THÈSE

En vue de l'obtention du

DOCTORAT DE L'UNIVERSITE DE TOULOUSE

Délivré par l'Université Toulouse Capitole

École doctorale : **Sciences Economiques-Toulouse School of Economics**

Présentée et soutenue par
GONNOT Jérôme

le 21/10/2020

Essays in political economy

Discipline : **Sciences Economiques**
Unité de recherche : **TSE-R (UMR CNRS 5314 – INRA 1415)**
Directeur de thèse : Monsieur Philippe DE DONDER, Directeur de recherche, CNRS-TSE

JURY

Rapporteurs Monsieur Simone MORICONI, Professeur, IESEG School of Management
Monsieur Javier VAZQUEZ-GRENNO, Professeur, Universitat de Barcelona et Institut d'Economia de Barcelona

Suffragants Madame Karine VAN DER STRAETEN, Directrice de recherche, CNRS-TSE
Monsieur François POINAS, Maître de conférences, Université Toulouse 1 Capitole

Essays in Political Economy

Toulouse School of Economics, University of Toulouse Capitole

Jerome Gonnot

July 2020

Acknowledgements

Before I close this five-year long chapter of my life, I wish to express a few words of gratitude to the people with whom I shared the path to this accomplishment.

I am foremost thankful to my advisor Philippe De Donder for his continuous guidance and encouragement, to Paul Seabright, who invested in our project, and François Poinas, without whom I would not have been able to wrap up this dissertation in the past few months. I thank them all for their support, indulgence, and kindness.

I am also grateful to Karine Van der Straeten for her advice from my very first year in Toulouse as a Masters student, and to Micael Castanheira for his warm welcome in Brussels.

My work also benefited from valuable discussions with Michael Becher at the Toulouse School of Economics and Gani Aldashev at ULB, as well as countless others at several conferences and seminars.

I extend my gratitude to the doctoral school of the Toulouse School of Economics and the Institute for Advanced Study in Toulouse for their financial and academic support, and to Caroline Tejedor and Ludmila Namolovan for administrative help.

I am also thankful to Simone Moriconi and Javier Vazquez-Grenno for agreeing to be on my jury, for their time and comments.

A special mention to all my fellow PhD colleagues in Toulouse, who made my time so much easier. I am very grateful to these smart and friendly people for supporting me in these difficult moments when I thought I was not up to the task.

Finally, I am thankful to my family who was always there when I needed them, with a special thanks to my partner Dafne who believed in me, supported me and endured all the few ups and many downs along the way.

Abstract

This thesis contains three essays that investigate the political integration and assimilation of foreign-born immigrants and the rise of socially conservative, so-called "populist" actors on the political scene in Western Europe. The shared feature of all three chapters is that they directly study the political transformation of contemporary Western European countries.

The first chapter examines natives' decision to grant political rights to foreign residents based on their contribution to a redistribution mechanism that finances a private and a public good. I propose a model where agents' preferences are determined by their skill level and cultural beliefs about public spending, which vary across nationalities. In contrast with a standard prediction of the political economy literature, I show that low-skill natives are willing to enfranchise relatively skilled foreigners as long as these foreigners have sufficiently liberal beliefs towards public spending. Moreover, I establish that the political rights that low-skill natives are prepared to grant to foreign residents is a non-monotonic function of immigration's skill level and cultural taste for public expenditure. In particular, low-skill natives favor greater political integration of less-skilled or more liberal foreigners if and only if these foreigners' average relative preferences for the private and the public good are sufficiently close to their own. I provide empirical support for some of the theoretical predictions of my model using an original municipality-level dataset of Swiss referenda about non-citizen voting rights. My results indicate that municipalities where a higher share of natives received social transfers were more likely to support immigrant voting and that this effect was greater where foreigners were poorer and emigrated from less economically conservative countries.

In the second chapter of this dissertation, Paul Seabright and I explore why voters might vote for candidates who are outsiders to the political Establishment and are willing to tolerate candidate characteristics they dislike. We develop a model in which these outsiders are perceived as more likely than Establishment candidates to implement economic policies that are congruent with voters' interests, and voters have imperfect information about candidates' type. An Establishment candidate seeking election may therefore choose a conservative social platform for *populist* reasons - that is, as a way of signaling independence from the interests of the Establishment. This requires that the value of social policies as signals of future economic policy outweighs their value as signals of future social policies. This populist strategy is more likely

when voters' trust in economic and social policy announcements is low, when the cost for candidates of breaking campaign promises once elected is low, and when there exist few alternative ways for the voters to evaluate the likelihood that the candidate will implement policies that run counter to the interests of the Establishment. Using survey data from several European countries, we also successfully test the main prediction of the model that liberal voters are less sensitive to ideological convergence with political parties, and thus more likely to vote for social outsiders, when they have lower levels of trust in politicians.

In the third and final chapter, I study to what extent and at what pace immigrants adapt to the political norms that prevail in their host countries. I use a cross-national research strategy to compare and analyze attitudes of foreign-born individuals in 16 European countries and find strong empirical support for assimilation over time: On average, the opinion gap between natives and immigrants' political preferences on redistribution, gay rights, EU unification, immigration policies, and trust level in national governments is reduced by 40% after 20 years of residence in the destination country. I also provide evidence that most of this assimilation is driven by immigrants from non-developed countries, and that convergence in political preferences varies significantly across immigrants' economic and cultural background as well as with the size of the immigrant group from their country of origin. Finally, I show that a substantial part of assimilation on gay rights, immigration and political trust is driven by acculturation at the national level where immigrants with longer tenure tend to adapt more to the political preferences of natives in their destination country. These findings shed new light on the timing and magnitude of the political assimilation of first-generation immigrants, with potentially important implications for the political economy of immigration policy.

Résumé

Cette thèse porte sur l'intégration et l'assimilation politique des populations étrangères dans les sociétés européennes et la montée en puissance des mouvements conservateurs dits "populistes" sur la scène politique en Europe occidentale. Les trois chapitres de cette thèse traitent ainsi directement des transformations politiques auxquelles font face les pays européens aujourd'hui.

Dans le premier chapitre de ma thèse, j'analyse la décision des populations autochtones - ou natifs - d'octroyer ou non des droits politiques aux étrangers. J'utilise pour cela un modèle d'économie politique qui s'appuie sur la contribution des agents à un mécanisme de redistribution qui finance un bien privé et un bien public. Dans ce modèle, les préférences individuelles pour la redistribution dépendent à la fois du niveau de qualification des agents et de leurs croyances culturelles, qui sont elles-même déterminées par le pays d'origine. A rebours de la littérature existante, je montre que les natifs sont disposés à octroyer des droits de vote à des étrangers plus qualifiés, à la condition que ces derniers soient suffisamment libéraux sur les questions de redistribution. Par ailleurs, je démontre théoriquement que le niveau d'intégration politique préféré des natifs les moins qualifiés est une fonction non-monotone du niveau de qualifications des immigrés et de leurs préférences culturelles vis-à-vis de la dépense publique. Ainsi, lorsque le niveau de qualification des étrangers baissent ou que ceux-ci sont moins conservateurs, les natifs sont favorables à des droits de vote plus étendus si et seulement si les préférences relatives des étrangers pour le bien public et le bien privé sont suffisamment proches des leurs. Dans la deuxième partie de ce chapitre, je présente des éléments empiriques qui corroborent certaines des prédictions du modèle. A l'aide de données inédites provenant de référendums municipaux sur le droit de vote des étrangers en Suisse, je montre que les communes où une part plus importante de citoyens suisses sont bénéficiaires des aides sociales d'Etat sont également plus favorables à l'octroi de droits de vote local aux étrangers. De surcroît, cet effet est d'autant plus important que les étrangers sont eux-même dépendants des aides de l'Etat et originaires de pays où la culture en matière de redistribution et de dépense publique est plus développée.

Dans le second chapitre de ma thèse, Paul Seabright et moi-même tentons d'apporter une explication au choix de certains électeurs de voter pour des candidats qui n'appartiennent pas à la classe politique traditionnelle - ci-après *Outsiders* - et dont ils ne partagent pas les opinions politiques. Pour cela, nous construisons un modèle dans lequel (i) les *Outsiders* sont perçus

comme étant plus enclins que les candidats de la classe politique traditionnelle à mettre en place une politique économique qui correspond aux attentes des électeurs et où (ii) les électeurs sont en situation d'information imparfaite et ignorent le type de candidat auquel ils ont affaire. Un candidat de la classe politique traditionnelle qui cherche à être élu peut ainsi choisir de faire campagne sur une plateforme dite populiste, ou conservatrice, afin de faire croire aux électeurs qu'il n'est pas soumis aux intérêts de l' *Establishment*. Pour que cela se produise, il est nécessaire qu'aux yeux des électeurs, le signal que représente le programme social des candidats quant à leurs intentions sur le plan économique ait plus de valeur que ce que ce même programme dit de leurs intentions sur le plan social. Cette stratégie *populiste* est alors d'autant plus probable que le niveau de confiance des électeurs dans les promesses de campagne des candidats est bas, que le coût de renier ses promesses de campagne pour un candidat est faible, et qu'il est difficile pour les électeurs de déterminer par un autre moyen quelle politique sera menée par un candidat une fois élu. Dans la deuxième partie de l'article, pour apportons la preuve empirique de la proposition principale du modèle en utilisant des données d'enquête issues de plusieurs pays européens. Nous montrons que les électeurs libéraux sur les questions sociales sont d'autant moins sujets à une convergence idéologique avec les partis politiques et d'autant plus disposés à voter pour des *Outsiders* que leur niveau de confiance envers les institutions politiques est faible.

Dans le troisième et dernier chapitre, j'étudie de quelle manière et à quel rythme les immigrés de première génération s'adaptent aux normes et à la culture politique de leur pays hôte en comparant leurs opinions politiques avec celles des natifs de 16 pays d'Europe occidentale. Mes résultats indiquent qu'un processus d'assimilation important est à l'oeuvre au niveau européen sur les questions de redistribution, des droits des homosexuels, d'élargissement de l'Union Européenne, de politique migratoire, et de confiance envers les institutions politiques : en moyenne, la différence entre immigrés et natifs est réduite de 40% dans les 20 ans qui suivent l'arrivée dans le pays d'accueil. Par ailleurs, cette assimilation concerne principalement les immigrés originaires de pays en développement, et cette convergence en termes de préférences politiques varie de manière importante selon l'origine ethnique, le bagage économique et culturel des étrangers, ainsi que la taille de la communauté des personnes venues du même pays. Enfin, je démontre qu'une part importante de l'assimilation sur les questions de droits des homosexuels, de politique migratoire et de confiance envers les institutions politiques est liée à un processus d'acculturation au niveau national par lequel les immigrés de première génération qui ont passé plus de temps dans le pays d'accueil sont davantages influencés par les préférences politiques des natifs de leur pays hôte. Mes résultats apportent un nouvel éclairage sur l'assimilation des populations étrangères et peut ainsi contribuer indirectement à la conception des politiques publiques visant à améliorer l'intégration de ces populations dans les sociétés européennes.

Contents

Introduction

I took an interest in political economy long before I came to study at the Toulouse School of Economics, but it is during my first year as a doctoral student, after I read Roemer, Van der Straeten and Lee's book "Racism, Xenophobia, and Distribution", which investigates how conservative politicians in the last thirty years have capitalized on voters' resentment of ethnic minorities to win votes and undermine government aid to the poor, that I made the decision to select immigration as a research topic. Immigration undoubtedly plays a crucial role in the politics of modern states, but it has also been studied extensively by scientists from various disciplines. In this context, my research asks questions that have not been answered yet by the economic literature and with the potential to further our understanding of multi-cultural contemporary societies. More specifically, Chapter 1 and 3 of this thesis deal with the political integration and assimilation of foreign-born immigrants. In those chapters, I study respectively public opinion on the right of foreigners to vote, and the opinion gap between first-generation immigrants and European natives on several policy issues. The second chapter of this dissertation had a somewhat different start. A year and a half into my PhD, I had the opportunity to meet and collaborate with Professor Paul Seabright, who was in the first stage of a project on the roots of populism. The topic may seem a bit at odds with the other two chapters of this thesis. Yet, it has an important connection with them. In our joint work, we study the rise of social outsiders - often referred to as populists -, on the far right of the political spectrum, whose offensive behaviour and socially radical platforms are commonly associated with anti-immigrant rhetoric.

All three chapters of this dissertation therefore study the political changes that affect the scope, shape, and directions of the political life of European countries. They are presented hereafter in chronological order from the moment of their inception.

Chapter 1 examines public opinion about the enfranchisement of foreign residents. Today, a large share of the population remains fully or partially disenfranchised in countries where many residents are non-citizens. Given the moral and economic shortcomings of a democratic government where only a fraction of taxpayers have political representation, it is important to understand the conditions under which voting rights are transferred to foreigners. At the same time, when enfranchised, foreign residents have the potential to directly shape the future tax and transfer systems chosen by governments, and the consequences of their enfranchisement is

therefore highly relevant for public life and a sensitive issue for receiving communities. In this chapter, I propose a model where natives' opinion about foreigners' political rights is influenced by the consequences of these political rights on redistribution policies. The main contribution of the theoretical analysis is to characterize the conditions under which natives support political rights and the extent of this support when preferences for redistribution are determined by individual skill level and cultural beliefs about public spending. This chapter also contains empirical evidence in favour of the predictions of the model based on municipal-level data collected from several Swiss cantons. More specifically, my results indicate that municipalities where a higher share of natives received social transfers were more likely to support immigrant voting and that this effect was greater where foreigners were poorer and emigrated from less economically conservative countries.

Chapter 2, co-authored with Paul Seabright, analyzes political distrust as a key driver of populism. The starting point for this project was to try and understand why voters belonging to certain ethnic or gender groups might vote for candidates who behave offensively towards those groups, such as the 53% of white women and 33% of Latino men who voted for Donald Trump in the 2016 US Presidential election. In our paper, we propose an alternative explanation in contrast with the conventional answer that the voters who behave in this way are those who do not place very much weight on the extreme ideology or the offensive behavior. Instead, voters who do not personally like an extreme ideology or an offensive kind of behavior may vote for a candidate *because of* the ideology or behavior and not in spite of it when the willingness to display the ideology or behavior is a signal to the voters that the candidate has other qualities the voters value. We build a game-theory model in which these outsiders are perceived as more likely than Establishment candidates to implement economic policies that are congruent with voters' interests. Our theoretical analysis predicts that a populist strategy is more likely when voters' trust in economic and social policy announcements is low, when the cost for candidates of breaking campaign promises once elected is low, and when there exist few alternative ways for the voters to evaluate the likelihood that the candidate will implement policies that run counter to the interests of the Establishment. In an empirical section, we also provide suggestive evidence for Proposition 1 of the model that liberal voters are less sensitive to ideological convergence with political parties, and thus more likely to vote for social outsiders, when they have lower levels of trust in politicians. We use the European Social Survey to collect information about individual characteristics and voting behaviour, and the Chapel Hill Expert Survey data to identify social outsider parties. Focusing our attention on middle-of-the-spectrum voters - i.e, socially moderate voters who do not espouse the same extreme ideologies as social outsider parties, we show that the negative effect of social distance is substantially decreased among those with lower levels of trust in political parties.

Chapter 3 contributes along with Chapter 1 to the study of concerns among public opinion and political pressures associated with immigration flows. The overall aim of the paper is to provide some insight into the political bloc that immigrant voters represent. To do this, I conduct an empirical study of the political assimilation of first-generation immigrants in their host societies

using data from several rounds of the European Social Survey. The main specificity of this work is its dynamic approach, where I describe the adjustment of immigrants' political and policy preferences to European norms with the time spent in their host country. I find strong assimilation of first-generation immigrants to European natives' standards: On matters of redistribution, gay rights, attitudes towards the European Union, immigration policy, and political trust, the opinion gap between natives and immigrants is reduced by half within 20 years of residence in the destination country. I also provide evidence that most of this assimilation is driven by immigrants from non-developed countries, and that convergence in political preferences varies significantly across immigrants' economic and cultural background as well as with the size of the immigrant group from their country of origin. Finally, I show that a substantial part of assimilation on gay rights, immigration and political trust is driven by acculturation at the national level where immigrants with longer tenure tend to adapt more to the political preferences of natives in their destination country.

Chapter 1

Taxation with Representation: The Political Economy of Foreigners' Voting Rights

JEROME GONNOT

Abstract

This paper examines natives' decision to grant political rights to foreign residents based on their contribution to a redistribution mechanism that finances a private and a public good. I propose a model where agents' redistributive preferences are determined by their skill level and cultural beliefs about public spending, which vary across nationalities. In contrast with a standard prediction of political economy theory, I show that low-skill natives are willing to enfranchise relatively skilled foreigners as long as these foreigners have sufficiently liberal beliefs towards public spending. Moreover, I establish that the political rights that low-skill natives are prepared to grant to foreign residents is a non-monotonic function of immigration's skill level and cultural taste for public expenditure. In particular, low-skill natives favor greater political integration for less-skilled or more liberal foreigners if and only if these foreigners' average relative preferences for the private and the public good are sufficiently close to their own. I provide empirical support for some of the theoretical predictions of the model using an original municipality-level dataset of Swiss referenda about non-citizen voting rights. My results indicate that municipalities where a higher share of natives received social transfers were more likely to support immigrant voting and that this effect was greater where foreigners were poorer and emigrated from less economically conservative countries.

1.1 Introduction

Recent history suggests that immigration plays a crucial role in the politics of modern welfare states. An important, yet commonly overlooked aspect of this matter regards the consequences of foreigners' enfranchisement. When foreign residents are granted the right to vote, they have the potential to directly shape the future tax and transfer systems chosen by governments, which in turn face key political decisions about these voting rights. Against this backdrop, a quick look at the data reveals that while improving from a historical perspective, foreigners' political participation remains an area of weakness for integration policy. A growing number of states have enfranchised foreign residents at the local level over the past decades[1], but only a handful of them grant foreigners the right to vote in national elections.[2] Moreover, the residence requirements to become eligible for naturalization amongst OECD countries range from 3 years in Canada to 15 in Lithuania, leaving a large share of the population fully or partially disenfranchised in countries where many residents are non-citizens. Given the moral and economic shortcomings of a democratic government where only a fraction of taxpayers have political representation, it is important to understand the conditions under which voting rights are transferred to foreigners.

In this paper, I argue that the consequences of foreigners' voting rights on redistribution policies is a critical driver of natives' attitudes towards the political integration of foreign residents. The literature already provides a rich theoretical insight into the relationship between natives' fiscal concerns and immigrants' political participation (see for instance Razin, 2002; Dolmas, 2004; Mayr, 2007; Ortega, 2010; Mariani, 2013). However, these works suffer from two main caveats. First, they assume that the implications of foreigners' political rights are limited to matters of income redistribution, and therefore fail to account for the fact that political choices may reflect individual preferences about both the size and the composition of public spending. Indeed, public social spending and income redistribution - individual cash benefits, direct in-kind provision of goods and services, and tax breaks with social purposes - represent less than 40% of EU government expenditures on average, while a more significant share of these expenditures finances public goods and services that benefit society as a whole, or large parts of society. In the paper, I choose to distinguish between public spending on private and public goods to understand how the enfranchisement of foreign residents can influence a country's spending policy. A second major assumption of my theoretical analysis which is absent from previous studies is that individuals' redistributive preferences are largely determined by cultural beliefs about public spending. The empirical literature has showed that economic welfare alone cannot explain individual preferences for redistribution and that culture plays a very significant part in driving these preferences (see for instance Alesina and Angeletos, 2005). More specifically, immigrants' views about public spending are strongly affected by preferences in their country

---

[1] In spite of considerable variation in the content of these voting rights (Earnest, 2015), over 60 countries in the world granted local voting rights to their non-citizen residents as of 2012. This figure includes the enfranchisement of EU-citizens in EU member countries under the Treaty of Maastricht.

[2] These countries are Uruguay New-Zealand, Chile, and Malawi.

of birth, regardless of the economic context and sometimes decades after individuals emigrated to their residence country (Luttmer et al., 2011). In this context, a political economy approach to the enfranchisement of foreign-born residents should look into the redistributive implications of immigrants' cultural beliefs.[3]

In my model, I therefore account for both economic and cultural drivers of preferences for redistribution and examine the incentives for domestic voters to support foreigners' political rights in an environment where the voting outcome reflects preferences for welfare transfers and the provision of a public good.

I find that low-skill natives are more likely to grant political rights to foreign residents when these foreigners are poorer and have greater cultural preferences for public spending. In particular, contrary to the commonly held view in the political economy literature that low-skill natives would only support the enfranchisement of foreigners if they are poorer than natives on average, I show that they are willing to enfranchise relatively skilled foreigners as long as these foreigners have sufficiently liberal beliefs towards public spending. Moreover, I establish that the level of political integration that low-skill natives are prepared to grant to foreign residents is a non-monotonic function of immigration's skill level and cultural support for public expenditure. Rather, low-skill natives favor greater political integration for less-skilled or more liberal foreigners if and only if these foreigners' average relative preferences for the private and the public good are sufficiently close to their own.

This paper also contributes to the applied economic literature on the determinants of foreigners' enfranchisement by testing the predictions of the model using an original, municipality-level dataset of Swiss referenda about non-citizen voting rights. I proxy the skill level of natives and foreigners using the share of welfare-dependent individuals and predict foreigners' cultural beliefs about public spending at the municipal level with the average preferences in their country of origin. I show that, consistently with the model's predictions, municipalities where a greater share of natives received social transfers were more likely to support immigrant voting, and that this effect was greater where foreigners were poorer and emigrated from less economically conservative countries.

My paper therefore adds to the political economy literature by proposing a new theoretical framework and supporting empirical evidence to explore natives' attitudes towards foreigners' enfranchisement. It should be stressed that my approach represents only one possible way to

---

[3]More generally, cultural proximity between natives and foreigners is also a powerful enabler of integration. In many countries, naturalization tests assess the desire to assimilate and the extent to which candidates to naturalization respect and sometimes espouse the views and traditions of their country of residence. At the European level, Portugal, the UK, and Spain have signed bilateral agreements with countries that they consider culturally close to them and grant foreign residents from these countries the right to vote in local elections - Brazil and Portugal, Spain and various Latin American countries, as well as England with several members of the Commonwealth -. Such positive discrimination holds more generally across Europe under Article 22 of the European Union, which grants exclusive local voting rights to citizens from fellow EU member countries.

sketch conflicting political preferences between natives and foreign residents when addressing the issue of foreign political participation. Also, I am aware that most immigrants often self-select into naturalization or political integration, and that these policies can sometimes lead to sizable economic perturbations which affect immigrants' productivity and skill level. I leave those as well as non-economic considerations outside of the model. In spite of these shortcomings, this paper is the first to propose a theory of enfranchisement which builds on a two-dimensional, realistic approach of redistribution, and accounts for cultural divergence in individual preferences for redistribution.

This work is related to three strands of literature. First, it contributes to the theoretical political economy literature on redistribution pioneered by Metzler and Richard (1981). Recent work in this field presents various models linking immigration and income redistribution. In some of these models, redistribution is endogenously determined while immigration is taken as exogenous. Immigrants then influence redistributive outcomes through economic channels such as labour market competition or fiscal leakage, and by adding to the size of different interest groups, changing the political constituency of the native population (See Razin et al., 2002; Dolmas and Huffman 2004; Roemer and Van der Straeten, 2006). For example, the median voter model developed by Dolmas and Huffman finds that admitting poor immigrants that can vote does not necessarily imply higher redistribution and may lead to a lower tax rate if the fiscal leakage effect dominates the political effect on the position of the median voter in the income distribution. A more recent strand of this literature studies the effect of varying political institutions and citizenship rules in a setting where immigration is endogenous. Ortega (2010) presents a dynamic model where voters choose the degree of income redistribution in addition to immigration policy under three citizenship regimes, and find that income redistribution can be sustained indefinitely under permanent migration and *jus soli*. Romero et al. (2016) investigates the attitudes of natives with different skill level towards immigrants based on their impact on wages, tax collection and the quality of the public good. They find that the higher the political weight of the rich, the less tolerant the poor and the middle-class are toward immigration and the more demanding toward increasing public spending. Closer to my work, two papers analyze more specifically the economic drivers of naturalization policies and the incentives for native citizens to grant political rights to foreigners. Mayr (2007) examines the effect of immigration on income redistribution via majority voting where the skill composition of immigrants is endogenous and depends negatively on the income tax. She finds that natives are at best indifferent towards immigrant voting and may be opposed to it when the native majority is not too strong. On the other hand, Mariani (2013) inquires about the timing of naturalization policies for immigrants whose values and political preferences are different from natives.

My paper is also related to the broader political economy literature studying enfranchisement. The issue of franchise extension has received considerable attention, with theoretical contributions by Acemoglu and Robinson (2000), Lizzeri and Persico (2004), Llavador and Oxoby (2005), and Jack and Lagunoff (2006). An interesting empirical counterpart to these works is Bertocchi and Strozzi (2010), in which the authors assemble a large, comprehensive cross-

country panel of citizenship laws and estimate the determinants of whether a country grants citizenship based on bloodline (*jus sanguinis*), birth place (*jus soli*), or has a mixed regime. Within this body of research, my paper is most related to the recent attempts to measure the consequences of enfranchisement on redistribution and the size of the welfare state. In this regard, recent work by Bertocchi (2011) finds that women's suffrage increased the size of government over the 1870-1930 period in non-catholic countries. Abrams and Settle (1999) show that women suffrage raised the overall size of the Swiss government, and that this occurred through welfare spending but not government consumption. As my paper deals not only with the size but also the composition of public spending, I should also mention the empirical work of Funk and Gathmann (2005). They find larger differences regarding the scope rather than the size of government at the cantonal level in Switzerland as a result of gender-specific preferences for redistribution. To the best of my knowledge, few empirical papers investigate the causes and consequences of franchise extension towards foreigners. One exception is Vernby (2013), who shows that the effect of local enfranchisement of non-citizens on public spending policy was large, causing spending on education and social and family services to increase substantially in Swedish municipalities where foreigners made up a significant share of the electorate. Another notable work by Stutzer and Slotwinski (2019) looks at power-sharing in the Swiss cantons of Grisons and Zurich. They show that enfranchisement is less likely in municipalities with larger shares of resident foreigners and a large language or cultural minority. I am also aware of a recent unpublished manuscript by Koukal et al. (2019) which studies the willingness of natives to enfranchise foreigners at the municipal level based on the same data on Swiss referenda as I use in my paper. However, my focus is different since I am using this data to test specific economic hypotheses based on a redistribution mechanism for which I provide theoretical intuition.

Third, my paper is related to the empirical literature studying the role of immigration in politics. A first strand of this literature explores individual attitudes towards immigration based on theories of labour market competition (Mayda, 2006; Scheve and Slaughter, 2001; Hainmueller and Hiscox, 2007) and fiscal leakage (Facchini and Mayda, 2009; Hanson et al., 2007). It provides mixed evidence for both of these theories and suggests that the relative skill level of immigrants does not necessarily plays out in the direction predicted by political economy models. Another series of papers focus on the effect of the size and the skill level of immigration flows on the political landscape of developed countries in terms of electoral behaviour (Otto and Steinhardt (2014), Barone et al. (2016), Brunner and Kuhn (2018), Edo et al. (2017)). While their findings varies according to specific national contexts, a recent paper by Moriconi et al. (2019) generalizes voting responses to immigration at the European level and finds that larger inflows of highly educated immigrants are associated with European citizens shifting their votes toward parties that favor expansion of the welfare state while immigration of low skilled individuals pushed political party agendas to reduce support for the welfare state.

Finally, because culture plays a crucial role in my theoretical and empirical analysis, my paper speaks to the literature on the impact of culture on redistribution (Verdier and Bisin (2000), and Tirole and Benabou (2006). My work also builds largely on the findings of Luttmer (2011), who shows that immigrants' preferences for redistribution are strongly affected by preferences

in their countries of birth, and in particular that immigrants from high-preference countries are more likely to vote for more pro-redistribution parties.

The paper is organized as follows: Section 1.2 presents the model. Section 1.3 solves the model and analyzes redistributive policy preferences with and without immigrant voting. Section 1.4 studies natives' attitudes towards foreigners' political rights. Section 1.5 empirically tests the predictions of the model, and section 1.6 concludes. Tables and proofs are located in the Appendix.

