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**Working Paper**

## Immigration and redistribution

UCD Centre for Economic Research Working Paper Series, No. WP20/24

**Provided in Cooperation with:**

UCD School of Economics, University College Dublin (UCD)

*Suggested Citation:* Concannon, Jeff; Elsner, Benjamin (2020) : Immigration and redistribution, UCD Centre for Economic Research Working Paper Series, No. WP20/24, University College Dublin, UCD Centre for Economic Research, Dublin

This Version is available at:

<https://hdl.handle.net/10419/228204>

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*UCD CENTRE FOR ECONOMIC RESEARCH*

*WORKING PAPER SERIES*

*2020*

**Immigration and Redistribution**

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University College Dublin

WP20/24

September 2020

**UCD SCHOOL OF ECONOMICS  
UNIVERSITY COLLEGE DUBLIN  
BELFIELD DUBLIN 4**

# Immigration and Redistribution

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## Abstract

One of the fundamental questions in the social sciences is whether modern welfare states can be sustained as countries welcome more immigrants. On theoretical grounds, the relationship between immigration and support for redistribution is ambiguous. Immigration may increase ethnic diversity, which may reduce the support for redistribution. On the other hand, natives may demand more redistribution as an insurance against labour market risks brought by immigration. In this chapter, we review the theoretical and empirical literature on immigration and redistribution from across the social sciences. We focus on two themes, namely the effect of immigration on natives' support for redistribution, and the effect on the actual setting of tax and spending policies. Recent empirical evidence suggests that immigration lowers the support for redistribution and leads to lower taxation and spending. However, the magnitude of these effects appears to be highly context-dependent.

*Keywords:* Migration, Redistribution, Public Policy

*JEL Codes:* F22, H2, H4

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## I. Introduction

Advanced economies have been a major destination for international migrants in the past 60 years. Currently, over ten percent of the population in OECD countries are foreign-born, and a significant share are the descendants of immigrants. The economic and social impacts of this immigration have been a recurring theme in public debate. A particularly contested issue is the potential impact of immigration on the welfare state. Most advanced economies redistribute a significant portion of their GDP through taxes and transfers, and it is often asserted that generous welfare benefits attract immigrants. At the same time, the social insurance systems of many countries face demographic pressures, which can be alleviated through migration.

The challenge immigration poses for modern welfare states has been a fundamental research theme in the social sciences. It is often argued that the U.S. have a less generous welfare state than most European countries because of its immigration history, which resulted in an ethnically diverse society. A central hypothesis in the social sciences is that more diverse societies find it harder to agree on a common set of policies, resulting in lower redistribution. This hypothesis has sparked a debate about the future of the welfare state in Europe. As European societies become more diverse, will this lead to less redistribution (Freeman 1986; Alesina and Glaeser 2004)? Or asked differently, can Europe afford its welfare state while keeping its door open for immigrants? The trade-off between generous welfare states and open borders – termed by sociologists as the *Progressive's Dilemma* or the *New Liberal Dilemma* (Pearce 2004; Reeskens and van Oorschot 2012) – has been discussed by many prominent social scientists. Examples are Milton Friedman's now famous remark in his 1978 lecture *What is America?*

*[...] It is one thing to have free immigration to jobs. It is another thing to have free immigration into welfare. And you cannot have both. If you have a welfare state [...] it is really an impossible thing,*

or Paul Collier's (2013) discussion of the effects of diversity on the society of migrant-receiving countries

*Diversity enriches economies by bringing fresh perspectives for problem solving and the variety it brings with it enhances the pleasures of life. But diversity also undermines mutual regard and its invaluable benefits for cooperation and generosity.*

To evaluate whether this dilemma exists, we turn in this chapter to the empirical evidence from across the social sciences. In our review, we focus on two strands of literature. First, we discuss the vast literature on immigration and native preferences for redistribution. We include studies on immigration as well as studies on ethnic diversity, which is often the result of immigration in

previous generations. Second, we discuss the small but growing literature on the effect of immigration on public policy setting, especially taxation and spending. Our main findings are:

1. Across countries, there is virtually no correlation between immigration and redistribution. This is likely the result of omitted variables, which are difficult to adjust for.
2. Studies exploiting variation within countries tend to confirm the hypothesis that immigration and/or ethnic diversity reduce support for the welfare state and lead to less redistribution.
3. Experiments and observational studies suggest that natives' preferences for redistribution are influenced by their perceptions of immigrants rather than the actual economic situation of immigrants.
4. Natives' support for redistribution is characterised by in-group bias. Survey data show that natives tend to view immigrants as less deserving of social benefits and are less willing to share public goods with immigrants, especially if immigrants come from a culturally distant group.

This review leaves out two important topics in the literature on migration and the welfare state that would deserve chapters on their own. These are the literature on *welfare magnets* – the question whether welfare states attract immigrants – and the literature on the fiscal effects of immigration – the question how much immigrants contribute in taxes and consume in public spending. Interested readers may want to consult the reviews on welfare magnets by Giulietti and Wahba (2013) and fiscal effects by Rowthorn (2008).

This chapter builds upon earlier literature reviews by Nannestad (2007) and Stichnoth and van der Straeten (2013). Especially the empirical literature has produced a wealth of new findings since 2013, which is why an update is in order.

The remainder of the chapter is organised as follows. In Section II, we provide an overview of the key theoretical models across the social sciences, touching on median-voter approaches, as well as in-group bias and anti-solidarity effects. In Section III, we begin by presenting some stylised facts, before reviewing the existing evidence on the effect of immigration on natives' attitudes towards redistribution. We place particular emphasis on the channels, for example, do natives change their views because they dislike sharing amenities with immigrants, or because they hold certain beliefs about the impact of migration on labour markets and crime? In Section IV, we review the recent evidence on the effect of immigration on actual policy setting, again following the presentation of some stylised facts. We finish the chapter in Section V by identifying open questions and providing guidance for future research.

## II. Theory

Across the social sciences, the relationship between immigration, ethnic diversity and redistribution is viewed through the lens of political economy models. At the core of these models are people's individual preferences for redistribution, which include preferences for taxation, social spending and the design of social programmes. Each person has a desired amount of taxation and spending, which depend on an individual's economic and social circumstances. If immigration or any other economic or social force changes these circumstances, individuals may desire a different amount of redistribution.

The existing theories can be broadly categorised into two types of models. In one type, people's decisions on the desired amount of redistribution are guided by their self-interest. Those with low incomes, who receive high transfers while paying little in taxes, will be in favour of generous redistribution. On the contrary, those with high incomes who are net contributors to the tax-transfer system will favour low taxes and spending. This idea is the premise behind political economy models with a long tradition in economics. However, although the standard models can generate powerful hypotheses, empirical work does not find a strong relationship between an individual's economic situation and preferences for redistribution (Senik, Stichnoth, and Van der Straeten 2009).

A second type of model incorporates social preferences and behaviours, such as altruism, reciprocity, group interests or beliefs in a just world. Numerous observational and experimental studies have shown that a person's beliefs about and attitudes towards society are an important determinant of individual preferences for redistribution (cf Alesina and Giuliano 2011). It is far from implausible that immigration changes these beliefs and attitudes and, therefore, affects people's support for redistribution.

In this section, we summarise both strands of the theoretical literature. We begin with the standard political economy models and the many static and dynamic extensions economists have developed to study the effect of immigration on redistribution. As we will see, these models are useful for illuminating interdependencies between tax-transfer policies, immigration policies as well as dynamic trade-offs. The conclusions of static models are often overturned in dynamic settings in which voters have to weigh long-term benefits against short-term costs.

In a second step, we discuss how social preferences and behaviours have been incorporated into standard models along with theories from sociology and political science that generate plausible hypotheses.

## A. Median Voter Models

The standard theory in economics for analysing the setting of tax and transfer policies is the median voter model developed by Romer (1975), Roberts (1977) and Meltzer and Richard (1981), which links the extent of redistribution to the income distribution of the voter base. In the most basic model, voters decide purely based on their self-interest without consideration of other members of society. Voters differ in their earnings potential and can choose their labor supply and they rationally decide on their desired amount of redistribution based on their earnings after taxes and transfers. Voters with a low earnings potential will be in favor of generous redistribution, as they pay little in taxes while receiving high transfers. On the other end of the spectrum, voters with a high earnings potential contribute a lot in taxes but receive no transfers and, hence, will be against generous redistribution. If policies are decided through a majority rule, the chosen amount of taxes and transfers is equal to the preferred amount of the median voter. The locus of the median voter, in turn, depends on the shape of the income distribution. In an unequal society with many low- and few high-wage earners, the median voter has a relatively low income and, therefore, supports high taxes and transfers.

In the standard model, the impact of immigration on redistribution depends on at least four factors: 1) whether immigrants have voting rights, 2) whether immigrants are eligible for social benefits, 3) how the incomes or skills of immigrants compare to those of natives, and 4) to what extent immigration affects the incomes of natives. Several permutations of these factors are interesting. If immigrants have the same skills and rights as natives, immigration will have no impact on redistribution because it does not change the income distribution. On the other hand, if immigrants have the same rights but lower incomes, they will side with low-income natives and support more redistribution.

A more realistic scenario is one where immigrants have no voting rights but are eligible for social benefits, and they have lower incomes than natives. Because immigrants are at the receiving end of the welfare state, immigration will have a fiscal effect. There may also be an effect on native incomes through the labour market, although empirically these effects tend to be small.<sup>2</sup> Razin, Sadka and Swagel (2002) explicitly model the fiscal effects.<sup>3</sup> In their model, low-skilled immigration leads to ‘fiscal leakage’. For a given tax rate, and assuming that the government’s budget is balanced, low-skilled immigration reduces the amount of transfers that can be given to each recipient, which worsens the economic situation of the median voter. At the

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<sup>2</sup> There is evidence that immigration induces natives to upgrade their skills (Hunt 2016; Lull 2018), as well as that immigration affects wages. For a review of the literature on the labour market effects of immigration, see Kerr and Kerr (2011) and Dustmann, Schönberg and Stuhler (2016).

<sup>3</sup> The idea that low-skilled immigration may lead to resistance against immigrants due to the cost for the welfare state has been previously modeled by Wildasin (1994) and Razin and Sadka (1995).

tax rate that was optimal without immigration, they are now worse off because part of the tax revenues are ‘leaked’ to the immigrants in the form of transfers. Consequently, through fiscal leakage, low-skilled immigration will reduce the chosen amount of redistribution.<sup>4</sup>

### *Interdependency between Immigration and Redistribution Policies*

The standard median voter model has been extended along several dimensions. One is the joint determination of immigration and redistribution policies. Whereas in Razin, Sadka and Swagel (2002) the number of immigrants is exogenous, in reality immigration restrictions form part of the policy mix and are often decided together with taxes and transfers. In an extension by Razin, Sadka and Suwankiri (2011, chap. 4), voters decide on taxes as well as the number and skill composition of immigrants. For example, it is possible that a country only admits a certain number of immigrants, and only issues visas to high-skilled workers. The chosen policy mix depends on the skill composition of the voter base. If the majority of voters are unskilled, they will admit as many skilled immigrants as possible, while fully restricting the immigration of unskilled workers. This choice is driven purely by economic concerns. Unskilled natives benefit from skilled immigration through higher transfers, as skilled migrants are net contributors to the tax-transfer system. In addition, the fact that skilled and unskilled workers are complements in the labour market means that skilled immigration increases the wages of unskilled natives. As before, due to fiscal leakage, they will choose a tax rate that is below the optimal amount in a world without migration. The policy choices are less clear-cut when the majority of voters are skilled workers. Simulations suggest that voters will choose a high level of unskilled migration along with low taxes and benefits.

