance, reduce prejudice, and diminish anti-immigrant sentiments (Cappelen & Peters, 2017; Heath et al., 2020). Thus, a larger share of immigrants in a population should decrease perceived group threat and not lead to exclusionary or retrenchment preferences for social protection. Indeed, Mutz (2002) finds that the more diverse an individual's social network, the greater their tolerance and understanding towards those who have opposing political views. On the other hand, based on data from the Netherlands, Van Der Meer and Reeskens (2021) find that diverse neighbourhoods lower support for redistribution with the out-group and not the in-group, thus arguing that immigration in this context has a considerable effect on welfare chauvinism.

Crucially, these relationships are likely to be highly dependent on other national contexts, such as levels of immigration or the generosity of benefits and the welfare regime type (Burgoon & Rooduijn, 2021; Dallinger, 2010), as individuals respond to the contexts in which they find themselves. For example, using ESS survey data and a survey experiment conducted in Italy, Magni (2021) states that selective solidarity or welfare chauvinism

is triggered by inequality, arguing that natives may be more supportive of redistribution only if migrants are excluded from sharing equally in those benefits. Additionally, Eick and Larsen (2022) test how the set-up of a social programme affects public attitudes towards the exclusion of migrants and find that the public are more reluctant to include migrants in cash transfer programmes than in-kind services to cover social risks.

5.2.2 Job insecurity and compensation

Another competing micro-level theory is the compensation hypothesis, which argues that as an individual's economic risk increases from exposure to economic openness and further globalisation, then they are more likely to express preferences for welfare state expansion to compensate for those increased risks and support more generous social policies at the ballot box (Marx, 2014; Paskov & Koster, 2014; Rodrik, 1998; Vlandas & Halikiopoulou, 2021; Walter, 2010, 2017). Walter (2017) builds on this and states that individuals' perceptions of labour market risk and policy preferences are also dependent on their skill level. Analysing cross-national survey data from 16 European countries, the empirical analysis shows that exposure to globalisation affects high- and low-skilled individuals differently, with exposure decreasing risk perceptions and demands for social protection for the former group and increasing risk perceptions and demands for social protection amongst the latter.

When adapted to immigration (Emmenegger, Marx, & Schraff, 2015; Fenwick, 2019; Finseraas, 2008; Gaston & Rajaguru, 2013), the compensation hypothesis supposes that job insecurity for native workers stems from increased competition in the labour market, particularly in occupations where natives may develop highly specific skills with low transferability and in the event of an economic shock (Pardos-Prado & Xena, 2019), and issues such as social dumping, i.e. when employers undermine collective agreements made with the native labour force by exploiting foreign labourers who are often willing to work longer hours for reduced wages (Brady & Finnigan, 2014). In addition, when exploring the validity of the compensation hypothesis, Finseraas (2008) argues that even those with negative sentiments toward immigration might not be less, but more, likely to support welfare redistribution out of a desire to protect themselves and/or their "own" native group. Indeed, those who are exposed to the risk of income or job loss (Cusack, Iversen, & Rehm, 2006), and those concerned about fellow (native) citizens with financial problems (Blekesaune & Quadagno, 2003) have been found to be more likely to support redistribution.

Using survey data from 17 European countries, Burgoon et al. (2012) demonstrate that when an individual works in an occupation that has a relatively higher share of foreign-born workers, this can increase an individual's perceived economic insecurity and as a result spurs greater support for government redistribution. Whereas they find that exposure to the

foreign-born population at the national- or macro-level has little effect on support. Thus, a more immediate and personal experience of immigration may have a more relevant effect on support for government redistribution than national-level immigration. However, the two measures – foreign-born as a percentage of the population and the proportion of foreign-born of total employment in each occupation are highly correlated (0.98) and so it would perhaps be surprising to find opposite effects for these two indicators. Following on from this, Burgoon and Rooduijn (2021) show how both the anti-solidarity hypothesis and the compensation hypothesis may be present at the same time and that the prevailing mechanism depends strongly on the macro-level context of the country. They found that anti-immigrant sentiments are likely tied to lower support for government redistribution when a respondent's country faces more immigration, has relatively generous levels of welfare provision, and when immigrants are drawing proportionately more upon the welfare state than natives.

5.2.3 Different effects for different groups?

Alongside the national context interacting with the way immigration may alter attitudes towards the welfare state, it would be entirely reasonable to expect that different types of movement influence attitudes towards social protection in diverse ways. It could be that the defining characteristics of the migrant population or of the migrants themselves may alter preferences. As such, perceptions or stereotypes of hypothetical or potential policy beneficiaries can shape the concerns and politics surrounding that policy (Schneider & Ingram, 1993). Consequently, the way researchers choose to operationalise migration and various forms of mobility are thus likely to have an effect on the results and interpretations of studies.

The argument, however, is often formulated in terms of the threat that immigration presents and the resulting response from an individual. For example, opposition to immigration or specific migrant groups typically increases as the social distance[3] does. This may vary depending on the type of threat, such as symbolic threat expressed as the fear of loss of culture, values and norms, and the national identity of the host society or economic threat like the loss of a job or earnings, and then the level of threat (minimal or great) attributed to immigrants (Bogardus, 1947; Davidov et al., 2020, Heath et al., 2020). The type of threat attributed to migrants can then have a resulting impact on various social policy preferences. Haselswerdt (2021) shows that when individuals in the US are primed to think about different types of threats, either economic or symbolic threat, this results in different assumptions as to whether a social welfare policy will benefit immigrants to

3 Social distance is a concept from social psychology. It illustrates the distance between individuals or social groups in society, which can increase or decrease as members of a group feel closer or more removed from members of another group dependent on various characteristics, prejudices, and/or perceived likenesses, for example.

the exclusion of a native-born US citizen. Moreover, the author found that fiscal or economic threat had a more substantial effect than cultural threat and was strongest in areas with low concentrations of Hispanic residents, which could also be evidence in favour of intergroup contact theory.

In addition, the public have group-specific concerns and associate different types of migrants with different types of threats. Hellwig and Sinno (2017) use survey data from the United Kingdom (UK) and find that Muslim immigrants trigger concerns regarding cultural change and security, while Eastern Europeans prompt economic and crime related concerns. Furthermore, using survey data from Sweden, Hjorth (2016) shows that when a welfare recipient is mentioned as Bulgarian vs Dutch, an individual's opposition to cross-border welfare rights increases by 6 percentage points. Hence, the nationality of a welfare recipient appears to play a role in conditioning public support for the welfare state (Blinder, 2015; Hellwig & Sinno, 2017; Hjorth, 2016; Jørgensen & Thomsen, 2016). The effect is conditional on the type of migration that individuals are exposed to, as each type of migration comes with its own type of risk and thus elicits a different response.

On the other hand, Cappelen and Peters (2018) explore the role of intra-EU mobility and its role in shaping attitudes towards the welfare state. They state that this particular group of mobile EU citizens have been the recipient of many attacks by the media and politicians for undercutting wages and taking advantage of the welfare state. As such it would be expected that natives would wish to remove access to benefits for this particular group. However, because EU member states are unable to discriminate against resident EU nationals in the field of social security, then the consequence of that inability to discriminate is that there will instead be a negative effect on individual attitudes towards overall redistribution.

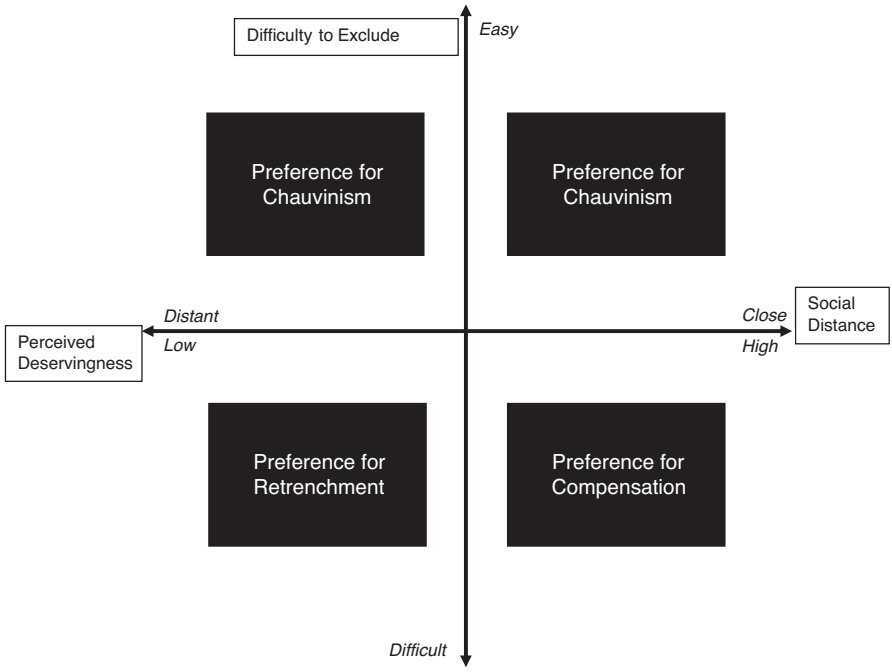
In light of this, I seek to operationalise a very specific type of migration, CEE labour mobility, in order to better understand how this has influenced job insecurity and preferences for redistribution. I theorise that CEE labour migrants affect subjective job security more acutely than general indicators of migration, as this particular type of mobility is more likely to prompt economic concerns than others (Hellwig & Sinno, 2017) and expect CEE labour migrants to increase subjective job insecurity. I test this in two ways: first, with support for redistribution as the dependent variable, I interact CEE labour mobility with the unemployment rate, and second, through directly testing the effect of CEE labour mobility on a measure of subjective job insecurity.