1.2   Model

I consider a closed economy with a native population whose size N is normalized to 1 and an immigrant population with size $M < 1$.[4] The native population has a share λ_l^n of low-skill workers and $1 - \lambda_l^n$ high-skill workers, whereas the share of low-skill workers in the immigrant population is equal to λ_l^m. I assume that foreign-born residents and natives provide inelastically one unit of labor supply to a measure 1 of firms that produce a good with the linear production function $Y = (\lambda_l^n + M\lambda_l^m)y_l + (1 - \lambda_l^n + M(1 - \lambda_l^m))y_h$, with skill-specific wages $y_l < y_h$.[5] In this economy, redistribution is financed via a proportional tax on wages at rate τ. The tax proceeds $G = \tau Y$ are then used to finance a private transfer t to the exclusive benefit of low-skill workers and a public good g in proportion μ (resp. $1 - \mu$), such that the government budget constraint writes $\tau Y = (\lambda_l^n + M\lambda_l^m)t + g$ with

$$t = \frac{\mu \tau Y}{\lambda_l^n + M\lambda_l^m} \tag{1.1}$$

and

$$g = (1 - \mu)\tau Y. \tag{1.2}$$

I define the utility of an individual with skill $i \in \{l, h\}$ and nationality $j \in \{n, m\}$ as

$$u_{i,j} = \ln(c_i) + \alpha_i^j \ln(g), \tag{1.3}$$

where the benefits of redistribution vary across income class and nationality. Private consumption writes $c_l = (1 - \tau)y_l + t$ for low-skill workers, and $c_h = (1 - \tau)y_h$ for high-skill ones. Only low-skill agents receive the private transfer, which aggregates all cash expenditures paid out to lower-income agents for welfare and social assistance purposes. On the other hand, $\alpha_i^j \geq 0$ is an

---

[4]In what follows, I will refer to either immigrants or foreigners interchangeably.

[5]Our results would not be affected by assuming a non-linear production function and a labour market competition effect on wages y_l and y_h. Indeed, as we shall see later in the paper, although income inequalities affect the redistributive preferences of agents in my model, my main predictions do not depend on the level of wages, neither in absolute nor in relative terms.

income and nationality-specific taste parameter for the public good g, where $\alpha_i^j = \psi_j \alpha_i$. This composite public good combines a variety of public expenditures including general public services, environmental protection, defense and justice expenditures, and economic and financial affairs which benefit all residents equally regardless of their skills and nationality. Moreover, this public good covers public services to which skilled natives may prefer privately funded alternatives, such as healthcare, education, housing and community amenities, leading to a lower overall valuation of these goods for high-skill than low-skill workers ($0 < \alpha_h < \alpha_l < 1$). Also, because individual preferences about the role of government in the provision of public goods and services are to some extent the product of a national and cultural heritage beside economic determinants, I make the assumption that the taste for the public good varies across nationality through the parameter ψ_j, with $0 < \psi_j < \frac{1}{\alpha_l}$[6].

Political rights $w \in [0, 1]$ are modeled as a continuous variable to capture the various degrees through which foreigners are able to gain political influence. Although political participation is often understood as the right to vote and exercise electoral rights, there exist several distinct ways to influence political decisions. I therefore propose a broader definition of political rights which encompasses all political liberties and opportunities to participate in democratic life[7]. Those include the presence of immigrant organisations and local consultative bodies, the right to partake in political activism, lobbying and protesting, the right to vote in local, regional, or national elections, and the whole set of criteria that governs access to citizenship and naturalization, which are both sufficient conditions for immigrants to participate in the political process. Alternatively, the variable w can be interpreted as the share of foreign residents in a country which are entitled to political rights based on their duration of residence.[8]

Finally, the redistributive policy $\sigma = (\tau, \mu)$ determines the size and composition of public spending in the economy. This policy σ is the outcome of a political process described by probabilistic voting in its simplest form (see Persson and Tabellini, 2000), where all types of agents, whether natives or foreigners, have the same ideological dispersion towards a candidate and the relative political weight of foreigners is equal to w. The redistributive policy outcome therefore maximizes the following social welfare function:

$$\underset{(\tau,\mu)}{W} = \lambda_l^n u_{l,n} + (1 - \lambda_l^n) u_{h,n} + wM(\lambda_l^m u_{l,m} + (1 - \lambda_l^m) u_{h,m}) \tag{1.4}$$

subject to the budget constraint: $\tau Y = (\lambda_l^n + M\lambda_m^n)t(\tau, \mu) + g(\tau, \mu)$, with $(\tau, \mu) \in [0, 1]^2$.

---

[6]The upper bound on ψ_j makes sure that public good consumption is valued less than or as much as private consumption ($\alpha_i^j < 1$ fo any $(i, j) \in \{l, h\} \times \{n, m\}$). However, in practice, my results would hold if I were to relax this assumption.

[7]This approach mirrors the Migrant Integration Policy Index (MIPEX), a set of over 160 policy indicators describing migrants opportunities to participate in society in several countries.

[8]Most countries impose residency requirements to foreign residents in order to be granted voting rights or file for naturalization.

1.3 Redistribution

1.3.1 Preferences for redistribution

Before solving for the redistributive equilibrium with and without foreigners' political rights, I look at individual preferences over τ and μ. Let $\gamma = \frac{y_h}{y_l}$ be the income inequality ratio, $L_l = \lambda_l^n + M\lambda_l^m$ and $L_h = 1 + M - L_l$ the total low-skill (resp. high-skill) labour force in the economy, and $F_l = \frac{y_l L_l}{Y}$ the share of output produced by low-skill workers. The policy preferences $\sigma_{i,j}^*$ of an individual with skill level $i \in \{l, h\}$ and nationality $j \in \{n, m\}$ are then characterized by the following first order conditions[9]:

$$FOC_{i,j}^\mu : \frac{t_i}{\mu c_i} - \frac{\alpha_i^j}{1-\mu} = 0 \tag{1.5}$$

$$FOC_{i,j}^\tau : \frac{\frac{t_i}{\tau} - y_i}{c_i} + \frac{\alpha_i^j}{\tau} = 0 \tag{1.6}$$

where $t_l = t$ and $t_h = 0$.

Turning first to the spending policy, notice that a greater μ is equivalent in my model to spending more on private transfers. As a result, the benefit from spending more tax proceeds on private transfers is represented by the positive term $\frac{t_i}{\mu c_i}$ while the benefit from spending more on public good provision is captured by $-\frac{\alpha_i^j}{1-\mu}$, which is negative. Notice also that because high-skill workers do not receive private transfers ($t_h = 0$), (1.5) becomes $-\frac{\alpha_h^j}{1-\mu}$ and is always trivially negative for high-skill agents regardless of the amount of income taxation in the economy. For low-skill workers, on the other hand, the marginal benefit of increasing the share of tax proceeds spent on private transfers is captured by the term $\frac{t_l}{\mu c_l} = \frac{\tau y_l}{F_l c_l} = \frac{1}{\mu + \frac{1-\tau}{\tau} F_l}$.

Moving now to the tax-rate policy, the first term on the LHS of (1.6) corresponds to the net gains from income redistribution. For high-skill workers, this simplifies to $-\frac{1}{1-\tau}$ and is always negative because they do no benefit from any private transfers. For low-skill workers, the first term on the LHS of (1.6) rewrites $\frac{1}{\tau + \frac{F_l}{\mu - F_l}}$, and the net gains from income redistribution are positive provided $\mu > F_l$, i.e when the spending policy redistributes a sufficiently high share of tax proceeds in the form of private transfers. The second term on the LHS of (1.6), $\frac{\alpha_i^j}{\tau}$, is always positive and captures the marginal benefit of increasing public good provision through a higher labour income tax for a given share μ spent on the financing of public goods.

As a result, the policy mix preferred by high-skill workers is trivial, so that $\mu_{h,j}^*(\tau) = 0$ for any $\tau \in [0, 1]$, and $\tau_{h,j}^*(\mu) = \frac{\alpha_h^j}{1 + \alpha_h^j}$ for any $\mu \in [0, 1)$.[10] Low-skill workers' relative redistributive

---

[9]The strict quasi-concavity of u in both τ and μ is trivially satisfied.

[10]Note that $\tau_{h,j}^*$ is in fact discontinuous at $\mu = 1$, where $\tau_{h,j}^*(1) = 0 < \frac{\alpha_h^j}{1 + \alpha_h^j}$ because skilled individuals want no redistribution at all when the tax proceeds finance exclusively private transfers. In the rest of the paper, I

preferences, on the other hand, depend on the relative value of τ and μ. More specifically, when $\tau < 1$, i.e under partial redistribution, low-skill workers' preferred spending policy $\mu_{l,j}^*(\tau)$ is an increasing function of τ because the provision of public goods depends entirely on government redistribution while individuals enjoy private good consumption in the form of labour income. Therefore, when tax proceeds are smaller, a higher share of them must finance the public good in order to ensure a minimal level of provision. Also, when the share of tax proceeds financing private transfers μ is smaller than $\frac{F_l}{1+\alpha_l^j}$, low-skill workers prefer partial redistribution ($\tau_{l,j}^*(\mu) < 1$) and their preferred tax rate $\tau_{l,j}^*(\mu)$ is an increasing function of μ. First, recall from the expression of (1.6) that when the share of government spending financing private transfers is low enough, the net gains from income redistribution for low-skill workers are negative[11], so that increasing the tax-rate will decrease their private consumption. Thus, when μ is such that the cost of a marginally higher τ on private consumption exceeds its marginal benefit from increasing the provision of public good, low-skill workers prefer an interior solution $\tau_{l,j}^*$. Moreover, as μ increases, the net marginal benefit from income redistribution increases as a greater share of tax proceeds finances private transfers, while the marginal benefit from increasing public good provision through a greater tax-rate remains constant[12]. Therefore, $\tau_{l,j}^*(\mu)$ increases with μ.

The former discussion is summarized in Lemma 1:

Lemma 1: *For any $(\tau, \mu) \times (0,1)^2$, $\tau_{h,j}^*(\mu) = \frac{\alpha_h^j}{1+\alpha_h^j}$ and $\mu_{h,j}^*(\tau) = 0$. Moreover, $\mu_{l,j}^*(\tau) = 0$ if $\tau \leq \frac{1}{\frac{1}{\alpha_l^j F_l}+1}$, and $\mu_{l,j}^*(\tau) > 0$ and is increasing in τ otherwise. If $\mu \geq \frac{F_l}{1+\alpha_l^j}$, then $\tau_{l,j}^*(\mu) = 1$, and $\tau_{l,j}^*(\mu) < 1$ and increases with μ otherwise.*

I can also derive from FOCs (1.5) and (1.6) the bliss points of each type of agents in the economy. In the absence of a distortionary effect of taxation, low-skill workers (resp. foreigners) prefer that all labour income is redistributed and that government spending finances the public good based on their relative taste for both goods, i.e such that the marginal benefit from consuming public and private goods is identical under full redistribution (when $\tau = 1$). On the other hand, we already know from what precedes that high-skill workers prefer that redistribution finances exclusively the public good and that labour income is taxed at a rate $\tau = \frac{\alpha_h^j}{1+\alpha_h^j}$. Therefore, a low-skill worker will always prefer a strictly higher tax rate τ and a weakly greater spending policy μ than a high-skill worker of the same nationality: $\tau_{l,j}^* = 1 > \tau_{h,j}^*$ and $\mu_{l,j}^* \geq \mu_{h,j}^* = 0$.

---

will however focus my attention on interior solutions for τ and μ.

[11]Observe that $\frac{1}{\tau + \frac{F_l}{\mu - F_l}} < 0$ whenever $\mu < F_l$, which is indeed satisfied if $\mu < \frac{F_l}{1+\alpha_l^j}$.

[12]$\frac{\alpha_i^j}{\tau}$ does not depend on μ.

Lemma 2: *The preferred policy pair $\sigma_{i,j}^* = (\tau_{i,j}^*, \mu_{i,j}^*)$ of an agent of skill $i \in \{l,h\}$ and nationality $j \in \{n,m\}$ is:*

$$
\begin{cases}
(\tau_{l,n}^*, \mu_{l,n}^*) = (1, \frac{1}{1+\psi_n \alpha_l}) \\
(\tau_{h,n}^*, \mu_{h,n}^*) = (\frac{\psi_n \alpha_h}{1+\psi_n \alpha_h}, 0) \\
(\tau_{l,m}^*, \mu_{l,m}^*) = (1, \frac{1}{1+\psi_m \alpha_l}) \\
(\tau_{h,m}^*, \mu_{h,m}^*) = (\frac{\psi_m \alpha_h}{1+\psi_m \alpha_h}, 0)
\end{cases}
$$

Individual policy preferences are corner solutions and are not affected by the size or the skill composition of the native and foreign populations. Figure 1.1 below graphs the preferred policy pair $\sigma_{l,j}^*$ and $\sigma_{h,j}^*$ and indifference curves IC_l^j and IC_h^j in the policy space (τ, μ). The utility-improving set of low-skill and high-skill workers is respectively located to the north-east and the south-west of IC_l^j and IC_h^j, and the grey areas capture the parameter space over which the indifference curve of high-skill workers, low-skill workers or both has a positive slope. Because rich workers' preferred tax-rate is always equal to $\frac{\alpha_h^j}{1+\alpha_h^j}$ and they do not want redistribution to finance private transfers, they will prefer to trade a lower tax-rate against a spending policy that finances a lower share of public good (a greater μ) as long as τ is greater than $\frac{\alpha_h^j}{1+\alpha_h^j}$.

As a result, their indifference curve is upward sloping if $\tau \leq \frac{\alpha_h^j}{1+\alpha_h^j}$, and downward sloping otherwise. For low-skill workers, the grey zone on the right hand side of Fig. 1.1 corresponds to the parameter space where (i) the spending policy μ is such that the net gains from income redistribution are positive (analytically, both terms on the LHS of (1.6) are positive) and (ii) the marginal benefit of spending more tax proceeds on public good provision is greater than the marginal benefit of spending more on private transfers (the LHS of (1.5) is negative). For any policy pair (τ, μ) located in this space, there is under-provision of public goods and low-skill workers prefer a greater income-tax and that a greater share of tax proceeds finances the public good. On the contrary, when the net marginal cost of labour taxation on private consumption outweighs the marginal benefit from increasing public good provision through a greater tax-rate (analytically, this is the case when the LHS of (1.6) is negative), low-skill workers benefit from a reduction in the income tax and a greater share of tax proceeds financing private transfers. This is represented by the grey zone in the upper left corner of Fig. 1.1 Finally, the white zone in the middle corresponds to the parameter space where the policy pair (τ, μ) is such that low-skill workers' utility increases with τ and μ.

Figure 1.1: *Indifference curves and MRS in the (τ, μ) space*
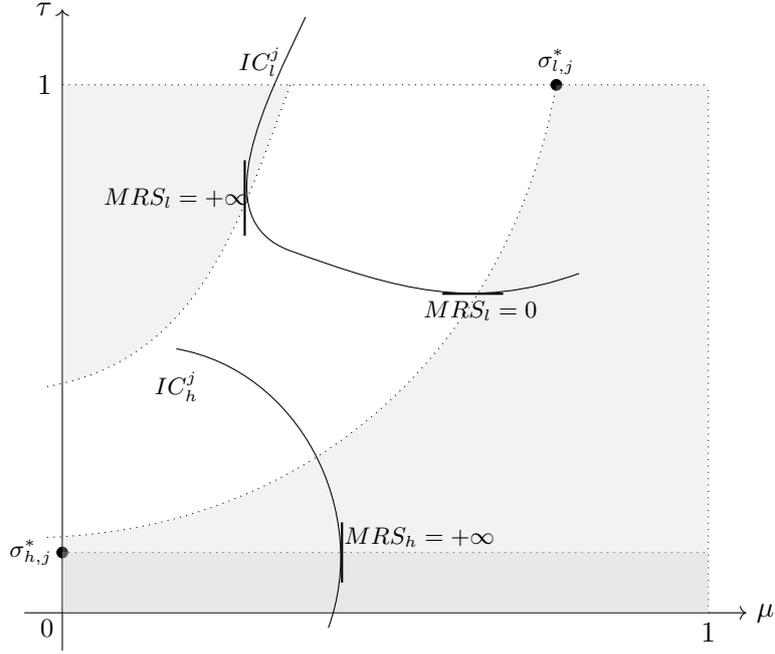
I now turn to the preferences of workers based on their nationality $j \in \{n, m\}$. Analyzing the redistributive policy preferred by natives and immigrants separately provides a more intuitive grasp of the underlying mechanisms driving natives' attitudes towards enfranchisement. To do this, I first describe in the next section the redistributive political equilibrium when only natives have the right to vote.

1.3.2 Redistributive equilibrium without foreign voting

In this section, I characterize natives' preferences by looking at the political outcome when foreigners have economic rights but are excluded from the franchise ($w = 0$). The political equilibrium defined in Section 1.2 then maximizes a weighted social welfare function where the weight of each skill group of natives is equal to their share of the population. Let $\sigma_n = (\tau_n, \mu_n)$ be the policy pair solution to

$$\max_{\sigma} W = \lambda_l^n u_{l,n}(\sigma) + (1 - \lambda_l^n) u_{h,n}(\sigma)$$

Solving the first order conditions for policy preferences τ_n and μ_n yields[13]:

$$\sigma_n = \begin{cases} \left(\frac{\alpha_n}{1+\alpha_n}, 0 \right) \text{ if } \lambda_l^n \leq F_l \\ \left(1 - \frac{1-\lambda_l^n}{(1+\alpha_n)(1-F_l(\lambda_l^n, \lambda_l^m))}, \frac{1}{1+\alpha_n \frac{1-F_l(\lambda_l^n, \lambda_l^m)}{\lambda_l^n - F_l(\lambda_l^n, \lambda_l^m)}} \right) \text{ otherwise} \end{cases} \qquad (1.7)$$

---

[13]The strict quasi-concavity of W_n in both τ_n and μ_n is trivially satisfied.

where $\alpha_n = \psi_n \left[\lambda_l^n \alpha_l + (1 - \lambda_l^n) \alpha_h \right]$ is the average taste for the public good among natives.
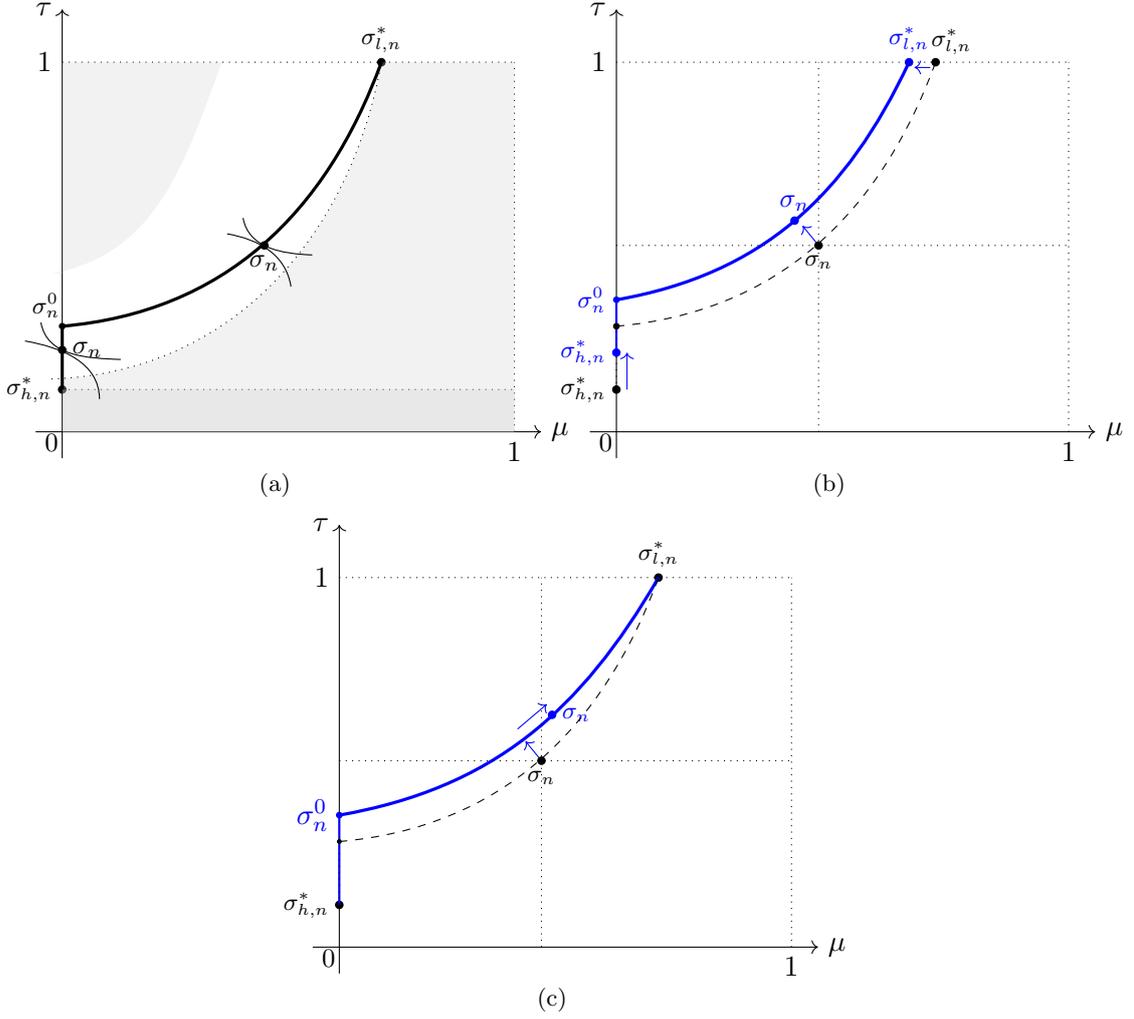
First, notice that under my simple probabilistic voting framework, the political weight of the low-skill group corresponds to the share of low-skill workers in the native population λ_l^n. Second, observe that the marginal benefit of a policy that spends more on private transfers will decrease when the share of output produced by low-skill workers F_l increases. The intuition is straightforward: $F_l = \frac{y_l L_l}{Y}$ is an increasing function of γ (i.e is decreasing with income inequalities) and the share of low-skill workers L_l in the economy. Therefore, in line with seminal models of redistribution such as Meltzer and Richards (1981), the marginal value of income redistribution is decreasing with the average wealth in the economy, which is captured here by F_l. A direct consequence of this effect is that low-skill natives have less to gain from increasing the share of public money spent on private transfers when F_l increases. In my model, this implies that income redistribution, i.e spending more tax proceeds on private transfers, becomes relatively less efficient and less valuable than spending those tax proceeds on the provision of public goods. Furthermore, because only low-skill natives receive the private transfers, the marginal value of income redistribution is always nill for high-skill natives. As a result, the social value of income redistribution, or the value of income redistribution for society as a whole, decreases with F_l. When the political weight of low-skill natives is too small with respect to F_l, the social value of income redistribution becomes negative, and $\mu_n = 0$.

Graphically, when $\lambda_l^n \leq F_l$, the redistributive equilibrium σ_n spends no money on private transfers ($\mu_n = 0$). In Figure 1.2.a, it is located between the points $\sigma_{h,n}^*$ and σ_n^0 on the contract curve that runs from low-skill to high-skill natives' policy preferences (the thick dark line). When $\lambda_l^n = F_l$, a marginal increase and a marginal decrease in μ have the same social value, and the redistributive outcome is located at σ_n^0. When $\lambda_l^n \geq F_l$, it becomes socially optimal to spend some of the tax proceeds on private transfers, and $\mu_n > 0$.

Moreover, observe that the electoral outcome σ_n is Pareto-optimal[14] ($MRS_{l,n} = MRS_{h,n}$) and that the marginal rate of substitution of natives is positive at σ_n: The equilibrium tax-rate and share of tax proceeds spent on private transfers is too low (resp. too high) for low-skill (resp. high-skill) natives. Because I make the assumption that immigration is already present in the country, the size and average wealth in the economy is fixed, and redistribution therefore boils down to a zero-sum game between low-skill and high-skill natives. It is worth stressing that symmetric results would hold for the redistributive preferences of foreigners $\sigma_m = (\tau_m, \mu_m)$ if the redistributive equilibrium was decided by a voting process in which only foreigners were allowed to vote. In this regard, symmetric propositions to 1.1, 1.2, and 1.3 derived hereafter apply to the preferences of foreigners.

---

[14]This is a standard result of probabilistic voting (Coughlin (1982)

Figure 1.2: *The consequences of immigration on natives' redistributive preferences*

Proposition 1.1: *When $\lambda_l^n \leq F_l$, τ_n is increasing with ψ_n, α_l and α_h. When $\lambda_l^n > F_l$, τ_n is increasing with α_l and α_h, and ψ_n, and μ_n is decreasing in ψ_n, α_l and α_h.*

A greater intrinsic taste for the public good (captured through ψ_n, α_l and α_h) decreases the share of tax proceeds financing the private transfer as natives' relative taste for the public good over the private good increases. Likewise, the equilibrium tax rate τ_n increases with ψ_n, α_l, and α_h since natives then value the consumption of the public good more independently of their support for income redistribution. Graphically, an increase in ψ_n shifts $\sigma_{l,n}^*$ to the left while $\sigma_{h,n}^*$ and σ_n^0 move up. As a result, the new policy equilibrium shifts up and left with the new contract curve (see Fig 1.2.b).

Proposition 1.2: *When $\lambda_l^n \leq F_l$, τ_n is increasing with λ_l^n. When $\lambda_l^n > F_l$, μ_n and τ_n are increasing with λ_l^n.*

I first describe what happens when $\lambda_l^n > F_l$. The impact of an increase in the share of low-skill natives λ_l^n on the equilibrium policy μ_n goes through three distinct channels. The first one is political: When the low-skill group has greater political weight, this pushes the spending policy μ_n up as low-skill natives prefer that a greater share of tax proceeds finances private transfers than high-skill natives (this is captured by the term $\lambda_l^n - F_l$ in the expression of μ_n in (1.7)). The second and third channels are economic: A greater share of low-skill workers λ_l^n implies that the economy is poorer on average, and therefore that the social marginal value of income taxation is lower, along the same intuition as the one developed in the previous section. Therefore, μ_n goes down as it becomes socially optimal to spend a lower share of public funds on private transfers. Also, because low-skill natives value the public good more than high-skill natives (recall $\alpha_l > \alpha_h$), the average taste for the public good among natives will increase with λ_l^n: As a result, the social value of the public good increases, and μ_n decreases. The aggregate impact of λ_l^n on μ_n is positive because the political effect dominates the economic effect: The additional political weight of low-skill native λ_l^n outweighs the change in natives' average economic preferences.

In the same fashion, the impact of λ_l^n on τ_n depends on the relative changes in the political weight of low-skill natives with respect to the economic preferences of the native population: When the political weight of low-skill natives λ_l^n increases, the tax rate policy τ_n increases as well because low-skill natives prefer a higher tax-rate than high-skill natives (recall that $\tau_{l,n}^*(\mu_n) > \tau_n > \tau_{h,n}^*(\mu_n)$). A greater share of low-skill workers λ_l^n also implies that the economy is poorer on average, and therefore that the marginal social value of income taxation is lower, which exerts a downward pressure on τ_n. Finally, because $\alpha_l > \alpha_h$, the average value of public good for natives goes up with λ_l^n. This increases their demand for the provision of public good regardless of how much they value income taxation and increases τ_n. The effect of the two positive channels combined always dominates the adverse impact of a lower social value of income taxation, and τ_n increases with λ_l^n.

When $\lambda_l^n \leq F_l$, the impact of λ_l^n on the equilibrium tax-rate τ_n only depends on the changes in the political weight of low-skill natives and natives' average taste for the public good. Indeed, redistribution does not finance the private transfer ($\mu_n = 0$) and therefore λ_l^n has no effect on the social value of income redistribution. Since both of the former channels have a positive effect on the equilibrium tax-rate, I have that τ_n unambiguously increases with λ_l^n when $\lambda_l^n \leq F_l$.

Graphically, when λ_l^n increases, σ_n^0 moves up and defines a new contract curve (see Fig 1.2.c). When $\lambda_l^n \leq F_l$, σ_n simply moves up along with this new contract curve. When $\lambda_l^n > F_l$, the policy equilibrium σ_n moves in the north-west direction and shifts up and right alongside the new contract curve.