Iturbe-Ormaetxe and Romero (2016) obtain a similar result in a median voter model wherein immigrants and natives contribute to the same public good but immigration reduces natives’ enjoyment of the public good. Voters can decide on the number of unskilled immigrants and the amount of taxation that is used to fund the public good. In this model, skilled and unskilled voters have very different views on migration. Skilled voters do not consume much of the public good and do not compete with immigrants on the labour market, and, hence, are indifferent towards unskilled immigrants. Unskilled voters oppose immigration because it lowers their enjoyment of the public good and leads to increased competition in the labour market.

Guerreiro, Rebelo and Teles (2020), show that the jointly optimal immigration and redistribution policy depends on a government’s ability to discriminate between immigrants and natives as well as high- and low-skilled workers in taxation and transfers. In a world without information frictions, where a government can exclude immigrants from the welfare state, the optimal policy – one that maximises the welfare of natives – is free immigration. The optimal policy changes

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<sup>4</sup> Sánchez-Pagés and Solano García (2016) show that more subtle dynamics can emerge if immigrants have no voting rights but a credible threat to initiate a conflict.



when the government has no ability to distinguish between immigrants and natives. Because the government provides transfers to low-skilled workers, it is optimal to fully restrict low-skilled immigration while having free immigration of high-skilled workers.

### *Dynamic Extensions to the Median Voter Model*

A major shortcoming of static models is that they do not incorporate voters' expectations about their own and their children's future economic situation. Immigration may have important long-run effects on the economy, the pension system as well as the political landscape. For example, if immigrants have different political preferences and their children obtain voting rights, this may change the support for tax and spending policies in the future. Forward-looking voters may factor these future effects into their decisions on immigration policies *today*. Moreover, given the different effects of migration in the short versus long run, voters face intertemporal trade-offs that depend on their discounting of the future as well as their expectations about the future effects of immigration. As we will see, the intertemporal optimisation gives rise to a richer set of equilibria compared to the static model.

Intergenerational trade-offs are at the core of models by Dolmas and Huffman (2004) and Ortega (2010). While in a static model low-skilled natives would fully restrict low-skilled immigration due to competition in the labor market and fiscal leakage, the same needs not be true in a dynamic model because immigrants may eventually obtain voting rights and influence policy setting. Dolmas and Huffman (2004) show that if natives are concerned that immigrants, once naturalized, vote for policies that natives do not support, natives may choose to restrict immigration in the first place. A similar mechanism is at play in Ortega's model, in which the children of immigrants obtain voting rights. If unskilled native voters care about their children's incomes, they face an intertemporal trade-off. Unskilled immigration is detrimental in their own generation but leads to a more favourable economic situation for the next generation of unskilled natives, because the children of immigrants will support a generous tax-transfer policy. In this model, the optimal number of unskilled immigrants and tax rate depend on the intergenerational mobility of human capital. With low mobility, low-earning parents are likely to have low-earning children, in which case low-earning voters tend to support unskilled immigration as well as high taxes. On the other hand, if mobility is perfect, children of low-skilled parents have the chance to climb up the income ranks, which makes low-earning voters less likely to support unskilled immigration and generous redistribution.<sup>5</sup> This is not to say that fiscal leakage and labour market competition play no role in setting the optimal number of immigrants. But with imperfect social mobility, low-earning natives will choose more unskilled immigration and more redistribution than they would under perfect social mobility.

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<sup>5</sup> This prediction about taxes is a special case of the POUM (prospect of upward mobility) hypothesis (Bénabou and Ok 2001).

Not only may voters decide on the number of immigrants and their skill composition, but also on immigrants' voting rights. Many destination countries have pathways to citizenship or grant birthright citizenship to the children of immigrants. Just as immigration restrictions, these naturalization laws emerge from a political process, whereby voters decide based on their preferences. Models by Mayr (2007) and Mariani (2013) illuminate the trade-offs for voters when deciding on naturalization laws. They show that if the current median voter favours high taxes but expects that immigrants tilt the majority in favour of low taxes, it is best for current voters to restrict immigrant voting rights. Gonnot's (2020) model allows for a different conclusion if voters care about the *type* as well as the *amount* of public spending. Even low-skilled voters may support granting migrants voting rights if the immigrants want public spending to be on public as opposed to private goods, as public goods mainly benefit low-skilled workers.

### *Immigration and Pension Systems*

While taxes and transfers redistribute income *within* a generation, there is also redistribution *between* generations through pensions. Many countries operate pay-as-you-go (PAYG) pension schemes, whereby the working generation's contributions finance the pensions of the older generation. With population ageing and a decline in fertility, the solvency of PAYG schemes has come under increasing financial pressure. Immigration is often seen as a potential remedy to stabilise pension systems. However, in a society where the population comprises workers of different skills as well as pensioners, immigration may benefit some groups while harming others. Given the complex interplay between the labour market, the tax-transfer system and the pension system, voters deciding on immigration and welfare policies face a multitude of trade-offs.<sup>6</sup>

A crucial ingredient in determining the effect on pension systems is the effect of migration on the labour market. As shown by Razin and Sadka (1999), in a world with perfect capital mobility, immigration benefits all age and skill groups as it increases contributions to the pension system while having no effect on wages. Consequently, all voters will be in favour of immigration. This result can be weakened – and even overturned – when capital is immobile, as shown by Razin and Sadka (2000). Immigrants contribute to the pension system, while, on the other hand, they may reduce wages of competing natives and be net beneficiaries of the tax-transfer system. Given this trade-off, the chosen immigration and tax policy depends on the skill and age distribution of immigrants and natives, as well as the strength of fiscal leakage and the effect on

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<sup>6</sup> For an early review of the theoretical literature on immigration and pensions, see Krieger (2002).

wages. For example, if the majority of workers are low-skilled and migration has strong effects on wages and fiscal leakage, voters are likely to opt for migration restrictions.<sup>7</sup>

Several authors have proposed extensions to these models, thereby highlighting additional redistributive conflicts. Krieger (2003) shows that the chosen immigration restrictions depend on the type of pension system – Beveridgean vs. Bismarckian, fixed contributions or fixed replacement rate. Under fixed contributions, when pensions depend on the number of contributors, there is broad political support for unrestricted migration. Under a fixed replacement rate, when pensions are fixed and contributions depend on demographics, pensioners are indifferent while low-skilled workers oppose unrestricted migration.

A further channel that gives rise to intertemporal trade-offs is natives' upgrading of education in response to immigration. Casarico and Devillanova (2003) show that, on aggregate, immigration has positive effects on the pension system and – due to educational upgrading – GDP per capita. For many workers, educational upgrading partially offsets the negative effects of migration on wages and the tax-transfer system. However, educational upgrading does not come without a cost. After all, workers who only upgraded their education because of immigration revealed that they preferred not to upgrade. By incurring the cost of educational upgrading, they may be worse off compared to a no-migration scenario and, thus, oppose migration even though their income improves.

## **B. Redistribution as Insurance: the Compensation Hypothesis**

A related theory that is based on self-interest is the *compensation hypothesis*, which states that voters should support greater redistribution as an insurance against globalisation pressures. It is well established that trade and migration are beneficial as they create an economic surplus. However, not all groups of the population equally benefit from globalisation. Groups that are negatively affected tend to be workers in industries facing import competition (Autor, Dorn, and Hanson 2013), or workers who compete with immigrants in the labour market (Dustmann, Frattini, and Preston 2013). Redistribution can insure workers against the risk from globalisation and help to spread the gains more evenly across society, which is why trade and immigration should increase the support for redistribution (Rodrik 1998; Iversen and Soskice 2001).

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<sup>7</sup> Similar points have been made in models by Scholten and Thum (1996) and Haupt and Peters (1998). Moreover, Krieger (2004) points out an additional reason why migration may not be ambiguously beneficial under perfect capital mobility, namely the interplay between immigrant fertility rates and skill acquisition. If immigrants have higher fertility than natives and their children have lower skills than native children, native children will benefit less from the tax-transfer system. Razin, Sadka and Suwankiri (2011, chaps. 5, 7) formalise the same idea within their workhorse model and derive conditions under which migration can sustain different types of pension systems.

### C. Models with Ethnic Diversity

#### *Hunkering Down and In-group Bias*

While standard median voter models allow for a rich set of mechanisms through which immigration may affect redistribution, empirical research strongly rejects their central assumption, namely that voters decide purely in their self-interest. There are many situations when people's choices differ from what a simple model would predict. People donate to charity without having an immediate payoff, they pay taxes even though evasion would make them better off, or they pay for a bus ticket even though no one checks. Such observations, confirmed in many experiments, suggest that people do not strictly act in their self-interest but care about others and adhere to social norms. When it comes to support for the welfare state, self-interest and regard for others need not be mutually exclusive. As argued by Cavaillé and Trump (2015) the same person may hold separate – and sometimes conflicting – views on *whom to redistribute from* versus *who to redistribute to*, such that their overall support for the welfare state depends on their attitudes towards the groups at the contributing as well as the receiving end of the welfare state.

It is difficult to imagine that modern welfare states would even exist if people only pursued their self-interest. Welfare states are part of a social contract that is built on mutual trust, common social norms, cooperation and reciprocity (Fong, Bowles, and Gintis 2006). Immigration may thus affect redistribution through more channels than just the labour market or the fiscal balance. It may erode trust and reciprocity and change the social fabric the welfare state is built on, and ultimately lead to less redistribution. This process has been termed *hunkering down* by Putnam (2007).

One reason why immigration may lower support for the welfare state is that natives see immigrants as members of a different ethnic group with whom they are reluctant to share common resources. The idea that people care more about their own group than other groups has a long tradition in social psychology. Festinger's (1954) theory of social comparisons posits that people mainly compare themselves to and interact with people who share the same characteristics and values. This idea has been reinforced by social identity theory (Tajfel and Turner 1979; Tajfel 1981), which posits that people categorise others into *us* and *them*, often also referred to as *in-group* and *out-group*. They identify with a group – their family, their club, their ethnic group, etc – and exaggerate differences between their group and other groups. Experiments show that these categorisations have important consequences for public goods provision and cooperation. Even in situations with arbitrary differences between groups, people discriminate against and are less willing to cooperate with the out-group (e.g. Chen and Li 2009; Habyarimana et al. 2007). This discrimination is often termed *in-group bias*. A related theory

that is often tested in empirical work is the *contact hypothesis* (Allport 1954), which states that the in-group bias and prejudices towards other groups get reduced if groups are in close contact with one another.