5.2.4 Theoretical Conceptualisation and Hypotheses

Figure 5.1 aims to provide a visualisation of how the theoretical concepts presented in the literature review interact with each other and ultimately provide a holistic overview of the mechanisms through which immigra-

tion may influence social policy preferences. Figure 5.1 takes two concepts discussed in the literature: (1) Social Distance and (2) Perceived Deservingness and combines them with the notion of 'Difficulty to Exclude', namely how easy or difficult is it to exclude an immigrant from accessing welfare programmes, in order to present the idea that the way they interact will determine the prevailing mechanism. Social Distance (close/distant) and Perceived Deservingness (high/low) are on the x-axis, and Difficulty to Exclude is on the y-axis. Therefore, an immigrant that is easy to exclude from the welfare state and for whom the perceived deservingness is low, or the social distance is distant, then the likely prevailing mechanism for determining attitudes towards redistribution is welfare chauvinism. In other words, a native will express a preference for ring-fencing benefits for natives because the migrant is easy to exclude from accessing welfare, they feel little to no solidarity towards that migrant, and/or they feel they are not deserving of receiving welfare. Equally, an immigrant that is close in social distance and/or a native feels is deserving of welfare and is therefore easy to extend solidarity to but is difficult to ring-fence benefits from (an EU mobile citizen with the right to access the social welfare systems of their host nations, for example) may mean that the prevailing mechanism influencing preferences is the compensation hypothesis.

Figure 5.1: Theoretical conceptualisation of the role different types of mobility may have on redistribution preferences



This theoretical conceptualisation stemming from the literature review guides the hypotheses I make next and assess in this chapter. Below are the two key hypotheses that are tested.

H1: CEE mobility as a percentage of the labour force is positively associated with support for redistribution through increasing individual job insecurity.

H2: Foreign-born as a percentage of the population has a neutral effect on support for redistribution because it is such a general measure and contains many different types of mobility so that positive and negative mechanisms cancel each other out, not because there is no association between immigration and social policy preferences.

5.3 Method

I explore how two different categories of movement – one general and one more specific – are associated with attitudes towards redistribution and how these migration indicators are related to job insecurity and preferences towards redistribution. After testing the direct link between immigration and preferences for redistribution, I aim to further assess the link between immigration and job insecurity through immigration's intersectional relationship with the unemployment rate. As a rise in the unemployment rate can be considered an external source of job insecurity, I test the way this interacts with the indicator for CEE labour mobility and foreign-born. In the additional checks section, I also test subjective job insecurity and subjective poverty risk as dependent variables. Plus, I use an indicator for welfare chauvinism.

To analyse individual preferences towards redistribution I use two different multilevel models, multilevel ordered logit and multilevel logit, to test our hypotheses. I explicitly model a multilevel structure with individuals nested in countries, because I want to control for the micro-level individual characteristics and macro-level contextual factors that can shape preferences. Multilevel modelling allows us to account for the hierarchical structure of our research question and data. Moreover, to allow for variation of dependent variable I use a random-slope model. The individual-level analysis uses data from the 2016 round (wave 8) of the European Social Survey (ESS). This wave is particularly relevant as, as well as following recovery from the 2008 financial crisis, it has a special module on welfare attitudes allowing us to explore a number of avenues related to redistribution preferences. I use data on 13 European countries: Belgium, Denmark, Finland, France, Germany, Greece, Ireland, the Netherlands, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. These are the countries that are both in the round of the 2016 ESS and that I was able to create indicators for labour migration in the EU-LFS.

I use several survey questions with categorical responses as our dependent variables, which comes with a number of caveats. It is important to point out that the distance between the categories, for example the gap between disagree and strongly disagree and the gap between agree and strongly agree, may not be equal. Additionally, I attach values to these categories in order to use them within the regression, but the values themselves do not mean anything, only the order in which they are placed matters (Cappelen & Peters, 2018). So, when the value of 5 is assigned to strongly agree and the value of 1 to strongly disagree, a positive coefficient will mean a greater probability of agreeing with the question in the dependent variable.

5.4 Data

5.4.1 Dependent Variables

The dependent variables are all drawn from survey questions in the European Social Survey (ESS), round 8 (2016). The ESS is a high-quality, harmonised cross-national individual level survey that provides us with a number of useful questions for measuring attitudes towards redistribution. I follow precedent and primarily use the survey question "Please say to what extent you agree or disagree with each of the following statement: The government should take measures to reduce differences in income levels" (ESS, 2008a: A3, Q.B30: 26) to denote an individual's attitude towards redistribution. The respondents can answer on a scale from 1 to 5, which I recoded so that 1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; and 5 = strongly agree**.** The proxy is not perfect, the question is broad, unspecific and does not indicate how redistribution should be achieved, for example through higher taxation, direct transfers, or more services (Dallinger, 2022, Margalit & Raviv, 2024). Consequently, our interpretation follows that of the researchers before us who argue that it is a good question to assess attitudes towards a general principle and ideal of fairness and equality rather than a focus on specific practical concerns, detailed policy preferences or an inclination to vote for a specific political party (Burgoon et al., 2012; Cappelen et al., 2018).

I test in the additional checks section the influence that the two indicators of mobility have on subjective job insecurity as it is a small piece of the puzzle. Again, following precedent, I use the question "How likely is it that during the next 12 months you will be unemployed and looking for work for at least four consecutive weeks?" (ESS, 2016). The respondents could choose between five options, 1= not at all likely; 2 = not very likely; 3 = likely; 4 = very likely; 5 = not working/not looking for work/never worked, which is recoded into a dummy variable for simplicity in order to indicate whether or not an individual expressed job insecurity. I also check for influence on welfare chauvinism, whether social benefits are considered a strain on the

economy, subjective poverty risk, and whether the respondent would be more likely to vote to leave the EU following the example of additional checks set by Burgoon, Koster, and van Egmond (2012). These variables are closely linked to our hypotheses and may help us identify the underlying causal mechanisms. They are defined using the relevant questions in the ESS. For welfare chauvinism the question "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?" (ESS, 2016) is used, with the responses being 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; and 5 = they should never get the same rights. For social benefits are considered a strain on the economy, the question "Please tell me to what extent you agree or disagree that social benefits and services in [country] place too great a strain on the economy?" (ESS, 2016) is used, with the responses being 1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree. For subjective poverty risk, the question "During the next 12 months how likely is it that there will be some periods when you don't have enough money to cover your household necessities?" (ESS, 2016) is used, with the responses being 1= not at all likely; 2 = not very likely; 3 = likely; 4 = very likely. For vote to leave the EU, the question "Imagine there were a referendum in [country] tomorrow about membership of the European Union. Would you vote for [country] to remain a member of the European Union or to leave the European Union?" (ESS, 2016) is used, with the responses being 1 = Remain a member of the European Union; 2 = Leave the European Union.

5.4.2 Explanatory Variables

In the following section, I discuss the two different indicators for mobility and elaborate on the operationalisation of our indicator for CEE labour migration and the challenges faced during its creation. First, I use a traditional indicator for general level of immigration, foreign-born as a percentage of the population (Burgoon, 2014; Burgoon et al., 2012; Gaston & Rajaguru, 2013; Mau & Burkhardt, 2009; Soroka et al., 2016; Soroka, Johnston, & Banting, 2006). This allows us to make reasonable comparisons to previous literature using different survey rounds of the ESS but similar data and methods. Second, the key novelty of this paper is the use of an innovative indicator for one aspect of intra-EU mobility, labour migration from the post-2004 EU member states, to look at the influence of post-2004 intra-EU labour migration and build further on the arguments of previous researchers. I created this indicator for CEE labour migration in order to provide a more nuanced view of migration and social protection. Although the two explanatory variables are measured slightly differently, one as a percentage of the population and the other as a percentage of the labour force, both are at the country level and identify migrants or mobile citizens as those who are foreign-born.

The indicator for CEE labour migration has been created using the EU-LFS, a large-scale household sample survey. I use information on country of birth and labour force status to identify labour migrants from Central and Eastern European countries and have created a time series indicator for the years 2004-2016 (Fenwick, 2021). For this article, however, I utilise the data from 2015 in our analysis. I constructed the variable as a percentage of the labour force for theoretical reasons as the chapter focuses on the effect of recent intra-EU mobility on labour market insecurity and by constructing this indicator as a percentage of the labour force then this is more clearly expressed. There are some limitations to the created indicator; in particular, the data for Germany relies on citizenship as Germany has anonymised country of birth data for the EU-LFS[4]. Other restrictions are as a result of limitations of the EU-LFS and household survey data in general, such as the underrepresentation and non-response of migrants.

Volume of migration varies quite considerably from country to country. In several countries, Central and Eastern European labour migration is on the rise and each year makes up a larger proportion of the labour force. The United Kingdom especially has seen a large increase in labour migration from Central and Eastern European member states. A likely reason is because the UK was one of only three EU countries that decided to not impose labour market restrictions (the 2-3-2 rule) on citizens from the 2004 EU enlargement countries and the language is widely spoken across other European nations making the job market more accessible.

Finally, I augment the individual level data with a number of indicators to describe the macro context of the countries included in our sample. These are listed below in Table 5.1.

Table 5.1: Independent Variables

Variable	*Measure*	*N*	*Mean*	*SD*	*Source*
Mobility					
CEE labour mobility	Labour migrants from EU–13 countries as a percentage of the labour force, 2015				EU-LFS (2017)
Foreign-born	Foreign-born as a percentage of the population				OECD (2017b)
Demographic					
Age	Age of respondent, calculated				ESS (2016)
Gender (Dummy)	Gender of respondent (Female = 1)				ESS (2016)
Foreign-born	Respondent is born outside of the reporting country				ESS (2016)

4 The drawbacks of which are discussed in Fenwick 2021.

Variable	*Measure*	*N*	*Mean*	*SD*	*Source*
Socioeconomic					
University (Dummy)	Respondent reports having higher-level degree (Degree = 1)				ESS (2016)
Income feeling	Respondent's subjective financial satisfaction				ESS (2016)
Unemployment (Dummy)	Ever unemployed and seeking work for a period more than three months (Yes=1)				ESS (2016)
Job insecurity	Respondent's self-reported likelihood of becoming unemployed and looking for work within the next 12 months for at least four consecutive weeks on a 4-point scale (Very unlikely=1; Very likely=4)				ESS (2016)
Union membership	Respondent reports (ever) being a member of a trade union or similar organisation				ESS (2016)
Sociocultural					
Ideological position	Self-reported placement on a 11-point scale (1=left; 10=right)				ESS (2016)
Religiosity	Self-reported religiosity on an 11-point scale				ESS (2016)
Contextual					
Log of GDP per capita	GDP per capita, constant prices & OECD base year – 2010				OECD (2017c)
Unemployment rate	The share of the labour force that is without work but available for and seeking employment				World Bank (2017)
Social spending as a % of GDP	Aggregated social expenditures as a percentage of GDP				OECD (2017d)

5.5 Empirical Analysis

Table 5.2 displays the multilevel ordered logit models for the dependent variable 'the government should take steps to reduce differences in incomes' indicating general attitudes towards redistribution. It presents six different mixed effects models, I first introduce a model using only micro-level factors and build up to including several contextual-level factors, testing the two different immigration indicators both separately and together, as well as testing an alternative control for welfare state generosity. The coefficients represent the log-odds of being in a higher category of the dependent variable relative to all lower categories. For example, a positive and significant coefficient indicates that as the independent variable

increases, the log-odds of choosing a higher category (greater support for redistribution) also increases.