Proposition 1.3: *γ has no effect on σ_n as long as $\lambda_l^n \leq F_l$. When $\lambda_l^n > F_l$, τ_n and μ_n increase with γ.*

Income inequalities only affect σ_n through the average income in the economy and therefore the social value of income redistribution. Therefore, as long as $\lambda_l^n \leq F_l$ and redistribution does not finance private transfers, a change in income inequalities will have no effect on the redistributive equilibrium. On the other hand, when $\lambda_l^n > F_l$ and $\mu_n > 0$, both τ_n and μ_n will increase with income inequalities γ. The intuition is the following: Ceteris paribus, greater income inequalities will increase the size of cash transfers received by low-skill natives. Because high-skill natives' preferences over μ and τ are completely independent (recall $\mu_{h,n}^*(\tau) = 0$ and $\tau_{h,n}^*(\mu) = \frac{\alpha_h^n}{1+\alpha_h^n}$), a higher γ will only affect low-skill natives' redistributive preferences. As a result, the marginal social value of greater income taxation increases, and τ_n and μ_n increase as well, bringing the redistributive equilibrium closer to low-skill natives preferences. Graphically, when γ increases, σ_n^0 goes down and σ_n will move up on the contract curve towards $\sigma_{l,n}^*$ and reach a redistributive equilibrium that features a greater tax-rate and a spending policy that spends a greater share of tax proceeds on private transfers.

Proposition 1.4: *When $\lambda_l^n \leq F_l$, a change in the the size (M) or the skill composition (λ_l^m) of immigration does not alter the redistributive outcome. When $\lambda_l^n > F_l$, μ_n and τ_n decrease with λ_l^m. Moreover, μ_n and τ_n decrease with M if and only if immigrants are less skilled than natives on average.*

When the spending policy does not finance private transfers, the change in immigrants' skill composition or in the size of immigration has no effect on σ_n. In fact, a larger and / or a less skilled immigration does not affect natives' preferences for the public good but only the average income in the economy and therefore the social value of income redistribution. As discussed previously, when redistribution does not finance private transfers, this has no effect on the redistributive equilibrium. However, when $\lambda_l^n > F_l$, a relatively less skilled immigration implies that the economy is poorer on average, which reduces the social value of income redistribution, and τ_n and μ_n therefore decrease. In the same fashion, if immigrants are less skilled than natives on average ($\lambda_l^n < \lambda_l^m$), the economy becomes poorer as more immigrants enter the country, which has the same adverse impact on the social value of income redistribution as an increase in λ_l^m. This leads to lower τ_n and μ_n in equilibrium. Graphically, an increase in λ_l^m or an increase in M when $\lambda_l^n < \lambda_l^m$ will have the same consequences: σ_n will shift down and left alongside the contract curve.

This last proposition resonates with the recent findings of the political economy literature. More specifically, a large body of works documenting the impact of immigration on welfare attitudes finds that natives reduce their support for income redistribution in the presence of a

relatively low-skill immigration (see for instance Alesina et al. (2005, 2018)), and this welfare retrenchment is often associated in the theoretical literature with two distinct channels. The first one is cultural: Natives selectively oppose redistribution towards immigrants whom they perceive as undeserving, which is also referred to as welfare chauvinism. The second channel is economic, and suggests that natives decrease their support for redistribution when faced with low-skill immigration as they expect transfers to decrease with the average income in the economy. Proposition 1.4 above falls into the second category, as I find that both the tax-rate and the share of tax proceeds spent on private transfers are decreasing (resp. increasing) with the size of immigration when immigrants are on average less (resp. more) skilled than natives.

1.3.3 Redistributive equilibrium with foreign voting

I now turn to the impact of foreigners' enfranchisement on the redistributive equilibrium. I first provide a graphical example in the policy space (τ, μ). In Figure 1.3, the locus of all possible redistributive equilibria when foreigners are granted political rights is represented by the shaded area in blue, where the outer limit of that space extends towards the contract curve of foreigners as the size of immigration M increases. More specifically, for a given set of preferences σ_n and σ_m, the policy equilibrium when foreigners do not have political rights coincides with the preferences of natives σ_n and moves towards σ_f - the policy outcome when foreigners are granted full enfranchisement ($w = 1$) - along the blue segment as foreigners' political rights increase. The slope of this segment is equal to the marginal rate of transformation between τ and μ with political rights, i.e the relative rate of change between the two policy variables with w. In the rest of the paper, I normalize natives' cultural taste for redistribution to $\psi_n = 1$ so that $\psi_m = \psi$ capture immigrants' relative cultural preferences for public spending.

Figure 1.3: *The consequences of foreigners' political rights on redistribution*

26
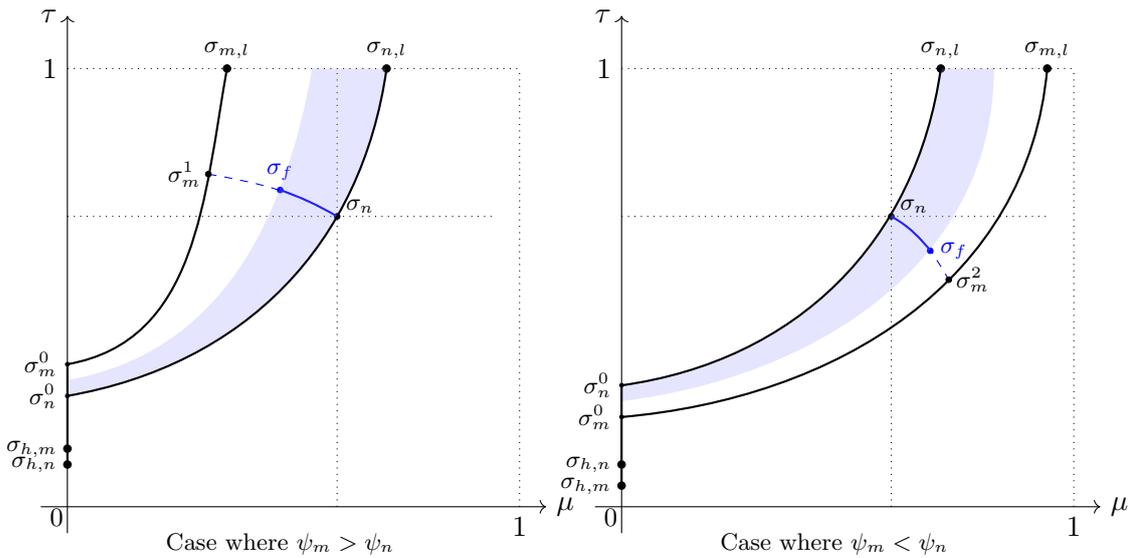
Let $\sigma_0(w) = (\tau_0(w)\mu_0(w))$ be the redistributive policy equilibrium when foreigners have political rights $w \in [0,1]$. Maximizing (1.4) over σ then yields the following equilibrium policies[15]:

$$\mu_0(w) = \cfrac{1}{1 + \cfrac{\alpha_p(w)(1-F_l)}{\lambda_l^n - F_l + Mw(\lambda_l^m - F_l)}} \tag{1.8}$$

$$\tau_0(w) = 1 - \frac{1 - \lambda_l^n + Mw(1 - \lambda_l^m)}{(1 + \alpha_p(w) + wM)(1 - F_l)} \tag{1.9}$$

where $\alpha_p(w) = \alpha_n + wM\alpha_m$ captures the socially weighted taste for the public good in the economy when foreigners have political rights w.

Proposition 2.1: *The tax rate τ_0 increases with the political rights of foreigners w if and only if $\frac{1+\alpha_n}{1+\alpha_m} \leq \frac{1-\lambda_l^n}{1-\lambda_l^m}$. The share of government spending financing private transfers μ_0 increases with w if and only if $\frac{\alpha_m}{\alpha_n} \leq \frac{\lambda_l^m - F_l}{\lambda_l^n - F_l}$.*

This proposition states the condition under which the enfranchisement of foreign workers will lead to an increase in the equilibrium tax rate τ_0. Intuitively, τ_0 will increase with the enfranchisement of foreign workers when the average preferred tax rate among foreigners is greater than the average tax rate preferred by natives. It is also clear from what precedes that the equilibrium tax rate τ_0 is increasing with the share of low-skill workers in the economy and the cultural taste for the provision of public good α. In relative terms, this implies that the preferred tax rate of the average immigrant worker τ_m will be greater than natives' preferred tax rate τ_n when (i) the relative share of low-skill workers in the foreign population and (ii) the relative taste of foreigners for the public good are sufficiently high, as stated by the inequality in the first part of the proposition.

Moreover, the impact of migrants' enfranchisement on the composition of public spending depends on the relative preference for private transfers and the public good between natives and foreigners. While a relatively greater share of low-skill foreign workers increases the demand for private transfers and thus increases μ_0, relatively stronger preferences for the public good exert a symmetric downward pressure on the spending policy as the average worker in the franchise values the public good more. Note that both channels depend positively on λ_l^m, and therefore μ_0 increases with w when foreigners' cultural preferences for the public good ψ are sufficiently low.

Figure 1.4 graphs the effect of the political rights of foreigners on redistributive policies in the space (λ_l^m, ψ). The red shaded area corresponds to the parameter space over which τ_0 is increasing with w, while the grey, hatched area indicates the values of ψ and λ_l^m for which the share of public spending on transfers μ_0 is increasing.

Proposition 2.2: *When foreigners are more conservative than natives ($\psi \leq 1$), the share of tax proceeds spent on cash transfers μ_0 increases with political rights w if foreigners are on average less skilled than natives ($\lambda_l^m > \lambda_l^n$). Moreover, when $\psi \leq 1$, if the equilibrium tax rate τ_0 is increasing with w then μ_0 is increasing as well: $\frac{d\tau_0}{dw} \geq 0 \Rightarrow \frac{d\mu_0}{dw} \geq 0$. When foreigners are more liberal than natives ($\psi \geq 1$), the equilibrium tax-rate policy τ_0 increases with political rights w if foreigners are on average less skilled than natives ($\lambda_l^m > \lambda_l^n$). Moreover, if μ_0 is increasing with w, then τ_0 is increasing as well: $\frac{d\mu_0}{dw} \geq 0 \Rightarrow \frac{d\tau_0}{dw} \geq 0$.*

When foreigners have lower cultural preferences for the public good than natives, they prefer that the government spends relatively more money on the provision of private transfers, ceteris paribus. Also, we know from Proposition 1.2 that a greater share of low-skill workers of nationality j increases the share of public money spent on private transfers μ_j preferred by individuals of nationality j. Therefore, when foreigners are both less skilled than natives and have intrinsically lower preferences for the public good ($\psi < 1$), their enfranchisement will always lead to a weakly greater share of tax proceeds spent on the financing of private transfers μ_0. Also, because a lower taste for the public good decreases the tax-rate τ_j preferred by workers of nationality j, a necessary condition for the tax rate τ_0 to increase with w is that immigrants are less-skilled than natives.

A symmetric argument can be made for the case where foreigners value the public good more than natives ($\psi > 1$). It suffices then that foreigners are relatively less skilled than natives ($\lambda_l^m > \lambda_l^n$) in order for the tax-rate policy τ_0 to increase with political rights w. Likewise, because foreigners with a greater taste for the public good than natives prefer to spend fewer tax proceeds on private transfers, a necessary but not sufficient condition for the equilibrium policy μ_0 to increase with w is that foreigners are relatively less skilled than natives.

Foreigners' political rights can therefore influence redistribution in the four possible ways depicted in Figure 1.4: When the skill level of immigration is high enough ($\lambda_l^m < G_\mu$ and $\psi < 1$ or $\lambda_l^m < G_\tau$ and $\psi > 1$), the enfranchisement of foreigners decreases both the tax-rate and the share of tax proceeds spent on private transfers (area (1)). When foreigners have sufficiently greater taste for the public good ($\lambda_l^m < G_\mu$ and $\lambda_l^m > G_\tau$), granting foreigners political rights lead to an increase in the size of public spending (a greater τ_0) and a decrease in the share of public spending spent on private transfers μ_0 (area (2)). When the immigrants are sufficiently unskilled and the preferences of foreigners for the public good low enough, both the tax rate and the share of tax proceeds spent on transfers increases when foreigners are enfranchised (area (3)). Finally, when the skill gap between immigrants and natives is small enough and foreigners value the public good less than natives, foreigners' enfranchisement leads to a greater share of public spending financing private transfers μ_0 and a lower tax rate τ_0 (area (4)). The thick black line represents natives' attitudes towards enfranchisement and will be discussed later in the paper.

Figure 1.4: *The consequences of foreigners' political rights on redistribution*
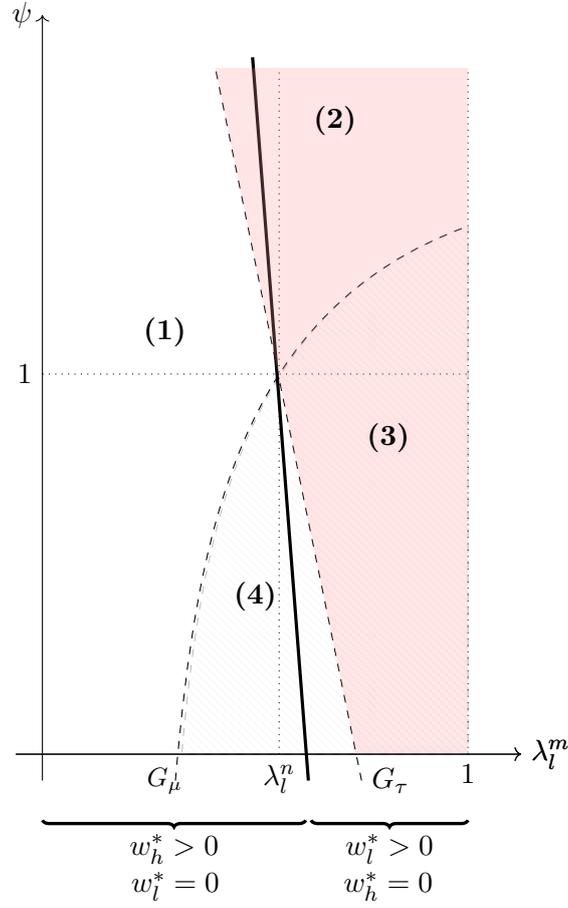
Finally, because natives' attitudes towards enfranchisement depend ultimately on the impact of political rights on the level of private consumption and public good provision through their redistributive implications, I characterize the effect of foreigners' political participation on c and g. Plugging (1.8) and (1.9) into the expression of c_i and g, we obtain the following level of private consumption and public good provision at the redistributive equilibrium σ_0:

$$c_i(\sigma_0) = \frac{Y(\lambda_i^n + \lambda_i^m M w)}{(\lambda_i^n + \lambda_i^m M)(1 + wM + \alpha_p)} \tag{1.10}$$

$$g(\sigma_0) = \frac{\alpha_p Y}{1 + wM + \alpha_p} \tag{1.11}$$

Proposition 2.3: *The private consumption c_i of natives with skill level $i \in \{l,h\}$ increases with the political rights of foreigners w if and only if $\lambda_i^m(1+\alpha_n) \geq \lambda_i^n(1+\alpha_m)$. The level of public good provision g increases with the political rights of foreigners w if and only if $\alpha_m \geq \alpha_n$.*

For low-skill natives, the net effect of political rights on private consumption is positive when private transfers increase with w. Because only low-skill workers receive private transfers, the political participation of foreigners leads to an increase in the size of these transfers only when the share of low-skill immigrants λ_l^m is sufficiently high. Moreover, the impact of political rights on redistributive policies depends not only on the skill composition of foreigners but also on their relative cultural preferences towards public spending. In particular, foreigners choose to increase the amount of tax proceeds and spend a greater share of those proceeds on public good provision as ψ increases. Therefore, another condition for low-skill private consumption and private transfers to increase with w is that foreigners' cultural preferences towards public spending are sufficiently low[16].

The level of public good provision g will increase with political rights when the average taste for the public good among foreigners is greater than among natives. Recall that $\alpha_j = \psi_j\left[\lambda_l^j\alpha_l + (1-\lambda_l^j)\alpha_h\right]$, from which comes immediately that the effect of w on the provision of public goods depends on the relative skill composition and the cultural preferences of foreigners. Therefore, public good provision will increase following foreigners' enfranchisement when $\alpha_m \geq \alpha_n$, i.e when immigrants are sufficiently unskilled and their cultural preferences for redistribution are sufficiently high.

1.4   Attitudes towards political rights

We have seen in the previous section how the political rights of foreigners alter the redistributive political equilibrium σ and thereby impact natives' private and public good consumption. I can now determine under which conditions the enfranchisement of foreigners benefits natives. Plugging (1.10) and (1.11) into (1.3) gives the following indirect utility function for low and high-skill natives:

$$V_l(w) = \ln\left(\frac{Y(\lambda_l^n + \lambda_l^m M w)}{(\lambda_l^n + \lambda_l^m M)(1 + wM + \alpha_p)}\right) + \alpha_l \ln\left(\frac{\alpha_p Y}{1 + wM + \alpha_p}\right) \tag{1.12}$$

$$V_h(w) = \ln\left(\frac{Y(1 - \lambda_l^n + (1 - \lambda_l^m)M w)}{(1 - \lambda_l^n + (1 - \lambda_l^m)M)(1 + wM + \alpha_p)}\right) + \alpha_h \ln\left(\frac{\alpha_p Y}{1 + wM + \alpha_p}\right) \tag{1.13}$$

---

[16]This can be seen analytically be rewriting the condition $\lambda_l^m(1+\alpha_n) \geq \lambda_l^n(1+\alpha_m)$ as $\frac{\lambda_l^m(1+\alpha_h+\lambda_l^n(\alpha_l-\alpha_h))}{\lambda_l^n(1+\alpha_h+\lambda_l^m(\alpha_l-\alpha_h))} \geq \psi$.

Lemma 3: *Low and high-skill natives have single-peaked preferences in w.*

The preferred level of political rights w_i^* of a native with skill level $i \in \{l, h\}$ is then obtained by maximizing V_i over w. The FOC yields the following proposition:

Proposition 3: *Natives have opposite views towards the political rights of foreigners: $w_l > 0$ $\Leftrightarrow w_h = 0$.*

The intuition is simple. In the absence of political rights, because the redistributive policy outcome σ_n is Pareto-optimal, the marginal rate of substitution is the same for low-skill and high-skill natives and there exists no policy deviation from σ_n that can improve the utility of both groups. Therefore, natives hold conflicting, income-specific views over w. Fig. 1.5 represents graphically the locus of political redistributive equilibria σ_0 for different values of σ_m and ψ. Natives will prefer to grant some political rights ($w_i^* > 0$) to foreigners when the redistributive political equilibrium moves from σ_n into their utility-improving set. When $\psi > 1$ (Fig. 1.5.a), a first possibility is that foreigners' preferences are located at σ_m^1, such that τ_0 and μ_0 decrease with w (outcome (1) of Fig. 1.4). The redistributive equilibrium is then located on the blue segment between σ_n and σ_m^1 in the utility-improving set of high-skill natives. On the other hand, both σ_m^2 and σ_m^3 represent foreign preferences under which foreigners' political rights would benefit low-skill natives at the margin (i.e at $w = 0$), respectively through an increase in τ_0 and a decrease in μ_0 (σ_m^2, outcome (2)) and an increase in both τ_0 and μ_0 (σ_m^3, outcome (3)). Fig. 1.5.b represents all possible political outcomes when $\psi < 1$. The case where foreigners' preferences are located at σ_m^1 and σ_m^3 have been discussed previously. σ_m^4 (outcome (4)) corresponds to the fourth possible way in which foreigners' political rights impact the redistributive equilibrium: The tax-rate τ_0 decreases while the spending policy μ increases. The graphical example presented here is such that the enfranchisement of foreigners benefit high-skill natives, but we will see later in the paper that this is not always the case.

Figure 1.5: *Natives' attitudes towards enfranchisement*
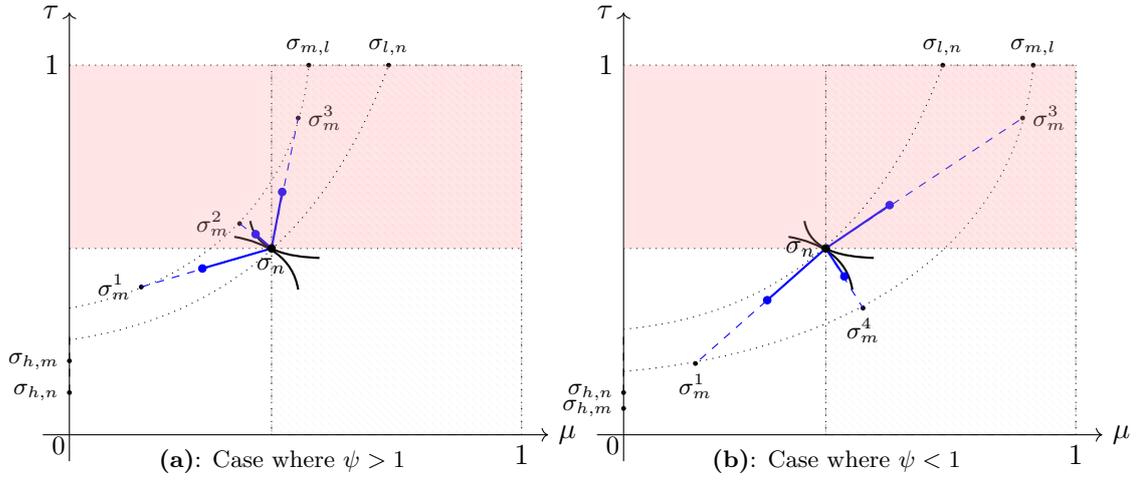
Proposition 4: *Skill i natives grant political rights $w_i^* > 0$ to foreigners if and only if $\lambda_i^m \geq \underline{\lambda_i}$, with $\underline{\lambda_i} > 0$. Moreover, $\frac{d\underline{\lambda_l}}{d\lambda_l^n} \geq 0$ and $\frac{d\underline{\lambda_l}}{d\psi} \leq 0$, and $\frac{d\underline{\lambda_h}}{d\lambda_h^n} \geq 0$ and $\frac{d\underline{\lambda_h}}{d\psi} \geq 0$. Finally, $\underline{\lambda_l} \geq \lambda_l^n$ and $\underline{\lambda_h} \leq \lambda_h^n$ if and only if $\psi \leq 1$.*

The first part of Proposition 4 is rather intuitive and simply states that natives prefer to grant foreigners political rights $w_i^* > 0$ when immigrants with the same skill level as their own make up a sufficiently high share of the foreign population. For low-skill natives, the redistributive policy outcome σ_n is such that the tax-rate and the share of public money spent on private transfers is too low. Therefore, they would never grant political rights to foreigners when too many of them are skilled, as their enfranchisement would then lead to lower values of both τ_0 and μ_0 (see Prop 2.1). Furthermore, because low and high-skill natives have symmetric views towards enfranchisement, high-skill natives will always grant foreigners political rights when low-skill natives refuse to do so, and therefore support foreigners' enfranchisement when immigrants are sufficiently skilled.

However, a relatively unskilled or skilled immigration alone is neither a sufficient nor a necessary condition for the enfranchisement of foreigners because redistributive preferences are also driven by cultural beliefs ψ. Proposition 4 therefore predicts that the maximum (resp. minimum) skill level for which low-skill (resp. high-skill) natives are willing to grant foreigners political rights increases with the share of low-skill (resp. high-skill) foreigners **and** immigrants' cultural preferences for redistribution: When foreigners are more liberal towards public spending ($\psi \geq 1$), low-skill natives are then willing to enfranchise them even if their average skill level is greater than natives', i.e even if $\lambda_l^m < \lambda_l^n$. On the other hand, they will hold more restrictive views towards the enfranchisement of conservative immigrants, and would only grant them political rights under the condition that they are strictly less skilled than the native population. High-skill natives, on the contrary, have symmetric attitudes towards immigrants' political rights, and would enfranchise foreigners more easily when those are less supportive of government spending. This is represented in Fig. 1.4 by the thick black line, which divides the parameter space

between the values of λ_l^m and ψ for which natives prefer to grant political rights to foreigners.

To understand the interaction between the skill level of immigrants and their cultural preferences behind this last result, I discuss hereafter the impact of foreigners' political rights on private consumption and public good provision from low-skill natives' perspective. The following discussion should give the reader sufficient intuition to achieve a symmetric conclusion for high-skill natives.

First, notice that low-skill natives always oppose enfranchisement when c_l and g decrease with w and always support it when both increase with w. On the other hand, a trade-off between private and public good consumption arises when either c_l or g increases and the other decreases with w. More specifically, when foreigners are more conservative than natives ($\psi < 1$), this trade-off is such that private consumption increases and public good provision decreases with w (see Prop 2.3), and low-skill natives then enfranchise foreigners ($w_l^* > 0$) if and only if the following inequality is satisfied:

$$\frac{\lambda_l^m(1 + \alpha_n) - \lambda_l^n(1 + \alpha_m)}{\alpha_n - \alpha_m} \geq \frac{\alpha_l \lambda_l^n}{\alpha_n} \tag{1.14}$$

The term on the LHS of (1.14) corresponds to the relative marginal impact (or marginal rate of transformation) of political rights on private consumption and public good provision, i.e the ratio of the marginal effect of w on c_l over its marginal impact on g at the redistributive policy equilibrium σ_n, i.e when foreigners are excluded from the franchise.[17] On the other hand, the term on the RHS captures natives' marginal rate of substitution between c and g at σ_n. The ratio $\frac{\alpha_l}{\alpha_n}$ measures the relative value of a marginal increase in g while λ_l^n corresponds to the marginal value of private consumption. Because utility is concave in both c and g, the relative value of an increase in g decreases with low-skill natives' average taste for the public good α_n and the relative value of private consumption c_l decreases with the political weight of skill low-skill natives λ_l^n. This is because the larger these parameters are, the greater the value of g and c_l will be at σ_n.

When c_l increases and g decreases with w, foreigners' political participation increases low-skill natives' utility through higher private transfers and decreases it through lower public good provision. Low-skill natives then enfranchise foreigners when the relative marginal impact of w on c_l is sufficiently high with respect to their marginal effect on g[18].
Also, while the share of low-skill immigrants λ_l^m does not affect natives' marginal rate of substitution between c_l and g at σ_n (the RHS of (1.14)), it increases the marginal impact of political

---

[17]The numerator is positive because c_l increases with w while the denominator is positive as g decreases with w. See Prop 2.3.

[18]Analytically, this is the case when the marginal impact of political rights is greater than the marginal rate of substitution.

rights on c_l and decreases their marginal impact on g[19], which implies that the relative marginal impact of w on c_l with respect to g (the LHS of (1.14)) is increasing with λ_l^m. In particular, when immigration is less skilled (λ_l^m is higher), the marginal impact of political rights on c_l increases with w by $(1 + \alpha_n) - \lambda_l^n \psi(\alpha_l - \alpha_h)$, where the first term $(1 + \alpha_n)$ is positive and captures the effect of the additional weight of low-skill voters supporting private transfers, while the second term $-\lambda_l^n \psi(\alpha_l - \alpha_h)$ represents the adverse impact on private consumption of foregone tax proceeds not financing private transfers as a result of a greater taste for the public good among foreigners: Recall that low-skill workers value the public good more than skilled workers: $\alpha_l > \alpha_h$, and therefore a less skilled immigration also has a greater average taste for the public good. Incidentally, the skill composition λ_l^m has a direct effect on the marginal impact of political rights on g, which decreases by $\psi(\alpha_l - \alpha_h)$, as foreigners' average preferences for the public good increase. Therefore, the fact that low-skill workers value the public good more than skilled workers lowers the positive marginal impact of w on private consumption c_l but also decreases the adverse marginal impact of w on g when the share of low-skill immigrants goes up.

Besides, it is easy to check that the share of low-skill immigrants λ_l^m has a relatively greater effect through foreigners' cultural preferences ψ on the marginal impact of political rights on g than it has on the marginal impact of political rights c_l, since $\psi(\alpha_l - \alpha_h) > \lambda_l^n \psi(\alpha_l - \alpha_h)$. When c_l increases and g decreases, this implies that the relative marginal impact of w will increase more rapidly with λ_l^m for larger values of ψ. In other words, as λ_l^m increases, political rights become relatively more efficient at increasing private consumption than they are at decreasing public good provision when ψ is higher, and low-skill natives will support enfranchisement for lower values of λ_l^m.