### *Welfare Chauvinism and (Anti-)Solidarity Effects*

One of the main motivations for redistribution is solidarity with people who are worse-off. Among the reasons why people want to support the poor are that they are only willing to tolerate a certain amount of inequality (Adams 1965; Fehr and Schmidt 1999) or that they view poverty as the result of bad luck. Individual views about what determines economic success and poverty are one of the main determinants of preferences for redistribution. People who believe that economic success is the result of effort – and, consequently, poverty is the result of not trying hard enough – will be less in favour of redistribution than those who believe that success is mainly due to luck. This difference in beliefs is often seen as an explanation why the U.S. has a less generous welfare state than Europe (Alesina and Angeletos 2005; Bénabou and Tirole 2006).

It is also plausible that the same person distinguishes between groups that deserve social benefits and those that do not. They may feel and show less solidarity with poor immigrants than with equally poor natives, either because the immigrants do not belong to the ethnic same group, or because it was the immigrants' choice to come to a country where they are initially poor. Social scientists have coined two terms for this phenomenon, namely *welfare chauvinism* (Andersen and Bjørklund 1990) and *anti-solidarity effects* (Roemer, Lee, and Van der Straeten 2007). Although both terms are sometimes used synonymously, behind them lie different motivations for denying immigrants social benefits. Welfare chauvinism refers to economic reasons; immigrants should be denied social benefits because they pay less in taxes than what they receive in benefits. Anti-solidarity effects refer to individual views about deservingness; immigrants should be denied social benefits because they willingly took the risk of moving to another country, such that their poverty is the result of their choice. The anti-solidarity effect is supported by European survey data. Van Oorschot (2006) analyses survey responses about deservingness, which measures the extent to which a respondent believes that social group deserves welfare support. While they find large support for elderly, sick or disabled people as well as for the unemployed, respondents view immigrants as less deserving of support.

### *Median Voter Models with Group Interests*

Alesina, Baqir and Easterly (1999) were among the first to incorporate group interests in a median voter model. In their model, public goods are financed through taxes and all voting is decided based on a majority rule. Voters first decide on the amount of public goods provision before deciding on the *type* of public good that is provided. All voters have the same income but differ in their preferences over the type of public good, which in turn depend on the norms of their ethnic group. The central result of the model is that the more polarized the preferences

across ethnic groups are, the lower is the provision of the public good. This may be the case because groups cannot find an agreement on the type of public good, and because each group's utility level from a given public good is reduced if the other group also uses it.

The predictions of this basic model change when voters differ in their incomes. As shown by Lind (2007), the interaction between inequality and group-specific preferences turns out to be important. The chosen level of redistribution depends on income inequality within and between groups as well as the *group antagonism* – the extent to which each group cares about the welfare of the other group. The model yields two main results. First higher group antagonism leads to lower redistribution, as members of the rich ethnic group will only care about the welfare of their own group and, hence, vote for lower taxes compared to a world with homogeneous voters. This effect is reinforced by ethnic fractionalization – the more ethnic groups there are, the more negative will be the effect of group antagonism on redistribution. A second result highlights the role of between-group inequality. The greater the economic difference is between ethnic groups, the lower is the chosen amount of redistribution. This is the case because greater between-group inequality means that the rich group are relatively more rich than the poor and, hence, the median voter *within* the rich group will prefer a lower tax rate than the overall median voter.

While in the standard models ethnic identity is considered exogenous, this need not be true. As minority groups assimilate, their members' ethnic identification may change. Bisin and Verdier (2017) incorporate this idea into a political economy model of public goods provision. The model shows that if the majority and minority groups have different income levels and preferences for public goods, they will opt for a low level of provision. In addition, the underprovision of the public good reduces the minority group's incentive to adopt the culture of the majority. The model further highlights that the dynamics of redistribution and assimilation depend on the initial size of the minority group. A group that is small initially will assimilate quickly. Because the minority adopt the majority's preferences, there is no conflict over public goods provision and, hence, more redistribution will be chosen. On the other hand, if the minority group is initially relatively large, we should expect little agreement over public goods provision and no assimilation and little redistribution in the long run.

### *Incorporating Anti-Solidarity Effects and Biased Perceptions*

A puzzling fact in the U.S. and other countries is that a rise in income inequality has been concurrent with a *reduction* in marginal income tax rates. This is the opposite of what a standard median voter model would predict. Lee, Roemer and van der Straeten (2006) posit that immigration can be an explanation behind this puzzle. In their model, two political parties compete along two dimensions, namely redistribution and immigration. The model highlights two effects. First, the *anti-solidarity effect*, namely that voters will opt for less redistribution if they view the poor as undeserving. Second, in equilibrium, one party is in favour of generous

redistribution and immigration (Democrats), whereas the other party prefers low taxes and a tough stance on immigration (Republicans). Because there are only two parties, there is no party catering for voters who are both poor and anti-immigrant. If parties only competed on redistribution, or if anti-immigrant attitudes did not matter, these voters would vote for the Democrats. However, because parties also compete over immigration, some poor voters will vote Republican because of the party's stance on immigration. This model provides one explanation as to why the U.S. has a less generous welfare state compared to European countries despite having higher inequality.

One reason why immigration reduces support for redistribution is that natives may have biased beliefs about the number of immigrants as well as the immigrants' economic situation. Survey evidence shows that natives vastly overestimate the share of migrants in the population and believe that the migrants are much more welfare dependent than they actually are (Alesina, Miano, and Stantcheva 2018). Alesina and Stantcheva (2020) develop a model that shows how biased beliefs affect individual support for redistribution. The model incorporates the idea that voters support transfers to people who are poor due to bad luck but oppose transfers to people who are poor because they choose not to work – a group the authors call 'freeloaders'. Support for redistribution is governed by three parameters, namely i) to what extent a voter believes that immigrants are freeloaders, ii) to what extent freeloaders should receive transfers, and iii) a voter's beliefs about the number of immigrants in a country. A voter who believes that immigrants are poor as a result of their own choices and who opposes transfers to freeloaders will generally express a low support for redistribution. This effect is amplified if the same voter overestimates the number of immigrants in the country. Therefore, a distaste for redistribution to immigrants and misperceptions about immigrants can be mutually reinforcing.

#### **D. Tax Competition and Mobility**

An additional strand of literature related to migration and redistribution is on tax competition between regions. If regions set different income tax rates, this may induce inter-regional migration. High-skilled workers have an incentive to migrate to the region with low taxes, while the opposite is true for low-skilled workers. In equilibrium, these incentives to migrate limit regions' ability to diverge in their tax rates. This mechanism is at the core of a large literature at the intersection of public finance and regional economics. Given that most theoretical works in this literature considers internal rather than international migration, summarising this literature would go beyond the scope of this review. For interested readers, we recommend the classic articles by Wildasin (1991), Epple and Romer (1991) and Hindriks (1999), as well as the study by Crémer and Pestieau (1998) on competition of pension systems when workers are mobile.

### III. Migration and Preferences for Redistribution

The previous section has shown that, on theoretical grounds, the relationship between immigration and redistribution is ambiguous. There are some plausible reasons why immigration may reduce support for redistribution – for instance fiscal leakage, or welfare chauvinism – but there are also plenty of reasons why natives may demand more redistribution in response to immigration, for example if immigration increases competition on the labour market. Moreover, dynamic models highlight that immigration and welfare regimes may be determined by the same political process and thus, are highly interdependent.

Over the past 30 years, a substantial body of literature has been testing these theories empirically. This literature can be classified in two broad strands; one uses survey data to study the effect of immigration on natives' *preferences* redistribution. The other strand investigates to what extent immigration affects governments' decisions on taxation, spending and the design of social programmes. In this section, we review the literature on preferences.

The literature has used different terms to describe a person's preferences for redistribution. *Preferences* is often replaced by *support*, and *redistribution* is often replaced by *the welfare state*, *social policy*, or *the provision of public goods*. While there may be subtle differences between these terms, we will use them interchangeably.

#### A. Immigration and Preferences for Redistribution

Preferences for redistribution are an important step on the causal path from immigration to the setting of redistributive policies. Yet they should not be viewed as a mere proxy for policy setting; they are an important outcome in its own right. Not only do people's preferences for redistribution influence the design of social policy, but they may have a broader effect on social norms in a society and, thus, determine many individual and political decisions.

There is also a practical reason why many researchers study preferences as opposed to actual policy setting. Preferences are measured in regular intervals, allowing researchers to document how preferences change in response to immigration. In contrast, tax and spending policies are the result of a long-winded political process and may react to immigration with considerable delay.

Alesina and Giuliano (2011) provide an overview of the study of preferences for redistribution in economics, although most principles discussed in their article also apply to other social sciences. They emphasise that individual preferences for redistribution not only depend on individual incomes, but more broadly on people's views about acceptable levels of income and wealth inequality. They identify seven non-mutually exclusive determinants of preferences for redistribution: 1) personal experience – for example, people who grew up during a recession are more in favour of redistribution; 2) cultural factors and different social norms; 3) influence



through a political system; 4) beliefs about social mobility; 5) family structures – larger families provide economic security, which lowers the demand for redistribution, 6) perceptions of fairness, and whether economic success is the result of luck or effort; and 7) the desire to achieve a high social standing.<sup>8</sup>

These determinants represent a non-exhaustive list of plausible channels through which immigration affects preferences. Immigration may change natives' perceptions of what is “fair”, their expectations about the economic opportunities of their children, or the general social norms about what is an acceptable level of inequality.

### *Data and Measurement*

Preferences for redistribution are typically measured through survey responses. Several large-scale surveys include modules that cover perceptions on different types of taxation and spending, fairness concerns, as well as views on deservingness, trust and reciprocity. Frequently used datasets are the *European Social Survey* (ESS, 38 European countries since 2002), the *International Social Survey Programme* (ISSP, 41 countries since 1985), the *European Values Study* (EVS, 47 European countries since 1981), the *World Values Survey* (WVS, close to 100 countries since 1981), as well as national surveys such as the *General Social Survey* (GSS) in the U.S. or the *German General Social Survey* (GGSS, Allbus) in Germany. These datasets are repeated cross sections that are representative of the respective population in a given year. In addition, several studies use tailored surveys, for example in survey experiments.

The survey modules on preferences typically ask respondents for their desired level of government involvement in domains such as unemployment insurance, healthcare, pensions, childcare, old-age care, education and housing. While the exact measurement differs between surveys, respondents typically have to give answers on a Likert scale with outcomes ranging from “*only the individual is responsible*” to “*only the government is responsible.*” Some datasets also ask broader questions such as whether “*the government should take measures to reduce differences in income levels*”, or elicit preferences by asking whether respondents agree or disagree on whether “*To be a good citizen, how important would you say it is for a person to support people who are worse-off than themselves*” (ESS).