Model 1 shows the results for a full range of micro-level factors that are considered important influences on an individual's attitude towards redistribution. I find a number of results for the control variables that are consistent with previous literature (Burgoon et al., 2012). For example, having experienced a spell of unemployment lasting three months or more means an individual is more likely to agree with the statement above, while having a right-leaning ideology means that one is more likely to disagree with the statement. Additionally, if you are female, you are more likely to agree, while feeling financially well-off means that you are more likely to disagree. Importantly, the analysis finds a significant and positive association between job insecurity and preferences for redistribution. Consequently, when an individual expresses job insecurity, then the log-odds of being in a higher category/more supportive of government redistribution increase versus those who feel more job secure. The effects of the control variables stay consistent across all the Models in Table 5.2.

In Model 2, I add three macro-level controls to test what contextual level variables play a role in affecting attitudes towards redistribution. The analysis shows that GDP per capita and the unemployment rate are key influences on attitudes towards redistribution and that they have opposite effects. GDP per capita is statistically significant and negative, suggesting that on average individuals in richer countries are more likely to disagree with the statement, aligning with earlier literature which finds that demand for redistribution reduces as economic prosperity increases (Dallinger, 2010). In addition, individuals in countries with higher levels of unemployment are more likely to agree with the statement. This result continues to provide evidence towards the idea that job insecurity can influence individual attitudes towards redistribution. On average, a poorer country with higher unemployment, which is suggestive of more uncertainty in the labour market, will be more supportive of the concept of redistribution. In addition, social spending is not associated with attitudes on redistribution, despite previous researchers hypothesising that a country with higher levels of spending or generosity garners more support for redistribution. As a robustness test to check whether the problem is the operationalisation of 'generosity', I utilise the unemployment replacement rate (Model 3) and find no change. The coefficient for the welfare state remains insignificant and there are no changes to any of the other independent variables. Moreover, the significant result for job insecurity remains after including the contextual level controls. Moving forward, religiosity and generosity are dropped from the specifications as they are consistently insignificant and do not affect the other results when excluded.

Table 5.2: Immigration and Redistribution

Model number:	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Title:	*Full micro*	*Full Macro*	*Welfare State Test*	*Foreign-Born*	*CEE*	*Foreign-Born + CEE*
Model Method:	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*
Dependent:	*Redistribution*	*Redistribution*	*Redistribution*	*Redistribution*	*Redistribution*	*Redistribution*
Age	0.01***	0.01***	0.01***	0.01**	0.01**	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female	0.20***	0.20***	0.20***	0.19***	0.19***	0.19***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Foreign-born	–0.04	–0.03	–0.03	–0.05	–0.05	–0.05
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
University degree	–0.23***	–0.23***	–0.23***	–0.22***	–0.22***	–0.22***
	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Income feeling	–0.26***	–0.26***	–0.26***	–0.26***	–0.26***	–0.26***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Job insecurity	0.15**	0.15**	0.15**	0.15**	0.15**	0.15**
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Unemployment	0.21***	0.20***	0.20***	0.21***	0.21***	0.21***
spell	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Trade union	0.27***	0.27***	0.27***	0.27***	0.27***	0.27***
member	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left-right scale	–0.20***	–0.21***	–0.21***	–0.21***	–0.21***	–0.21***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)
Religiosity	–0.01	–0.01	–0.01			
	(0.01)	(0.01)	(0.01)			
GDP per capita$_{t-1}$		–0.86**	–0.85***	–1.21**	–1.20**	–1.60***
		(0.43)	(0.32)	(0.48)	(0.50)	(0.51)
Unemployment		0.03**	0.03**	0.03**	0.02	0.02
rate$_{t-1}$		(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Social Spending$_{t-1}$		0.00				
		(0.02)				
Unemployment			0.00			
replacement rate$_{t-1}$			(0.00)			
Foreign-born$_{t-1}$				0.02**		0.02**
				(0.01)		(0.01)
CEE Labour					0.04	0.04
Migration					(0.03)	(0.03)
Cut 1	–5.46***	–14.25***	–13.92***	–17.78***	–17.86***	–21.76***
	(0.11)	(4.88)	(3.41)	(4.98)	(5.32)	(5.37)
Cut 2	–3.50***	–12.29**	–11.96***	–15.82***	–15.90***	–19.80***
	(0.11)	(4.86)	(3.41)	(4.98)	(5.31)	(5.36)
Cut 3	–2.47***	–11.26**	–10.92***	–14.79***	–14.87***	–18.77***
	(0.11)	(4.85)	(3.40)	(4.96)	(5.30)	(5.36)
Cut 4	–0.25*	–9.04*	–8.71**	–12.57**	–12.65**	–16.55***
	(0.14)	(4.83)	(3.40)	(4.97)	(5.29)	(5.34)
N	15549	15549	15549	15549	15549	15549
Clusters	13	13	13	13	13	13
Log pseudolikelihood	–19263.28	–19256.58	–19256.10	–19258.36	–19258.20	–19256.95

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

In Model 4, I test the direct relationship between foreign-born as a percentage of the population and attitudes towards the welfare state through including the indicator in our main model. The analysis finds that the general indicator of migration has a direct association with preferences for redistribution, higher levels of foreign-born increase the likelihood of supporting redistribution. Model 5 tests the indicator for CEE labour migration and finds no effect and Model 6 combines the two indicators to ensure that any result in Model 5 is not as a result of excluding an indicator for general level of immigration. In both Models, CEE labour migration is insignificant, there is no direct influence of this specific type of migration on attitudes towards redistribution. However, it is possible that this type of migration may influence a different part of the causal mechanisms of the compensation hypothesis, or that there is an indirect influence through the unemployment rate, presented in Table 5.3.

Table 5.3 presents the marginal effects of our two migration indicators when interacted with the unemployment rate. Model 7 presents the results for foreign-born interacted with the unemployment rate and excluding GDP per capita (due to concerns about degrees of freedom), while Model 8 reintroduces GDP per capita as a robustness test. I follow the same procedure for CEE labour migration, Model 9 excludes GDP per capita while Model 10 includes it. In Model 11 I include both migration indicators. For foreign-born as a percentage of the population, there seems to be a minor relationship using the interaction variable, however this does not hold up when GDP per capita is reintroduced. For CEE labour migration, this interaction with unemployment appears to be more important.

The analysis finds that at high levels of CEE labour migration and unemployment that there is a moderating effect on preferences for redistribution – the coefficient for CEE labour migration is positive while the interaction is negative. This suggests that an individual's concerns for compensation may only extend so far and that beyond a certain limit or threshold of immigration and unemployment, then there are alternate mechanisms (e.g. anti-solidarity, symbolic and/or economic threat) driving preferences. It may be that the compensation hypothesis cannot explain attitudes in EU states that have high levels of both CEE labour migration and unemployment – although this combination is rare. To explore this in more detail I plot marginal effects graph for Model 9 (see Figure 5.2).

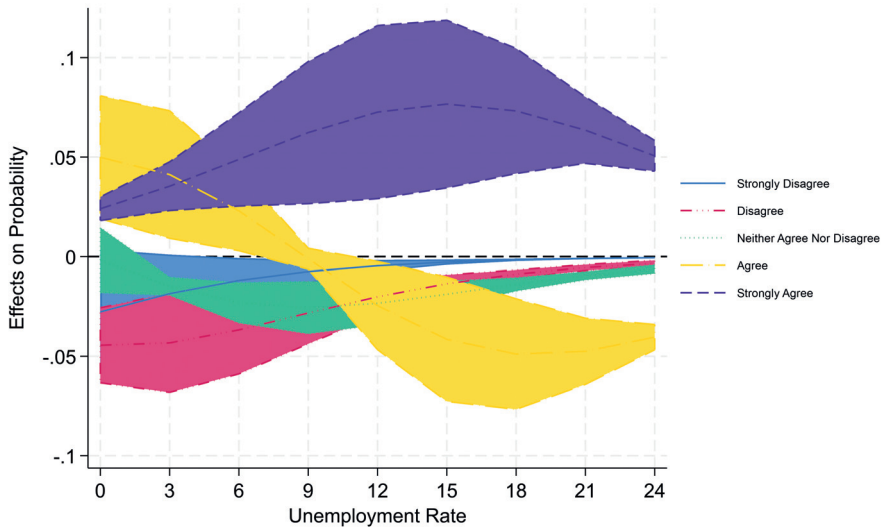
Table 5.3: The Marginal Effects of Foreign-Born and CEE Labour Migration