When $\psi > 1$, low-skill natives face the opposite trade-off, where private consumption decreases and public good provision increases with w. They enfranchise foreigners if and only if the following inequality is satisfied :

$$\frac{\lambda_l^m(1 + \alpha_n) - \lambda_l^n(1 + \alpha_m)}{\alpha_n - \alpha_m} \leq \frac{\alpha_l \lambda_l^n}{\alpha_n} \tag{1.15}$$

Using a symmetric argument as before, a greater ψ then implies that as λ_l^m increases, political rights will be more efficient at increasing public good provision than they are at decreasing private consumption so that the maximum skill level for which low-skill natives are willing to grant foreigners political rights increases with ψ.

A more general economic intuition for the previous discussion is that greater cultural taste for redistribution and a greater share of low-skill immigrants work as complements in low-skill natives' decision to enfranchise foreigners: For a given skill level of immigration λ_l^m, a greater ψ

---

[19]The derivative of $\lambda_l^m(1 + \alpha_n) - \lambda_l^n(1 + \alpha_m)$ with respect to λ_l^m is $(1 + \alpha_n) - \lambda_l^n \psi(\alpha_l - \alpha_h)$, which is always positive when $\psi < 1$, and the derivative of $\alpha_n - \alpha_m$ with λ_l^m is $-\psi(\alpha_l - \alpha_h)$ and always negative.

leads, ceteris paribus, to greater tax proceeds, which can be used to finance more public good and / or greater private transfers. On the other hand, a lower ψ leads to lower tax proceeds and forces a trade-off between the financing of private and public goods. When $\psi > 1$, the fact that foreigners have greater cultural taste for redistribution therefore creates a form of *redistributive slack* by increasing the amount of tax proceeds so that low-skill natives may choose to enfranchise immigrants even if those are relatively more skilled than natives on average. On the other hand, when $\psi < 1$, foreigners' more conservative views reduces the amount of tax proceeds, which implies that immigrants must be strictly less skilled than natives for low-skill natives to benefit from their enfranchisement.

Therefore, in my model, the skill composition of immigrants alone does not explain natives' attitudes towards foreigners' political participation. Rather, natives will support the enfranchisement of foreigners based on the combined effect of the quality of immigration and the cultural preferences of foreigners on redistribution. In this regard, Proposition 4 establishes a simple but original result[20]. It predicts that when foreigners are relatively liberal towards public spending, low-skill natives grant political rights to richer immigrants when the aggregate effect of enfranchisement on their level of public and private consumption increases their economic welfare. Symmetrically, when foreigners are relatively conservative, high-skill natives enfranchise poorer immigrants when their enfranchisement decreases the size of government spending so that the utility gains from a lower tax-rate are greater than the cost of decreasing the provision of public goods.

In what follows, I characterize the willingness of natives to grant political rights to foreigners by looking at how w^* varies with the exogenous parameters of the model when the optimization problem admits an interior solution.

Proposition 5: *Both low and high-skill natives' preferred level of political rights decreases with the size of immigration M.*

In line with recent studies about natives' attitudes toward foreigners' political participation (Mariani, 2013, Stutzer et al., 2019), my model predicts that a larger immigration reduces natives' support for political rights. In my model, the size of immigration influences natives' preferred level of political rights only through the political weight of foreigners. Recall that because immigration is not endogenous, redistribution is a zero-sum game. Natives therefore only support the political rights of foreigners insofar as they contribute to bringing the policy outcome as close as possible to their own preferences. In this regard, the level of political participation w and the size of immigration M can be regarded as perfect substitutes because foreigners' political weight following enfranchisement is simply the product of the size of immigration and their political rights Mw. Since a larger immigration implies that the impact of

---

[20]As mentioned in the introduction, these results do not depend on income levels and inequalities and would therefore hold under the assumption of labour market competition between natives and immigrants.

foreigners' enfranchisement on redistribution will be greater for a given level of political rights w, less political rights are required to influence the equilibrium policy in natives' most preferred way when M is larger, and w^* therefore decreases with M.

Proposition 6: *When foreigners are more conservative than natives ($\psi \leq 1$), low-skill natives' preferred level of political rights w_l^* increases with foreigners' cultural preferences for redistribution ψ. Moreover, w_h^* increases with ψ for sufficiently low values of α_m, and decreases with ψ otherwise. When foreigners are more liberal than natives ($\psi \geq 1$), low-skill natives preferred level of political rights w_l^* increases with foreigners' cultural preferences for redistribution ψ for sufficiently low values of α_m, and decreases with ψ otherwise. Moreover, w_h^* always decreases with ψ.*

First, notice that if both private consumption c_i and public good provision g increase with w, then natives will always grant foreigners full enfranchisement ($w_i^* = 1$). On the contrary, when both private consumption and public good provision are decreasing with political rights, natives always oppose enfranchisement and $w_i^* = 0$. Therefore, for any interior solution $w^* \in (0, 1)$ to the optimization problem of natives, it must be that either c or g increases while the other decreases with w, and I will thus focus my attention on these two scenarios in what follows.

Second, notice that an increase in ψ implies that (i) foreigners are in favour of taxing labour income more because a greater taste for the public good, ceteris paribus, requires higher tax proceeds, and (ii) foreigners' valuation of the public good α_m w.r.t to private transfers increases.

In what follows, I describe the intuition behind Proposition 6 separately for low-skill natives and high-skill natives.

When $w_l^* \in (0, 1)$ and foreigners are relatively conservative ($\psi \leq 1$), low-skill natives' private consumption c_l increases while public good provision g decreases with w (τ_0 is decreasing and μ_0 increasing with w). Therefore, a higher ψ implies that a marginal increase in political rights leads to relatively greater tax proceeds, i.e is such that the tax rate τ_0 decreases less with w. Second, as foreigners' cultural views on public spending ψ improve, the spending policy μ_0 puts relatively more weight on the financing of public good provision and these additional tax proceeds are spent in a way that is better aligned with low-skill natives' relative taste for the public and the private good[21]. Therefore, by increasing the size of tax proceeds and directing the use of public funds in a more profitable way, a larger ψ increases the marginal benefit of political rights for low-skill natives, and w_l^* increases with ψ.

When w_l^* is interior and foreigners are relatively liberal ($\psi \geq 1$), low-skill natives' private consumption c_l decreases while public good provision g increases with w (τ_0 is increasing and μ_0

---

[21]α_m increases with ψ. Therefore, when $\frac{dg}{dw} < 0$ and $\alpha_m < \alpha_n$, the gap between low-skill natives' relative taste for the public good α_l and foreigners' α_m gets smaller as ψ increases, since we have trivially that $\alpha_l > \alpha_n > \alpha_m$.

decreasing with w). As before, a higher ψ is such that a marginal increase in political rights increases tax proceeds relatively more (τ_0 increases more with w), which benefits low-skill natives. However, the effect of ψ on the spending policy now depends on foreigners' relative taste for the public good α_m. As long as α_m is lower than α_l, the same positive effect as before plays out: Changes to the spending policy benefit low-skill natives because foreigners' relative preferences between both goods gets closer to their own as ψ increases[22]. Therefore, w_l^* increases with ψ. On the other hand, when ψ increases and foreigners' valuation of the public good α_m is greater than α_l, a marginal increase in w will redistribute tax proceeds according to a spending policy that is now further away from natives' relative preferences. An increase in ψ is then profitable for low-skill natives as long as the positive effect on τ_0 dominates the adverse impact on the spending policy μ_0. This is the case when foreigners' average taste for the public good α_m is sufficiently close to that of low-skill natives α_l. However, when α_m is too high, the spending policy channel dominates and w_l^* decreases with ψ.

For high-skill natives, a symmetric reasoning applies: When foreigners are relatively liberal ($\psi \geq 1$), private consumption c_h decreases while public good provision g increases with political rights (τ_0 increases and μ_0 decreases with w). An increase in ψ is such that a marginal increase in political rights leads to relatively greater tax proceeds, which decrease the marginal benefit of political rights for high-skill natives as their after-tax private consumption c_h decreases. Moreover, the spending policy μ_0 puts relatively more weight on the financing of public good provision and these additional tax proceeds are spent in a way that is even further away from high-skill natives' relative taste for the public and the private good[23]. Therefore, by increasing the tax rate and spending public funds in a less profitable way, an increase in ψ always decreases the marginal benefit of political rights for high-skill natives, and w_h^* decreases with ψ.

On the contrary, when foreigners are relatively conservative ($\psi \leq 1$), private consumption c_h increases while public good provision g decreases with political rights (τ_0 decreases and μ_0 increases with w). As is the case when $\psi \geq 1$, an increase in ψ is such that a marginal increase in political rights leads to relatively greater tax proceeds, which decreases the marginal benefit of political rights for high-skill natives. However, these additional tax proceeds may be spent in a way that is better aligned with high-skill natives' relative taste for the public and the private good: In particular, as long as foreigners' average valuation of the public good α_m is lower than α_h, an increase in ψ implies that a marginal increase in w will redistribute tax proceeds according to a spending policy that is closer to high-skill natives' preferences[24]. When this positive impact dominates the negative tax-rate effect of ψ on the marginal impact of political rights, an increase in ψ becomes profitable and w_h^* increases with ψ.

---

[22]The gap between α_l and α_m gets smaller when ψ increases as long as α_m is lower than α_l.

[23]When $\frac{dg}{dw} > 0$ and $\alpha_m > \alpha_n$, the gap between α_h and α_m gets bigger as ψ increases since we have trivially that $\alpha_h < \alpha_n < \alpha_m$.

[24]The gap between α_h and α_m gets smaller as ψ increases whenever α_m is lower than α_h.

Proposition 7: *When foreigners are more conservative than natives ($\psi \leq 1$), low-skill natives' preferred level of political rights w_l^* increases with the share of low-skill immigrants λ_l^m. Moreover, w_h^* increases with λ_l^m for sufficiently low values of α_m, and decreases otherwise. When foreigners are more liberal than natives ($\psi \geq 1$), low-skill natives preferred level of political rights w_l^* increases with the share of low-skill immigrants λ_l^m for sufficiently low values of α_m, and decreases with λ_l^m otherwise. Moreover, w_h^* always decreases with λ_l^m. Finally, if w_l^* increases with ψ, then it increases with λ_l^m. If w_h^* increases with λ_l^m, then it increases with ψ.*

The effect of an increase in λ_l^m on the marginal impact of political rights is two-fold: The first channel through which it operates increases the share of immigrants that receive private transfers and therefore the marginal impact of political rights on the labour income tax and the size of private transfers. The second channel is comparable to the effect of an increase in ψ described previously, where foreigners are in favour of taxing labour income more in order to finance a greater taste for the public good, and their relative valuation of the public good w.r.t to private transfers increases.

Because the former of these two channels is unambiguously profitable for low-skill natives, only the latter matters for the sign of $\frac{dw_l^*}{d\lambda_l^m}$, and the intuition is the same as in Proposition 6. Low-skill natives' preferred level of political rights w_l^* therefore increases with λ_l^m as long as foreigners' average relative taste for the public good α_m is sufficiently close to that of low-skill natives α_l. However, because λ_l^m also increases the share of immigrants that receive private transfers, the positive effect of λ_l^m on the marginal impact of political rights on τ is greater than when ψ increases, and the aggregate effect of λ_l^m on w_l^* will remain positive for greater values of α_m and a larger gap between low-skill natives' and foreigners' relatives preferences for the public good $\alpha_l - \alpha_m$.

For high-skill natives, the effect of an increase in λ_l^m on the share of immigrants that receive private transfers has a symmetric, negative impact on w_h^*. Therefore, w_h^* may increase with λ_l^m when α_m is lower than α_h, although under more restrictive conditions than those of Proposition 6.

The comparative statics presented in Propositions 6 and 7 therefore provide a set of original predictions about natives' attitudes towards foreigners' political rights. I find that low-skill natives' support for enfranchisement is not monotonically increasing in the share of low-skill immigrants or the cultural preferences of immigrants for public spending. Because redistribution operates through two distinct policies - τ and μ - to finance a private and a public good, natives' relative taste between both goods is a critical driver of their attitudes towards enfranchisement. More specifically, when foreigners' skill composition and economic conservatism are such that their average relative preference for the public good over the private good is too high with respect to natives', a higher share of low-skill immigrants or more pro-redistribution beliefs decrease the marginal benefit of foreigners' political rights for low-skill natives: The marginal utility

cost of spending a higher share of government funds on public goods is too high relative to the marginal utility gains from immigrants helping to increase the size of tax proceeds. Low-skill natives thus support lower levels of political participation despite immigrants being more liberal and less skilled than the native population. On the contrary, high-skill natives can support greater political rights for less skilled foreigners if increasing the share of low-skill immigrants compensates for relatively conservative views about public spending. The marginal utility cost of taxing skilled natives' labour income is then sufficiently low relative to the marginal utility gains from immigrants helping to spend more on public goods, which can only be financed via government redistribution. High-skill natives then support higher levels of political participation even though immigrants are more liberal and less skilled than natives.

In the next and final section of the paper, I test the predictions of the model regarding low-skill natives' attitudes towards foreigners' political rights.

1.5 Empirical analysis

1.5.1 Local voting rights in Switzerland

In this section, I provide empirical support for the model using Swiss municipal data. I choose Switzerland as a case study because of its unique political institutions. First, Switzerland is a country where a significant level of financial and political autonomy is delegated to subnational levels of government, either regional (Canton) or municipal (Communes). Under the laws of the Federal Constitution, cantons have extensive powers to enact their own legislation and in particular extend voting rights to foreign nationals in cantonal and municipal elections. In practice, while most cantons do not enfranchise their foreign residents, between 1990 and 2014, over 30 regional referenda asked Swiss citizens from 14 different cantons their opinions about enfranchising foreign residents[25]. Although most of these referenda were bundled into a process of broader constitutional revision, a few of them asked citizens specifically it they wanted to grant political rights to foreign residents. Moreover, due to a high level of decentralization, local authorities in Switzerland enjoy a significant amount of financial responsibilities: Cantons and municipalities are jointly responsible for the implementation and financing of welfare programmes. While municipalities are statutorily required to provide social assistance to poor residents subject to a binding minimum standard under the cantonal law, local administrations nevertheless retain some control over the final level of distributed cash benefits. Municipalities also have control over various policy areas such as healthcare, primary and secondary education, environmental issues, order and security, public administration, financial and economic affairs, to which they allocate the remainder of their budget[26]. The delegation of substantial financial responsibilities to local authorities comes with significant tax autonomy: Swiss municipalities have the ability to collect taxes on personal income and wealth (concurrently with the cantonal

---

[25]"Pour la participation politique des etrangers au niveau local", Adler et al. 2015.

[26]The range and depth of their responsibilities over these various items also vary across regions.

and federal authorities) as well as corporate profits, and thus finance a large portion of their expenditures through their own revenues.

It is therefore reasonable to assume that the opinion of Swiss voters regarding local franchise extension was motivated by economic considerations and in particular the consequences of these voting rights on the size and composition of local public spending, which according to my model depends on foreigners' relative economic position and cultural preferences. Against this backdrop, foreigners in Switzerland as in many European countries suffer from poorer integration into the labour market than their native counterparts, resulting in higher unemployment rates and lower economic status. At the national level, the unemployment rate amongst foreign residents in 2010 was almost three times as high as among Swiss natives ($8, 9\%$ against $3, 3\%$), and the poverty rate twice as high ($21, 4$ against $10, 4\%$). Moreover, while only one in four people residing in Switzerland is a foreigner, they represent almost 50% of "Aide Sociale Economique" beneficiaries at the national level.[27] This pattern holds at the regional level, where foreigners are overrepresented amongst welfare recipients in all 26 cantons. My computations suggest that foreigners are also poorer than natives in the vast majority of municipalities.[28] Moreover, Switzerland is a notoriously conservative country when it comes to public spending. According to several international surveys such as the International Social Survey Programme (ISSP) and the European Social Survey (ESS), support for public spending in most of the countries from which foreigners emigrated is greater than in Switzerland[29].

In light of the context in which these referenda took place, the theoretical perspective adopted in this paper has several implications. First, according to Proposition 4, low-skill natives will support foreigners' enfranchisement when these foreigners are relatively less skilled and hold more liberal beliefs about public spending than natives, while high-skill natives will oppose it.[30] I therefore expect support for the enfranchisement of foreigners to increase with the municipal share of low-skill natives. In addition, Proposition 6 and 7 predict that low-skill natives' support for enfranchisement w_l^* will increase with the share of low-skill workers λ_l^m and foreigners' cultural preferences for public spending ψ on the condition that foreigners' relative preferences for the public good α_m are sufficiently low. In the notation of the model, $\alpha_m = \psi[\lambda_l^m(\alpha_l - \alpha_h) + \alpha_h]$ is an increasing function of λ_l^m, the share of low-skill foreigners. In Switzerland, the share of low-skill foreigners as per the definition of my theoretical model is relatively low[31], and I therefore assume that the previous condition is satisfied. As a result, Proposition 6 implies that an increase in the municipal share of low-skill foreign-born residents should be associated with in-

---

[27]"Aide Social Economique" is the main social assistance scheme in Switzerland.

[28]Source: Federal Statistical Office, "Statistique de l'aide sociale (SAS)". See Appendix and Figure 1.7 for more information.

[29]see the Variable section and author's own calculations in Appendix and Table 1.7 for more detailed evidence from the ISSP survey module on the role of government.

[30]This corresponds to the parameter space depicted in the upper-right corner of Figure 1.4 in Section 1.3.3, where $w_l^* > 0$ and $w_h^* = 0$.

[31]I identify as low-skill workers in the model those individuals who benefit from income redistribution through publicly funded cash transfers. In practice, only 6% of foreign-born workers receive such transfers in Switzerland.

creased support for enfranchisement among low-skill natives. Likewise, according to Proposition 7, I expect the support for foreigners' enfranchisement among low-skill natives to increase when foreigners residing in the same municipality have more liberal views about the role of government in the provision of public goods. In order to examine these predictions, I proxy the share of low-skill native voters and foreigners using the share of individuals receiving cash transfers in the population. I also build an index of economic conservatism based on the average preferences for public spending in immigrants' origin countries as a measure of pro-redistribution culture among foreign residents. I then test the following hypotheses:

H1: Municipalities in which a greater share of natives received welfare benefits should be more supportive of the enfranchisement of foreigners.

H2: Support for foreigners' enfranchisement should increase more strongly with the share of natives receiving welfare benefits in municipalities where a greater share of foreigners received welfare benefits.

H3: Support for foreigners' enfranchisement should increase more strongly with the share of natives receiving welfare benefits in municipalities where foreigners had greater cultural preferences for public spending.

1.5.2 Data

I assemble an original dataset which combines information about municipal scores in six referenda conducted between 2005 and 2014 in the Cantons of Geneva, Bern, Schaffhausen, Zurich, Luzern, and Vaud[32]. I also use data from the Swiss Federal Statistical Office and the regional statistical offices of various Swiss cantons to collect several economic and political variables at the municipal level. Data on municipal parliaments were kindly provided by Pr. Andreas Ladner.

I construct an original measure of foreigners' relative poverty and cultural preferences for public spending at the municipal level. To proxy the former, I estimate foreigners' relative welfare dependency, i.e the difference in the share of welfare-dependent residents in the native and foreign population. I focus specifically on individuals who receive cash transfers under the "Aide Sociale Economique" programme.[33] Because this variable is not directly available for foreign residents at the municipal level, I first extract the share of individuals receiving the ASE transfer for each nationality at the regional level, and impute the share of welfare recipients at the municipal

---

[32]More information about the nature of these referenda is available in Table 1.6.

[33]The Aide Sociale programme is a means-tested, poverty relief programs to which low-income residents are eligible when they are not part of any other targeted social insurance or welfare scheme.

level according to the share of each nationality in the municipal population[34].

Following Luttmer (2011), I measure the cultural preferences of foreign residents about the role of government in the provision of public goods and services based on their country of origin. Luttmer shows that the birth country's cultural preferences for redistribution of a European immigrant is a strong predictor of that immigrants' individual taste for redistribution, and that this effect persists for those immigrants who have lived many years, have become citizens, and have been granted the right to vote in their country of residence. Moreover, he finds that immigrants from countries with a greater taste for redistribution are more likely to vote for more pro-redistribution parties, which gives further credit to the theoretical mechanism identified in the model whereby low-income natives support the enfranchisement of foreigners insofar as they hope to secure greater redistribution thanks to their political influence. My variable capturing cultural preferences is constructed using a two-step process. First, I build an international index of economic conservatism which captures country-specific preferences for public spending. To do this, I use survey data from three rounds of the ISSP survey (1996, 2006, and 2016), which measure attitudes towards the role of government across countries and over time, and extract the country-specific effect driving individual preferences towards government's responsibility to provide jobs and public services. Second, I compute a weighted average of foreigners' cultural preferences for redistribution at the municipal level by imputing scores according to the share of each nationality in the municipal population[35].

My final sample contains around 690 municipalities for which descriptive statistics are provided in Table 1.1.

1.5.3 Empirical strategy

To examine the effect of the share of welfare-dependent natives on the willingness of a municipality to enfranchise foreigners and how this effect varies with the relative economic position and cultural preferences of these foreigners, I fit the following model:

$$y_{ij} = \alpha Share\_welfare_i + \beta \ Z_i + \gamma \ Share\_welfare_i \times Z_i + \delta X_i + \mu_j + \epsilon_{ij}$$

where y_{ij} is the percentage of votes in favour of foreigners' political rights in municipality i and canton j, $Share\_welfare_i$ denotes the share of welfare beneficiaries in the municipal resident

---

[34]More details on the construction of this variable are available in Appendix.

[35]More details on the wording of the questions about attitudes towards the role of government and the construction of this variable are available in Appendix. In practice, because not all countries whose nationals have emigrated to Switzerland are surveyed by the ISSP, my index of cultural preferences for redistribution does not cover one hundred percent of the foreign population in a municipality. I therefore restrict the final sample to municipalities in which data on cultural redistributive preferences were available for at least 70% of the municipal foreign population.

population, Z_i corresponds alternatively to foreigners' cultural preferences for public spending or their relative welfare-dependency.[36] In the baseline model, I also include a set of control variables X_i that are likely to influence the result of a referendum on foreign voting rights. These control variables include the turnout rate and the logarithms of the population and mean income. Since there also exist non-economic drivers of the preferences of natives toward foreigners' political rights, such as religion and ethnicity, I also control for the municipal share of residents with non-European origins. Finally, I include canton dummies to capture the effect of regional characteristics such as language or culture and the purpose of the referendum, which was the direct implementation of foreign voting rights in some cantons but only included the possibility of opting-in in others.[37]

1.5.4 Results

Column (1) of Table 1.2 shows the results of the baseline model with controls, excluding foreigners' welfare dependency and economic conservatism as regressors. The coefficient for the share of welfare recipients in a municipality is positive and significant, and suggests that a one percent increase in the share of welfare recipients in an average municipality increases the referendum score by 1.51 percentage points. This result provides support for hypothesis H1 that municipalities with a greater share of welfare-dependent natives are more likely to support the enfranchisement of foreigners. This effect holds for the fuller specification in column (2), where I add as explanatory variables the relative welfare dependency and cultural preferences of foreigners. The coefficient for the cultural preferences of foreigners for public spending is positive and significant, suggesting that it increases the support for the enfranchisement of foreign residents within a municipality independently of the share of low-income residents. A possible explanation behind this coefficient is that cultural preferences for public spending are correlated with other cultural or social preferences that are likely to positively influence the willingness of native residents to enfranchise foreigners. Regarding the impact of immigrants' skill level on the effect of the share of welfare beneficiaries, the coefficient for the interaction term in column (3) is statistically significant and has the expected positive sign, indicating that municipalities where the share of welfare recipients is greater support foreigners' political rights more strongly when foreigners are relatively poorer. Likewise, the interaction term in column (4) returns a positive and statistically significant coefficient which indicates that an increase in the share of welfare beneficiaries will have a stronger positive effect on the support for foreigners' enfranchisement in municipalities where foreigners have greater preferences for public spending. This result corroborates hypothesis H3 that low-income natives will be more supportive of the political integration of foreigners when the latter hold more liberal beliefs about redistribution and therefore increase the size of the pro-redistribution coalition.

Turning to the control variables, my estimates suggest that richer and more ethnically homoge-

---

[36]The share of welfare beneficiaries in the resident population can be regarded as an acceptable measure of natives' welfare dependency as long as the relative size of the foreign population is low enough. In my final sample, foreigners represent on average 14% of the municipal resident population.

[37]See Table 1.6.

neous municipalities - in which the total share of non-European population is lower - voted more in favour of non-citizen enfranchisement. Although not statistically significant in the baseline regression, the negative coefficient for the share of non-EU residents is in line with the general intuition that natives usually have more restrictive attitudes towards foreigners with different ethnic background. To the extent that the mean income reflects the average level of education in a municipality, the positive income coefficient could be interpreted as less hostile views about immigration in more educated municipalities independently of the share of welfare recipients, which represents in fine a small fraction of the population.[38]

My empirical findings therefore corroborate the predictions of the model. I find that municipalities where a greater share of people receive welfare transfers are more likely to support the enfranchisement of foreigners, and that this effect is stronger when foreigners are relatively poorer and emigrated from countries with more liberal attitudes towards public spending.

1.5.5 Robustness checks

My results are robust to alternative specifications and the inclusion of richer demographic, economic, and political control variables. Column (1) of Table 1.3 reports the baseline coefficients without interaction for a specification with only canton dummies as controls. Although lower in magnitude, the coefficient for the share of welfare beneficiaries in the total population is still highly significant. Column (2) offers an alternative measure for the share of low-skill natives, where the share of welfare recipients is replaced by the unemployment rate at the municipal level. The coefficient is positive and very significant, suggesting that a one percent increase in unemployment rate in an average municipality increases the referendum score by 2.7 percentage points. Column (3) to (5) report significant coefficients for specifications where I use the log of the median income and the Gini coefficient as alternative measures of municipal wealth. Next, I run specifications that include a more comprehensive list of control variables: I control for demographic characteristics through the relative share of school-aged population and elders among natives and foreigners, as well as the average age of the municipal resident population. To refine my measurement of non-economic drivers, I also include the share of muslim individuals in the resident population and control for violations of the Federal law on foreigners (LEtr), a legislation that contains measures on immigration of foreign individuals, family reunification, and integration policy as well as law and order. Moreover, I consider the possibility that natives' decision to support foreign voting rights could be influenced by the perceived impact of political integration on selective migration, for instance if political rights were to affect the quantity and the quality of immigration by acting as a welfare magnet for low-skill immigrants. I control for this channel with the net inflows of international immigrants at the municipal level in the three years prior to the referendum. Finally, I also add a dummy variable for whether or not the municipality has an elected municipal parliament[39]. The results

---

[38]This result is in line with the evidence in the literature that more educated natives are less hostile to immigration regardless of redistribution concerns - see for instance Hainmueller and Hiscox (2010).

[39]In Switzerland, all municipalities elect an executive council but the decisional power when it comes to budget, tax rates and other investment projects at the city level lies in the hands of a legislative council. While in bigger

in Column (6) to (8) show that the coefficients remain significant and very close in magnitude to those reported in the baseline model when I add that full set of controls. Although slightly lower than in the baseline model (1.38), the coefficient for the share of welfare recipient - Col (6) - remains strongly significant. Moreover, the interaction coefficients in Column (7) and (8) suggest that the mediating effect of foreigners' relative welfare dependency and cultural preferences for public spending hardly varies with more comprehensive controls. These coefficients are respectively 0.22 and 9.43 against 0.24 and 9.98 in the baseline model, and their level of statistical significance remains unchanged.

I also test the robustness of the findings to the choice of sample. For example, my results are robust to using different threshold values of the share of foreigners covered by the index of economic conservatism preferences (Table 1.4). I also successfully test the baseline regressions on a subsample that includes only municipalities which voted about foreign municipal voting rights (thus excluding regional voting rights referenda) or restricted to municipalities where the share of welfare beneficiaries was strictly greater than 0 (see Table 1.5).

1.6   Conclusion

I propose in this paper a new theoretical framework to explore the consequences of foreigners' political rights on redistribution policy and natives' attitudes towards non-citizen enfranchisement. My model is the first to both account for economic and cultural drivers of preferences for redistribution and distinguish between public spending on private and public goods.