### *Empirical Challenges - Identification and Interpretation*

Studies on the economic impact of immigration face an inherent endogeneity problem. While producing correlations is often straightforward, establishing causality is challenging because

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<sup>8</sup> Some key references for these determinants are: personal experience (Giuliano and Spilimbergo 2014); cultural factors and social norms (Alesina and Glaeser 2004); influence through a political system (Alesina and Fuchs-Schündeln 2007; Fuchs-Schündeln and Schündeln 2015); beliefs in a just world (Bénabou and Tirole 2006); perceptions of fairness and deservedness (Alesina and Glaeser 2004); social status (Corneo and Gruner 2000)

migration is not a random process. It is neither random who moves and who stays, nor where people move to. A potential migrant has to compare the economic and psychological benefits against the costs of moving, and often faces a choice between several destinations. For example, there are many reasons why Mexican immigrants to the U.S. cluster in Los Angeles and Chicago. These places offer favourable economic conditions, and the presence of many other Mexicans may facilitate the economic and social integration of newcomers. A correlation between the number of migrants, and various economic or social variables is difficult to interpret: does it reflect the causal effect of the immigrant inflow, or rather the fact that certain areas attract more migrants?

Causality requires the benchmark of an ideal controlled experiment, no matter how realistic or ethical such an experiment would be in practice. A useful example for such a thought experiment is provided by Borjas (2016), namely a gigantic helicopter that randomly drops off migrants in different places. Through this process, the number of migrants dropped off is unrelated to the area's social and economic conditions, and the migrants could not choose an area based on their preferences. This experiment would allow a researcher to establish causality by comparing areas with many versus few migrants.

Because such experiments are typically not available, common solution to this fundamental problem of establishing causality is to exploit natural experiments, that is, situations in which the assignment of migrants to places was as good as random. We will discuss the use of these methods along with the review of the literature below.

An equally profound challenge is the measurement of exposure to immigrants. A typical statistical model relates individual survey responses to the individual's exposure to immigration. But measuring exposure is far from trivial as individuals can be exposed in many different ways – in their everyday lives, in the workplace or in the media. Many studies use the share of immigrants at the national or regional level as a proxy for a person's exposure. But researchers and readers should be aware of the limitations of such a measure in capturing the true exposure that may eventually influence a person's preferences.

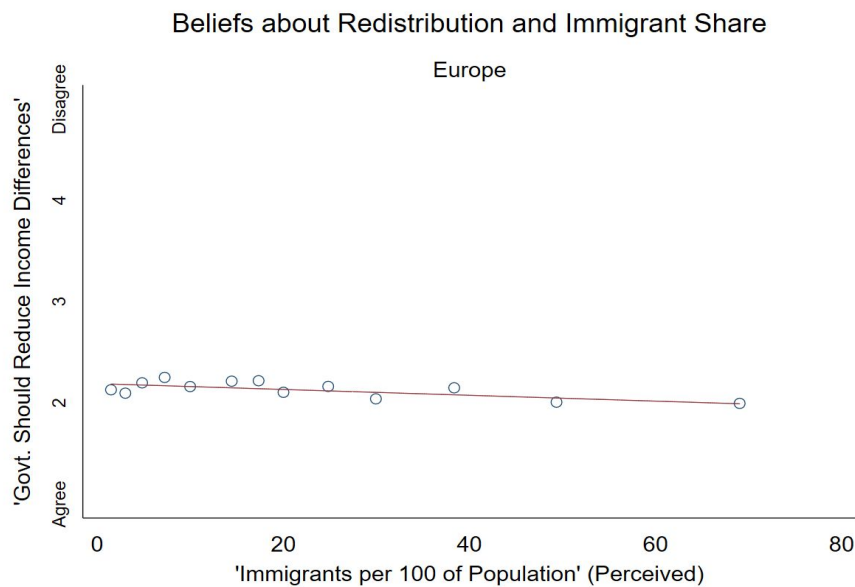
## **B. Stylised Facts**

Before summarising and discussing the existing literature, we provide some stylised facts about migration and preferences for redistribution based on recent social surveys from Europe and the U.S.. The graphs to follow will illustrate to what extent individual attitudes towards immigration are correlated with attitudes towards the welfare state. All graphs represent raw correlations without adjusting for potential confounding factors.

### *Perceived Immigration and Preferences for Redistribution*

Figure 1 displays the relationship between a respondent's perceptions about migration and their preferences for redistribution. The figure is based on round 7 of the ESS, which comprises data for 1,800 respondents in 29 European countries. The outcome variable is based on a survey question which asks respondents, on a five-point scale, to what extent they agree or disagree with the statement 'The government should take measures to reduce differences in income levels'. We correlate this measure with an individual's perceived share of immigrants, elicited through the question 'Out of every 100 people living in [country], how many do you think were born outside [country]?'.

The binscatter in Figure 1 shows that there is no obvious relationship between perceived numbers of immigrants and support for redistribution. The same holds true if we replace perceived with actual shares of migrants (not shown here).



*Figure 1*

*Note:* The binscatter displays the relationship between perceived immigration and preferences for redistribution in Europe. Source: individual-level data from round 7 of the ESS.

In Figure 2, we perform a similar analysis for the U.S. based on GSS data from 1994. The variable on the vertical axis is based on the question whether a respondent believes the U.S. is 'spending too much, too little, or about the right amount on welfare'. The variable on the horizontal axis measures perceptions about immigration, whereby respondents were asked

whether they believed immigration should be ‘increased a lot’, ‘increased a little’, ‘left the same as it is now’, ‘decreased a little’, or ‘decreased a lot’, when considering current levels of immigration to the U.S.. The pattern for the U.S. is similar to that in Europe in Figure 1: there is no visible relationship between perceived immigration and preferences for redistribution.<sup>9</sup>

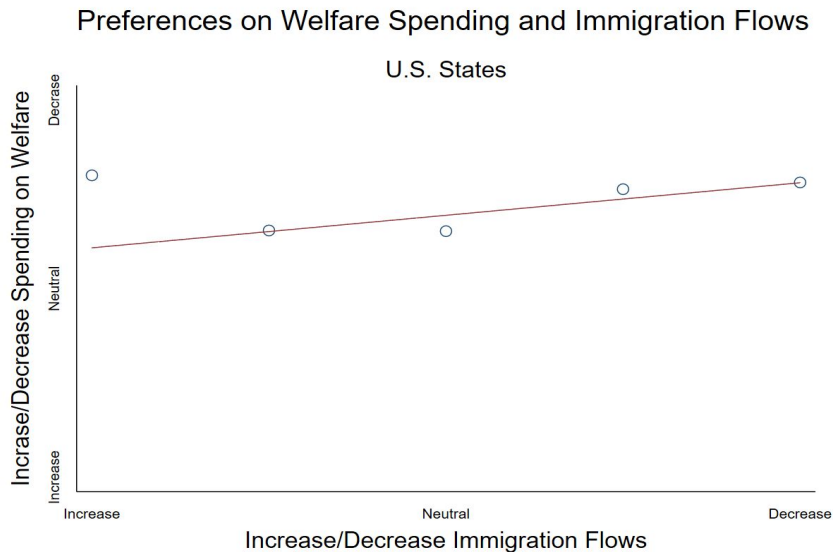


Figure 2

*Note:* The binscatter displays the relationship between perceived immigration and preferences for redistribution in the U.S.. Source: individual-level data from the GSS 1994.

### *Labour Market Concerns and Preferences for Redistribution*

One reason for the absence of a correlation between perceived immigration and preferences for redistribution is that many natives may not see immigrants as competitors in the labour market. In Figures 3 and 4, we focus explicitly on natives’ labour market concerns. In Figure 3, respondents of the ESS are asked on a 10-point scale to what extent they believe that immigrants take away or create native jobs. Natives who view immigrants as a threat to native jobs appear to be more in favour of redistribution compared to those who believe immigrants create jobs. However, the correlation between both variables is weak. The correlations are even weaker when native perceptions are based on questions whether their country ‘is made better or worse by

<sup>9</sup> Due to a lack of state identifiers in the non-sensitive GSS file, we cannot relate the actual share of immigrants in each state to aggregate welfare preferences in that state. However, we return to this question later in the chapter when we examine the linkage between immigration and welfare policy setting.

immigrants' or whether they believe their country's cultural life is undermined or enriched by immigrants.

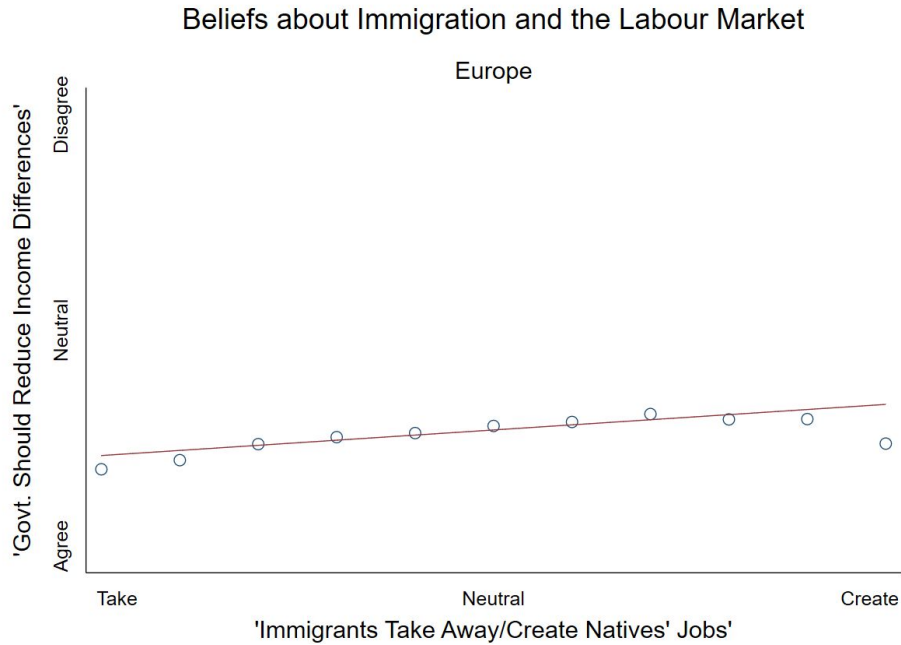
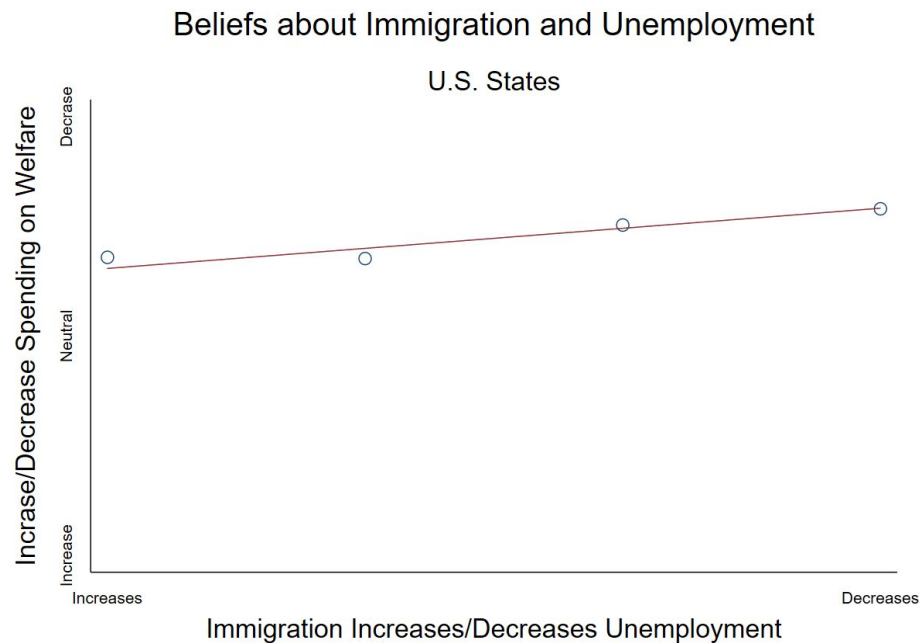


Figure 3

*Note:* The bincscatter displays the relationship between natives' belief that immigrants take away or create native jobs and preferences for redistribution in Europe. Source: individual-level data from round 7 of the ESS.