Model number:	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*
Title:	*Foreign-born & Unemployment*	*Foreign-born & Unemployment + GDP per capita*	*CEE migration & Unemployment*	*CEE migration & Unemployment + GDP per capita*	*CEE migration, Foreign-born & Unemployment*
Model Method:	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*	*Ordered Logit*
Dependent:	*Redistribution*	*Redistribution*	*Redistribution*	*Redistribution*	*Redistribution*
Age	0.01**	0.01**	0.01**	0.01**	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female	0.19***	0.19***	0.19***	0.19***	0.19***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Foreign-born	–0.05	–0.05	–0.05	–0.05	–0.05
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
University degree	–0.22***	–0.22***	–0.22***	–0.22***	–0.22***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Income feeling	–0.26***	–0.26***	–0.26***	–0.26***	–0.26***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Job insecurity	0.15**	0.15**	0.15**	0.15**	0.15**
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Unemployment spell	0.21***	0.21***	0.21***	0.21***	0.21***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Trade union member	0.27***	0.27***	0.27***	0.27***	0.27***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left-right scale	–0.21***	–0.21***	–0.21***	–0.21***	–0.21***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
GDP per capita$_{t-1}$		–1.07**		–0.50	
		(0.49)		(0.52)	
Unemployment rate$_{t-1}$	0.17**	0.07	0.17***	0.13**	0.18***
	(0.07)	(0.05)	(0.04)	(0.05)	(0.04)
Foreign-born$_{t-1}$	0.06*	0.04			0.00
	(0.03)	(0.02)			(0.01)
Foreign-born X	–0.01**	–0.00			
Unemployment rate	(0.00)	(0.00)			
CEE labour migration			0.34***	0.27**	0.35***
			(0.11)	(0.11)	(0.11)
CEE labour migration X			–0.04***	–0.03**	–0.04***
Unemployment rate			(0.01)	(0.01)	(0.01)
Cut 1	–4.23***	–15.96***	–3.86***	–9.50*	–3.78***
	(0.51)	(5.23)	(0.42)	(5.73)	(0.47)
Cut 2	–2.27***	–14.00***	–1.90***	–7.53	–1.82***
	(0.54)	(5.24)	(0.41)	(5.68)	(0.45)
Cut 3	–1.24**	–12.97**	–0.86**	–6.50	–0.78*
	(0.56)	(5.24)	(0.43)	(5.68)	(0.47)
Cut 4	0.98*	–10.75**	1.35***	–4.28	1.43***
	(0.59)	(5.26)	(0.46)	(5.68)	(0.50)
N	15549	15549	15549	15549	15549
Clusters	13	13	13	13	13
Log pseudolikelihood	–19260.36	–19258.18	–19256.94	–19256.44	–19256.88

Standard errors in parentheses
* $p < .1$, ** $p < .05$, *** $p < .01$

Figure 5.2 displays the average marginal effects of CEE labour migration on the probability of the five outcomes at different levels of unemployment with 95% confidence intervals. From the graph, one can see that the marginal effects matter most regarding the probability of 'agreeing' with the statement regarding redistribution. At higher levels of unemployment and CEE labour migration the average probability of responding with 'agree', all else remaining equal, is significantly reduced. The initial effect suggests some evidence in favour of the compensation hypothesis, but then at high levels of CEE labour mobility and unemployment the relationship becomes negative. It may be that individuals in a more unstable economic environment, high levels of unemployment are generally associated with downturns in the economy, are somewhat more concerned about the financial burden on the welfare state. For the other outcomes, there are no significant changes.

Figure 5.2: Average Marginal Effects of CEE Labour Migration with 95% Cis



5.6 Additional Checks

For examining how attitudes towards social policy are influenced by foreign-born and CEE labour migration, I also test some related variables alongside our main analysis that may help identify the mechanisms behind our hypotheses. I follow the example set by Burgoon et al., 2012 and present a similar table (Table 5.4) where the headline results for the two indicators of immigration are presented for each dependent variable. I explore six related dependent variables to help understand the nuanced relationships between immigration and attitudes towards social policy: (1) subjective unemployment risk, (2) welfare chauvinism, (3) fiscal efficiency, (4) subjective poverty risk, and (5) the likelihood of voting yes to leaving the EU.

Table 5.4: Additional checks for Foreign-born and CEE labour migration

Dependent	Foreign-born		CEE Labour Migration	
	Expected	*Actual*	*Expected*	*Actual*
Subjective unemployment risk	Neutral to Positive	0.02** (0.01)	Neutral to Positive	–0.03 (0.03)
Chauvinism	Neutral to Positive	–0.05*** (0.02)	Neutral	–0.01 (0.06)
Social benefits are a strain on the economy	Neutral to Positive	0.02 (0.02)	Neutral	0.05 (0.06)
Subjective poverty risk	Neutral to Positive	0.001 (0.02)	Neutral to Positive	0.09* (0.05)
Leave EU	Neutral	–0.02 (0.02)	Strong Positive	0.03 (0.07)

Each row is a different dependent variable, and the columns depict the expected and actual results for foreign-born and CEE labour migration, respectively. Not shown are the control variables, which follow the standards set in this article's previous models. Standard errors are in parentheses.
* $p < .1$, ** $p < .05$, *** $p < .01$

For subjective unemployment risk, the coefficient for foreign-born is positive and statistically significant, indicating that increases in the percentage of foreign-born is associated with a higher perceived risk of unemployment. This result echoes findings from Burgoon et al. (2012) and Dustmann and Preston (2007), which contend that an increase in foreign-born residents can heighten concerns about job security among native populations. In contrast, the effect of CEE labour migration on subjective unemployment risk is not statistically significant. This suggests that the impact of CEE labour mobility on perceived unemployment risk is less pronounced or potentially moderated by other factors.

Contrary to expectations, I find that the relationship between foreign-born and welfare chauvinism is negative and significant, suggesting that foreign-born immigration is associated with reduced support for exclusive welfare benefits for natives. Our findings align with Burgoon et al. (2012) who observed that increased interaction with immigrants could lead to improved intergroup relations and reduced exclusivity in welfare support. Similar to Cappelen and Peters (2017) who find that countries with greater intra-EU mobility have lower levels of welfare chauvinism, I do not find a statistically significant relationship between CEE labour mobility and welfare chauvinism.

For social benefits as a strain on the economy; both foreign-born and CEE labour migration show non-significant effects on the perception that social benefits strain the economy. The non-significant effects of both foreign-born and CEE labour migration on perceptions of social benefits as a strain on the economy support the idea that immigration's impact on perceptions of the sustainability of the welfare state may not be as pronounced as often

suggested. It may be that other factors, such as economic conditions and the level of generosity of social policies, might be more important for determining these perceptions.

On the other hand, CEE labour mobility has a positive and significant association with subjective poverty risk. This finding aligns with the hypothesis that CEE labour mobility might exacerbate concerns about wealth and poverty, reflecting concerns regarding greater competition for economic resources aligning with Dustmann et al. (2010), who found that specific types of migration could heighten concerns about poverty and economic resources. However, there is no effect for foreign-born on subjective poverty risk.

Finally, neither indicator for immigration is associated with a greater likelihood of voting to leave the EU, which suggests that other factors, such as broader political sentiments and economic conditions, might play a more critical role in shaping EU exit preferences and that migration alone and immigration may not be as decisive a factor in Eurosceptic attitudes as previously thought. This resonates with Colantone and Stanig (2018) who also find no association between immigration and support for Leave but instead show that the vote for Leave was higher in regions hit harder by economic globalisation and driven by the general economic situation of their region and absence of effective compensation.

Next, in Table 5.5 the dependent variable is the degree to which an individual expresses job insecurity (the first assumption in the compensation hypothesis) and I use the same explanatory variables as in the main analysis in order to explore which micro-level factors are important for predicting job insecurity. Model 12 presents an ordered logit model with support for redistribution as the dependent variable and Models 13-16, using the same sample as Model 12 for ease of comparison, all show logit models with subjective job insecurity as the dependent variable. There are some key differences between the two dependent variables, such as those who are younger are more likely to express greater levels of job insecurity than those who are older, whereas age is not such a crucial factor for determining preferences for redistribution. This is unsurprising, as often levels of youth unemployment are double that of the general population. Moreover, while being foreign-born has no influence on whether your likelihood of agreeing with the statement on redistribution, it is an important predictor of whether or not someone is likely to express job insecurity. Again, this is reflected in the fact that the foreign-born population usually have higher rates of unemployment than the native-born. Furthermore, in Model 16 the analysis shows that general levels of immigration, as measured by foreign-born as a percentage of the population, have a positive and significant association with job insecurity. When levels of foreign-born are higher, individuals are more likely to express feelings of job insecurity. In Table 5.5, the analysis finds that general levels of immigration, as measured by foreign-born as a percentage of the

population, are more important for understand changes in subjective job insecurity than the more specific indicator for CEE labour mobility.

Table 5.5: Immigration and Job Insecurity

Model number:	*(12)*	*(13)*	*(14)*	*(15)*	*(16)*
Title:	*Restricted sample*	*Base line*	*Foreign-born*	*CEE*	*CEE+*
Model:	*Ordered Logit*	*Logit*	*Logit*	*Logit*	*Logit*
Dependent:	*Redistribution*	*Insecurity*	*Insecurity*	*Insecurity*	*Insecurity*
Age	0.00	–0.02***	–0.02***	–0.02**	–0.02**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female	0.21***	0.05	0.05	0.05	0.05
	(0.05)	(0.09)	(0.09)	(0.09)	(0.09)
Foreign-born	–0.06	0.53***	0.52***	0.53***	0.52***
	(0.06)	(0.14)	(0.14)	(0.14)	(0.14)
University degree	–0.22***	–0.13	–0.13	–0.13	–0.13
	(0.07)	(0.08)	(0.09)	(0.08)	(0.09)
Income feeling	–0.28***	–0.64***	–0.64***	–0.64***	–0.64***
	(0.03)	(0.05)	(0.06)	(0.05)	(0.05)
Unemployment spell	0.18**	0.84***	0.84***	0.84***	0.84***
	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)
Trade union member	0.25***	–0.10	–0.09	–0.10	–0.10
	(0.04)	(0.11)	(0.11)	(0.11)	(0.11)
Left-right scale	0.29***	–0.03	–0.03	–0.03	–0.03
	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)
GDP per capita$_{t-1}$	–0.24***	0.68***	0.23	0.83**	0.44*
	(0.03)	(0.22)	(0.17)	(0.34)	(0.24)
Unemployment	–0.01	0.08***	0.08***	0.08***	0.08***
rate$_{t-1}$	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social Spending$_{t-1}$					
Unemployment		0.01			
replacement rate$_{t-1}$		(0.00)			
Foreign-born$_{t-1}$			0.02**		0.02**
			(0.01)		(0.01)
CEE Labour				–0.03	–0.02
Migration				(0.03)	(0.02)
N	11434	11458	11458	11458	11458
Clusters	13	13	13	13	13
Log Likelihood	–14487.071	–4074.3329	–4074.1771	–4074.7685	–4073.9249

Overall, these results indicate that different forms of migration have varying impacts on attitudes towards social policy. The differential effects underscore the complexity of migration's influence on public opinion, highlighting the importance of considering the specific characteristics of migrant groups when analysing policy attitudes and emphasising the need for tailored policy responses that address the diverse concerns of different populations.