I find that low-skill natives are more likely to grant political rights to foreign residents when these foreigners are relatively less skilled and have greater cultural preferences for public spending. More specifically, contrary to the commonly held assumption in the political economy literature that low-skill natives would only support the enfranchisement of poorer foreigners, I show that they are willing to enfranchise relatively skilled foreigners as long as these foreigners have sufficiently liberal beliefs towards public spending. I also establish that the extent of the political rights that low-skill natives are prepared to grant them is not monotonically increasing in the share of low-skill foreigners or immigrants' cultural taste for public expenditure. Rather, low-skill natives favor greater political integration for less-skilled or more liberal foreigners if and only if these foreigners' average relative preferences for the private and the public good are sufficiently close to their own. I also test empirically some of the predictions of the model using an original municipality-level dataset of Swiss referenda about non-citizen voting rights. In line with the theoretical intuition of the model, I find that municipalities where a greater share of natives received social transfers were more likely to support immigrant voting, and that this effect was stronger where foreigners were poorer and emigrated from countries with stronger redistributive preferences.

---

municipalities this council takes the form of an elected municipal parliament, enfranchised citizens can exercise their right to vote on municipal budgets and policies in municipal assemblies which meet several times a year in smaller municipalities.

From a public policy perspective, the paper provides a richer picture of the political preferences of native and foreign residents, and shows why immigrants' cultural preferences about public spending are key to understand the fiscal implications of immigration on both redistribution and integration policies. It is therefore relevant for public life to help inform future political strategies regarding immigration rights and ensure the successful integration and social inclusion of foreign-born populations.

1.7 Appendix

1.7.1 Proofs

Proof of Lemma 1 and 2

Lemma 1 and 2 come immediately from the expression of the FOCs.

Proof of Proposition 1.1

Proposition 1.1 comes immediately from observing that τ_n and μ_n are respectively increasing and decreasing with α_l, α_h, and ψ_n.

Proof of Proposition 1.2

Let $F_l' = \frac{dF_l}{d\lambda_l^n} = \frac{y_l y_h (1+M)}{Y^2}$. From the expression of τ_n, we have that $\frac{d\tau_n}{d\lambda_l^n} \geq 0$ is equivalent to

$$-\left[\frac{(1+\alpha_n)(1-F_l) - (1-\lambda_l^n)\big[\psi_n(\alpha_l - \alpha_h)(1-F_l) - (1+\alpha_n)F_l'\big]}{\big((1+\alpha_n)(1-F_l)\big)^2}\right] \geq 0 \tag{1.16}$$

$$\Leftrightarrow F_l'(1-\lambda_l^n)(1+\alpha_n) \leq (1-F_l)\big[1+\alpha_n + (1-\lambda_l^n)\psi_n(\alpha_l - \alpha_h)\big] \tag{1.17}$$

$$\Leftrightarrow F_l'(1-\lambda_l^n)(1+\alpha_n) \leq (1-F_l)(1+\psi_n\alpha_l) \tag{1.18}$$

$$\Leftrightarrow \frac{(1-\lambda_l^n)}{1-F_l} \leq \frac{1+\psi_n\alpha_l}{(1+\alpha_n)F_l'} \tag{1.19}$$

where because $\psi_n\alpha_l > \alpha_n$, we have immediately that the RHS of (1.19) is greater than $\frac{1}{F_l'}$. Therefore, it suffices that $\frac{1}{F_l'}$ is greater than the LHS of (1.19) for τ_n to increase with λ_l^n. Let us check that $\frac{1}{F_l'} \geq \frac{(1-\lambda_l^n)}{1-F_l}$ is indeed satisfied. From the expression of F_l and F_l' we obtain

$$\frac{1}{F_l'} \geq \frac{1-\lambda_l^n}{1-F_l} \tag{1.20}$$

$$\Leftrightarrow \frac{Y^2}{y_l y_h (1+M)} \geq \frac{(1-\lambda_l^n)Y}{L_h y_h} \tag{1.21}$$

$$\Leftrightarrow \bar{y}L_h \geq (1-\lambda_l^n)y_l \tag{1.22}$$

where $\bar{y} = \frac{Y}{1+M}$ is the average income in the economy. Because, $\bar{y} > y_l$ and $L_h > (1-\lambda_l^n)$, (1.22) is trivially satisfied. Therefore, (1.19) is satisfied as well and $\frac{d\tau_n}{d\lambda_l^n} \geq 0$.

Turning to μ_n, we have that $\frac{d\mu_n}{d\lambda_l^n} \geq 0$ is equivalent to

$$-\left[\frac{(1+\alpha_n)(1-F_l)-(1-\lambda_l^n)\left[\psi_n(\alpha_l-\alpha_h)(1-F_l)-(1+\alpha_n)F_l'\right]}{\left((1+\alpha_n)(1-F_l)\right)^2}\right] \geq 0 \qquad (1.23)$$

$$\Leftrightarrow \frac{(1-\lambda_l^n)}{1-F_l} \leq \frac{\psi_n(\alpha_l F_l + (1-F_l)\alpha_h)}{\alpha_n F_l'} \qquad (1.24)$$

Trivial algebra proves that the RHS of (1.24) is increasing with α_h when $\lambda_l^n > F_l$. We then have $\frac{\psi_n(\alpha_l F_l+(1-F_l)\alpha_h)}{\alpha_n F_l'} \geq \frac{\psi_n \alpha_l F_l}{\psi_n \alpha_l \lambda_l^n F_l'} = \frac{F_l}{\lambda_l^n F_l'}$[40], and it suffices therefore that $\frac{F_l}{\lambda_l^n F_l'}$ is greater than the LHS of (1.24) for μ_n to increase with λ_l^n. Let us check that $\frac{F_l}{\lambda_l^n F_l'} \geq \frac{(1-\lambda_l^n)}{1-F_l}$ is indeed satisfied. From the expression of F_l and F_l' we obtain

$$\frac{F_l}{\lambda_l^n F_l'} \geq \frac{(1-\lambda_l^n)}{1-F_l} \qquad (1.25)$$

$$\Leftrightarrow \frac{y_l y_h (L_l + L_h)(1-\lambda_l^n)\lambda_l^n}{Y^2} \leq \frac{y_l y_h L_l L_h}{Y^2} \qquad (1.26)$$

$$\Leftrightarrow (L_l + L_h)(1-\lambda_l^n)\lambda_l^n \leq L_l L_h \qquad (1.27)$$

$$\Leftrightarrow (1-\lambda_l^n)^2 \lambda_l^m \geq -(1-\lambda_l^m)((\lambda_l^n)^2 + M\lambda_l^m) \qquad (1.28)$$

which is trivially satisfied. $\square$

Proof of Proposition 1.3

Notice that $\frac{dF_l}{d\gamma} \leq 0$, from which we have trivially using the chain rule that $\frac{d\tau_n}{d\gamma} \geq 0$. Moreover, simple algebra gives us that $\frac{1-F_l}{\lambda_l^n - F_l}$ is increasing with F_l, which leads to the same result for μ_n under the assumption that $\lambda_l^n > F_l$. $\square$

Proof of Proposition 1.4

Using the chain rule, we have that $\frac{d\tau_n}{d\lambda_l^m} = \frac{d\tau_n}{dF_l}\frac{dF_l}{d\lambda_l^m}$, which implies $\frac{d\tau_n}{d\lambda_l^m} \leq 0$ since $\frac{d\tau_n}{dF_l}$ is negative and $\frac{dF_l}{d\lambda_l^m}$ is positive. A similar argument gives us $\frac{d\mu_n}{d\lambda_l^m} \leq 0$. $\square$

Proof of Proposition 2.1

The derivative of τ_0 with respect to w writes $\frac{d\tau_0}{dw} = -\frac{M}{1-F_l}\frac{(1-\lambda_l^m)(1+\alpha_n)-(1-\lambda_l^n)(1+\alpha_m)}{(1+\alpha_p(w)+wM)^2}$, which is positive if and only if $\frac{1+\alpha_n}{1+\alpha_m} \leq \frac{1-\lambda_l^n}{1-\lambda_l^m}$.

The derivative of μ_0 with respect to w is $\frac{-\frac{M}{1-F_l}\frac{\alpha_m(\lambda_l^n-F_l)-\alpha_n(\lambda_l^m-F_l)}{(\lambda_l^n-F_l+Mw(\lambda_l^m-F_l))^2}}{\left(1+\frac{\alpha_p(w)(1-F_l)}{\lambda_l^n-F_l+Mw(\lambda_l^m-F_l)}\right)^2}$, which is positive if and only if $\frac{\alpha_m}{\alpha_n} \leq \frac{\lambda_l^m-F_l}{\lambda_l^n-F_l}$. $\square$

---

[40]where $\frac{\psi_n \alpha_l F_l}{\psi_n \alpha_l \lambda_l^n F_l'}$ is the expression of the RHS of (1.24) when $\alpha_h = 0$

Proof of Proposition 2.2

To prove the first part of Proposition 2.2, we must show that if $\psi < 1$ and $\lambda_l^m > \lambda_l^n$, then $\frac{\alpha_m}{\alpha_n} \le \frac{\lambda_l^m - F_l}{\lambda_l^n - F_l}$.

$\frac{\alpha_m}{\alpha_n} \le \frac{\lambda_l^m - F_l}{\lambda_l^n - F_l}$ is equivalent to $\alpha_n(\lambda_l^m - F_l) \ge \alpha_m(\lambda_l^n - F_l)$. Because $\psi < 1$, we also have that $\alpha_m < \alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h$, which gives us $\alpha_m(\lambda_l^n - F_l) < \left[\alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h\right](\lambda_l^n - F_l)$. By transitivity, it suffices to show that $\alpha_n(\lambda_l^m - F_l) \ge \left[\alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h\right](\lambda_l^n - F_l)$ to complete the proof. Notice that

$$\alpha_n(\lambda_l^m - F_l) \ge \left[\alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h\right](\lambda_l^n - F_l) \tag{1.29}$$

$$\Leftrightarrow \left[\alpha_l \lambda_l^n + (1 - \lambda_l^n)\alpha_h\right](\lambda_l^m - F_l) \ge \left[\alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h\right](\lambda_l^n - F_l) \tag{1.30}$$

which simplifies to $\left(\alpha_h + F_l(\alpha_l - \alpha_h)\right)(\lambda_l^m - \lambda_l^n) \ge 0$ and is trivially satisfied if $\lambda_l^m > \lambda_l^n$. □

Moreover, we have to prove $\frac{d\tau_0}{dw} > 0 \Rightarrow \frac{d\mu_0}{dw}$ if $\psi < 1$, which is equivalent to showing $\frac{1+\alpha_n}{1+\alpha_m} \le \frac{1-\lambda_l^n}{1-\lambda_l^m} \Rightarrow \frac{\alpha_m}{\alpha_n} \le \frac{\lambda_l^m - F_l}{\lambda_l^n - F_l}$.

Suppose $\frac{1+\alpha_n}{1+\alpha_m} \le \frac{1-\lambda_l^n}{1-\lambda_l^m}$. If $\psi < 1$, then $\alpha_m < \alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h$, which by transitivity gives us

$$\frac{1 - \lambda_l^n}{1 - \lambda_l^m} \ge \frac{1 + \alpha_n}{1 + \alpha_m} \ge \frac{1 + \alpha_n}{1 + \alpha_l \lambda_l^m + (1 - \lambda_l^m)\alpha_h} \tag{1.31}$$

After some trivial algebra, $\frac{1-\lambda_l^n}{1-\lambda_l^m} \ge \frac{1+\alpha_n}{1+\alpha_l \lambda_l^m + (1-\lambda_l^m)\alpha_h}$ simplifies to $(1 + \alpha_l)(\lambda_l^m - \lambda_l^n) \ge 0$, which implies $\lambda_l^m \ge \lambda_l^n$. Using that if $\psi < 1$ and $\lambda_l^m \ge \lambda_l^n$, then $\frac{d\mu_0}{dw} > 0$ (which was proved above), we have indeed that $\frac{d\tau_0}{dw} > 0 \Rightarrow \frac{d\mu_0}{dw}$ if $\psi < 1$. □

The second part of the proof (for $\psi > 1$) is obtained using a symmetric reasoning.

Proof of Proposition 2.3

Proposition 2.3 is obtained after some trivial algebra on the expression of c and g in (1.10) and (1.11).

Proof of Lemma 3

To prove Lemma 3, we must prove that V is strictly quasi-concave in w for both types of natives, i.e we must show that the following SOC is satisfied[41]:

$$\frac{d^2 V_i}{d^2 w} = M\left[-\frac{(\lambda_i^m)^2}{(\lambda_i^n + \lambda_i^m M w)^2} - \frac{\alpha_i \alpha_m^2}{\alpha_p^2} + \frac{(1 + \alpha_i)(1 + \alpha_m)^2}{(1 + wM + \alpha_p)^2}\right] < 0 \tag{1.32}$$

---

[41]I only provide the proof for V_l as a symmetric reasoning can be used to obtain the result for high-skill natives.

Notice that the FOC for low-skill natives writes

$$\frac{dV_l}{dw} = 0 \Leftrightarrow M\left[\frac{\lambda_l^m}{\lambda_l^n + \lambda_l^m Mw} + \frac{\alpha_l \alpha_m}{\alpha_p} - \frac{(1+\alpha_l)(1+\alpha_m)}{1 + wM + \alpha_p}\right] = 0,$$

which gives us $\frac{(1+\alpha_l)(1+\alpha_m)}{1+wM+\alpha_p} = \frac{\lambda_l^m}{\lambda_l^n + \lambda_l^m Mw} + \frac{\alpha_l \alpha_m}{\alpha_p} \Rightarrow \left(\frac{(1+\alpha_m)}{1+wM+\alpha_p}\right)^2 = \frac{1}{(1+\alpha_l)^2}\left(\frac{\lambda_l^m}{\lambda_l^n + \lambda_l^m Mw} + \frac{\alpha_l \alpha_m}{\alpha_p}\right)^2$.
Therefore, the SOC for low-skill natives can be expressed as the following inequality:

$$-\frac{(\lambda_l^m)^2}{(\lambda_l^n + \lambda_l^m Mw)^2} - \frac{\alpha_l \alpha_m^2}{\alpha_p^2} + \frac{1}{(1+\alpha_l)}\left(\frac{\lambda_l^m}{\lambda_l^n + \lambda_l^m Mw} + \frac{\alpha_l \alpha_m}{\alpha_p}\right)^2 < 0 \tag{1.33}$$

$$\Leftrightarrow (1 - (1+\alpha_l))\frac{(\lambda_l^m)^2}{(\lambda_l^n + \lambda_l^m Mw)^2} + (\alpha_l - (1+\alpha_l))\frac{\alpha_l \alpha_m^2}{\alpha_p^2} + \frac{2\lambda_l^m \alpha_l \alpha_m}{(\lambda_l^n + \lambda_l^m Mw)\alpha_p} < 0 \tag{1.34}$$

$$- \alpha_l\left[\frac{\lambda_l^m}{\lambda_l^n + \lambda_l^m Mw} - \frac{\alpha_m}{\alpha_p}\right]^2 < 0 \tag{1.35}$$

which is unambiguously negative. $\square$.

Proof of Proposition 3

Using the strict quasi-concavity of V_i[42], we have that $w_i^* > 0$ if and only if the derivative of V_i with respect to w is positive at $w = 0$. This conditions ($\frac{dV_i}{dw}_{|w=0} \geq 0$) writes

$$\frac{\lambda_i^m}{\lambda_i^n} + \frac{\alpha_i \alpha_m}{\alpha_n} - \frac{(1+\alpha_i)(1+\alpha_m)}{1+\alpha_n} \geq 0 \tag{1.36}$$

$$\Leftrightarrow (1+\alpha_n)(\alpha_n \lambda_i^m + \alpha_i \alpha_m \lambda_i^n) - \alpha_n(1+\alpha_i)(1+\alpha_m)\lambda_i^n \geq 0 \tag{1.37}$$

$$(1+\alpha_n)\alpha_n \lambda_i^m \geq \lambda_i^n(\alpha_n(1+\alpha_i)(1+\alpha_m) - \alpha_i \alpha_m(1+\alpha_n)) \tag{1.38}$$

$$(1+\alpha_n)\lambda_i^m - \lambda_i^n(1+\alpha_i + \alpha_m(1 - \frac{\alpha_i}{\alpha_n})) \geq 0 \tag{1.39}$$

$$\lambda_i^m\left[(1+\alpha_n) - \psi(\alpha_i - \alpha_{-i})(1 - \frac{\alpha_i}{\alpha_n})\lambda_i^n\right] - \lambda_i^n\left[1+\alpha_i + \psi\alpha_{-i}(1 - \frac{\alpha_i}{\alpha_n})\right] \geq 0 \tag{1.40}$$

$$\lambda_i^m \geq \frac{1+\alpha_i + \psi\alpha_{-i}(1 - \frac{\alpha_i}{\alpha_n})}{\frac{1+\alpha_n}{\lambda_i^n} + \psi(\alpha_i - \alpha_{-i})(\frac{\alpha_i}{\alpha_n} - 1)} \tag{1.41}$$

To prove $w_l > 0 \Leftrightarrow w_h = 0$, it is then enough to show that $\lambda_l^m \geq \underline{\lambda_l} \Leftrightarrow \lambda_h^m \leq \underline{\lambda_h}$. First, notice that $\underline{\lambda_i}$ can write $\frac{(1+\alpha_i+\alpha_m(1-\frac{\alpha_i}{\alpha_n}))}{(1+\alpha_n)}\lambda_i^n$[43], and we therefore have to prove that $\lambda_l^m \geq \frac{(1+\alpha_l+\alpha_m(1-\frac{\alpha_l}{\alpha_n}))}{(1+\alpha_n)}\lambda_l^n \Leftrightarrow \lambda_h^m \leq \frac{(1+\alpha_h+\alpha_m(1-\frac{\alpha_h}{\alpha_n}))}{(1+\alpha_n)}\lambda_h^n$. Using that $\alpha_l = \frac{\alpha_n - (1-\lambda_l^n)\alpha_h}{\lambda_l^n}$, we have

---

[42]As in Lemma 3, we prove the Proposition for low-skill natives only.

[43]This comes immediately from the expression of (1.23)

$$\lambda_l^m \geq \frac{(1 + \alpha_m + \alpha_l(1 - \frac{\alpha_m}{\alpha_n}))}{(1 + \alpha_n)}\lambda_l^n \tag{1.42}$$

$$\Leftrightarrow \lambda_l^m(1 + \alpha_n) \geq \left(1 + \alpha_m + (1 - \frac{\alpha_m}{\alpha_n})\frac{(\alpha_n - (1 - \lambda_l^n)\alpha_h)}{\lambda_l^n}\right)\lambda_l^n \tag{1.43}$$

$$\Leftrightarrow \lambda_l^m(1 + \alpha_n) \geq (1 + \alpha_m)\lambda_l^n + (1 - \frac{\alpha_m}{\alpha_n})(\alpha_n - (1 - \lambda_l^n)\alpha_h) \tag{1.44}$$

$$\Leftrightarrow \lambda_l^m(1 + \alpha_n) \geq \lambda_l^n - (1 - \lambda_l^n)\alpha_m - \alpha_h(1 - \lambda_l^n)(1 - \frac{\alpha_m}{\alpha_n}) + \alpha_n \tag{1.45}$$

$$\Leftrightarrow (\lambda_l^m - 1)(1 + \alpha_n) \geq \lambda_l^n - 1 - (1 - \lambda_l^n)(\alpha_m + \alpha_h(1 - \frac{\alpha_m}{\alpha_n})) \tag{1.46}$$

$$\Leftrightarrow 1 - \lambda_l^m \leq \frac{1 + \alpha_m + \alpha_h(1 - \frac{\alpha_m}{\alpha_n})}{1 + \alpha_n}(1 - \lambda_l^n) \tag{1.47}$$

$$\Leftrightarrow \lambda_h^m \leq \frac{1 + \alpha_m + \alpha_h(1 - \frac{\alpha_m}{\alpha_n})}{1 + \alpha_n}\lambda_h^n \tag{1.48}$$

$\square$.

Proof of Proposition 4

The first part of proposition 4 was already proven in (1.41), where $\underline{\lambda_i} = \frac{1 + \alpha_i + \psi\alpha_{-i}(1 - \frac{\alpha_i}{\alpha_n})}{\frac{1 + \alpha_n}{\lambda_i^n} + \psi(\alpha_i - \alpha_{-i})(\frac{\alpha_i}{\alpha_n} - 1)}$.

Using that $\underline{\lambda_i} = \frac{(1 + \alpha_i + \alpha_m(1 - \frac{\alpha_i}{\alpha_n}))}{(1 + \alpha_n)}\lambda_i^n$, trivial algebra gives us $\frac{d\lambda_l}{d\lambda_l^n} \geq 0$, $\frac{d\lambda_l}{d\psi} \leq 0$, $\frac{d\lambda_h}{d\lambda_h^n} \geq 0$, and $\frac{d\lambda_h}{d\psi} \geq 0$.

Finally, we must show that $\underline{\lambda_l} \geq \lambda_l^n$ and $\underline{\lambda_h} \leq \lambda_h^n$ if and only if $\psi \leq 1$.

First, we prove that $\underline{\lambda_i} = \lambda_i^n$ if and only if $\psi = 1$.

Notice that $\psi = 1$ implies $\underline{\lambda_i} = \frac{1 + \alpha_i + \alpha_{-i}(1 - \frac{\alpha_i}{\alpha_n})}{\frac{1 + \alpha_n}{\lambda_i^n} + (\alpha_i - \alpha_{-i})(\frac{\alpha_i}{\alpha_n} - 1)} = \lambda_i^n \frac{1 + \alpha_i - \alpha_{-i}\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right)}{1 + \alpha_n + \lambda_i^n(\alpha_i - \alpha_{-i})\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right)}$.
Moreover, we have that $1 + \alpha_n + \lambda_i^n(\alpha_i - \alpha_{-i})\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right) - \left[1 + \alpha_i - \alpha_{-i}\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right)\right] = 0$,
which implies $\underline{\lambda_i} = \lambda_i^n$.

Also if $\underline{\lambda_i} = \lambda_i^n$, then $1 + \alpha_n + \psi\lambda_i^n(\alpha_i - \alpha_{-i})\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right) = \left[1 + \alpha_i - \psi\alpha_{-i}\left(\frac{(1 - \lambda_i^n)(\alpha_i - \alpha_{-i})}{\alpha_n}\right)\right]$,
which implies $\psi\frac{(\alpha_i - \alpha_{-i})(1 - \lambda_i^n)(\lambda_i^n(\alpha_i - \alpha_{-i}) + \alpha_{-i})}{\alpha_n} = (\alpha_i - \alpha_{-i})(1 - \lambda_i^n)$, and $\psi = 1$.

Therefore, $\underline{\lambda_i} = \lambda_i^n$ if and only if $\psi = 1$. Moreover, we know from the first part of Proposition 4 that $\frac{d\lambda_l}{d\psi} \leq 0$ and $\frac{d\lambda_h}{d\psi} \geq 0$. It is then easy to complete the proof. $\square$.

Proof of Proposition 5

Rewriting the FOC of V_i, we have

$$\alpha_p \lambda_i^m(1 + wM + \alpha_p) + \alpha_i \alpha_m(1 + wM + \alpha_p))(\lambda_i^n + \lambda_i^m Mw) = \alpha_p(1 + \alpha_i)(1 + \alpha_m)(\lambda_i^n + \lambda_i^m Mw)$$

$$\text{(1.49)}$$

$$\Leftrightarrow wM\alpha_m\big[\lambda_i^n(1 + \alpha_m) - \lambda_i^m(1 + \alpha_n + \alpha_i(1 - \frac{\alpha_n}{\alpha_m}))\big] = \alpha_n\big[\lambda_i^m(1 + \alpha_n) - \lambda_i^n(1 + \alpha_m + \alpha_i(1 - \frac{\alpha_m}{\alpha_n}))\big]$$

$$\text{(1.50)}$$

$$\Leftrightarrow w = \frac{1}{M}\Big(\frac{\alpha_n\big[\lambda_i^m(1 + \alpha_n) - \lambda_i^l(1 + \alpha_m + \alpha_i(1 - \frac{\alpha_m}{\alpha_n}))\big]}{\alpha_m\big[\lambda_i^l(1 + \alpha_m) - \lambda_i^m(1 + \alpha_n + \alpha_i(1 - \frac{\alpha_n}{\alpha_m}))\big]}\Big)$$

$$\text{(1.51)}$$

which gives us a closed form expression of w_i^*. It comes immediately from the expression of w_i^* in (1.51) that w_i^* decreases with M. $\square$

Proof of Proposition 6

I only prove the proposition for low-skill natives.

Proposition 6 can be proven applying the Implicit Function Theorem and calculating the sign of $-\frac{\frac{d^2V_l}{dwd\psi}}{\frac{d^2V_l}{d^2w}}$, which in turn gives us the sign of $\frac{dw_l^*}{d\psi}$. That $\frac{d^2V_l}{d^2w}$ is negative has already been established in the proof of Lemma 3. We are thus left to check under which conditions $\frac{d^2V_l}{dwd\psi}$ is positive. From the expression of $\frac{dV_l}{dw}$, we have that

$$\frac{d^2V_l}{dwd\psi} = \frac{\alpha_l \alpha_n}{\alpha_p^2} - \frac{(1 + \alpha_l)(1 + \alpha_n)}{(1 + wM + \alpha_p)^2} \tag{1.52}$$

which is positive whenever

$$\frac{\alpha_l \alpha_n}{\alpha_p^2} - \frac{(1 + \alpha_l)(1 + \alpha_n)}{(1 + wM + \alpha_p)^2} \geq 0 \tag{1.53}$$

$$\Leftrightarrow -\alpha_p^2(1 + \alpha_l)(1 + \alpha_n) + \alpha_l \alpha_n(1 + wM + \alpha_p)^2 \geq 0 \tag{1.54}$$

$$\Leftrightarrow -\alpha_p^2(1 + +\alpha_n + \alpha_l) + \alpha_p(2\alpha_n\alpha_l(1 + wM)) + \alpha_l\alpha_n(1 + wM)^2 \geq 0 \tag{1.55}$$

Let $Q(x) = -x^2(1 + +\alpha_n + \alpha_l) + x(2\alpha_n\alpha_l(1 + wM)) + \alpha_l\alpha_n(1 + wM)^2$. Trivial algebra gives us that the unique positive root of Q is

$$x = \frac{\alpha_l\alpha_n(1 + wM)}{1 + \alpha_n + \alpha_l}\Big[1 + \big(1 + \frac{1 + \alpha_n + \alpha_l}{\alpha_l\alpha_n}\big)^{\frac{1}{2}}\Big]$$

from which we have that (1.55) is equivalent to

$$\alpha_p \leq \frac{\alpha_l\alpha_n(1 + wM)}{1 + \alpha_n + \alpha_l}\Big[1 + \big(1 + \frac{1 + \alpha_n + \alpha_l}{\alpha_l\alpha_n}\big)^{\frac{1}{2}}\Big] \tag{1.56}$$

$$\Leftrightarrow \alpha_m \leq \frac{\alpha_n}{wM}\Big[\frac{\alpha_l(1 + wM)}{1 + \alpha_n + \alpha_l}\Big[1 + \big(1 + \frac{1 + \alpha_n + \alpha_l}{\alpha_l\alpha_n}\big)^{\frac{1}{2}}\Big] - 1\Big] \tag{1.57}$$

which is satisfied when α_m is sufficiently small.

Moreover, we have to prove that if $\psi < 1$, then w_l^* is increasing with ψ. Recall that if $w_l^* \in (0, 1)$ and $\psi < 1$, then $\frac{dg}{dw} \leq 0$, which implies $\alpha_m < \alpha_n$.

Also, we can show that (1.57) holds for $\alpha_m = \alpha_n$. Indeed, observe that

$$\alpha_n \leq \frac{\alpha_n}{wM} \left[\frac{\alpha_l(1+wM)}{1+\alpha_n+\alpha_l} \left[1 + \left(1 + \frac{1+\alpha_n+\alpha_l}{\alpha_l\alpha_n} \right)^{\frac{1}{2}} \right] - 1 \right] \tag{1.58}$$

$$\Leftrightarrow \frac{1+\alpha_n+\alpha_l}{\alpha_l} \leq 1 + \left(1 + \frac{1+\alpha_n+\alpha_l}{\alpha_l\alpha_n} \right)^{\frac{1}{2}} \tag{1.59}$$

$$\Leftrightarrow (1+\alpha_n)^2 \alpha_n \leq \alpha_l(1+\alpha_n+\alpha_l+\alpha_l\alpha_n) \tag{1.60}$$

where because $(1+\alpha_n) \leq (1+\alpha_n+\alpha_l+\alpha_l\alpha_n)$ and $\alpha_n \leq \alpha_l$, (1.60) is trivially satisfied. By transitivity, we therefore have $\alpha_m \leq \alpha_n \leq \frac{\alpha_n}{wM} \left[\frac{\alpha_l(1+wM)}{1+\alpha_n+\alpha_l} \left[1 + \left(1 + \frac{1+\alpha_n+\alpha_l}{\alpha_l\alpha_n} \right)^{\frac{1}{2}} \right] - 1 \right]$, and $\frac{dw_l^*}{d\psi} \geq 0$. $\square$

A symmetric reasoning allows to prove Proposition 6 for high-skill natives.