Figure 4 yields a similar pattern for the U.S.. In the GSS, respondents are asked on a five-point scale whether they believe that immigration fuels unemployment or not. The correlation between this variable and preferences for redistribution is equally small as in Europe. Likewise, we find a very small correlation between preferences for redistribution and the question whether immigration damages or fosters national unity.



*Figure 4*

*Note:* The binscatter displays the relationship between natives' belief that immigration increases or decreases unemployment preferences for redistribution in the U.S..  
Source: GSS from 1994

Taken together, these raw correlations reject the notion that people with pessimistic views about immigration differ in their preferences for redistribution from people holding more optimistic views. Without further adjustment for endogeneity and/or improvements in the measurement of preferences for redistribution and views about migration, we should not expect compelling results from studies using variation across European countries or U.S. states.

### **C. Evidence across and within Countries**

#### *Cross-Country Evidence on Immigration*

A natural starting point to study the relationship between immigration and preferences for redistribution is to see whether natives' preferences differ between high- and low-immigration countries. Cross-country studies are useful as they provide stylised facts and suggestive evidence in favour of or against theoretical explanations. However, these studies typically suffer from two drawbacks. First, sample sizes are typically small, as most surveys only include a small number of countries. Second, given that global migration is not a random process, removing all possible confounders and establishing causality is almost impossible, which is why cross-country studies should not be seen as producing conclusive evidence.

Given these empirical challenges, it is rather unsurprising that the relationship between immigration and preferences for redistribution appears weak and sensitive to the chosen specification. Brady and Finnigan (2014) use individual-level ISSP panel data from 17 countries over 20 years and consider preferences in six domains. Based on multi-level and two-way fixed effect models, they find a weak positive relationship between immigration and native preferences for redistribution, which holds after controlling for social welfare expenditures and employment rates. Kwon and Curran (2016), using the same data, uncover a more nuanced pattern. In countries with ‘multiculturalist’ policies – policies that foster a multicultural society – the relationship between immigration and preferences for redistribution tends to be positive whereas in countries without these policies it tends to be negative.

A study by Burgoon, Koster and van Egmond (2012), based on ESS data, highlights the importance of the geographic level at which immigration and survey data are linked. For the share of immigrants at the national level – the standard measure in this literature – they find little evidence of a relationship between immigration and preferences for redistribution. However, interesting correlations emerge when they instead consider the share of immigrants in a person’s occupation. People in occupations with a high concentration of foreigners tend to be more in favour of redistribution. The authors interpret this result as consistent with the view that immigration increases natives’ labour market risk, which is why natives favour more redistribution.

An empirical challenge with most cross-country studies is that most welfare policies are set at the national level. If migration is also measured at the same level, establishing causality becomes inherently difficult because a country’s welfare system may attract migrants as well as shape its citizens’ preferences for redistribution. Some of the aforementioned studies aim to address this problem by controlling for features of a country’s welfare state, for example the share of social spending in GDP or tax revenues relative to GDP. However, controlling for a limited number of confounders is unlikely to solve this endogeneity problem, as there are many unobserved features of the welfare state that jointly determine immigration and preferences. A more promising approach is to measure the concentration of immigrants at a more fine-grained regional level, and exploit variation within countries. By using this approach, researchers can compare preferences of people who live under the same welfare regime but face different levels of immigration. One example for such work is Eger and Breznau (2017), who measure the concentration of immigrants at the NUTS-2 level in Europe. Using multi-level models and data from the ESS, they document a negative relationship between the regional share of immigrants and natives’ preferences for redistribution.

A study by Alesina, Murard and Rapoport (2019) follows a similar idea but addresses causality more convincingly. Their empirical model includes country fixed effects, which control for most

design features of the welfare state. To further address the challenge that local economic conditions affect both the level of immigration and natives' preferences, they use a shift-share instrument, which isolates regional variation in immigration that is driven by the location choices of migrants many decades before and, therefore, independent of current local economic conditions. Using ESS data, the authors find a significant negative effect of immigration on natives preferences for redistribution. This effect is largely driven by countries with generous welfare systems, as well as by individuals at the center or right of the political spectrum.

### *Cross-Country Evidence on Ethnic Diversity*

A related strand of literature looks at the relationship between ethnic diversity and preferences for redistribution. Although immigration and ethnic diversity are inextricably linked, both are not the same, as ethnic diversity is a much broader term than immigration. Ethnic diversity is often the result of migration over many generations. But places with a high ethnic diversity need not have many immigrants – at least not if immigrants are defined as people who were born in a country that is different from their current country of residence. The difference can be illustrated with the example of the Turkish community in Germany. Currently, over three million people in Germany are of Turkish descent. While the majority of these people were born in Germany it was their parents or grandparents who immigrated from Turkey. To the extent that people of Turkish descent form a distinct ethnic group, their presence contributes to ethnic diversity in Germany, but they are not immigrants because they were born in Germany. Moreover, not all ethnic diversity is the result of migration. For example, many African countries are home to multiple ethnic groups, which is often the result of arbitrarily drawn colonial borders that did not coincide with ethnic lines. Ethnic diversity is usually measured with an index of the average concentration of ethnic groups in a society – sometimes also referred to as *ethnic fractionalisation*. A commonly used index is the Hirschman-Herfindahl index, which is high if one ethnic group has a high share relative to all other groups and low if all groups have equal shares.<sup>10</sup>

While most studies on ethnic diversity focus on the regional level, four studies provide a global perspective based on cross-country data. Mau and Burkhardt (2009) use ESS data from several European countries to look at the correlation between ethnic diversity and social spending as well as attitudes towards the welfare state. Although they find no correlation between ethnic diversity and social spending, they document that countries with greater ethnic diversity have lower support for the welfare state. In contrast however, Steele (2016) finds no correlation using similar data for over 90 countries.

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<sup>10</sup> The Hirschman-Herfindahl index is by no means the only index used in the literature. For a discussion of different indices, see for example Posner (2004) and Schaeffer (2013).



An interesting perspective is provided by Houle (2017), who considers the general relationship between inequality and redistribution for 89 countries, based on the Luxembourg Income Study. Standing apart from studies based on social surveys, they find a significant positive correlation, in line with standard political economy models. But the relationship is considerably weaker in countries in which a large share of low-income earners belong to a minority ethnic group. This suggests that ethnic diversity at the low end of the income distribution in particular reduces the support for redistribution.

Gründler and Köllner (2020) undertake an important step towards estimating a causal effect of diversity on redistribution. They combine several global datasets on culture, diversity and attitudes towards the welfare state. To estimate a causal effect, they instrument for diversity in a country  $i$  with the average diversity of its neighbouring countries. The argument behind this empirical strategy is that the diversity in neighbouring countries is related to diversity in country  $i$  but has no direct effect on preferences for redistribution in country  $i$ .<sup>11</sup> In linear models, they find a significant negative effect of diversity on preferences for redistribution, although it is worth mentioning that the effect appears to be non-linear. From low to moderate levels of diversity the relationship is negative whereas it turns positive with higher levels of diversity.

### *Within-Country Studies*

The cross-country evidence is complemented by studies on migration, diversity and redistribution within countries. While not allowing for a global perspective, within-country studies can be compelling nonetheless, as researchers can study the attitudes of people who live under the same welfare regime. Therefore, the relationship between immigration and attitudes is not confounded by differences in welfare regimes across countries. The central empirical challenge in within-country studies is the endogenous sorting of immigrants to places. Local economic conditions, which are largely unobserved by the researcher, may affect immigration into the area, as well as the attitudes of the incumbent population.

Within-country studies can help researchers answer a fundamental question in the social sciences, namely whether the U.S. – the quintessential multicultural and multiethnic society – is exceptional in its attitudes towards welfare, or whether European countries are similar. Evidence from European countries rejects the notion of U.S. exceptionalism in support for the welfare state. Eger (2010) considers the case of Sweden, one of the countries with the most generous welfare states in the world. Using variation in the share of immigrants across Swedish counties, they document a significant negative relationship between the number of immigrants and preferences for redistribution. Dahlberg, Edmark and Lundquist (2012), also using Swedish data, take a decisive step towards establishing causality. They exploit the allocation of refugees to

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<sup>11</sup> These instruments are often referred to as jackknife Instrument, as they are based on the average regressor of neighbouring countries while leaving out the country in question.

Swedish municipalities, which they claim to be random, and show that a larger share of immigrants reduces preferences for redistribution.<sup>12</sup>

Similar results are found by Schmidt-Catran and Spies (2016) with German data. They use panel data to isolate within-regional variation in immigration, and demonstrate that an increase in immigration in a region lowers support for welfare spending. Interestingly, they find smaller effects in areas with higher shares of foreigners – supporting Allport’s (1954) *contact hypothesis* – and larger effects in areas with high unemployment – supporting Forbes’ (1997) *conflict theory*.<sup>13</sup>

While immigration appears to affect attitudes to general welfare spending in Germany, there appears to be no effect on support for the unemployed. Stichnoth (2012) documents a strong negative correlation between the regional share of immigrants and native support for the unemployed, but this correlation disappears when he uses panel data and adjusts for the endogenous location choices of immigrants.

#### **D. Channels: Why Does Immigration Affect Preferences for Redistribution?**

Having established that immigration and redistribution are related – at least within countries – we now turn to the channels that explain *why* this relationship may exist. As described in Section II, there are a multitude of economic, political and cultural channels. Immigration may influence natives’ support for the welfare state because it affects their individual economic situation through labour market competition, pensions, or fiscal leakage. But immigration may also affect natives’ preferences for non-economic reasons, for example if they fear that their native culture is threatened by immigrants ‘importing’ their culture, if they have a distaste for sharing public goods with a different group or believe that immigrants deserve less support than natives.