5.7 Conclusion

This paper aims to contribute to the growing literature on immigration and social policy preferences through exploring how immigration is related to attitudes towards redistribution. Using multilevel ordered logit models to include both micro- and macro-level factors and two different measures for immigration (foreign-born as percentage of the population to test the effect of general level of immigration and Central and Eastern European labour mobility), the paper finds somewhat varied results between these two different migration indicators.

Similar to Cappelen and Peters (2017, 2018) and Brady and Finnigan (2014), the analysis finds a positive and significant relationship between general levels of immigration and support for redistribution, suggesting that there may indeed be some evidence in favour of the compensation hypothesis and intergroup contact theory (more frequent contact with the out-group can increase tolerance, reduce prejudice, and diminish anti-immigrant sentiments). Consequently, a larger share of immigrants in a population could decrease perceived group threat and reduce the likelihood of exclusionary or retrenchment social policy preferences. Supporting this theory, when the dependent variable is replaced with an indicator for welfare chauvinism, I find a negative association, suggesting that at higher levels of immigration, people are less likely to support ring-fencing benefits, contrary to the expectations of some of the literature (e.g., Eger and Breznau, 2017; Negash and van Vliet, 2024; van der Meer and Reeskens, 2021). Moreover, the analysis finds that foreign-born as a percentage of the population does not significantly affect perceptions of social benefits as a strain on the economy or subjective poverty risk.

When the CEE labour mobility is tested in the analysis, there is no significant, direct effect on preferences for redistribution. However, the analysis of interaction effects reveals that CEE labour mobility is more complexly linked to preferences for redistribution. At higher levels of unemployment and CEE labour mobility the average probability of responding with 'agree' to the idea that government should take steps to reduce inequality, all else remaining equal, is significantly reduced. The initial effect of CEE labour mobility is positive suggesting some evidence in favour of the compensa-

tion hypothesis, but then I find that at high levels of CEE labour mobility and unemployment the relationship becomes negative. It may be that individuals in a more unstable economic environment are somewhat more concerned about the financial burden on the welfare state. Furthermore, CEE labour mobility shows a positive association with perceived poverty risk (as CEE labour migration increases, so does an individual's belief that they may not be able to cover household necessities) but does not significantly affect welfare chauvinism or perceptions of social benefits as a strain on the economy. The possibility that multiple mechanisms are at work resonates with Naumann and Stoetzer (2017) who argue that the effect of immigration on attitudes towards the welfare state varies across groups within society.

When the analysis breaks down the compensation hypothesis into its two component parts: (1) that increased mobility increases individual job insecurity and (2) increased job insecurity in turn increases preferences for redistribution, it finds evidence that increased mobility does increase individual job insecurity and a positive association between job insecurity and support for redistribution. This aligns with previous research (e.g., Burgoon et. al, 2012, Hellwig and Sinno, 2017), reinforcing the idea that personal economic vulnerability drives greater support for redistributive policies and that CEE labour mobility especially may prompt economic concerns for individuals.

Ultimately, these findings continue to support the idea that broader economic conditions play a crucial role in shaping attitudes towards income redistribution (e.g., Burgoon and Rooduijn, 2021) and immigration may only somewhat modify some of these already well-established relationships (e.g., Walter, 2010). In addition, this analysis contributes to the broader debate on migration and redistribution by underscoring the nuanced impacts of different types of migration and economic conditions on public opinion. The results challenge simplistic views of migration's impact on welfare state attitudes and highlight the importance of considering both direct and indirect effects. The interaction findings indicate that while migration might influence redistribution preferences, this relationship is mediated by broader economic conditions, particularly unemployment. By advancing our understanding of these dynamics, this chapter contributes valuable evidence to inform policymakers and contribute to a more nuanced public debate on immigration and social policy, highlighting the importance of considering specific migration patterns and contextual factors when addressing migration-related policy challenges. Additionally, the mixed results emphasise the need for a more refined understanding of migration's impacts, particularly by considering both the type of migration and the broader socio-economic context.

6 Conclusion

This dissertation aims to answer the overarching research question: "to what extent does immigration structurally and conceptually challenge the boundaries of welfare states in Europe?" through a collection of four comparative political economy essays. I address long-standing debates on whether increasing migration leads to welfare state retrenchment or expansion and provide an in-depth, empirical analysis of the complex and nuanced relationship between immigration and welfare states in European countries. The findings from these four chapters offer important conclusions about the resilience of European welfare states in the face of increasing immigration. This chapter is structured as follows: first, by providing a summary of the four previous chapters, their main conclusions and how they are interlinked, followed by some policy considerations, and then by identifying some areas for further research.

6.1 Chapter Conclusions

Chapter 2 sets out to present the broad trends and associations between immigration and welfare state generosity in Europe. It tests the relationship between stocks of immigrants, as measured by the proportion of the population that is foreign-born, and welfare state effort, as measured by social welfare spending as percentage of GDP and a welfare generosity index, a composite indicator developed by Scruggs et al. (2014). It contributes to the comparative political economy literature on welfare states and migration by expanding the definition of welfare state effort through including an index of generosity as a direct comparison to welfare state spending. The contrast between these two measures highlights a key challenge in welfare state research: expenditure alone does not always capture policy generosity (Scruggs, 2006) and fulfils the need to consider alternative dimensions of welfare policy by incorporating both social spending as a percentage of GDP and a welfare generosity index and thus providing a more nuanced view of welfare state effort.

Through using pooled cross-sectional time-series analyses, the results indicate that immigration has a neutral to positive association with welfare state effort in Europe. Social welfare spending is positively and significantly associated with foreign-born and when social welfare spending is exchanged for a welfare generosity index then no statistically significant relationship

is found. Moreover, after a number of robustness tests, including the use of an instrumental variable to account for reverse causality, the findings remain consistent. Accordingly, I find no evidence to suggest that increasing immigration leads to the retrenchment of the welfare state, despite earlier claims that increasing heterogeneity in Europe would lead to cut-backs in generosity (Alesina et al., 2001; Alesina & Glaeser, 2004; Alesina et al., 2019; Borjas, 1999; Collier, 2013; Freeman, 1986).

The results support the ideas of the embedded liberalism thesis (Ruggie, 1982) and the compensation hypothesis (Rodrik, 1998; Walter, 2010), which in the case of the former posits that immigration can create a need to deliver compensatory welfare policies in order to garner support for more open economic policies or, in the case of the latter, increase the demand for them rather than diminish welfare state support or generosity to mitigate the risks of more open policies. This provides comparable results to more recent research that finds evidence of a neutral or compensatory effect of immigration on welfare state effort and contributes to a growing body of literature that challenges the notion that immigration necessarily leads to welfare state retrenchment (e.g., Gaston and Rajaguru, 2013; Lipsmeyer and Zhu, 2011; Römer, 2023; Taschwer, 2021), thus providing an important contribution to existing knowledge on the political economy of immigration and welfare, as well as the wider political debate.

Chapter 3 aims to explore in greater depth the currently available data on immigration and identifies some key gaps in its coverage. First, the chapter draws attention to the lack of harmonised definitions across countries, even within the EU. Different countries define migrant stocks (total immigrant population at a given time) and flows (new entries and exits) differently. For example, most countries use country of birth to identify migrants but some, such as Germany, use nationality instead meaning that the stock of migrants identified is slightly lower as immigrants that have nationalised will not be counted in the statistics. Second, irregular migration remains difficult to track and measure because of clandestine crossings, visa overstays, and lack of registration. Moreover, asylum seekers whose claims have been rejected may become irregular migrants as removing these individuals once they have already arrived can be expensive or their country of origin may refuse to receive them. Data on the number of irregular migrants in the EU can range widely as the statistics are often based on extrapolations from enforcement data or surveys rather than systematic counts. Third, while inflows of immigration are reasonably well recorded, outflows of emigration are typically not well recorded. EU free movement makes tracking emigration outflows especially difficult, as many migrants leave without de-registering from population registries. Fourth, there is very little data on circular or seasonal migration as these short-term forms of mobility are difficult to track, especially across the Schengen zone as there is little incentive to register and deregister from population registries. Fifth, most migration

statistics focus on national-level trends, but there is a lack of regional-level data, so areas that receive disproportionate numbers of migrants find that this more granulated information is obscured by the aggregate statistics.

Similarly, there is a lack of disaggregated immigration data based on the type of movement, such as labour migration, family reunification, students, etc. For the EU, and despite the high economic importance and increasing political salience of intra-EU labour mobility, high quality and detailed data on stocks and flows of this particular movement is lacking, hindering research on this subject. I highlight that, despite the EU's principle of free movement, inconsistencies in data collection and reporting across member states hinder accurate measurement of intra-EU labour migration. As such, Chapter 3 aims to fill this specific gap and details the creation of indicators for intra-EU labour mobility for 16 European countries, from 2004 to 2016, using the EU-LFS.

Moreover, through untangling pre-2004 member states from post-2004 member states, this chapter maps the different trends between the two groups of labour migrants, showing that labour mobility from the pre-2004 expansion member states remains stable (no major increases or decreases in stocks of migrants), while the stock of labour migrants from post-2004 expansion member states has been steadily increasing over the time period. This data is essential for contributing to improving the availability of more specific migration statistics, as well as understanding labour market dynamics within the EU for the evaluation and development of EU and national labour migration policy. However, this chapter still emphasises the need for harmonised definitions and methodologies across EU countries to improve the reliability of EU migration statistics.

Chapter 4 utilises the data developed in the previous chapter and looks at the implications that more specific indicators of immigration have on welfare state effort. The theoretical section of the Chapter outlines two theories from the globalisation literature and applies them in the context of migration. First, the embedded liberalism theory argued initially by Ruggie (1982) that for elites to maintain an open international economic order, governments need to provide a certain level of social protection to safeguard citizens from the risks brought about by globalisation. Whereas the efficacy hypothesis argues that due to fiscal pressures arising from globalisation, governments seek to reduce welfare state effort in order to reduce the fiscal burden and stay competitive globally. We argue that both these theories are applicable to increasingly open borders as governments must make choices whether to support citizens from increased competition on the labour market, which could lead to either reduced wages, a higher likelihood of unemployment, and more difficulty becoming employed, or if immigrants are a (perceived) burden on the welfare state, then the decision might be to retrench the welfare state to ease budgetary pressure.