Proof of Proposition 7

I only prove the proposition for low-skill natives.

Again, Proposition 6 can be obtained applying the Implicit Function Theorem by calculating the sign of $-\frac{\frac{d^2V_l}{dwd\lambda_l^m}}{\frac{d^2V_l}{d^2w}}$, which in turn gives us the sign of $\frac{dw_l^*}{d\lambda_l^m}$. From the FOC of V_l, we have that

$$\frac{d^2V_l}{dwd\lambda_l^m} = \frac{\lambda_l^n}{(\lambda_i^n + \lambda_l^m Mw)^2} + \psi(\alpha_l - \alpha_h) \left[\frac{\alpha_l\alpha_n}{\alpha_p^2} - \frac{(1+\alpha_l)(1+\alpha_n)}{(1+wM+\alpha_p)^2} \right] \tag{1.61}$$

The sign of this expression has already been discussed in the proof of Prop 6., from which we have that (1.61) is positive when ψ is sufficiently small. $\square$

1.7.2 Tables and figures

Table 1.1: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Referendum score (% of yes)	24.34	11.18	2.36	61.6	688
Turnout (%)	42.78	11.11	15.7	77.5	688
Log population	6.98	1.18	3.87	12.86	688
Share of foreigners in tot. pop (%)	14.01	9.45	0	51.2	688
Share of non-EU foreigners (%)	19.1	10.47	0	100	688
Log mean income	10.51	0.35	9.68	12.42	688
Log median income	10.28	0.22	9.14	10.87	688
Gini coefficient	0.47	0.08	0.34	0.9	688
Average age of tot. pop.	40.56	2.5	34.34	49.98	688
Share of Muslims in tot. pop (%)	1.46	1.65	0	16.4	688
Net inflow of for. migrants (% of tot. pop.)	0.02	0.02	-0.05	0.31	688
Dummy elders (for. vs natives)	0.03	0.18	0	1	688
Dummy school-aged pop. (for. vs natives)	0.35	0.48	0	1	688
Violations of the law on foreigners (/1000 inhab.)	1.56	4.35	0	50.83	688
Unemployment rate (%)	2.39	1.24	0	7.91	688
Parliament dummy	0.24	0.43	0	1	688
Share of welfare beneficiaries in tot. pop.	1.73	1.45	0	8.97	688
Share of welfare benef. in foreign pop. (%)	5.64	3	0	15.18	688
Foreigners' relative welfare dependence	4.52	2.58	-4.07	13.73	688
Foreigners' cultural pref. for public spending	0.43	0.07	0.19	0.62	688

Table 1.2: Main results

	Yes vote [0,100]			
	(1)	(2)	(3)	(4)
Share of welfare beneficiaries in tot. pop.	1.51***	1.35***	0.41	-3.28**
	(0.32)	(0.30)	(0.43)	(1.37)
Foreigners' relative welfare dependency		0.19	-0.23	0.14
		(0.16)	(0.23)	(0.16)
Foreigners' cultural pref. for public spending		22.8***	18.4**	5.59
		(7.45)	(7.40)	(8.38)
Share of welf. benef. in tot. pop. × Foreigners' RWD			0.24***	
			(0.094)	
Share of welf. benef. in tot. pop. × Foreigners' cultural pref. for PS				9.91***
				(3.04)
Share of non-EU foreigners in tot. pop.	-0.057	-0.13	-0.31**	-0.26*
	(0.13)	(0.13)	(0.15)	(0.14)
Log mean income	3.36***	5.08***	5.17***	5.01***
	(1.08)	(1.19)	(1.19)	(1.18)
Log population	0.29	0.032	0.051	0.098
	(0.35)	(0.39)	(0.40)	(0.40)
Turnout	0.18***	0.14**	0.13**	0.14**
	(0.059)	(0.058)	(0.059)	(0.058)
N	688	688	688	688
r2	0.58	0.59	0.60	0.60

Sample includes only municipalities in which cultural preferences about redistribution are available through the index of economic conservatism for at least 70% of the foreign population. Robust standard errors in parentheses. All regressions include canton dummies. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 1.3: Robustness Checks with Comprehensive Controls

	Yes vote [0,100]							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share welfare benef.	0.83***		1.47***	0.50	-3.21**	1.38***	0.52	-3.01**
	(0.26)		(0.30)	(0.43)	(1.36)	(0.31)	(0.41)	(1.37)
Unemployment rate		2.71***						
		(0.42)						
Foreigners' RWD	0.17	0.17	0.21	-0.21	0.17	0.21	-0.17	0.16
	(0.15)	(0.15)	(0.16)	(0.23)	(0.16)	(0.17)	(0.24)	(0.17)
Foreigners' cult. pref. for PS	18.9**	17.3**	24.0***	19.8***	6.77	21.8***	18.7***	6.26
	(7.55)	(7.43)	(7.45)	(7.36)	(8.29)	(7.47)	(7.36)	(8.27)
Share welfare benef. × Foreigners' RWD				0.25***			0.22**	
				(0.094)			(0.090)	
Share welfare benef. × Foreigners' cult. pref. for PS					10.0***			9.34***
					(3.03)			(3.00)
Baseline controls		x	x	x	x	x	x	x
Alternative economic controls			x	x	x			
Comprehensive controls						x	x	x
N	695	688	688	688	688	686	686	686
r2	0.57	0.61	0.60	0.61	0.61	0.60	0.61	0.61

Sample includes only municipalities for which cultural preferences about redistribution are available through the index of economic conservatism for at least 70% of the foreign population. Robust standard errors in parentheses. All regressions include canton dummies.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 1.4: Robustness of Baseline Specifications to Different Shares of Foreign Population Covered by the Index of Redistributive Preferences

	Yes vote [0,100]								
	Coverage > 65%			Coverage > 75%			Coverage > 80%		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Share welfare benef.	1.25***	0.65*	-2.08	1.39***	0.12	-4.54***	1.45***	0.31	-6.13***
	(0.28)	(0.39)	(1.34)	(0.35)	(0.50)	(1.57)	(0.42)	(0.53)	(1.94)
Foreigners' relative welfare dependency	0.090	-0.18	0.076	0.30	-0.34	0.23	0.27	-0.36	0.16
	(0.14)	(0.21)	(0.14)	(0.20)	(0.29)	(0.19)	(0.23)	(0.32)	(0.22)
Foreigners' cultural pref. for public spending	22.8***	21.0***	9.93	19.0**	12.9	-3.21	15.2*	9.70	-11.3
	(6.90)	(6.81)	(8.04)	(8.28)	(8.18)	(9.34)	(9.19)	(9.10)	(10.2)
Share welfare benef. × Foreigners' RWD		0.14*			0.37***			0.39***	
		(0.081)			(0.11)			(0.13)	
Share welfare benef. × Foreigners' cult. pref. for PS			7.11**			13.0***			16.9***
			(3.04)			(3.63)			(4.52)
N	765	765	765	571	571	571	473	473	473
r2	0.60	0.60	0.60	0.57	0.58	0.58	0.53	0.55	0.55

Sample size varies with coverage, the share of foreign population whose cultural preferences are accounted for through the index of economic conservatism. Coefficients for higher values of the threshold above 80% (not shown here) have the expected sign but lose statistical significance as the sample of municipalities becomes smaller. Robust standard errors in parentheses. All regressions include baseline controls and canton dummies.

$* \ p < 0.1$, $** \ p < 0.05$, $*** \ p < 0.01$

Table 1.5: Additional Robustness Checks

	Yes vote [0,100]					
	Municipal Voting rights only			Percentage of welf. benef. > 0		
	(1)	(2)	(3)	(4)	(5)	(6)
Share welfare benef.	1.75***	-0.077	-8.21***	1.48***	0.54	-2.60*
	(0.52)	(0.67)	(1.37)	(0.31)	(0.48)	(1.47)
Foreigners' RWD	0.33	-0.30	0.19	0.27	-0.19	0.21
	(0.20)	(0.30)	(0.19)	(0.17)	(0.27)	(0.17)
Foreigners' cult. pref. for PS	35.4***	30.6***	-2.21	25.6***	22.9***	9.61
	(9.24)	(9.25)	(9.58)	(8.05)	(7.97)	(9.35)
Share welfare benef. × Foreigners' RWD		0.37***			0.22**	
		(0.12)			(0.10)	
Share welfare benef. × Foreigners' cult. pref. for PS			22.8***			8.69***
			(3.26)			(3.25)
N	378	378	378	649	649	649
r2	0.67	0.68	0.70	0.61	0.61	0.61

Sample includes only municipalities for which cultural preferences about redistribution are available through the index of economic conservatism for at least > 70% of the foreign population. Robust standard errors in parentheses. All regressions include baseline controls and canton fixed effects. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Variables

Score of 'YES' vote in referendum: Data on municipal referendum come from cantonal offices of statistics. The voting rule in all referenda excluded foreigners from participating and suffrage was limited to Swiss citizens. In practice, voters were asked to vote "yes" or "no" to a political proposal offering to grant foreign residents local voting rights under some residency requirements. The content of these rights can be found in Table 1.6 below.

Table 1.6: List of referendums

Canton	Political rights	Jurisdiction	Date of referendum
Schaffhausen	RV, RE, RBE	MUN, CANT	2014
Zurich	RV, RE, RBE	MUN (opting-in)	2013
Vaud	RV, RE, RBE	CANT	2011
Luzern	RV	MUN (opting-in)	2011
Bern	RV, RE, RBE	MUN (opting-in)	2010
Geneva	RV, RE	MUN	2005

RV = Right to vote /RE = Right to elect/RBE = Right to be elected.

CANT = Canton level / MUN = Municipal level / opting-in = Possibility for municipalities to opt-in.

Log of mean / median income: Log of mean / median taxable income.

Net inflow of foreign migrants (% of tot. pop.): This variable corresponds to the ratio of the net migratory balance (immigration - emigration) of international migrants in the three years prior to the referendum over the total resident population in the year the referendum took place.

Dummy elders: This dummy takes value 1 when the share of people of 65 years of age or more is greater in the foreign population than in the native population.

Dummy education: This dummy takes value 1 when the share of school-aged people (between 3 and 16 years of age) is greater in the foreign population than in the native population.

Violations of the law on foreigners : This variable corresponds to the annual number of registered offences against the law on foreigners (LEtr) per 1'000 inhabitants, averaged over the three years prior to the referendum.

Municipal share of muslim residents: The share of muslims residents in the total resident population in 2000.

Municipal share of welfare recipients: The share of individuals in the total resident population receiving the "Aide Sociale Economique" transfer.

Share of welfare recipients in the resident foreign population: To construct this variable, I use regional census data and several rounds of the "Statistique de l'aide sociale (SAS)" survey from the Federal Statistical Office to obtain the share of foreign welfare-beneficiaries by nationality at the cantonal level, which I store under variable $Welfaredep_j^l$, expressed as the percentage of foreign residents of nationality j receiving financial help through the Aide Sociale programme in canton l. The share of welfare recipients at the municipal level is then imputed according to the share of each nationality in the municipal population: For a given municipality i in canton l, I compute the weighted share of welfare beneficiaries in the foreign resident population $WD_i^l = \sum_j w_i^j Welfaredep_j^l$, where the weight variable w_i^j corresponds to share of foreigners of nationality j in municipality i.[44]

Foreigners' relative welfare dependency: The relative welfare dependency of foreigners $RWD_i = \frac{WD_i - Share\_welfare_i}{Nat_i}$ is obtained by taking the difference between the share of welfare recipients in the foreign resident population WD_i and the share of welfare recipients in the total

---

[44]For every municipality i, I have $\sum_j w_i^j = 1$. The average share of foreign residents for which such data are available in my sample is 98% ($\bar{w}_i > 0.98$), with a minimum coverage rate of 85%. Note that the municipal share of welfare recipients in the total resident population is directly available from federal statistical sources. Therefore, when my proxy of the municipal share of foreign welfare recipients does not square with those federal data, I correct for outstanding values by imputing as the share of welfare recipients in the foreign resident population WD_i the maximum possible value according to federal sources. For instance, if my proxy WD_i for municipality i is strictly greater than 0 while official data state that no individual (whether foreigner or native) received cash transfers in that municipality, then my estimate is replaced with $WD_i = 0$.

resident population $Share\_welfare_i$, divided by the inverse of the share of Swiss citizens in the total resident population Nat_i.

Foreigners' cultural preferences for public spending: The data come from various rounds of the ISSP survey module on the role of government (1996, 2000, 2006) which collected information for a total of 45 countries across 132,000 individual observations. In each round, respondents from several countries were asked to what extent they think it is the government's responsibility to provide jobs and public services[45]. In particular, individual respondents were offered to disagree strongly, disagree, neither agree nor disagree, agree, or agree strongly to the following statements:

---

[45]Some countries participated in all rounds of the survey, while other were only surveyed once.

On the whole, do you think it should or should not be the government's responsibility to...

- *Provide a job for everyone who wants one ?*

- *Provide health care for the sick ?*

- *Provide a decent standard of living for the old ?*

- *Provide industry with the help it needs to grow ?*

- *Give financial help to university students from low-income families ?*

- *Provide decent housing for those who cannot afford it ?*

Because these questions do not refer specifically to the government of the country that the respondent lives in but rather ask about the state's general responsibility, I believe that they provide an adequate measure of individual ideological beliefs about redistribution instead of simply capturing attitudes towards the relative level of public expenditures in the country at the time the survey was administered. I code respondents' answers between disagree strongly, disagree, neither agree nor disagree, agree, or agree strongly on a five-point scale and use the average individual scores across all six items to measure respondents' general attitudes towards the role of government as provider of basic public services, which I store under variable $Pref\_Red_i$. I then perform the following OLS regression on the full sample of respondents in order to extract the country-specific effect driving economic conservatism:

$$Pref\_Red_i = \alpha W_i + \delta_t + \gamma_j$$

where W_i is a vector of demographic characteristics, such as age and gender[46], as well as measures such as income and education that are meant to capture how much the individual stands to gain or lose from greater public spending. It also includes a variable that controls for individual trust in politicians, which is likely to influence respondents' beliefs about the role of government in the provision of public services. δ_t is a fixed effect for the date at which the survey was administered, and captures the possible effect of the international, macro-economic context on preferences for redistribution. Finally, the dummy variable γ_j measures the country effect, i.e the extent to which living in a specific country influences individual economic conservatism. I choose Switzerland as the reference country in the model and report the list of coefficient γ for every country in Table 1.7. All but one country (Japan) surveyed by the ISSP appear to entertain more liberal views than Switzerland about the role of government in the provision of jobs and public goods. I store these country-specific scores under the variable $\widehat{PrefCult_j}$ to construct a weighted average of foreigners' attitudes for public spending at the municipal level. I attribute to every foreign resident from country j the score $\widehat{PrefCult_j}$ of her country

---

[46]Because the ISSP questionnaire does not distinguish between native and foreign respondents, I cannot separate the two and all respondents are therefore included in the sample. I also exclude from the sample individuals that were younger than 18 at the time of the survey.

of origin, which captures the average citizen's beliefs that it is the government's responsibility to provide jobs and public services. I then compute the weighted average of foreigners' relative cultural preferences for public spending CPR_i in municipality i following this simple rule: $CPR_i = \sum_j w_i^j \widehat{PrefCult}_j$, where w_i^j the share of foreigners in municipality i born in country j is such that $\sum_j w_i^j = 1$.[47]

---

[47]Because the list of countries surveyed in the ISSP is not exhaustive, the share of foreign population covered by my index varies depending on the country of origin of the foreign population across municipalities. Figure 1.9 graphs the distribution of the municipal share of foreigners for which I was able to impute redistributive preferences

Table 1.7: Relative cultural preferences for public spending

Country	Red. score
Japan	-0.03
Switzerland	**0**
USA	0.16
Korea	0.17
Canada	0.22
Australia	0.25
Germany	0.26
New-Zealand	0.27
Sweden	0.29
Netherlands	0.30
Cyprus	0.32
Finland	0.32
Czech Republic	0.34
Denmark	0.35
Belgium	0.38
Taiwan	0.39
UK	0.40
Lithuania	0.41
France	0.41
Iceland	0.42
Hungary	0.47
Norway	0.48
Thailand	0.49
Bulgaria	0.49
Philippines	0.50
Italy	0.53
Turkey	0.53
Dominican Republic	0.55
Slovakia	0.58
Poland	0.60
Uruguay	0.60
Latvia	0.60
Chile	0.60
India	0.61
South Africa	0.62
Israel	0.62
Ireland	0.62
Russia	0.64
Portugal	0.64
Spain	0.66
Slovenia	0.66
Suriname	0.73
Croatia	0.74
Georgia	0.84
Venezuela	0.91

Note on Figure 1.6, 1.7, 1.8 and 1.9: The share of welfare beneficiaries is the share of individuals receiving the *Aide Sociale Economique* transfer in the resident population. The relative welfare dependency of foreigners corresponds to the difference between the estimated share of welfare beneficiaries among foreigners and the share of welfare beneficiaries in the total resident population.

Figure 1.6: Distribution of the share of welfare beneficiaries
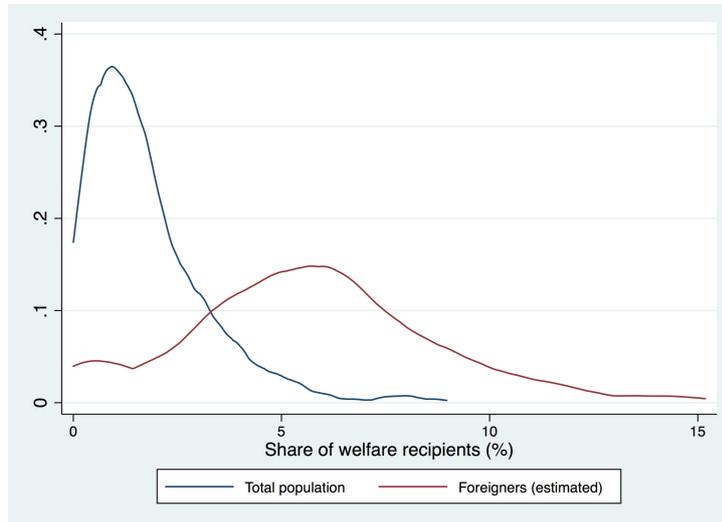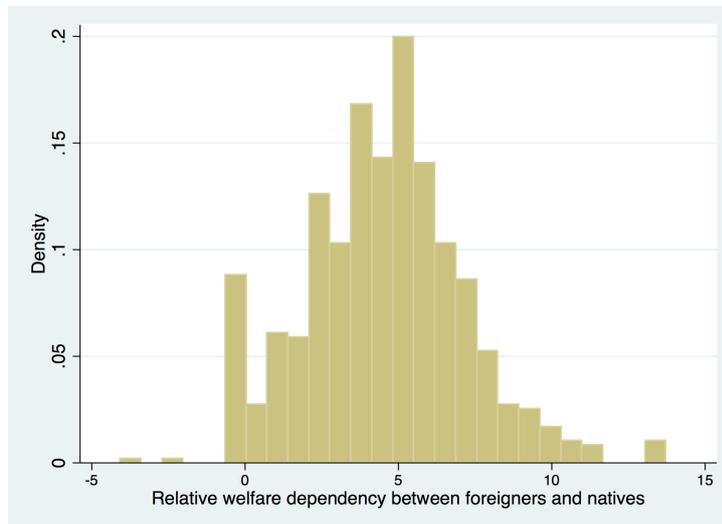

Figure 1.7: Distribution of foreigners' relative welfare dependency

Notes: A positive value on the x-axis means that the share of welfare beneficiaries is higher among foreigners than among natives.

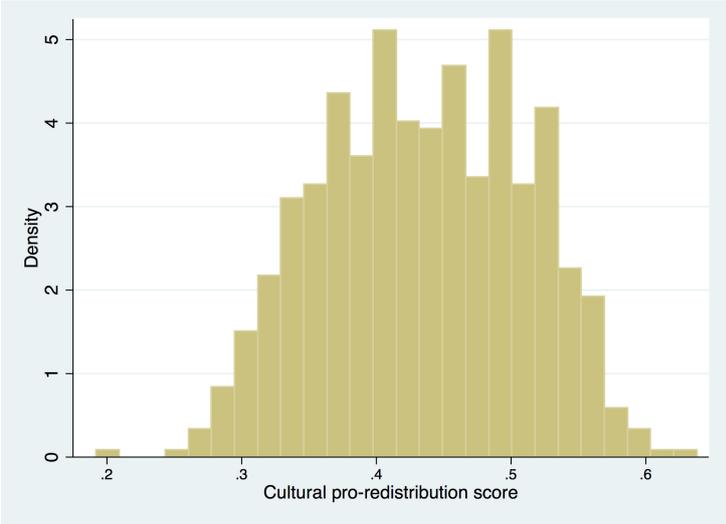Figure 1.8: Distribution of foreigners' average cultural preferences for redistribution

Figure 1.9: Share of foreigners covered by index of red. preferences
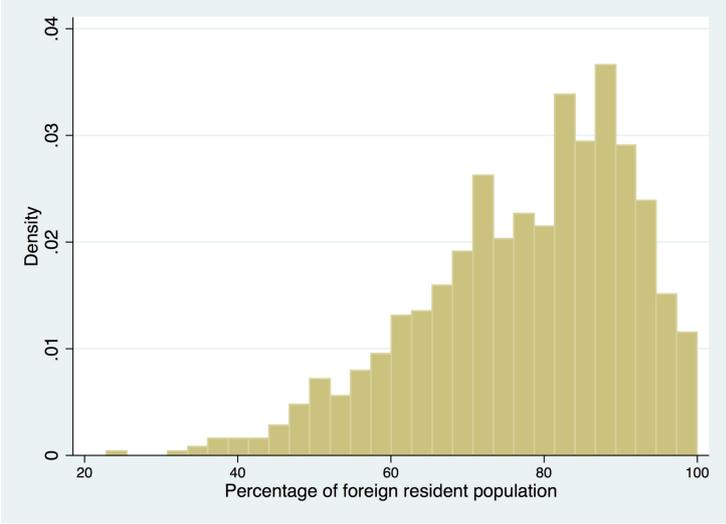
Chapter 2

Establishment and Outsiders: Can Political Incorrectness and Social Extremism work as a Signal of Competence ?[1]

JEROME GONNOT AND PAUL SEABRIGHT

Abstract

This paper explores why voters might vote for candidates who are outsiders to the political Establishment, and are willing to tolerate candidate characteristics they dislike. We develop a model in which these outsiders are perceived as more likely than Establishment candidates to implement economic policies that are congruent with voters' interests, and voters have imperfect information about candidates' type. An Establishment candidate seeking election may therefore choose a conservative social platform for *populist* reasons - that is, as a way of signaling independence from the interests of the Establishment. This requires that the value of social policies as signals of future economic policy outweighs their value as signals of future social policies. This populist strategy is more likely when voters' trust in economic and social policy announcements is low, when the cost for candidates of breaking campaign promises once elected is low, and when there exist few alternative ways for the voters to evaluate the likelihood that the candidate will implement policies that run counter to the interests of the Establishment. Using survey data from several European countries, we also successfully test the main prediction of the model that liberal voters are less sensitive to ideological convergence with political parties, and thus more likely to vote for social outsiders, when they have lower levels of trust in politicians.

2.1 Introduction

Why might voters vote for political candidates who espouse extreme ideologies that the voters themselves do not support (such as costly restrictions on personal freedom in the name of religious law)? One way to understand this is to ask a question about a phenomenon that appears different but on closer inspection is rather similar. Why might voters belonging to certain ethnic or gender groups vote for candidates who behave offensively towards those groups, such as the 53% of white women and 33% of Latino men who voted for Donald Trump in the 2016 US Presidential election? The conventional answer to both of these questions would be that the voters who behave in this way are those do not place very much weight on the extreme ideology or the offensive behavior. Their concerns are different, the argument goes, so that they vote for the candidate for other reasons, in spite of the unattractive aspects of their platform or their behavior.

In this paper we propose an alternative view. In certain circumstances, we suggest, voters who do not personally like an extreme ideology or an offensive kind of behavior may vote for a candidate *because of* the ideology or behavior and not in spite of it. Why? The answer is that sometimes the willingness to display the ideology or behavior is a signal to the voters that the candidate has other qualities the voters value. Most obviously this may be a signal that the candidate is not captured by the interests of the Establishment and may therefore be trusted more than rival candidates to enact policies that run counter to the interests of the Establishment. The implied rule of inference is relatively simple. Economic platforms are cheap talk, so you should rarely trust what a candidate promises to do. Extreme ideologies, and offensive behavior even when this is not part of an extreme ideology, are not cheap talk, precisely because they alienate people that members of the Establishment do not like to alienate. When you see a candidate display such ideologies or such behavior patterns, their willingness to alienate people is precisely what makes them attractive, since it increases the likelihood that they will enact policies that do not favor the Establishment. If your preference for such policies exceeds your intrinsic dislike of the ideology or the behavior, you should be more inclined to support the candidate. An article in the *New York Times* of April 3rd 2018 expressed this point of view well when it quoted a supporter of Donald Trump as follows:

"Mr. Trump's most ardent supporters say they appreciate his willingness to criticize the corporate establishment. 'He continues to go directly after the companies and not care about political correctness,' said Terry Bowman, a former Trump campaign organizer who works at a Ford Motor parts factory in Ypsilanti, Mich. 'He says things that a polished politician would never say. He says things that come directly from the American worker.'"

In this paper, we examine this theory by developing a model where outsider candidates are perceived as more congruent with (median or representative) voters' economic interests than

Establishment candidates. Voters do not trust candidates' policy announcements and imperfectly observe candidates' type - that is, whether or not a candidate belongs to the Establishment -. Instead, they infer the type of candidates using social policy announcements as a signal of their true policy intentions.

We solve our model for an election in which a liberal representative voter chooses between a conservative outsider and a liberal Establishment candidate. The main trade-off behind her decision weighs the role of social policies as signals of future economic policy against their role as signals of future social policies. We find that there exists a political demand for social outsiders when the credibility of economic policy announcement is sufficiently low, despite the preference of the representative voter for liberal over conservative social policies. However, if candidates' true social policy preferences are not easily observed, and if the cost of lying for political candidates is small, all candidates will claim to be conservative and the claim will lose its value. A pooling equilibrium then emerges where the likelihood of populist strategies increases when voters' trust in economic policy announcement is low; when the credibility of social platforms is low; when the political cost of reneging on social policy announcements once elected is low; and when there exist alternative ways for the voters to evaluate the likelihood that the candidate will implement policies that run counter to the interests of the Establishment.

In an empirical section, we also provide some suggestive evidence for Proposition 1 of the model, that liberal voters are less sensitive to ideological convergence with political parties, and thus more likely to vote for social outsiders, when they have lower levels of trust in politicians. We use the European Social Survey to collect information about individual characteristics and voting behaviour, and the Chapel Hill Expert Survey data to identify social outsider parties. Focusing our attention on middle-of-the-spectrum voters - i.e, socially moderate voters who do not espouse the same extreme ideologies as social outsider parties, we show that the negative effect of social distance is substantially decreased among those with lower levels of trust in political parties.