##### *Immigrant Integration*

An important channel highlighted in the literature is the integration of immigrants. Natives may view immigrants more favourably if immigrants are well-integrated, in economic and social terms. Consequently, we would expect natives’ support for the welfare state to be less responsive if immigrants are well-integrated. Burgoon (2014) tests this hypothesis in a cross-country study with ESS data. They measure the integration of immigrants through the similarity between immigrants and natives in terms of unemployment, benefit receipt and social attitudes. The data support the aforementioned hypothesis. While there is generally a negative correlation between

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<sup>12</sup> The causal interpretation of this result is not without controversy. Nekby and Pettersson-Lidbom (2017) show that the original result becomes insignificant under a more appropriate measurement of the assignment policy.

<sup>13</sup> However, in a replication by Auspurg, Brüderl and Wöhler (2019), it was shown that the original results become small and insignificant once they account for non-parallel pre-trends. Schmidt-Catran and Spies (2019) set an excellent example how authors should respond to replications that weaken their initial conclusions.

immigration and support for redistribution, this correlation is weaker in countries where immigrants are economically more integrated.

A study by Spies and Schmidt-Catran (2016) tells a cautionary tale about the role of immigrant integration for the relationship between immigration and support for redistribution. They exploit rich variation in both immigration and the economic and social integration of immigrants across cantons in Switzerland, and find no evidence that immigrant integration affects the relationship between immigration and native support for the welfare state. They conjecture that the *perceived* integration of immigrants – the extent to which natives believe immigrants are integrated – is more important than *actual* integration.

### *Perceptions of Migration*

Natives' support for the welfare state may also be affected by natives' perceptions of and attitudes towards migrants. Cross-country studies by Finseraas (2008), Senik, Stichnoth and van der Straeten (2009), Magni-Berton (2014) and Coban (2020) provide evidence for this channel. Finseraas (2008) uses ESS data to study the correlation between perceptions of migration and support for redistribution in 22 countries. They find evidence consistent with both an *anti-solidarity* and a *compensation effect*. Natives who believe that immigrants should not have equal rights are less in favour of redistribution whereas natives who perceive immigration as an economic threat are more in favour of redistribution. Senik, Stichnoth and van der Straeten (2009) make a similar point, also based on the ESS. They first document a weak negative relationship between the perceived presence of immigrants and preferences for redistribution. Furthermore, they find a considerable degree of heterogeneity across individuals. The effect is strong among natives who believe that immigration reduces native employment and wages, and in addition express a strong dislike towards immigrants. For individuals who do not hold such views, the correlation between perceived migration and preferences for redistribution is close to zero. Magni-Berton (2014) performs a similar analysis based on later waves of the ESS, spanning 45 countries. They show that native beliefs about the effects of immigration have countervailing effects on their stated preferences. Those who believe in strong negative effects of immigration on native wages and employment display more support for redistribution, which is not unexpected given that social welfare dampens the income consequences of immigration. This result does not prove robust to controls for individual characteristics. On the other hand, those who believe that immigrants drain the welfare system are less in favour of redistribution, and this correlation appears highly robust.

Coban (2020), also based on the ESS, uses a decomposition method that quantifies the role of attitudes towards immigration as a mediating factor on the causal path from ethnic diversity to support for the welfare state. The study shows that a large part of the effect of ethnic diversity and preferences for redistribution is explained by the intermediate effect on attitudes towards

immigrants. These results are consistent with Ford's (2006) study in the U.K., which documents a significant negative correlation between individual anti-immigrant attitudes and support for redistribution on the one hand, but no significant correlation between support for redistribution and actual ethnic diversity in a respondent's region on the other hand.

While these cross-country studies document interesting correlations, several recent experimental studies aim at the causal effect of natives' perceptions of immigrants on preferences for redistribution, namely Naumann and Stoetzer (2018, Norway, Germany, Netherlands), Runst (2018, Germany) and Alesina, Miano and Stantcheva (2018, six countries). The research design of these studies is based on priming natives about immigration. In an otherwise standard survey, a randomly chosen treatment group receives information about immigrants – for example, the share of immigrants in their country, or the average tax contribution of immigrants – before answering questions about preferences for redistribution. Based on this design, researchers can evaluate the causal effect of information about immigrants on political preferences. The first experiment in this recent literature was by Naumann and Stoetzer (2018). They find no significant difference in preferences between the treatment and control groups, although they document important differences with respect to labour market competition. Respondents with a high likelihood of competing with immigrants show a stronger support for redistribution when they were primed about migration. Runst (2018) performed a similar survey experiment in Germany and, likewise, finds heterogeneous effects. Priming natives with immigration leads to more support for the welfare state among less educated and less support among more educated individuals. These results show that averages can mask important heterogeneity in effects, as migration does not affect everyone in the same way. Even if there is no effect on average, there may well be groups with strong effects.

The experiment of Alesina, Miano and Stantcheva (2018) is similar to that of Naumann and Stoetzer (2018). A survey in six countries reveals that natives vastly overestimate the share of migrants as well as the share of muslims among migrants, and they believe that immigrants are much poorer and more welfare dependent than they actually are. In an information experiment, the authors provide the respondents with randomized information treatments about immigration. These include randomizing the order of question blocks – making immigration more salient by asking the immigration questions before those about redistribution – as well as presenting respondents with facts about the number and origin of immigrants in their country. The striking finding is that groups that were primed about immigration express *lower* support for redistribution compared to the control group. The only treatment that has a weak effect is when respondents are told an anecdote about a hard-working immigrant. These results suggest that it is not the *facts* about immigrants that are important for shaping preferences for redistribution, but rather people's *perceptions* about immigrants.

A survey experiment by Avdagic and Savage (2019) points to the importance of how the information about immigration is framed. When respondents in Germany, Sweden and the UK are presented with negative information suggesting that immigrants are a drain on public finances, they show lower support for welfare spending compared to a control group. Interestingly, a second treatment group that received positive information suggesting that immigrants make a net contribution to the tax-transfer system also show lower support for welfare spending, although the difference to the control group is not statistically significant. Overall, this study suggests that negative information about immigrants has a stronger effect on native attitudes than positive information.

### *Us versus Them: The Role of Attitudes towards Immigrants*

Social identity is a potentially important factor explaining preferences for redistribution among natives. They may feel and show less solidarity with poor immigrants than with natives who are equally poor, simply because the immigrants do not belong to the same ethnic group. One of the first studies to test social identity theory with respect to preferences for redistribution was by Luttmer (2001). The author uses survey data from the U.S. and employs a fixed effect estimator which isolates variation in ethnic diversity within areas over time. They document a negative *exposure effect*: the higher the share of welfare recipients in an area, the lower is the support for redistribution. However, the exposure effect depends on the racial group of the respondents and welfare recipients. Individual support for redistribution increases in the share of welfare recipients from one's own racial group and decreases in the neighbourhood share of recipients from other groups. This result gives evidence that group identity and loyalty are important determinants of political and social preferences. Similar evidence for the U.S. has been provided, among others, by Gilens (1995), who shows that white Americans with prejudices against Blacks oppose means-tested social programmes, and Fox (2004), who finds a similar role for the stereotypes of Whites towards Latinxs.

Such results support the often-expressed claim that the welfare state in the U.S. is less generous than in Europe because of its long tradition as a multi-ethnic society (Stephens 1979; Alesina and Glaeser 2004). As Europe has been experiencing more immigration over the past decades, an important question is whether Europeans' perceptions of immigrants and preferences for redistribution converge to those of Americans. Larsen (2011) tests this hypothesis based on survey data from the U.S., Denmark, Sweden and the U.K., and finds that Europeans view immigrants as an out-group to the same extent as Americans view Blacks or Latinxs. Moreover, in both Europe and the U.S. the study finds similar negative correlations between a person's anti-immigrant views and their support for welfare. Garand, Xu and Davies (2017) and Burgoon and Rooduijn (2020) document similar patterns, respectively, for the U.S. and Europe. Both find

robust evidence that natives expressing more anti-immigrant attitudes show a lower support for redistribution.

### *Welfare Chauvinism: Do Immigrants Deserve Social Benefits?*

If immigrants are indeed considered an out-group, natives' support for redistribution may depend on the group that predominantly receives social benefits. Several studies show that natives support less redistribution if the main beneficiaries are immigrants rather than natives – a distinction that is often termed *welfare chauvinism* (Andersen and Bjørklund 1990). Evidence for welfare chauvinism is provided in Ford's (2016) observational study in the UK, which finds that white British respondents view immigrants as well as non-white British as less deserving of social benefits. Harell, Soroka and Iyengar (2016) find similar results in a comparative study in the U.K. and Canada but not in the U.S.. Causal evidence is provided by Cappelen and Midtbø (2016), who focus on intra-EU migration to Norway. Their study combines list experiments with vignettes, whereby they randomise both the list items used for measuring welfare chauvinism as well as the information about EU immigrants receiving the same social benefits as Norwegians. They find that welfare chauvinism towards immigrants is widespread and that natives show less support for the welfare state when presented with information about immigrants' eligibility for social benefits.

Two studies from Sweden directly investigate some of the driving forces for welfare chauvinism. Hjorth (2016) study emphasises cultural distance and family size. In a survey experiment, they find that natives see more culturally distant migrants – Bulgarians as opposed to Dutch – as less deserving of child benefits. Likewise, they see larger immigrant families as less deserving, which indicates that natives show less support for immigrants who receive high benefits. This result appears to be driven by individual prejudice, as the effects are more pronounced among natives with strong anti-immigrant attitudes. The role of prejudice in explaining welfare chauvinism is also emphasised by Goldschmidt and Rydgren (2018). The authors use a linked survey and administrative dataset to test whether welfare chauvinism is driven by individual prejudice, the economic situation of immigrants in the neighbourhood and the exposure to immigrants in the workplace. They document a strong role of prejudice and exposure to unemployed immigrants in the neighbourhood, but find no correlation with the concentration of immigrants in the workplace. This result suggests that welfare chauvinism is mainly driven by one's prejudice and one's observations in the neighbourhood rather than close contacts in the workplace.

### *The Role of the Institutional Context*

While the survey experiments establish a clear causal relationship between immigration and support for redistribution, this relationship may differ across institutional contexts. For example, natives' support for redistribution may be different for a policy that benefits everyone equally compared to a policy that predominantly benefits immigrants. Muñoz and Pardos-Prado (2019)

explore this hypothesis in a survey experiment in the U.K.. They prime a treatment group with information about immigrants being beneficiaries of means-tested child benefits and test whether this treatment reduces support for the child benefit. While the support for means-tested and universal child benefits is equal in the control group, respondents who were primed about immigration show significantly lower support for means-tested benefits. These results indicate that natives care about which group receives a social benefit. Similar results have been found by Goldschmidt (2015) in an observational study with German survey data. Respondents with stronger anti-immigrant attitudes show lower support for spending on unemployment benefits, which benefit some groups more than others, while they find no significant effects for pensions and healthcare spending, which benefit everyone equally.