This chapter builds on Chapter 2 by narrowing the scope to focus on intra-EU labour mobility and by disaggregating welfare state effort further. Specifically, it distinguishes between Western European (WE) labour mobility and Central and Eastern European (CEE) labour mobility, two previously unmeasured categories of movement, in order to ask do these two groups of labour migrants have differing effects on welfare state effort? Furthermore, welfare state spending is disaggregated into five component parts (old age, incapacity, family, active labour market policies, and unemployment spending) and complemented with two replacement rates (unemployment and social assistance). The study is a cross-comparative analysis of 16 European countries, and results show that CEE labour mobility is positively and significantly associated with the social benefit subdomains of incapacity, family, and unemployment spending. For WE labour migrants, we do not find any significant results except for family spending, but this is only at the 10 percent level of significance. For other immigrants, measured as the foreign-born population, we find positive and significant results across almost all spending categories. Furthermore, labour migrants from CEE member states are positively and significantly associated with the unemployment replacement rate and the social assistance replacement rate. In contrast, there is no statistically significant effect of WE labour migrants on either the unemployment replacement rate or the social assistance replacement rate, and foreign-born is only positively and significantly associated with social assistance replacement rates. When we consider programme design, such as whether a benefit is contributory or non-contributory/targeted or universal, we do not find any patterns that would provide clear evidence that that is an important contributory factor. However, it may be that other dimensions of generosity are more likely to be affected (such as access) in light of increasing immigration and were these aspects to be under study, then the conclusions drawn may differ. Moreover, there may be multiple mechanisms at work. For example, a universal programme may be more at risk of retrenchment because of the fiscal pressure that more beneficiaries cause, but equally it may have a larger support base in order to protect it from cuts because ultimately anyone can be a beneficiary.

Several studies show that public attitudes toward immigration depend on criteria such as perceptions of economic and cultural compatibility (Hainmueller & Hopkins, 2014), which may explain why CEE migrants (often lower wage) drive compensatory welfare increases, whereas Western European migrants (potentially seen as more economically similar) do not. In addition, as we find increases in replacement rates and not just social spending, migration flows may not just increase total spending but reshape welfare priorities. Finally, our findings of a compensatory effect considering increasing mobility across the EU, complement the evidence presented in Chapter 2. This Chapter shows that the type of movement and the type of social protection programme is important for better understanding how immigration reshapes the boundaries of the welfare state.

Chapter 5 seeks to test the micro-level foundations of the macro-level trends the previous chapters have uncovered through exploring how immigration is related to attitudes towards redistribution. I use multilevel ordered logit models to include both micro- and macro-level factors and two different measures for immigration (foreign-born as percentage of the population to test the effect of general level of immigration and Central and Eastern European labour mobility) and find somewhat varied results between these two different types of migration. I find a positive and significant relationship between general levels of immigration and support for redistribution, suggesting some evidence in favour of welfare state expansion over retrenchment. Previous research has found that a larger share of immigrants in a population can decrease perceived group threat, which is the feeling that an outgroup (such as immigrants) might threaten the ingroup's own interests and thus reduce the likelihood that the ingroup would express a preference for social policies that either seek to exclude (i.e. welfare chauvinism) or retrench the welfare state as whole (Cappelen & Peters 2017). Indeed, when I test welfare chauvinism in the analysis, I find a negative association between foreign-born and the likelihood of expressing exclusionary social policy preferences.

When the CEE labour mobility is tested in the analysis, there is no significant, direct effect on preferences for redistribution. However, when interacting CEE labour mobility with the unemployment rate, this reveals that CEE labour mobility is more complexly linked to preferences for redistribution. The initial effect of CEE labour mobility is positive, suggesting some evidence in favour of the compensation hypothesis, but at higher levels of unemployment and CEE labour mobility the average probability of agreeing with the concept that government should take steps to reduce inequality, all else remaining equal, is significantly reduced. This finding highlights how context conditions welfare attitudes. It may be that individuals in a more unstable economic environment with high immigration and high unemployment are more concerned about the financial burden on the welfare state. Some previous research suggests that when economic conditions worsen (e.g., rising unemployment), concerns about welfare sustainability or government spending more generally can increase, particularly if immigration is perceived as an additional strain on public spending (Burgoon & Rooduijn, 2021). Although, when I test the link between CEE labour mobility on perceptions of social benefits as a strain on the economy, I find no effect.

Nevertheless, these findings continue to support the idea that broader economic conditions play a crucial role in shaping attitudes towards income redistribution (Alesina & Giuliano, 2011; Hacker et al., 2013; Hays et al., 2005; Jaime-Castillo & Sáez-Lozano, 2016; Pontusson & Rueda, 2010) and that immigration may only somewhat modify some of these already well-established relationships. Subsequently, after breaking down the

compensation hypothesis into its two component parts: (1) that increased mobility increases individual job insecurity and (2) increased job insecurity in turn increases preferences for redistribution, I find that increased mobility increases individual job insecurity and job insecurity increases the likelihood of supporting redistribution, reinforcing the idea that personal economic vulnerability drives greater support for redistributive policies (Hacker et al., 2013; Häusermann et al., 2015; Margalit, 2013; Meltzer & Richard, 1981; Rehm, 2009; Walter, 2010, 2017).

Taking all the chapters together, this dissertation contributes to the theoretical debate around how immigration can be expected to alter the welfare state through showing empirically that immigrant origins matter for welfare state responses and by challenging assumptions that migration weakens the welfare state or undermines welfare support. This dissertation interprets associations with increased spending or replacement rates not as evidence of strain, but potentially as policy responses to compensation mechanisms especially as there is no association found between increased immigration and the generosity index. Furthermore, this dissertation demonstrates the importance of not only disaggregating the dependent variable – welfare state effort – into its component programmes, as done in the previous literature (e.g., Gaston & Rajaguru, 2013; Lipsmeyer & Zhu, 2011; Römer, 2023; Soroka et al., 2016; Taschwer, 2021) but also disaggregating the independent variable – immigration – into the various subcategories that make up the whole. Moreover, this dissertation supports a more conditional perspective, such as that economic conditions or inclusive institutions may help sustain welfare generosity despite rising diversity.

However, as with all observational research, this dissertation has certain limitations. First, there are inherent challenges in establishing any kind of causal inference. While the analyses identify robust associations between immigration and welfare generosity, these are associations and not causality. In addition, the potential for endogeneity through reverse causality or omitted variable bias – remains a key limitation. I attempt to account for these factors by using econometric methods such as an instrumental variable approach, lagged independent variables, or by including a wide-range of controls, but there is always the possibility that it is not enough to be considered fully exogenous.

6.2 Policy Implications

For policymakers, these results should help shed light on a polarised debate frequently influenced by implicit biases and prejudices related to race and difference. A key takeaway is that immigration does not necessarily pose a threat to welfare states in Europe. Instead, it is possible for welfare states to maintain or even enhance their levels of social protection despite, or

because of, increasing immigration. This finding challenges the concern that immigration leads to a 'race-to-the-bottom' in welfare provision and increasing immigration should not mean that policymakers need to reduce benefit levels below that of their neighbouring countries when drawing up their own welfare policies. Instead, policymakers can focus on collaboration and cooperation with their neighbours for goals such as understanding best practice, setting minimum social standards and converging social policies such as in the case of European integration.

Following the finding that immigration does not lead to welfare retrenchment but may instead foster support for redistribution, then policymakers should ensure that welfare policies remain robust and adaptable to demographic changes and that social welfare spending should be maintained or adjusted based on evidence-driven assessments rather than assumptions that increased immigration will necessarily strain public resources. In order to deliver better evidence-based policy, then data collection on migration should be improved. This means enhancing the quality, coverage and detail of data on stocks and flows of migrants, as well as distinguishing between different types of migrants, including migrant origins should be greatly improved. Quality individual-level surveys and access to administrative data for researchers, as well as improved migration tracking, can be used to close existing data gaps and better inform national and EU policies.

Given that higher levels of immigration may reduce exclusionary social policy preferences through psychological mechanisms such as intergroup contact, steps should be taken to improve public communication on immigration in areas with fewer migrants, so attitudes align more closely with those who are more exposed to immigration. For example, governments could look to improve public awareness of the economic and social contributions of migrants and foster community integration programs that encourage interaction between native and foreign-born populations with the aim of further reducing perceived group threats and social tensions, and to prevent negative attitudes toward redistribution in high-unemployment contexts.

Finally, the findings presented in this dissertation also indicate that while immigration might influence redistribution through changes in spending, generosity, and policy preferences, this relationship is mediated by broader economic conditions, particularly unemployment. Since CEE labour mobility is positively associated with feelings of job insecurity, consider policies that enhance job security and mitigate economic vulnerability while balancing economic competitiveness, such as active labour market policies that have been shown to support economic growth (Bação et al., 2024). For example, policies that increase and improve access to retraining programs and skill-building initiatives in high-demand sectors to improve employability.

By advancing understanding of these dynamics, this dissertation contributes valuable evidence to inform policymakers and contribute to a more nuanced public debate on immigration and social policy, highlighting the importance of considering specific immigration patterns and contextual factors when addressing migration-related policy challenges. Policymakers should take note of the evidence presented here to guide their decisions on immigration and welfare, ensuring that they continue to provide welfare policies while fostering solidarity and inclusion in the face of ongoing migration challenges.

6.3 Future Research

The findings of this dissertation contribute to existing knowledge on the comparative political economy of immigration and welfare, however there is still space for future research to consider further nuance and contribute to fine-tuning our understanding around these complex interactions.