Our paper speaks directly to the large scholarship on populism in sociology, history and political science (see Mudde and Kaltwasser (2017) for a general introduction, and Gidron and Bonikowski (2013) and Kaltwasser et al. (2017) for a recent review). In economics, Dornbusch and Edwards (1991, 2007) discuss macroeconomic populism in Latin America as a political programme that contains non-sustainable policies and beliefs about key elasticities that economists tend to view as implausible. Rodrik (2018) provides a generic discussion of the recent rise of populist parties and interprets it in the light of economic theory. Among recent theoretical works, Acemoglu et al. (2013) develops the idea that populism arises as the consequence of the capture of the political power and economic policies by the elite. In the same vein, Tella and MacCulloch (2007) propose a model in which corruption by bureaucrats signals to voters that the rich elite are not fair, and the voters, who are assumed to directly care about fairness, react to this information by moving to the left. Before them, Alesina (1998) emphasized how

redistributive policies are captured by special interest groups. In addition, a number of recent empirical works study populism's origins in specific contexts. Becker et al. (2017) find that areas with deprivation in terms of education, income and employment were more likely to vote Leave in the British referendum on the European Union. On the same issue, Colantone and Stanig (2016) show that globalization in general and import competition from China in particular are strong correlates of the Brexit vote. Their findings are line with Dorn et al. (2016), who show in the US context that counties that were most affected by China's entrance to the WTO experienced an increase in the likelihood of Trump voting and political polarization. Against this fast-growing strand of the literature on the trade and immigration origins of populism, one of the main explanations behind the wave of populist politics in the Western World emphasizes voters' lack of trust towards traditional politics and political parties to provide economic protection and redistribution (see Muller (2016)). Our paper contributes more specifically to the empirical literature studying the impact of trust on the demand and supply of populism (Guiso et al. (2017), Dustmann et al. (2017), Algan et al. (2017), Inglehart and Norris (2016)). Using individual data on voting in European countries, Guiso et al. (2017) document a link between economic insecurity and distrust in political parties, voting for populist parties, and low electoral participation. Dustmann et al. (2017) reach similar results, finding that distrust in European institutions is largely explained by the poorer economic conditions of the Euro-area countries and correlates with the populist vote. Algan et al. (2017) study the political consequences of the Great Recession in Europe, showing that in elections after 2008 the regions where unemployment rose saw the sharpest decline of trust in institutions and establishment politics. In contrast, focusing on individual-level variables, Inglehart and Norris (2016) observe that cultural variables outweigh economic ones in the decision to vote for a populist party[1].

We also contribute to the sizable literature on signaling in elections. Formal models that incorporate the cost of betrayal and signaling concerns into the platform choice by a politician date back to Banks (1990) and Harrington (1993). Callander and Wilkie (2007) consider signaling equilibria in elections in which participating politicians have different propensities to lie to voters about their true preferences. Kartik and McAfee (2007) have a model where some candidates have character, which voters value in addition to campaign promises, while others do not and are strategic, choosing their platform to maximize their probability of getting elected. As political platforms are used to signal voters about character, strategic candidates can therefore run on platforms which are different from the one preferred by the median voter. Developing this idea in the context of populism, Di Tella and Rotemberg (2018) present a model in which they show that voters can exhibit a preference for incompetent leaders when they experience low income as a result of leader betrayal instead of bad luck. They gather evidence from the Trump-Clinton 2016 election and show that on average, subjects primed with the importance of competence in policy making decrease their support for Trump. A major similarity of our work with Di Tella and Rotemberg's is that their paper models the demand

---

[1]For a more detailed analysis on the link between cultural values and authoritarianism and populism, see Norris and Inglehart (2019).

for incompetent politicians because competent politicians have a higher propensity to betray them. In our framework, we also hypothesize that social outsiders are less likely to betray campaign promises of redistribution than Establishment candidates. Our paper also builds on Acemoglu et al. (2013), who analyze left-wing populism with a two-period model in which an incumbent, either corrupt or honest, faces reelection concerns, and chooses an economic policy to signal her type to voters. In the presence of a lobby defending the interest of the rich elite, politicians have an incentive to implement a policy to the left of that preferred by the median voter to signal honesty. Populist policies thus emerge as a way for politicians to signal that they will choose future policies in line with the interests of the median voter. Like Acemoglu et al. (2013), we assume that politicians need to campaign on platforms that are not those preferred by the median voter to signal they are not prone to elite capture, which we refer to as being a member of the Establishment. However, our definition of populism is somewhat different insofar as we do not regard economic policy platforms as those subject to populist rhetoric. Instead, we make the assumption that economic policy platforms are cheap talk, and that voters evaluate the quality of candidates based on their social policy announcement or personal behaviour, which may act as a signal of candidates' economic preferences. Politicians in our framework do not have to compromise between announcing a policy that caters to the needs of the median voter and one that signals competence. Instead, they choose a social policy announcement which has superior credibility to any economic policy announcement they might make. Another fundamental difference between our model and that of Acemoglu et al. (2013) is that we identify under which conditions populist politics may or may not arise, while their model assumes that populist strategies necessarily come about as soon as voters believe that politicians, despite their rhetoric, might have a right-wing agenda.

Finally, we speak to the vast scholarship on the competence of policy makers, including Besley and Coate (1997)'s study of the ability of citizens entering politics as candidates, as well as several works on fiscal policy distortions by politicians that want to signal high ability (see Rogoff and Sibert (1988); Banks and Sundaram (1993) and Alesina et al. (1995)). Because candidates' incentives in our model are also influenced by the reputation cost of lying about campaign promises, this paper is also related to the study of the role played by rewards (Caselli and Morelli (2004), Messner and Polborn (2004)) and threats (Dal Bo and Di Tella (2003)) on the quality of politicians.

The paper is organized as follows. Section 2.2 presents and solves the model. Section 2.3 presents empirical evidence, and Section 2.4 concludes.

2.2 Model

There are two political candidates with given social preferences $j \in \{L, C\}$ - liberal or conservative - and given intrinsic type $k \in \{E, O\}$ - meaning they are co-opted into the Establishment or remain Outsiders. We assume in what follows that an incumbent candidate who is part of a liberal Establishment faces a conservative Outsider in an election. The candidates compete to win the vote of a representative voter with utility function $U(I, J) = u(I) + v(J)$, where $I \in \{R, F\}$ - *Redistribution* or *Laissez-faire* - and $J \in \{L, C\}$ are respectively the economic and social policies implemented by the elected candidate. To simplify the exposition, we let $u(R) = u > 0$, $U(F) = 0$, $v(L) = v > 0$, and $v(C) = 0$. Also, we assume $u > v$, such that the representative voter has the following order of preferences over implemented policies: $U(R, L) > U(R, C) > U(F, L) > U(F, C)$. This simply means that the voter cares more about the difference in economic outcomes than he cares about the difference in social outcomes.[2] To make it easier to keep track, we refer to candidates as "she" and to the voter as "he".

We also assume that intrinsic types are not observable, but that the voter knows there are constraints on what different types of candidate can say and do. These constraints arise from various features of the political system that we do not model explicitly but that we believe to be present across a wide range of societies, albeit to different degrees in different societies.

The first constraint is on the relationship between a candidate's social preferences and her membership of the Establishment. We assume that the Establishment is hostile to social conservatism while being welcoming to economic conservatism (for example, many Establishment members like being able to accumulate wealth while disliking lifestyle restrictions - on alcohol consumption, for instance - that prevent them from freely enjoying their wealth). We capture this with the following stylized assumption: a liberal candidate is aways a member of the Establishment, while a conservative candidate is an Outsider with probability ρ (and a member of the Establishment with symmetric probability $1 - \rho$), with $\rho \in (0, 1]$.

To explore the demand for social outsiders, the second constraint captures in a simple manner the idea that social outsiders have a higher likelihood of improving economic outcomes for voters. The relationship between a candidate's *economic* preferences and her type is such that an Establishment candidate always implements a laissez-faire policy F, while an outsider implements redistributive policy R with probability θ (and laissez-faire with complementary probability $1 - \theta$), with $\theta > 0$.

The third constraint is that while economic policy announcements may be largely cheap talk they are not completely so. A candidate's true views and intentions about economic policy

cannot be kept entirely secret but may leak out to voters through the press or through political gossip of various kinds. We capture this in a stylized way by an assumption that with probability $\varepsilon \in [0, 1)$, candidates are obliged to tell the truth about their economic policy preferences. With complementary probability $1 - \varepsilon$, economic policy announcements are cheap talk, so that candidates can announce whatever they believe to be in their interests to announce. We refer to the variable ε as the "informativeness" of economic policy announcements.

Therefore, both economic and social preferences are correlated with candidates' intrinsic type. A liberal candidate has a strictly greater probability of being a member of the Establishment than a conservative candidate, and an Establishment candidate has a strictly greater probability of implementing a laissez-faire policy than an outsider.

Candidates receive a benefit B from being elected, and zero otherwise.

2.2.1 Almost cheap talk

In the baseline model, the order of the game is as follows. The representative voter observes candidates' social preferences. Then candidates simultaneously announce their economic platforms.[3] The voter observes candidates' economic platforms and votes for his preferred candidate. If both candidates offer the same expected payoff to the voter, the election is decided by a coin toss and each candidate wins with probability $\frac{1}{2}$.

We obtain the following payoff function for the representative voter:

$$U(I_k|j_k) = \varepsilon u + (1 - \varepsilon)\rho(j_k)\theta u + v(j_k) \tag{2.1}$$

where

$$\rho(j_k) = \begin{cases} 0 & \text{if } j_k = L \\ \rho & \text{if } j_k = C \end{cases}$$

Notice that $\forall j_k \in \{L, C\}$, $P(win|R, j_k) > P(win|F, j_k)$ because $U(R|j_k) > U(F|j_k)$, where $P(win|I_k, j_k)$ is the probability that candidate with social preference j_k wins the election when announcing I_k. The intuition is trivial: because the representative voter strictly prefers redistribution to laissez-faire and the announced economic policy enters the voter's expected utility with strictly positive weight ε, announcing laissez-faire is a strictly dominated strategy.

---

[3]We assume hence that there is no need for candidates to announce a social policy as they are expected to implement their preferred social policy with certainty.

It is never optimal to announce a laissez-faire economic policy $I_k = F$, and candidates always run on the redistributive platform $I_k = R$. We can derive the following:

$$\begin{cases} \text{L wins the election} & \text{if } \varepsilon > 1 - \frac{v}{\rho\theta u} \\ \text{C wins the election} & \text{if } \varepsilon < 1 - \frac{v}{\rho\theta u} \\ \text{The election is tied} & \text{if } \varepsilon = 1 - \frac{v}{\rho\theta u} \end{cases}$$

When the outsider premium $\frac{\rho\theta u}{v}$ is high enough relative to ε, the informativeness of economic policy announcements, the representative voter prefers the conservative candidate to the liberal candidate.

The outsider premium depends on two types of consideration. First, the term $\rho\theta$ indicates how closely social policy preferences of the candidates are correlated to the economic policies they will implement: it is the product of ρ which is the probability that a Conservative candidate is an Outsider, and θ which is the probability that an Outsider implements a a redistributive policy. Secondly, there is the ratio of u to v which is the relative importance of economic policy outcomes to social policy outcomes in the preferences of the representative voter. We can therefore summarize the result in the form of:

Proposition 1: *If social policy is sufficiently informative about candidates' economic preferences, and economic policy decisions are sufficiently more important than social policy decisions in the preferences of the representative voter, relative to the informativeness of economic policy announcements, then a conservative candidate is preferred to a liberal candidate even though the voter prefers a liberal to a conservative social policy.*

Proposition 1 will be the main subject of our empirical section. In that section we will use the expressed degree of voters' trust in political parties as a measure of the extent to which they consider economic policy announcements to be informative about future policy choices.

We extend hereafter our baseline in two ways. First, we explore a version of the model without social preferences, in which candidates announce an economic policy and signal their type in the form of personal behavior. Secondly, we assume that voters cannot observe candidates' social preferences with certainty but only with some positive probability. Candidates run on a bi-dimensional policy platform and announce an economic policy and a social policy, which they use to signal their type to the representative voter when social preferences are not observable.

2.2.2 Signaling through personal behavior

In this model, there are no social preferences. Instead, prior to the election, each candidate announces simultaneously a unidimensional platform $I \in \{R, F\}$ and sends a signal s in the form of personal behavior. We define personal behavior as a signal $s \in \{0, 1\}$ that candidates' choose to send ($s = 1$) or not ($s = 0$).[4] The signal could be in the form of an expression of opinions (so-called politically incorrect views may be an example of this, but there are others), or it could be a way of behaving without cognitive content (such as failure of observe a dress code or a courtesy norm, for example). What matters is that the signal helps voters to decide how likely is the candidate to be part of the Establishment, hence which economic policy the candidate will implement. It does so because Establishment candidates find it more costly to send the signal than do Outsiders.

The order of the game is as follows. The candidates simultaneously announce their economic platforms and send their signals. The representative voter then infers a posterior probability ϕ about whether the candidate is part of the Establishment, computes an expected payoff based on this posterior, and votes for the candidate who gives the highest expected platform utility. If both candidates offer the same expected payoff to the representative voter, the election is decided by a coin toss and each candidate wins with probability $\frac{1}{2}$.

The utility of candidate $V_k(.)$ is the function $V_k = B - c_k(s)$, where c_k is the cost of sending the signal for a type-k candidate, and B is the rent from being elected (which is common to all candidates). We set $c_k(0) = 0$ for all k and $c_k(1) = c_k$, with $c_O = 0 < c_E < B$. Moreover, we assume that the behavior signal incurs disutility $v > 0$ to the representative voter - for this reason we will call the signal a form of "offensive" behavior.

2.2.2.1 Voters' payoff

Under asymmetric information, the voter cannot observe candidates' type and his expected payoff depends on the set of belief μ associated with each signal profile of candidate (s_k, s_l) where $\mu = \{\phi(0,0), \phi(1,1), \phi(1,0)\}$ and $\phi(s_k, s_l)$ is the voter's posterior belief that candidate k is an outsider given the pair of signals (s_k, s_l). Assuming that voters hold the prior that the pool of candidates is equally distributed between outsiders and Establishment candidates - i.e that the probability that a candidate randomly drawn from the pool of candidates is of either type is equal to $\frac{1}{2}$, we define this posterior as:

---

[4]The discrete nature of the signal simplifies the setting. The signal could be made continuous, but this would involve a more complex resolution without providing additional insight.

$$
\begin{cases}
\phi(s_k, s_l) = \frac{P(s_k, s_l | j_k = O)}{P(s_k, s_l | j_k = O) + P(s_k, s_l | j_k = E)} & \text{if } s_k \neq s_l \\
\phi(s_k, s_l) = \frac{1}{2} & \text{if } s_k = s_l
\end{cases}
\tag{2.2}
$$

We obtain the following expected payoff function for the representative voter:

$$
U(I_k, s_k | s_k, s_l) = \varepsilon u(I_k) + (1 - \varepsilon)\theta \phi(s_k, s_l) u - v(s_k)
\tag{2.3}
$$

2.2.2.2 Candidates' strategy

Candidate k chooses platform I_k and signal s_k to maximize her expected utility $E[V_k(I_k, s_k)] = P(win | I_k, s_k)B - c_k(s_k)$, where $P(win | I_k, s_k)$ is the probability that she wins the election when announcing I_k and sending signal s_k.

Observe that whatever the strategy of the other candidate may be, we have that $\forall s_k \in \{0, 1\}$, $P(win | R, s_k) > P(win | F, s_k)$ because $E[U(R, s_k)] > E[U(F, s_k)]$. The intuition is the same as in the baseline model. It is never optimal to announce a laissez-faire economic policy $I_k = F$. Therefore, candidates always run on the redistributive platform $I_k = R$.

A strategy decision for candidate k then turns on the signal s_k she chooses to send.

2.2.2.3 Equilibrium

We look for Perfect Bayesian Equilibria (PBE) in pure strategies and will assume that for any out-of-equilibrium belief, the following rule applies: $\phi(1, 0) > \frac{1}{2}$. As the cost of sending the signal is greater for an Establishment candidate, the representative voter holds the following beliefs about how to interpret deviations from equilibria. Consider an equilibrium in which both candidates behave in the same way, either because they both send the signal or because neither sends the signal. A deviation from such an equilibrium would result in one candidate sending the signal and the other not sending it. In any such situation the representative voter would believe that the candidate sending the signal would be more likely to be an Outsider than an Establishment candidate.[5]

This assumption allows us to prove the following:

---

[5]Although somewhat restrictive, this assumption is similar to the D1 (or divinity equilibrium) refinement as defined by Banks and Sobel (1987) and allows to restrict the set of possible equilibria of the game to more plausible outcomes.

- If $\varepsilon \geq 1 - \frac{v}{\theta u}$, there exists a unique and pooling PBE where candidates' strategies are $(s_O^*, s_E^*) = (0,0)$, the payoff of both candidates is equal to $\frac{B}{2}$ for any out-of-equilibrium belief $\phi(1,0) \in [\frac{1}{2}, 1]$. Neither candidate chooses to send the signal because signalling your type to gain credibility on the economic dimension is unnecessary when economic platform announcements are sufficiently informative.

- If $\varepsilon < 1 - \frac{v}{\theta u}$:

  - if $c_E > \frac{B}{2}$, there exists a unique separating PBE $(s_O^*, s_E^*) = (1,0)$ and the payoffs of the Establishment and outsider candidate are respectively 0 and B. The cost of sending the signal is too high for the Establishment candidate, both candidates reveal their type and the representative voter elects the outsider.

  - When $c_E \leq \frac{B}{2}$, the cost of acting as an outsider is low enough for both candidates. Then, for any $\phi(1,0) \in \frac{1}{2}$,

    * If $\varepsilon > 1 - \frac{v}{(2\phi-1)\theta u}$, there exists a unique pooling PBE $(s_O^*, s_E^*) = (0,0)$ where the payoff of both candidates is equal to $\frac{B}{2}$. Although economic platform credibility is sufficiently cheap talk that the voter prefers to elect an outsider, both candidates choose not to send the signal because the cost of political incorrectness in the eyes of the voter outweighs its role as a signal of future economic policy.

    * If $\varepsilon < 1 - \frac{v}{(2\phi-1)\theta u}$, there exists a unique pooling PBE $(s_O^*, s_E^*) = (1,1)$ where the payoffs of the Establishment and outsider candidate are respectively $\frac{B}{2} - c_E$ and $\frac{B}{2}$. The value of the information conveyed by political incorrectness about future economic intentions outweighs its cost and both candidates choose to send the signal.

In a political environment where offensive behavior can signal economic preferences in line with those favored by the representative voter, we can summarize the results as follows:

Proposition 2: *If displaying offensive behavior is sufficiently informative about candidates' economic preferences relative to economic policy announcements ($\varepsilon < 1 - \frac{v}{\theta u}$), then candidates have an incentive to use such behavior even though the voter dislikes it. When the cost of displaying this kind of behavior is too high for the Establishment candidate, then only the Outsider displays offensive behavior, and wins the election with certainty. Moreover, when this cost is low enough even for a member of the Establishment ($c_E \leq \frac{B}{2}$), then both types of candidates display this kind of behaviour as long as the role of political incorrectness as a signal of future economic policy outweighs its cost in the eyes of the representative voter ($\varepsilon > 1 - \frac{v}{(2\phi-1)\theta u}$), and refrain from doing so otherwise ($\varepsilon < 1 - \frac{v}{(2\phi-1)\theta u}$).*

2.2.3 Signalling through social policy

In this version of the model, social preferences are imperfectly observable. The voter learns about the true social preferences of the candidates with some probability $q > 0$, in which case he infers the type of candidates based on their true social preferences. When the voter cannot observe candidates' social preferences, he has to infer candidates' type by forming a posterior probability based on candidates' social policy platform announcements $s \in \{L, C\}$. The nature of equilibrium will depend on the relative informativeness of social policy announcements and economic policy announcements.

The order of the game is as follows:

First, candidates announce their platforms (I_k, s_k). The representative voter then observes the true social preferences of candidates with probability q. Based on the information received, the voter computes his expected payoff and votes for the candidate who offers the highest expected platform utility. If both candidates offer the same expected payoff to the voter, the election is decided by a coin toss and each candidate wins with probability $\frac{1}{2}$.

Each candidate gets rent B if elected, as before.

Running for office is costless *per se*, but candidates may incur a cost of announcing a social policy that is different from their true preferred social policy. This cost is two-fold. First, a candidate of type k incurs a fixed reputational cost l_k by lying about her social preferences if these preferences are subsequently observed. Second, when the voter cannot observe social preferences, there is a strictly positive probability $\xi \in [0, 1)$ that an elected candidate cannot renege on her campaign promises and has to follow through with her social policy announcement. This probability can be considered a measure of the 'social credibility" of candidates. Therefore, with probability ξ, an elected candidate of type k who lied about her social preference during the campaign will pay a cost γ_k of implementing a social policy that is different from her true preference.

2.2.3.1 The voter's utility and decision problem

Observe first that both candidates run on a redistributive platform, where the intuition for this result carries over from the baseline model section. We can thus write the representative voter's utility from candidate k's social policy announcement s_k conditional on the information he receives and candidate k's social preference j_k.

Under full information, when social preferences are observable, the rep. voter's utility can be written as:

$$U^0(I_k, j_k) = \varepsilon u + (1 - \varepsilon)\rho(j_k)\theta u + v(j_k) \tag{2.4}$$

where

$$\rho(j_k) = \begin{cases} 0 & \text{if } j_k = L \\ \rho & \text{if } j_k = C \end{cases}$$

Therefore, the voter's decision problem is straightforward. He will vote for candidate k over candidate l whenever $U^0(j_k) > U^0(j_l)$, randomize with probability $\frac{1}{2}$ when $U^0(j_k) = U^0(j_l)$, and vote for l otherwise. Following this simple decision rule, we define P_k^0 as the probability that the voter votes for candidate k when social preferences are observable.

When social preferences are unobservable, the voter has to infer the type of candidates based on their announcements. His utility under imperfect information can be written as:

$$U^1[j_k|s_k] = \varepsilon u + (1 - \varepsilon)\rho(j_k)\theta u + \xi v(s_k) + (1 - \xi)v(j_k) \tag{2.5}$$

where, because he cannot observe the true social preferences of candidate j_k but only her social platform s_k, the rep. voter must infer a posterior probability about the preferred social policy of candidate k. We define $\phi(s_k, s_l)$ the voter's posterior belief that candidate k is a conservative given the pair of policy announcements (s_k, s_l). Assuming that voters hold the prior that the pool of candidates is equally distributed between liberals and conservatives - i.e that the probability that a candidate randomly drawn from the pool of candidates is a liberal or a conservative are both equal to $\frac{1}{2}$, we define this posterior following Bayes' rule as:

$$\begin{cases} \phi(s_k, s_l) = \frac{P(s_k, s_l | j_k = C)}{P(s_k, s_l | j_k = C) + P(s_k, s_l | j_k = L)} & \text{if } s_k \neq s_l \\ \phi(s_k, s_l) = \frac{1}{2} & \text{if } s_k = s_l \end{cases} \tag{2.6}$$

where the ratio $\frac{P(s_k, s_l | j_k = C)}{P(s_k, s_l | j_k = C) + P(s_k, s_l | j_k = L)}$ is the probability that the conservative candidate an-

nounces policy s_k over the probability that this policy is announced. We call

$$\mu = \big(\phi(L, L), \phi(C, C), \phi(C, L)\big) = \big(\frac{1}{2}, \frac{1}{2}, p\big)$$

the set of beliefs of the representative voter over all possible strategy profiles played by the candidates. If no candidate runs either on the conservative or the liberal platform and the posterior $\phi(C, L)$ cannot be derived using Bayes' rule, we make the following assumption:

Assumption 1: $p > \frac{1}{2}$

Under this assumption, the representative voter holds the intuitive belief that any deviation to a liberal platform from an equilibrium in which both candidates announced conservative platforms is more likely to have come from a liberal candidate, while any deviation to a conservative platform from an equilibrium in which both candidates announced liberal platforms is more likely to have come from a conservative candidate. As in the previous section, this restriction on the off-the-equilibrium path beliefs is similar to the D1 equilibrium refinement by Banks and Sobel (1987).

The voter's expected payoff from electing candidate k conditional on the set of beliefs μ can then be written as:

$$U[s_k|\mu] = \phi(s_k, s_l)U^1[C|s_k] + (1 - \phi(s_k, s_l))U^1[L|s_k] \tag{2.7}$$

Finally, we define $\sigma(s_k, s_l, \mu) : (s_k, s_l) \times \mu \in \{C, L\}^2 \times [0, 1]^3 \longrightarrow \sigma \in [0, 1]$ as the voting rule of the representative voter when candidates k and l respectively announce social platforms s_k and s_l, where σ represents the probability of voting for candidate k.

2.2.3.2 Candidates' strategy and payoff

We formally define candidate k's strategy s_k as a type-dependent social platform announcement. Candidate k's expected payoff from strategy s_k conditional on her opponent's strategy s_l and the representative voter's voting rule σ can be written as:

$$V_k[s_k|\sigma(s_k, s_l, \mu)] = q\big[P_k^0 B - l_k \mathbb{I}_{s_k \neq j_k}\big] + (1 - q)\sigma\big[B - \xi\gamma_k \mathbb{I}_{s_k \neq j_k}\big] \tag{2.8}$$

where $\mathbb{I}_{s_k \neq j_k}$ is the indicator function equal to 1 when candidate k lies about her social policy, and 0 otherwise.

We now define threshold levels for the two types of candidate to lie about their social policy preferences. Let $\xi_l = \frac{B - 2\frac{q}{1-q}l_l}{\gamma_l}$ and $\xi_c = \frac{B - 2\frac{q}{1-q}l_c}{\gamma_c}$. In the rest of the paper, we maintain the following assumption:

Assumption 2: $0 \leq \xi_l < \xi_c$

This assumption implies $B - 2\frac{q}{1-q}l_l > 0$, which makes sure that both candidates have an incentive to lie about their social policy preferences. Also, the expected cost of lying about social preferences is higher for the liberal than for the conservative candidate[6].

2.2.3.3 Equilibrium definition

In what follows, we use the concept of sequentially rational Perfect Bayesian Nash Equilibrium.

Definition: *A PBE (s_c, s_l, σ, μ) corresponds to a strategy profile for both candidates (s_c, s_l) (resp. conservative and liberal), and a voting rule σ for the representative voter together with the set of Bayes'rule compatible beliefs μ such that*:

1. *The candidates' strategies (s_c, s_l) are sequentially rational under the set of beliefs μ and given the representative voter's voting rule $\sigma(s_c, s_l, \mu)$:*

$$\begin{cases} s_c = \max_{s \in \{C,L\}} V_c[s, \sigma(s, s_l, \mu(s, s_l))] \\ s_l = \max_{s \in \{C,L\}} V_l[s, \sigma(s_c, s, \mu(s_c, s))] \end{cases} \quad (2.9)$$

2. *The representative voter's beliefs μ are compatible with Bayes' rule as defined in (2.6)* **and** *satisfy the intuitive criterion when they are off the equilibrium path and cannot be derived using Bayes' rule.*

3. *The representative voter's voting rule is sequentially rational given his beliefs μ and candidates's announcements (s_c, s_l):*

$$\sigma(s_c, s_l, \mu) \text{ solves } \max_{\sigma \in [0,1]} \sigma U[s_c|\mu] + (1 - \sigma)U[s_l|\mu]$$

---

[6]We relax this assumption in the equilibrium analysis section 2.2.3.7.

2.2.3.4 Solving the model

There are two quite different regimes in the model: one in which the probability ε that candidates announce their true economic policy preferences is low, and one in which it is high enough that their announcements act as a significant constraint on what they subsequently do if they win power.

A) Case where $\varepsilon \leq 1 - \frac{v}{\rho\theta u}$[7].

There are two main implications of the above inequality, which implies a low probability that economic policy announcements are binding. First, if the voter observes candidates' social preferences, she will vote for the conservative candidate over the liberal candidate. This is because social preferences provide a more reliable guide to the candidate's economic preferences than anything the candidate actually says.

Second, if the voter does not observe candidates' social preferences, the incentives for candidates are to persuade voters that they are of a particular type. The strategy for doing so will depend in turn on the extent to which candidates are dissuaded from lying about their social preferences by the possible reputation cost of lying, and by the probability of having to implement the social policy they have announced rather than the one they would prefer.

When these costs are low, there is little difference in the incentives for the conservative and liberal candidates, so we should expect to see pooling equilibria. However, which pooling equilibrium is observed will depend on whether the role of social policy announcements as signals of likely future economic policy outweighs their role as signals of likely future social policy.

- If $\xi \in (0, \xi_l]$, for any $p \in [\frac{1}{2}, 1]$,

  - If $\varepsilon \leq 1 - \frac{v\big(\xi + (2p-1)(1-\xi)\big)}{(2p-1)\rho\theta u}$, there exists a unique pooling equilibrium where both candidates announce a conservative platform, the voter randomizes with probability $\frac{1}{2}$ between the two candidates and the respective payoff of the liberal and conservative candidates are $\frac{1}{2}\Big[B - (1-q)\xi\gamma_l\Big] - q l_l$ and $\frac{B}{2}$.