Another important factor determining the relationship between immigration and support for redistribution is political parties. Parties may compete for voters with anti-immigrant attitudes by pointing out that immigrants are the main beneficiaries of social benefits – a strategy referred to as *playing the race card*. This may have a direct effect on redistribution through voting, as well as an indirect effect if campaigns make immigration and redistribution more salient in the public debate. Schmidt-Catran and Spies (2013) investigate the interplay between party politics, attitudes towards immigrants and support for the welfare state using ESS data from 14 European countries. They show that in countries where parties emphasise immigration before elections people with anti-immigration attitudes show less support for welfare. They find no such relationship in countries where immigration plays a minor role in electoral campaigns.

### *The Importance of Historical Migration*

While most studies consider the effect of *recent* migration on natives' preferences, Giuliano and Tabellini (2020) document that preferences for redistribution today can be traced back to past immigration over a century ago. Among people born in the U.S., those living today in countries that received a higher share of European immigrants in the early 20th century show significantly higher support for redistribution. They show that this relationship is independent of county characteristics or immigrants' traits. Moreover, the effect is stronger in places where immigrants and natives had closer interactions. These results suggest that immigrants brought European ideas about the welfare state to America, which had lasting effects on the political landscape.

## **E. Effect on Voting Behaviour**

While stated preferences in surveys allow researchers to test theories about immigration and the welfare state, it is unclear whether a change in natives' preferences actually translates into votes. And although there is abundant evidence that immigration affects voting in general (Barone et al. 2016; Halla, Wagner, and Zweimüller 2017; Dinas et al. 2019; Dustmann, Vasiljeva, and Damm 2019; Edo et al. 2019; Steinmayr 2020; Mayda, Peri, and Steingress forthcoming), little is known whether it actually affects voting on redistributive policies. Moriconi, Peri and Turati (2019) fill

this gap by combining ESS voting data with a text analysis of party programmes. They show that the immigration of high-skilled workers shifts votes towards parties in favour of a generous welfare state, while low-skilled immigration shifts votes towards parties in favour of a small government.

### IV. Migration and Public Policy Setting

As shown in the previous section, there is a large amount of literature on the effect of immigration – or ethnic diversity – on preferences for redistribution. What remains unclear from this literature is whether a change in preferences translates into actual policy changes. In this section, we review a small but growing literature that directly looks at the effect of immigration on public policy setting. With *public policy* we mean any policy set by the government, ranging from taxation and spending to the design of unemployment insurance.

#### A. A Look at the Raw Data

Before discussing the existing literature, we present stylised facts about immigration and redistributive policy in Europe and the U.S. In Figure 5, we focus on the OECD countries and correlate the share of immigrants in the population with the share of government spending in overall GDP, a proxy for redistribution. The data underlying both variables are taken from the OECD database for the year 2018. As can be seen from Figure 5, there is no obvious correlation between the share of immigrants and the share of spending in GDP.

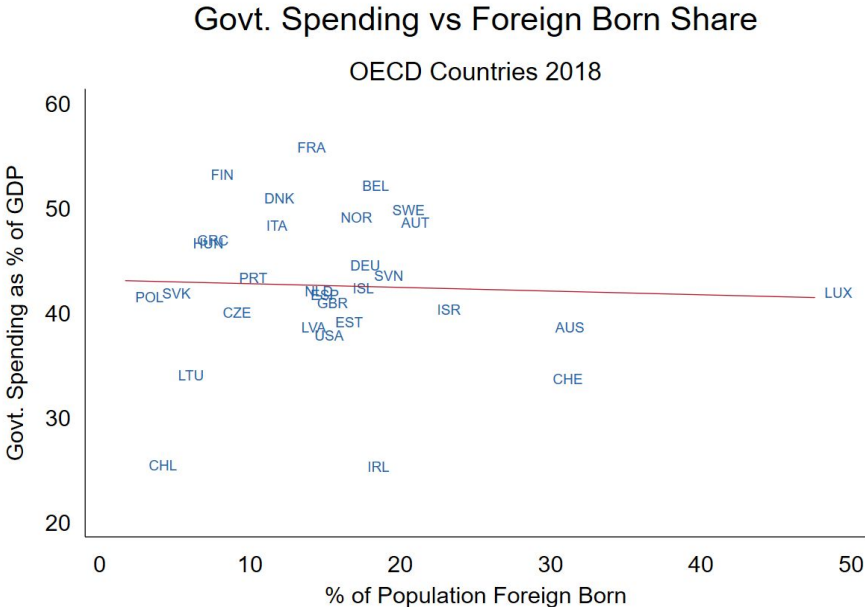




Figure 5

Note: The graph displays the scatterplot and regression line between the share of the population that is foreign-born and the share of government spending in GDP across OECD countries. Source: OECD database, 2018.

The picture looks different in the U.S.. Figure 6 shows that, across states, a higher share of foreign-born population is negatively associated with spending as a share of GDP.

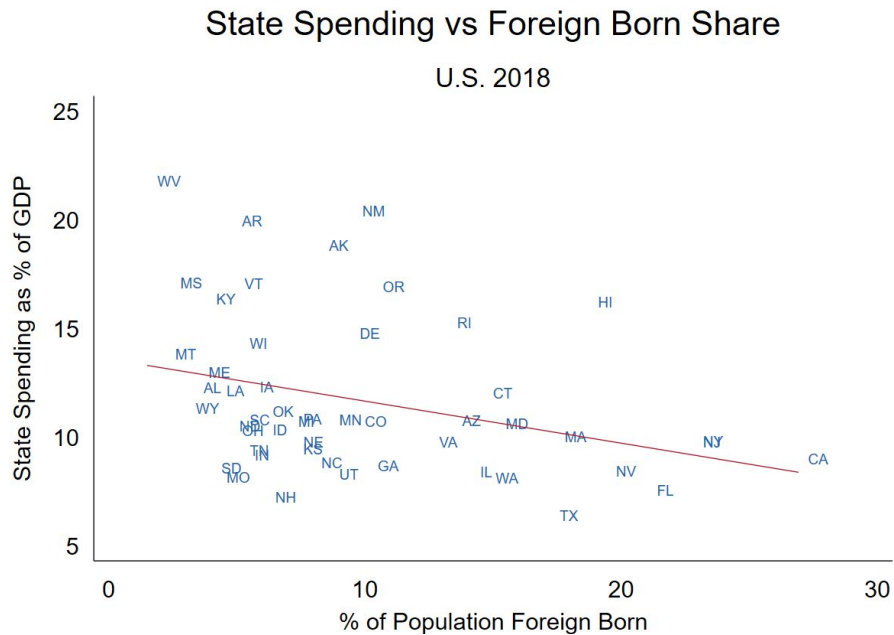


Figure 6

Note: The graph displays the scatterplot and regression line between the share of the population that is foreign-born and the share of spending in GDP in a given state. Source: IPUMS (population data), Bureau of Economic Analysis, Kaiser Family Foundation (spending data), 2018.

## B. The Effect of Migration on Taxation and Spending

### *Immigration and Public Policy Setting*

The stylised facts in Figures 5 echo the findings from two studies using country-level data from the OECD. Böheim and Mayr-Dorn (2005) consider the effect on public spending and distinguish between low- and high-skilled immigration. Using a fixed effect estimator, they find opposing effects for both types of migration; an increase in the number of low-skilled migrants in a country decreases public spending, whereas an increase in high-skilled immigration

increases it. They interpret the effect of low-skilled immigration as evidence for the anti-solidarity effect, and the effect of high-skilled immigration as evidence for a fiscal effect – namely that the positive net contribution of immigrants allows for more spending. Gaston and Rajaguru (2013) also use OECD data and focus on the average effect of immigration on welfare spending. Using dynamic panel data models, they only find a weak relationship. If anything, immigration has a small positive effect on welfare spending.

The challenge with cross-country studies lies in the endogeneity of migration. Even if researchers include country fixed effects – and, thus, compare changes within countries over time – it is neither random who moves and who stays, nor what country migrants move to, nor when they move. Tabellini (2020) addresses these challenges in a study on immigration and policy setting following the mass immigration in the U.S in the early twentieth century. Their instrumental variable approach exploits the fact that new immigrants to the U.S. tended to move to locations where immigrants from the same countries settled many years before. The idea behind this approach is that past settlement patterns should have no direct effect on local political and economic conditions several decades later, except by attracting new immigrants. Based on county-level data, they show that although immigration was economically beneficial for natives, it led to a political backlash. Areas with more immigration saw an increase in support for anti-immigrant legislation and less redistribution, shown through lower tax rates and lower public spending.

A study by Jofre-Monseny, Sorribas-Navarro and Vázquez-Grenno (2016) focuses on a more recent wave of mass immigration, namely from Latin America to Spain in the late 1990s and early 2000s. To account for the endogenous location choice of immigrants, they use the availability of rental housing ten years before the immigrant wave as an instrument. Although social spending in Spain drastically increased after the immigration wave, the increase was smaller in areas with many immigrants.

### *The Importance of Voting Rights*

An important determinant of the effect of migration on policy setting is whether the immigrants have voting rights and can directly influence policy. While in most countries immigrants can only obtain voting rights after many years, an interested benchmark is provided by studies on internal migration. As citizens, internal migrants have the same voting rights and eligibility for social benefits as the immobile population. Moreover, in some cases the internal migrants are seen as a separate ethnic group and are treated by the incumbent population like migrants coming from abroad.

Chevalier *et al.* (2018) consider an episode of large-scale forced internal migration in Germany. After World War II, around twelve million ethnic Germans were displaced from territories all over Europe and forced to move to West and East Germany. In West Germany, the sudden

arrival of eight million forced migrants increased the population by almost 20%. The forced migrants had full voting rights and eligibility for social welfare but were considerably poorer than the local population. Using a shift-share instrument that allocates the expelled population based on travel distances, the authors show that cities responded to the inflow with higher tax rates and spending. The authors also provide evidence that the effect is partly driven by the political participation of the forced migrants. They were more politically active than the local population and predominantly voted for a party that catered for their interests.

Another insightful study of internal migration is by Tabellini (2018) on the Great Migration of Blacks to cities in the northern U.S.. They show that an increase in the share of Blacks led to a reduction of tax revenues in northern cities. However, this reduction cannot be explained by a change in tax rates – which did not happen – but rather by a reduction in property values. It appears that the inflow of Blacks imposed an externality on natives through the housing market but had no effect on taxation and spending.

The importance of immigrants' voting rights for the setting of taxation and spending policies is underlined by Ferwerda (2020) based on municipality-level data from nine European countries. In countries where immigrants have voting rights, they find a positive relationship between the share of immigrants in a municipality and local tax rates and spending. In countries without immigrant voting rights, the relationship is clearly negative. To build a causal argument, the author exploits franchise extensions in Belgium and Switzerland in a difference-in-difference setting. Relative to countries without franchise extensions, providing immigrants with voting rights led to an increase in tax rates and spending. These results echo those in Vernby's (2013) study of the introduction of non-citizen suffrage in Sweden in 1975. Municipalities with high shares of foreigners before the reform had higher social spending after the reform. They further show that the change in spending depends on the demographics of the immigrants. In areas with high shares of immigrants with school age children they find a significant increase in spending on education, whereas in areas with many immigrant preschool children, they find significant increases in spending on family benefits.