First, as this dissertation shows, the effects of immigration on the welfare state likely depend on the type of migration. Consequently, the independent variable (immigration) should be further disaggregated into different types of migration, e.g., different forms of labour migration, family migration, refugees, or asylum seekers, in order to yield a more precise understanding of how various forms of immigration impact welfare state effort. For instance, I find that labour migration from CEE countries has a more pronounced positive association with welfare spending compared to migration from WE countries. Indeed, the literature seems to be headed in this direction with studies such as Cappelen et al. (2025) focusing on filling this gap, in this case specifically, they study Polish labour migrants and their link with rising welfare chauvinism. Moreover, the composition of migration flows may also have an effect. For example, if immigration is made up predominantly of labour migration, does this have a different effect if migration flows are mostly made up of individuals relocating for family reunification or retirement reasons?

Second, there is more room for understanding how welfare regimes and institutional contexts may mediate the relationship between immigration and social policy. I find a compensatory effect throughout this dissertation, but does this vary across welfare state models? Comparative research could further explore the potentially mediating role of different welfare regimes (e.g., Social-Democratic, Liberal, Conservative, Southern European, and post-Communist models) as countries with different welfare state designs may experience different policy outcomes in response to immigration. Some previous research suggests that more universalist welfare systems are more resilient to pressures from immigration versus more liberal systems, while others argue that the more progressive the system, the more vulnerable it

is to conflicts over *who gets what* (Beramendi & Rehm, 2016), but this needs further investigation.

In line with this, there is a need for better understanding on whether certain types of programme design (e.g., means-tested versus contributory welfare programs) are more, or less, resilient to the pressures of immigration or changes in public opinion. Means-tested programmes (e.g., social assistance, housing benefits) are more directly redistributive and often more politically contested. Research suggests that increased immigration can lead to concerns about "free-riding" and discussions around "deservingness", especially if immigrants are perceived as net beneficiaries rather than contributors. Future research could explore whether and how immigration affects the generosity of means-tested benefits across different welfare regimes or if public support for welfare declines more in countries with highly means-tested systems in response to immigration. Moreover, in response to increasing immigration it could be that welfare states shift toward more means-testing to control access and limit expenditures, or they may introduce more contributory elements to restrict immigrant access to welfare while maintaining support for natives. Contributory programmes (e.g., pensions, unemployment insurance) are based on prior contributions, which may make them vulnerable to welfare chauvinism as individuals are easier to exclude. Conservative welfare regimes that rely on contributory systems may limit immigrant access to social support, which could be of particular interest as it provides the space for welfare chauvinism mechanisms to play a role. This could be an interesting avenue for future research, although the data on the extent to which intra-EU migrants have access to welfare state programmes is limited. Even though this dissertation examines replacement rates in addition to social spending data, one limitation is that it does not focus on other institutional dimensions such as access to welfare state programmes. These questions need more empirical testing and would be interesting avenues for future research.

Furthermore, several political economy and rational-choice theories suggest the importance of the skill-level of migrants for having divergent influences on welfare state effort (e.g., Magni-Berton, 2014; Razin et al., 2002; Ruhs and Martin, 2006), and steps should be taken to test this empirically in a macro-level study. However, there are practical limitations concerning the availability of data to take into consideration in order to make such an analysis possible. In line with this, this dissertation underscores the need for better data on intra-European Union (EU) migration, in particular temporary and circular migration. While the European Union Labour Force Survey (EU-LFS) provides a useful dataset, it has limitations, especially in capturing short-term migration and seasonal labour flows. Addressing these data gaps would enhance future research, enable researchers to understand the effects of short-term and circular migration flows on the sustainability of

the welfare state and allow for more precise policy interventions related to labour mobility and social policy within the EU.

Future research could expand upon our understanding of how political and economic contexts mediate the relationship between immigration and the welfare state. For example, explore how political party competition, populism, and the framing of immigration in media discourse affect welfare state policies. Do right-wing populist parties drive retrenchment, and under what conditions (e.g., high- and low-immigration contexts), or does their rise paradoxically lead to more generous welfare policies to mitigate public discontent? Some scholars (e.g., Koopmans, 2009; Larsen and Dejgaard, 2013; Reeskens and van Oorschot, 2012; van Oorschot, 2006) argue that political rhetoric, the depiction of welfare recipients or the perception of migrants influence whether welfare states retrench or expand. Future work could explore whether countries with populist or anti-immigrant governments experience different policy responses compared to those with more pro-migration coalitions. Moreover, comparative work could examine how changing labour market structures (e.g., dual labour markets, informal employment, gig economy) shape the impact of immigration on social welfare spending and whether different migrant integration policies (e.g., Koopmans, 2009) affect the relationship between immigration and welfare state. Studying these questions through cross-national comparisons and historical analyses could provide valuable insights into the long-term impact of immigration on welfare state design.

These areas for further research highlight certain limitations to this dissertation and its scope. As always, important to note is that the results may not be generalisable to other parts of the world, other selections of countries or other time periods. Nevertheless, this dissertation contributes significantly to the scholarly and policy debate surrounding immigration and welfare in Europe. By demonstrating the resilience of European welfare states and the nuanced ways in which different forms of immigration influence public policy and opinion, this research offers both a robust empirical foundation and a call for more refined future studies. Ultimately, origins matter for welfare state responses. This contributes to the broader debate by challenging simplistic assumptions that migration necessarily weakens the welfare state. Instead, this dissertation supports a more conditional, institutional, and politically mediated perspective – which is crucial for both academic theory and policy debates on welfare state sustainability in the EU.

Nederlandse samenvatting (Dutch summary)

De politieke economie van hervormingen in de welvaartsstaat: een bundel essays over migratie en sociale bescherming

Deze dissertatie, *The Political Economy of Welfare State Reform: a collection of essays on human mobility and social protection*, onderzoekt de centrale onderzoeksvraag in hoeverre immigratie structureel en conceptueel de grenzen van Europese welvaartsstaten uitdaagt. Door theoretische inzichten uit de vergelijkende politieke economie en sociale psychologie te combineren, draagt het onderzoek bij aan een meer genuanceerd begrip van de wijze waarop Europese welvaartsstaten zich aanpassen aan migratiedruk.

Het onderzoek stelt expliciet vraagtekens bij de wijdverspreide aanname dat immigratie onvermijdelijk de houdbaarheid of generositeit van welvaartsstaten ondermijnt. Dergelijke zorgen zijn prominent aanwezig in de maatschappelijke en politieke discussie, vooral in tijden van economische onzekerheid of verhoogde migratiestromen. In deze context worden migranten geregeld voorgesteld als een financiële last voor de staat, wat zou moeten leiden tot versobering van sociaal beleid, migratiebeperking of uitsluiting van toegang tot sociale voorzieningen. Zulke claims zijn echter zelden gebaseerd op solide empirisch bewijs en gaan vaak voorbij aan de complexiteit en diversiteit van migratiestromen, beleidscontexten en institutionele kaders.

Als reactie op deze vraagstukken, biedt deze dissertatie een empirische benadering waarin rekening wordt gehouden met verschillende contextuele factoren. In plaats van immigratie als een monolithisch risico voor welvaartsstaten te beschouwen, ontleedt het onderzoek verschillende vormen van migratie —met name intra-Europese arbeidsmobiliteit— en analyseert het hoe deze verband houden met de generositeit van de welvaartsstaat. Deze analyse vindt plaats op twee niveaus: via vergelijkende studies op macroniveau van overheidsuitgaven en indicatoren van welvaartsgenerositeit, en op basis van data op microniveau over beleidsvoorkeuren ten aanzien van herverdeling en sociale bescherming. Deze benadering van zowel de aanbod- als de vraagzijde van herverdelingsmechanismen stelt de dissertatie in staat om te analyseren hoe overheden hervormingen vormgeven in reactie op immigratie en hoe migratie de publieke opinie voor sociaal beleid kan beïnvloeden.

Een belangrijke methodologische vernieuwing betreft de ontwikkeling en toepassing van nieuwe indicatoren die intra-Europese arbeidsmobiliteit preciezer in kaart brengen. Deze vullen een significant gat in het bestaande onderzoek, dat doorgaans onvoldoende onderscheid maakt tussen verschillende migratietypen of hun respectieve implicaties. Door traditionele immigratie-indicatoren (zoals het aandeel buitenlandse geboorten) te combineren met gegevens over arbeidsmigratie uit Midden- en Oost-Europese lidstaten naar West-Europa, wordt een migratievorm onderzocht die zowel politiek gevoelig als economisch relevant is binnen het kader van Europese integratie. De bevindingen leveren een krachtig tegengeluid op ten opzichte van de *'race-to-the-bottom'*-theorie. Uit meerdere analyses blijkt dat immigratie—met name arbeidsmigratie uit Midden- en Oost-Europa—niet samenhangt met een afbouw van sociaal beleid. In sommige contexten is zelfs sprake van stijgende sociale uitgaven of beleidsinspanningen ter versterking van de welvaartsstaat. Dit suggereert een grotere veerkracht van Europese welvaartsstaten dan vaak wordt verondersteld, en wijst op het vermogen van beleidsmakers om herverdelende instituties aan te passen aan demografische veranderingen.

Een mogelijke verklaring hiervoor ligt in het concept van *'embedded liberalism'*: overheden kunnen sociale bescherming uitbreiden als reactie op de economische of sociale onzekerheden die gepaard gaan met open grenzen en arbeidsmobiliteit, met als doel publieke steun voor een open economie te behouden. Een verwante verklaring is de *compensatiehypothese*: burgers kunnen juist méér sociale bescherming verlangen in tijden van verhoogde arbeidsmobiliteit, wanneer gevoelens van baanonzekerheid toenemen—ongeacht of deze gevoelens objectief gerechtvaardigd zijn. Een van de empirische bevindingen van deze dissertatie is dat intra-Europese arbeidsmobiliteit positief samenhangt met gepercipieerde baanonzekerheid in ontvangende landen, wat op zijn beurt aanleiding kan geven tot meer publieke steun voor het behouden of uitbreiden van sociaal beleid gericht op het verminderen van gepercipieerde arbeidsmarktrisico's geassocieerd met migratie.

Naast inzichten uit de politieke economie maakt deze dissertatie gebruik van psychologische en sociologische theorieën, waaronder de intergroepscontacttheorie. Deze stelt dat intensiever contact tussen groepen negatieve stereotypering en *'welfare chauvinism'* kan temperen, en daarmee steun voor universeel sociaal beleid kan bevorderen. In regio's met beperkte migratieervaring kan gebrek aan dergelijke contacten de voedingsbodem vormen voor angst en vijandige opvattingen over de impact van migratie op sociale voorzieningen.

Naast de empirische bijdrage levert deze dissertatie ook een theoretische bijdrage aan debatten binnen de comparatieve politieke economie. Theoretische argumenten die stellen dat immigratie noodzakelijkerwijs leidt tot

minder genereuze welvaartsstaten worden door de empirische bevindingen uit dit onderzoek op de proef gesteld. In plaats daarvan laat dit onderzoek zien dat genoemde mechanismen afhankelijk zijn van institutionele en andere contextuele factoren.

De dissertatie levert ook een tweede bijdrage aan theoretische debatten binnen de vergelijkende politieke economie. Ze stelt deterministische modellen ter discussie die een terugdringing van de welvaartsstaat voorspellen als een automatisch gevolg van immigratie, en pleit in plaats daarvan voor een institutionele en contextafhankelijke benadering. De reactie van de verzorgingsstaat op immigratie kan worden beïnvloed door het type regime, de opzet van het programma, en de sociaaleconomische en politieke dynamiek. Zo illustreert het vijfde hoofdstuk van dit proefschrift het belang van werkloosheid als moderator van de relatie tussen arbeidsmobiliteit en sociale beleidsvoorkeuren.

Immigratie stelt Europese welvaartsstaten op de proef, niet doordat zij deze per definitie ondermijnt, maar doordat zij beleidsmatige en institutionele reacties uitlokt die variëren afhankelijk van het type migratie, de beleidscontext en institutionele kenmerken. Deze dissertatie toont aan dat met name intra-Europese arbeidsmobiliteit niet alleen kan samengaan met, maar onder bepaalde voorwaarden zelfs kan bijdragen aan de versterking van sociaal beleid. De impact van immigratie op de welvaartsstaat is daarbij afhankelijk van publieke percepties, economische omstandigheden en de manier waarop beleid wordt vormgegeven, waarmee wordt laten zien dat aannames die stellen dat welvaartsstaten onvermijdelijk vastlopen als gevolg van migratie niet opgaan.

De resultaten van dit onderzoek laten zien dat beleidsmakers niet automatisch moeten veronderstellen dat immigratie leidt tot een noodzakelijke afbouw van sociaal beleid. Integendeel: immigratie en een robuust sociaal beleid kunnen naast elkaar bestaan. Beleidsmakers en politici zouden kunnen inzetten op genuanceerde communicatie over de sociale en economische bijdragen van migranten, vooral op plekken waar sprake is van beperkte directe ervaring met migratie. Daarnaast kunnen beleidsmakers zich richten op versterkte internationale samenwerking, onder meer door het uitwisselen van '*best practices*', het harmoniseren van sociale normen, en de ontwikkeling van gecoördineerde beleidskaders binnen de EU.

Ten tweede wijst de dissertatie op het belang van betere dataverzameling omtrent migratie. De beschikbaarheid, consistentie en toegankelijkheid van migratiegegevens zijn momenteel onvoldoende georganiseerd, vooral ten aanzien van tijdelijke, seizoensgebonden en circulaire migratie. Individuele surveydata en administratieve gegevens zouden uitgebreider en beter toegankelijk moeten zijn voor wetenschappelijk onderzoek, om zo bestaande kennishiaten te dichten en de effectiviteit van beleid te vergroten.

Ten derde benadrukt de studie de rol van de bredere economische context waarin migratie plaatsvindt. De relatie tussen migratie en sociaal beleid is niet lineair en is afhankelijk van factoren als economische groei, werkloosheid en arbeidsmarktonzekerheid. Een veelbelovende richting voor toekomstig beleid is de uitbreiding van actief arbeidsmarktbeleid, dat niet alleen bijdraagt aan het economische concurrentievermogen van nationale economieën, maar ook gevoelens van baanonzekerheid kan verminderen door het aanpassingsvermogen van werknemers te versterken.

Voor toekomstig onderzoek identificeert de dissertatie enkele veelbelovende richtingen. Ten eerste is er behoefte aan een meer gedifferentieerde benadering van migratiecategorieën—zoals arbeidsmigratie, gezinshereniging, studentenmigratie, pensioenmigratie en asielmigratie—omdat elk van deze typen mogelijk verschillende beleidsimplicaties en maatschappelijke en politieke reacties oproept. Zo leiden arbeidsmigranten uit MOE-landen tot andere dynamieken dan migranten uit andere EU-regio's.

Ten tweede verdient het interactie-effect tussen het ontwerp van sociale programma's en immigratie meer aandacht. In hoeverre is de politieke weerstand tegen immigratie groter in landen waarin sociale uitkeringen voornamelijk uit de algemene middelen worden gefinancierd? Bieden werknemersverzekeringen die vanuit premies worden gefinancierd meer standvastigheid tegen *"welfare chauvinism"*? Beide vragen zijn nog niet voldoende onderzocht en zijn essentieel om te begrijpen hoe welvaartsinstituties zich ontwikkelen onder demografische druk. Vergelijkend empirisch onderzoek dat systematisch deze dynamieken onderzoekt tussen landen en beleid kan hier belangrijke inzichten opleveren.

Ten derde is de rol van vaardigheden onder migranten en de invloed daarvan op de generositeit van de verzorgingsstaat van belang. Politiek-economische modellen voorspellen dat laag- en hooggeschoolde migratie verschillende effecten hebben op beleidsvorming, maar het empirische bewijs hiervoor is beperkt. Betere gegevens, met name op macroniveau zoals representatieve gegevens over de verdeling van vaardigheden en opleidingsniveau binnen verschillende typen migranten, zijn noodzakelijk om deze hypothesen te toetsen.

Tot slot vormen de structurele kenmerken van de arbeidsmarkt — zoals de opkomst van precaire arbeid, duale arbeidsmarkten en de platformeconomie — een veelbelovend onderwerp voor toekomstig onderzoek naar de relatie tussen migratie en hervormingen van de welvaartsstaat. Migranten bevinden zich vaak in marginale of onzekere arbeidsposities, wat vragen oproept over hoe evoluerende arbeidsmarktinstituties de inclusiviteit van welvaartssystemen zullen beïnvloeden. Ook integratiebeleid verdient hierbij aandacht, aangezien dit op de lange termijn bepalend kan zijn voor

hoe migranten worden gezien: als bijdragende burgers of als afhankelijke ontvangers van overheidssteun.

Samenvattend, het onderzoek doorbreekt deterministische en alarmistische verhalen en legt in plaats daarvan de nadruk op de institutionele, economische en politieke factoren die beleidsuitkomsten bepalen. Door zich te richten op intra-Europese arbeidsmobiliteit, het ontwikkelen van nieuwe indicatoren en het combineren van macro- en microniveaus van analyse, vult deze studie een belangrijk gat in de bestaande literatuur. De centrale boodschap is dat de toekomst van de Europese welvaartsstaat niet gedetermineerd wordt door migratie, maar door politieke keuzes die gemaakt worden door individuen in het stemhokje, en het hierop volgende beleidsontwerp van politici. In dat licht dient migratie niet als bedreiging te worden beschouwd, maar als een toets voor solidariteit, institutionele capaciteit en politieke visie. Daarmee levert de dissertatie ook een bijdrage aan het bredere debat over de toekomst van 'Sociaal Europa' en de vraag in hoeverre traditionele Europese welvaartsmodellen verenigbaar zijn met vrij verkeer van arbeid en verdere EU-integratie.

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Curriculum Vitae

Clare Fenwick (1989) was born in London, United Kingdom. In 2011 she received the Bachelor of Science (BSc) Politics with Economics at the University of Bath. In 2015, she received a Master of Science (MSc) in Public Policy and Human Development (Cum Laude), a double degree from Maastricht University and the United Nations University (UNU-MERIT), with a specialisation in Migration Studies.

In 2016, Clare began her PhD on the political economy of immigration and welfare state transformations at the Department of Economics, at Leiden Law School of Leiden University. Her research examined how immigration redefines the institutional and conceptual boundaries of national welfare systems in Europe and was conducted as part of the *SOLID: Solidarity under Strain – A legal, criminological and economic analysis of welfare states and free movement in the EU* project. During her doctoral studies, Clare attended various PhD courses and summer schools, presented her work at leading conferences such as the European Consortium for Political Research (ECPR) and the Council for European Studies (CES). She also contributed to and organised specialist panels, seminars, and workshops. In 2019, her article *The Political Economy of Immigration and the Welfare State: Evidence from Europe* was published in the *European Political Science Review* and received the 2020 Meijers Prize for best published article.

Following her time at Leiden, Clare continued to explore the evolving dynamics of welfare provision and labour markets in the context of European integration and digital transformation. As a postdoctoral researcher at Studio Europa, Maastricht University, she investigated labour market and affective polarisation, and the constraints that labour market uncertainty places on the achievement of socio-economic equality. She also helped shape public engagement initiatives connecting academic research with policy debates, including events for the European Commission and the Conference on the Future of Europe.

Clare later joined the Centre for Microsimulation and Policy Analysis at the University of Essex as a Senior Research Officer, contributing to EU-commissioned projects focused on the effect of digital transformation on employment, wage, poverty and inequality effects in the EU. Together with her colleagues, she co-authored the article *The impact of a decade of digital*

transformation on employment, wages, and inequality in the EU: A "conveyor belt" hypothesis, published in *Socio-Economic Review.*

In 2025, Clare returned to Leiden University and the Institute of Security and Global Affairs as a postdoctoral researcher to work on the project *Networks and the Rule of Law: Uncovering Socio-Economic Outcomes (NET-ROL*) to investigate the role of networks in weakening of the rule of law the consequences for various socio-economic outcomes, such as altered economic growth, inequality, and trust.

Across all her work, Clare brings a strong commitment to understanding how large-scale structural shifts – immigration, digitalisation, and rule of law backsliding – challenge and reshape the foundations of politics and economics in Europe, contributing to both scholarly understanding and contemporary policy debates.

In the range of books published by the Meijers Research Institute and Graduate School of Leiden Law School, Leiden University, the following titles were published in 2024 and 2025

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