Finally, Sabet and Winter (2019) show that the mere prospect that immigrants can get voting rights in the future can affect public spending today. They consider the Immigrant Reform and Control Act (IRCA) in the U.S. in 1986, which led to the legalisation of three million immigrants and provided immigrants with a pathway to citizenship five years later. They show that counties with more immigrants affected by the IRCA received higher transfers from their state governments. These results were stronger in states where the governor was eligible for re-election, which suggests that the transfers were motivated by the future votes of legalised immigrants.

### *Ethnic Diversity and Public Policy Setting*

A related literature focuses on the broader concept of ethnic diversity and its effect on taxation and spending policies. A series of studies have tested the hypothesis that ethnic diversity reduces public goods provision based on cross-country and regional data.

Desmet, Ortuño-Ortín and Weber (2009) provide global evidence in favour of this hypothesis. When they use linguistic diversity, a common proxy for ethnic diversity, they find no correlation with redistribution. This changes when they account for the linguistic distance between languages, which is a proxy for cultural distance. They document a robust negative relationship between a distance-weighted linguistic diversity index and redistribution. This result points to the severe challenges in measuring ethnic diversity. Researchers may fail to find an effect if they use the wrong concept of diversity.

Societies can be diverse along many dimensions – ethnically, culturally, economically, just to name a few. Baldwin and Huber (2010) evaluate which of these dimensions matters more for redistribution. Across 46 countries, they compare the explanatory power of standard indices of ethnolinguistic and cultural fractionalisation to an index of between-group inequality, which measures economic diversity. They find that between-group inequality has a strong negative relationship with public goods provision whereas ethnic and cultural diversity appears to have no explanatory power.

The cross-country evidence is complemented by several studies exploiting variation within countries. Alesina, Baqir and Easterly's (1999) provide suggestive evidence for the U.S., showing that, as counties become more diverse, their public spending gets reduced. This finding has been called into question by Gisselquist (2014), who re-examines the empirical evidence based on the same data and shows that the negative relationship is likely driven by omitted variable bias. Once corrected, the relationship is very weak.

Gerdes (2011) overcomes the omitted variable bias by exploiting the random assignment of asylum seekers to municipalities in Denmark. The assignment results in natural variation in ethnic diversity, which is unrelated with local political and economic conditions. They find no effect of ethnic diversity on public spending.

A notion that underlies many cross-sectional studies is that places with greater ethnic diversity are characterised by more diverse preferences for redistribution. Hopkins (2009) calls this notion into question. They use town-level panel data on diversity and property tax votes in Texas and Massachusetts, and isolate variation within towns through fixed effects. Their results show that increasing diversity leads to fewer tax raises, but these effects are driven by towns with strong

and sudden changes in diversity. This result suggests that changes in diversity need to be salient in order to affect policy setting.

One domain where ethnic diversity is visible and potentially consequential is politics. Beach and Jones (2017) investigate to what extent the ethnic composition of city councils in California affects public goods provision. To establish causality, they apply a regression discontinuity design, exploiting marginal wins and losses of candidates who are ethnically different from the majority. They find a significant negative effect of ethnic diversity: a council that becomes more diverse spends less on public goods. Moreover, councillors receive fewer votes when they run for re-election, which suggests that the lower public spending is driven by greater disagreement in diverse councils.

### *Migration and Spending on Education*

One type of spending that has received particular attention is spending on education. Studies on the effect of immigration on education spending are part of a larger literature on the impact of immigration on the education system, which is summarised by Ortega and Tanaka (2016). We limit the discussion here to studies looking at spending.

Coen-Pirani (2011) quantifies the effect of immigration in on school spending in California based on a structural model of school choice. Over the period 1970-2000, public spending on education per pupil declined significantly, while at the same time California saw a surge in immigration. In a counterfactual exercise, the author fixes immigration at the level of 1970, in which case public spending in 2000 would have been around 24% higher than it actually was.

Two studies document negative effects of immigration on education spending in Europe. Speciale (2012) exploits the sudden inflow of refugees during the Balkan wars in the 1990s and shows that immigration led to a small reduction in country-level education spending. Tanaka, Farré and Ortega (2018) document the effect of the mass immigration in Spain in the 2000s on the education system. Immigration led to a 15% increase in public school enrollment, which was accompanied by a 3% reduction in public education spending and an increase in private school enrollment by natives.

## **V. Summary and Directions for Future Research**

In this article, we have summarised the theoretical and empirical literature on immigration and redistribution. On the empirical side, we focused on two broad strands on the literature, namely the effect of migration on preferences for redistribution and on actual policy setting. Researchers from all disciplines of the social sciences have produced a vast amount of quantitative evidence based on observational and experimental approaches. Although the results are often context-dependent, some clear patterns emerge:

1. *The theory is more comprehensive than the empirical evidence.* The two broad classes of theoretical models – those in which people decide in their self-interest and those in which people also care about others – allow for a large number of channels through which immigration and ethnic diversity can affect redistribution. The discussion in Section II shows that the predictions of commonly used static models may change in dynamic models in which voters factor in today what immigrants and natives will do tomorrow. While most empirical studies are motivated by the static version of these models, there are virtually no tests of dynamic models.
2. *The evidence across countries is weak.* Numerous studies test hypotheses about immigration and the welfare state based on cross-sectional data at the country or individual level. In many studies, the variable of interest, migration or ethnic diversity only varies at the country level and, therefore, only allows for a coarse measurement of individual exposure to migration. Perhaps more importantly, correlations across countries should be seen as suggestive, as they can be influenced by a large number of confounding factors. Very few studies based on cross-country data convincingly address this endogeneity problem; lots of them do not even attempt to, or they do not even acknowledge the problem. This is not to say that studies documenting correlations are meaningless, but researchers should be clear about whether they are after a correlation or a causal relationship.
3. *Within countries, immigration and ethnic diversity tend to reduce the support for redistribution.* Most studies using within-country variation in immigration find a negative effect of immigration on support for redistribution, although the size of the effect depends on the context. Even though within-country studies cannot provide a global picture, they allow for more credible research designs than cross-country studies because they compare people who live under the same welfare regime.
4. *Perceptions about immigration matter more than actual migration.* Several observational and experimental studies show that people’s support for redistribution is more affected by their perceptions of immigrants than the actual situation of immigrants in their country. While unsurprising, this result is in our view the most concerning in this literature. Survey experiments show that many people vastly overestimate the number of migrants and the migrants’ welfare dependency. If these beliefs could be corrected, there would likely be more support for redistribution.
5. *In-group bias is important.* Many studies provide direct and indirect evidence that natives view immigrants as an out-group; they view them as less deserving of social benefits and are less willing to share public goods with them. These views appear stronger in areas that are more diverse, which has important implications for countries and regions that are becoming more diverse through immigration.

6. *Immigration affects actual policy setting; it tends to reduce redistribution.* Although the literature on policy setting is considerably smaller than the literature on preferences, it has produced convincing causal evidence that immigration often reduces public spending.

Based on these observations, we see several fruitful avenues for future research:

*1) Measurement needs to be taken more seriously.*

Empirical studies use statistical models that explain redistribution by a measure of immigration or ethnic diversity. The results from these models are only as good as the measurement of both the explanatory and explained variables. However, measuring both is far from straightforward. Researchers should take a step back to think about what it is that they actually want to measure. For example, if they use individual-level data, it is unclear what a person's exposure to migration looks like. Does an individual interact with migrants in the workplace? See them in the park while jogging? Hear about them in the media? Getting served by one in a restaurant? And which migrants are more relevant for individual responses, recent arrivals or people who arrived many years ago? Immigration may trigger different responses in people depending on the context, and interpreting the effect of immigration on any variable requires good knowledge of the context as well as the measurement of migration that is appropriate for the research question.

The same goes for preferences for redistribution. Surveys differ substantially in their questions about redistribution; some ask very broadly about the government's role in reducing income inequality, while others ask specifically about different domains of welfare. Researchers need to take a stand on what type of preference they want to measure and design or find surveys with questions that allow for accurate measurement. This is a difficult task because there are no objective criteria for what is the most relevant measure of an individual's support for redistribution. Nonetheless, it is important for scientific progress that researchers undertake this task.

*2) So you found an effect on preferences for redistribution. Now what?*

As we have shown, there is a vast number of studies showing an effect of immigration on preferences for redistribution. But changes in preferences are only consequential for society if they lead to changes in behaviour and/or policies. For future research, it would be important to explore the causal chain from preferences to actual policy changes. The findings on actual policy setting in Section IV suggest that a causal link may exist, but it would be important to dig deeper into the political and social processes that determine why changes in preferences affect policies in some but not other contexts.

*3) Causality needs to be taken more seriously.*

Although the literature has made significant progress in addressing endogeneity concerns, causality – and discussions thereof – are still not the standard in many studies. This is particularly the case in studies on preferences for redistribution. It is not uncommon that researchers test a theory based on raw or partial correlations between migration and preferences for redistribution. This is unproblematic if the theory points to a correlation. However, most theories that are tested make causal statements, and adjusting for a limited set of confounders does often not eliminate the omitted variable bias. Take as an example the compensation hypothesis: *with more immigration, workers should demand more redistribution to insure them against labour market risks*. This is clearly a causal statement; an empirical test requires careful thinking about a research design that exploits exogenous variation in immigration.

*4) We need to understand more about how natives perceive immigrants.*

Experiments and observational studies show that people's perceptions of immigrants are important determinants of preferences for redistribution. It is, thus, important to gain a deeper understanding of what it is about immigrants and immigration that changes people's views of the welfare state. Do people's preferences change gradually or do they respond to a sudden change in immigration? Do people change their views in response to salient events such as the New Year's Eve in Cologne in 2016, when several hundred women were assaulted by asylum seekers? In addition, it would be important to understand what model people have in mind when assessing the economic effects of immigration. If people overestimate the effect on wages or crime, their response to immigration may be more extreme than it would be if they had correct beliefs.

*5) Time to move beyond the U.S. and Europe.*



Social scientists have mainly been focusing on the U.S. and (Western) Europe, not least because both have fundamentally different welfare regimes while having a similar level of economic prosperity. It is a fundamental question in the social sciences whether Europe's welfare states will become less generous as its societies become more diverse. However, for several decades, the popular destinations of migrants have been shifting away from the U.S. and Europe and towards middle-income countries (Özden et al. 2011). Given that the welfare states are different in other parts of the world, it will be important to provide new evidence for migrant destinations in Asia, Africa and South America.

*Cite each other!*

On a final note, we want to encourage researchers to cite social scientists from other disciplines. This review demonstrates that each discipline makes important contributions to the literature. Although not entirely surprising (Fourcade, Ollion, and Algan 2015), it is staggering how few citations there are across disciplines. This goes in particular for our discipline, economics, which rarely acknowledges the work of political scientists and sociologists on a related topic.

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