  - If $\varepsilon > 1 - \frac{v\big(\xi + (2p-1)(1-\xi)\big)}{(2p-1)\rho\theta u}$, there exists a unique pooling equilibrium where both candidates announce a liberal platform, the voter randomizes with probability $\frac{1}{2}$ between the two candidates and the respective payoff of the liberal and conservative candidates are $\frac{B}{2}$ and $\frac{1}{2}\Big[B - (1-q)\xi\gamma_l\Big] - q l_c$.

  When social credibility ξ is low enough that the liberal candidate can afford to lie about her social preferences but the credibility of economic announcements is also very low,

---

[7] Analytically, this implies $U^1[L|C] \geq U^1[C|C] \geq U^1[L|L] \geq U^1[C|L]$

both candidates will claim to be conservative. This is because the role of social policy announcements as signals of future economic policy outweighs their role as signals of future social policy.

However, when social credibility is low enough for candidates to lie, but still high enough for social policy announcements to serve as a more credible signal of future social policy than of future economic policy, both candidates will claim to be liberals. This is because the representative voter would still prefer to randomize between two liberal platforms than two conservative platforms, because of the strictly positive probability with which social announcements are implemented and the fact that he intrinsically prefers a liberal over a conservative policy $(v > 0)$.

We now see what happens when social credibility is sufficiently high that candidates no longer have an incentive to lie.

- If $\xi \in (\xi_l, 1]$, there exists a unique fully revealing separating equilibrium where both candidates announce their preferred social policy and the representative voter always votes for the conservative platform, yielding respective payoffs B and 0 for the conservative and the liberal candidate.

  When lying is too costly for the liberal candidate, platform divergence is the only possible equilibrium and the outsider candidate is elected on a conservative platform.

B) Case where $1 - \frac{v}{\rho\theta u} < \varepsilon \leq 1$

In this configuration, the voter will neither vote for a conservative platform when candidates' social preferences are observable, nor for a candidate announcing a conservative social policy when another candidate announces a liberal platform. The expected economic benefit from voting for a conservative outsider to the voter does not outweigh the social loss it incurs. Then, the only candidate with an incentive to lie about her social policy preferences is the conservative candidate. She will do so when the level of social credibility ξ is sufficiently low, yielding the following conditions:

- If $\xi \in (\xi_c, 1]$, there exists a unique separating, fully revealing PBE where both candidates announce their preferred social policy. The representative voter always vote for the liberal platform and the respective payoffs are B and 0 for the liberal and the conservative candidate.

- if $\xi \in (0, \xi_c)$, a unique pooling equilibrium exists where both candidates announce a liberal platform and the rep. voter randomizes with probability $\frac{1}{2}$ between the two can-

didates. The respective payoffs of the liberal and conservative candidates are $\frac{B}{2}$ and $\frac{1}{2}\left[B - (1-q)\xi\gamma_c\right] - ql_c$.

We can summarize these results in the following proposition:

Proposition 3:

a) *When economic policy announcements are sufficiently uninformative and the political cost of lying about social preferences is low enough ($\xi \in (0, \xi_l]$), candidates will pool and announce a conservative policy as long as the role of social policies as signals of future economic policy outweighs their role as signals of future social policies and will pool and announce a liberal policy otherwise.*

b) *When the credibility of economic policy announcements increases and lying becomes too costly for the liberal candidate ($\xi \in (\xi_l, 1]$), truth-telling is the only equilibrium.*

c) *When social policy conveys little information about economic preferences, there is no demand for conservative platforms and the liberal Establishment candidate always tells the truth, while the conservative Outsider lies when the cost of doing so is not too high.*

2.2.3.5 Comparative static analysis

Figure 2.1 graphs the different equilibrium outcomes in the (ε, ξ) space.

The area below ε_1 represents the subset of the parameter space in which there exists a political demand for conservative candidates despite the preference of the representative voter for liberal over conservative social policies. However, if candidates' true social policy preferences are not easily observed, and if the cost of lying is small, all candidates will claim to be conservative and the claim will lose its value.

We first discuss what happens when the cost of lying is low for the liberal candidate ($\xi \le \xi_l$).

In the bottom left corner of Figure 2.1, a pooling equilibrium (C, C) exists when the representative voter decides to vote for a conservative platform in the absence of information. This happens when the credibility of economic platforms is low enough with respect to the credibility of social announcements (the area below the red, downward sloping line with graph $\varepsilon = 1 - \frac{v\left(\xi + (2p-1)(1-\xi)\right)}{(2p-1)\rho\theta u}$). This result is in line with the empirical findings of Guiso et al. (2017)

that lower trust levels following the 2008 economic crisis drove party platforms of Establishment candidates to the right. Likewise, in our model, lower levels of political trust may push Establishment policy platforms on social issues toward conservative positions.

As the credibility of both social and economic announcements increases, the unique PBE of the game switches from the pooling equilibrium (C, C) to the pooling equilibrium (L, L). This equilibrium is somewhat surprising as the representative voter would prefer to elect a conservative candidate over a liberal one when the two are running against each other, since $\varepsilon < \varepsilon_1$. However, because the representative voter also prefers a liberal social policy to a conservative social policy, in the absence of informative signal, he prefers a lottery over 2 liberal platforms to one over 2 conservative platforms, and the equilibrium (L, L) dominates. The intuition behind this equilibrium is as follows: Even when the representative voter holds the intuitive belief that any deviation to a conservative platform from an equilibrium in which both candidates announced liberal platforms is more likely to have come from a conservative candidate, it can still be a dominant strategy for him to vote for the liberal platform when the relative credibility of economic announcement vis-à-vis social announcements is high enough. This is because the value of the information contained in the signal is small enough that the role of social policy announcements as signals of future economic policy outweighs their role as signals of future social policy. Therefore, the representative voter prefers a gamble between the outsider and the Establishment candidate to electing the outsider with certainty.

In the case where there is no demand for outsider candidates ($\varepsilon \geq \varepsilon_1$), both candidates announce their true social preferences when it is too costly for the conservative candidate to lie ($\xi_c \leq \xi$). The conservative candidate lies and announces a liberal social policy when the expected cost of lying about her social policy is lower than her expected gain from doing so, i.e whenever $\xi < \frac{R - 2\frac{q}{1-q}l_c}{\gamma_c} = \xi_c$.

2.2.3.6 Comment on the relative credibility of economic and social platforms

A more accurate description of the setting in which we expect political outsiders to be successful would assume that a change in candidates' policy positions does not involve the same amount of cognitive dissonance on the economic and social dimensions. While it seems relatively easy to renege on economic promises regardless of whether or not they are cheap talk because of the intricate nature of economic problems, it is harder for an elected politician to implement a policy that runs against her campaign promises when it comes to social matters. Amongst others, this is so because it is easier to tell whom social policies will benefit, while the welfare gains from economic reforms are harder to gauge and their beneficiaries certainly harder to identify. Analytically, we hence believe that our results have more grip under the assumption that $\xi \geq \varepsilon$[8].

---

[8]This corresponds to the area located below the 45 degree dashed line in Figure 2.1
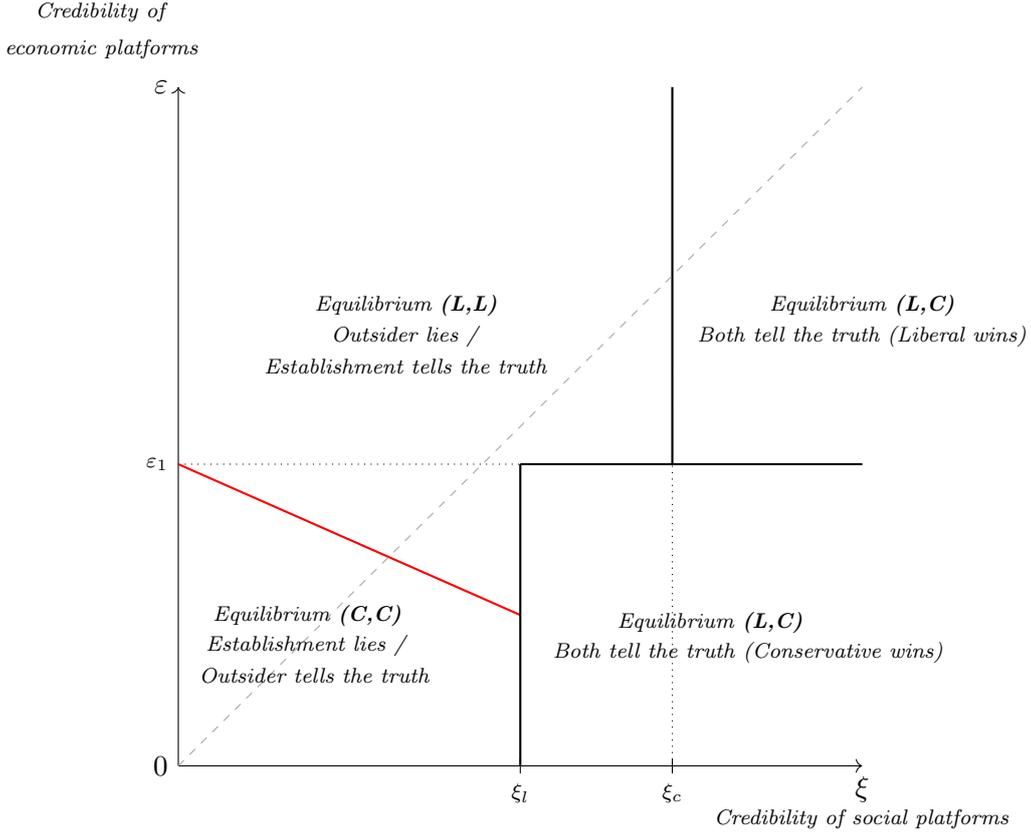
Figure 2.1: *Equilibrium in the (ε, ξ) space, with*

$$\begin{cases} \varepsilon_1 = 1 - \frac{v}{\rho \theta u} \\ \xi_l = \frac{B - 2\frac{q}{1-q} l_l}{\gamma_l} \\ \xi_c = \frac{B - 2\frac{q}{1-q} l_c}{\gamma_c} \\ \xi_l > \varepsilon_1 \end{cases}$$

2.2.3.7 On candidates' motivation for office and relaxing Assumption 2

Assumption 2 is not only sufficient but also necessary for our results. Indeed, if $\xi_k < 0$, then candidate k no longer has an incentive to lie, regardless of the policy announcement of her opponent. The intuition is as follows. Lying can only be an equilibrium strategy in a pooling equilibrium where candidates are elected with probability $\frac{1}{2}$. Therefore, candidate k has an incentive to lie only if her expected rent from being in office $(\frac{(1-q)B}{2})$ outweighs the cost of being caught doing so (ql_k). This is equivalent to $\xi_k > 0$. If we relax this assumption, then truth-telling is the only equilibrium, with the liberal candidate winning the election when $\varepsilon > \varepsilon_1$ and the conservative candidate winning otherwise.

Assumption 2 can be somewhat relaxed, however, if we assume that candidates have a policy motivation. By this we mean that they care about which social policy will be implemented

after the election, whether or not they themselves are elected. Building on the design of the model, it is convenient to define policy utility as the cost γ_k that candidates have to pay when the social policy implemented after the election is not their preferred policy, whether because they have lost the election or because despite being elected they must follow through with their campaign promises to implement a policy that was not the one they preferred. Using the same notation as before, the payoff of policy motivated candidate k can be written as:

$$
\begin{aligned}
V_k'[s_k|\sigma(s_k, s_l, \mu)] &= q\big[P_k^0 B - (1 - P_k^0)\gamma_k - l_k \mathbb{I}_{s_k \neq j_k}\big] \\
&\quad + (1 - q)\bigg[\sigma\big[B - \xi\gamma_k \mathbb{I}_{s_k \neq j_k}\big] - (1 - \sigma)\big[(1 - \xi)\gamma_k + \xi\gamma_k \mathbb{I}_{s_l \neq j_k}\big]\bigg] \\
&= V_k[s_k|\sigma(s_k, s_l, \mu)] - q(1 - P_k^0)\gamma_k - (1 - q)(1 - \sigma)\big[(1 - \xi)\gamma_k + \xi\gamma_k \mathbb{I}_{s_l \neq j_k}\big]
\end{aligned}
$$

$$(2.10)$$

Comparing this with equation (2.8) we can see that the expected payoff of policy motivated candidate k is now lower ($V_k' \leq V_k$) because of the disutility term $-q(1-P_k^0)\gamma_k - (1-q)(1-\sigma)\big[(1-\xi)\gamma_k + \xi\gamma_k \mathbb{I}_{s_l \neq j_k}\big]$ that she incurs from seeing a social policy she dislikes being implemented after the election. Analytically, this disutility term increases with the probability that candidate k loses the election when social preferences are not observable, captured by σ. Therefore, when a candidate arbitrates between lying ($s_k = j_l$) and truth-telling ($s_k = j_k$), she has an extra incentive to lie, for this will increase her probability of winning the election from 0 to $\frac{1}{2}$. Indeed, one can check that

$$
V_k'[j_l|\tfrac{1}{2}] - V_k'[j_k|0] = V_k[j_l|\tfrac{1}{2}] - V_k[j_k|0] + \frac{1 - q}{2}\gamma_k \tag{2.11}
$$

Because $\frac{1-q}{2}\gamma_k > 0$, the difference in utility between the two strategies is greater for a policy motivated candidate.

As losing the election becomes more costly, policy motivated candidates have stronger incentives to use a strategy that increases their probability of winning and are therefore more likely to lie about their preferences. With policy motivated candidates, our results in Proposition 3 then hold under the following, less restrictive assumption $-1 \leq \xi_l < \xi_c$.

We have argued that, when the credibility of politicians' economic policy announcements is low, voters may vote for candidates who either promise social policies that the voters do not want, or behave in ways that the voters do not personally like or admire, because these may be credible signals that the candidates in question do not belong to the political establishment and may therefore implement more radical economic policies than the political establishment would be prepared to accept. Such candidates often fit the description "populist", and in our model the description is apt to the extent that candidates who do these things are indeed more likely than other candidates to be political Outsiders. This does not mean, however, that all

who behave as populists intend really to implement redistributive economic policies. In our model, candidates from the Establishment may pretend to be Outsiders, when the costs of lying are not too high; and even Outsiders may disappoint those who voted for them by failing to implement redistributive policies.

However, many readers may recognize some of the characteristics of such populist politicians, including the individual described as "vulgar, almost illiterate, a public liar easily detected....an actor of genius" who ran successfully for the presidency of the United States on a protectionist, anti-immigrant platform in ....1936, in the bestselling novel *It Can't Happen Here*, by Sinclair Lewis.

2.3 Empirical analysis

In this section, we attempt to provide some empirical support for the main prediction of our baseline model, as captured in Proposition 1. In particular, we investigate whether or not socially moderate voters are less sensitive to ideological convergence with political parties and thus more likely to vote for social outsiders, when they have lower levels of trust in politics (which we interpret to mean that they consider announcements about economic policy to be relatively uninformative).

2.3.1 Data

Our main source of individual data is the European Social Survey (ESS), which maps attitudes, beliefs, and behaviors in Europe. It covers all European countries, though not every country participates in every wave. Data have been collected every two years, since September 2002, by face-to-face interviews. We use eight consecutive waves between 2002 and 2016. The questionnaire consists of a core module, constant from round to round, and smaller rotating modules repeated at intervals on selected topics. We use the core module, which covers a wide range of social, economic, political, psychological and demographic variables. To identify parties' policy positions on both the economic and social dimensions, we rely on the classification proposed in the CHES Chapel Hill Expert Survey database (2017), which studies party positioning on European integration, ideology and policy issues for national parties in a variety of European countries. The first survey was conducted in 1999, with subsequent waves in 2002, 2006, 2010, and 2014. Not every country and every party was surveyed in every wave, and we use all rounds of the survey in order to maximize the reliability of our data.

Measuring voting decisions

The ESS asks people whether they voted in the last parliamentary election in their country and which party they voted for: "Did you vote in the last [country name] national election in [month/year?]". Those answering yes were then asked: "Which party did you vote for in that

election?" and shown the list of parties. We include in our database only those respondents who claimed to have voted, and amongst them those who voted for a party that has been surveyed at least once in the CHES[9].

Measuring voters' characteristics

Trust in traditional politics. In our narrative, social outsiders' platforms are more likely to succeed when voters lose faith in politicians. The ESS has several proxies for confidence in governments and political parties, all on a scale between 0 (no trust) and 10 (full trust). These indicators tend to be closely correlated and thus hard to tell apart. In analyzing individual voting behaviour we use trust in political parties, which speaks directly to our model.

Economic and social ideology. A critical feature of the model is that moderate voters choose to vote for outsiders because of their radical stance on social issues. The ESS contains several questions related to social beliefs. We choose 6 of them[10], and combine these objective measures into a single composite index of social conservatism $SocialCons$ by taking the first principal component, rescaled to vary between 0 (least conservative) and 1 (most conservative). Moreover, we construct a measure of how socially conservative every country is for every election year using the mean value of our social conservatism index across all individuals[11]. In order to capture voters' political preferences on the economic dimension, we use the $gincdif$ variable of the ESS questionnaire, which codes respondents' answer to the following question: "Do you think the government should reduce differences in income levels?", which we rescale between 0 and 1 under the name $EcoCons$, a higher score indicating greater opposition to redistribution and hence greater economic conservatism[12].

Voting sample

The intuition in the model is that people would vote for socially radical candidates because their policy positions serve as a signal of their economic intentions. Therefore, we limit our sample

---

[9]Because several parties are not surveyed in the CHES database and many respondents refused to give the name of the party they voted for, we are forced to leave out of the analysis a significant share (18%) of voters. Figure 2.2 in appendix provides information about the share of excluded voters in each country and the list of parties that are not covered by the CHES dataset.

[10]These 6 questions are the following: "Is it important that government is strong and ensures safety?", "Do you agree with the following statement: Gay men and lesbians should be free to live their own life as they wish?", "To what extent do you think [country] should allow people of a different race or ethnic group as most [country]'s people to come and live here?", "Is [country] made a worse or a better place to live by people coming to live here from other countries?", "Is [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?", "Is it important to to follow traditions and customs handed down by religion or family?".

[11]This index of social conservatism for each country is constructed based on the entire weighted population sample and not exclusively on the voting population within that sample.

[12]The ESS features other questions that proxy individual opinions on economic policies and economic conservatism but none is part of the core module which is constant from round to round.

to middle-of-the-spectrum voters who hold moderate views on social issues and are unlikely to be drawn to conservative platforms because of ideological convergence. To do so, we rank the voting population of every country and every election according to their social conservatism and restrict our analysis to those in the 4th, 5th, 6th, and 7th deciles of the distribution[13].

Measuring parties' characteristics

Social distance. In order to distinguish between outsiders and traditional parties, we construct a dummy variable to identify radically conservative parties in Europe based on the classification of the CHES survey. We use the "*galtan*" variable, which codes the position of a party in terms of their views on democratic freedoms and rights, and rescale it to vary between 0 (least conservative) and 1 (most conservative)[14]. For every party j competing in country c and election t, we identify as social outsiders those parties that (i) ranked higher that 0.9 on the *galtan* variable or (ii) were located at least 2.5 standard deviations to the right from the mean of voters' social conservatism distribution[15]. Because party positions can change over time, some parties were identified as social outsiders in some elections and as a mainstream party in others. The list of parties listed at least once as social outsider can be found in Table 2.2 of the Appendix.

Economic distance. We measure parties' economic conservatism EC using the "lrecon" variable, which codes the position of a party in terms of its ideological stance on economic issues[16], and rescale it from 0 to 1.

---

[13]We check the validity of our results for narrower brackets as a robustness test.

[14]A lower score on this variable indicates "Libertarian" or "postmaterialist" parties which favor expanded personal freedoms, for example, access to abortion, active euthanasia, same-sex marriage, or greater democratic participation, while a higher score is attributed to "Traditional" or "authoritarian" parties that often reject these ideas, value order, tradition, and stability, and believe that the government should be a firm moral authority on social and cultural issues. A more accurate way of measuring social conservatism could be to use the first principal component of party positions on issues which we already use for individuals. Those issues are civil liberties and law and order, multiculturalism, social lifestyle, environmental policies, the rights of ethnic minorities, immigration policy, and the role of religion in politics. However, these variables were not recorded in every year of the CHES survey, and using this method would force us to reduce substantially the size of the sample. In any event, our calculations reveal that when available, the correlation between parties' PCA score for those items and the *galtan* variable is very high (0.93), suggesting that we should not be concerned with the possibility that our measure of parties' social conservatism is too far off the mark.

[15]Although this method unavoidably contains a certain amount of subjective judgement, robustness tests show that our results hold for looser or more restrictive classifications of social outsiders. Moreover, although our theoretical setting does not rule out the possibility that social outsiders can exist on the far-left of the social spectrum, we choose to classify party as social outsiders only when they are sufficiently more conservative than average. Because our inference mechanism is based on radical social platforms and policy positions that are likely to be found alienating or offensive, we choose to regard very liberal parties as part of a moderate alternative on account of their rather inclusive opinions, which are unlikely to clash with the views of socially moderate voters

[16]In particular, parties on the economic left want government to play an active role in the economy, while parties on the economic right emphasize a reduced economic role for government: Privatization, lower taxes, less regulation, less government spending, and a leaner welfare state.

Constructing the social and economic distance variables

For each voter, we then construct party-specific social and economic distance variables based on the previous measures of conservatism.

For every individual i who voted in country c and election t, we compute the difference between her social conservatism score $SocialCons_{ict}$ and the social score SC_{jct} of every party j that was running in that same election[17]. We thus obtain for every voter and every party the variable $\delta_{ijct}^S = |SocialCons_{ict} - SC_{jct}|$ that captures the social distance between them. We repeat the same procedure on the economic dimension and create the distance variable $\delta_{ijct}^E = |EcoCons_{ict} - EC_{jct}|$ that captures the distance on the economic dimension between a voter i and party j with respective economic conservatism $EcoCons_{ict}$ and EC_{jct}.

We then introduce a binary choice framework where individual vote choice boils down to choosing between a mainstream and an outsider alternative. Indeed, while our theoretical setting assumes that both traditional and outsider parties can run on the same platform, elections almost always give voters the choice between extremely conservative social platforms and more moderate ones.

To do this, we need to attribute to each alternative a social and economic distance based on those computed for every single party. A first issue is to capture the social distance between an individual and the alternative she did not vote for. For instance, if a voter chose to vote for a social outsider as per our classification, then we are left with several mainstream (liberal) parties to choose from as the mainstream alternative. In practice, we select as the liberal alternative the party in the set of all liberal parties with the smallest social distance to the voter. We use a symmetric method for voters who voted for a liberal party, and repeat the same procedure for the economic distance variable where because we do not distinguish between economically extreme parties and moderate ones, our alternative-specific measure of economic distance comes directly from the party used to create the social distance variable.

For policy dimension $P \in \{E, S\}$ (Economic or Social), we thus define the alternative-specific variables capturing the distance between a voter i voting for party k and the liberal (resp. conservative) alternatives δ_{iLct}^P (resp. δ_{iCct}^P) as follows:

---

[17]For every round of the ESS, individuals were asked about their vote in the latest parliamentary elections, which sometimes took place as much as 4 years before the survey took place, while the rest of the questions were asked at the time of survey. This creates a potential limitation insofar as we attempt to explain past vote choices through current individual characteristics and ideology. We investigate this issue in the robustness section and control that our results carry over when we include in the analysis only those individuals who voted in the same year as that in which they were surveyed.

$$\delta_{iLct}^P = \begin{cases} \delta_{ikct}^P \text{ if } k \in L \\ \delta_{ilct}^P, \text{ where } l = \underset{j \in L}{\arg \min} \, \delta_{ijct}^S \text{ if } k \notin L \end{cases} \tag{2.12}$$

and

$$\delta_{iCct}^P = \begin{cases} \delta_{ikct}^P \text{ if } k \in C \\ \delta_{ilct}^P, \text{ where } l = \underset{j \in C}{\arg \min} \, \delta_{ijct}^S \text{ if } k \notin C \end{cases} \tag{2.13}$$

where L (resp. C) denotes the liberal (resp. conservative) alternative choice set, and party j belongs to C if it was identified as a social outsider as per the classification detailed in the previous section.

Note on the reliability of voting data in the ESS

Obviously, the voting choices reported in the ESS do not necessarily correspond to what people actually did. Guiso et al. (2017) point out that the correlation between ESS votes for populist parties conditional on participation and actual voting is only 65%. Given the high correlation between socially conservative and populist platforms, our results may suffer from a similar bias. Figure 2.3 of the appendix describes the share of ESS interviewees who reported to have voted for social outsiders in each country, both within the entire voting population and the sub-sample of "middle-of-the-spectrum", socially moderate voters on which we run our analysis.

2.3.2 Empirical strategy

We propose a simple framework to empirically model people's voting choices. Individuals who participate in elections have to decide whether to vote for a political outsider or for a mainstream party[18]. To estimate the relationship between social distance and trust, we use a conditional logit model with alternative-variant regressors (the social and economic distance variables) in which the probability that voter i will vote for alternative $k \in L, C$ can be written as:[19]

$$P(y_i = k) = \frac{exp(x_{ik}'\beta)}{\sum\limits_{j \in L, C} exp(x_{ij}'\beta)} \tag{2.14}$$

where

$$x_{ik} = \begin{bmatrix} \delta_{ik}^E \\ \delta_{ik}^S \end{bmatrix}$$

We omit alternative-invariant explanatory variables such as education, income, age, gender and other individual characteristics as they are very likely to influence voters' decision to vote for political outsiders through social and economic conservatism. Another way of putting this is that we are not interested here in testing hypotheses about why voters are socially or economically conservative. We want to take their degree of social and economic conservatism as given and

---

[18] We leave abstention outside the scope of this paper.

[19] We have omitted the country-election specific subindices c and t to simplify the notation.

see what voting strategy this leads voters to adopt when faced with different party alternatives.

2.3.3 Results

Table 2.1 indicates that voters are more likely to vote for political alternatives that are closer to their own views on both the social and economic dimensions. Moreover, as expected, the negative effect of social distance is substantially decreased among those with lower levels of trust in political parties: The adverse impact of social distance on the probability to vote for a political alternative is more than twice as large for voters who have complete trust in political parties than among voters who do not trust political parties at all. These findings corroborate the intuition in the model that moderate voters who trust political parties less may turn to socially radical candidates because their policy positions serve as a signal of their economic intentions.

We do not find that the effect of distrust is large enough to lead moderate voters with low levels of trust in political parties to prefer, on average, parties whose social policies are more distant from their own preferences to parties whose policies are closer. However, this statement holds true for the mean preferences of moderate voters, and is quite compatible with the existence of some moderate voters whose preferences may indeed take that form. At all events, the evidence provides clear support for the view that conservative social preferences are not as off-putting as might be expected to moderate voters when those moderate voters have low levels of trust in political parties.

The supplementary tables in section 2.5.3 contain the various robustness tests based on voter coverage in each country, the definition of socially *moderate* voters, the time lag between the date respondents were surveyed and when they voted, and using alternative measures of political trust and social outsiders.

2.4 Conclusion

In this paper, we explore why voters might vote for political candidates who espouse extreme ideologies that the voters themselves do not support. In particular, we argue that, when the credibility of politicians' economic policy announcements is low, voters may vote for candidates who either promise social policies that the voters do not want, or behave in ways that the voters do not personally like or admire, because these may be credible signals that the candidates in question do not belong to the political establishment and may therefore implement more radical economic policies than the political establishment would be prepared to accept. Such candidates often fit the description "populist", and in our model the description is apt to the extent that radically conservative candidates are indeed more likely than other candidates to be political

Outsiders.

The main message of the paper is that populist behaviour should be most common when voters' trust in economic policy announcement is low; when the credibility of social platforms is low; when the political cost of reneging on social policy announcements once elected is low; and when there exist alternative ways for voters to evaluate the likelihood that the candidate will implement policies that run counter to the interests of the Establishment.

This does not mean, however, that all who behave as populists are really outsiders to the political Establishment or intend to implement redistributive economic policies. In our model, candidates from the Establishment may pretend to be Outsiders, when the costs of lying are not too high; and even Outsiders may disappoint those who voted for them by failing to implement redistributive policies. In the empirical section of the paper, we provide some support for the main prediction of the model that liberal voters are less sensitive to ideological convergence with political parties and therefore more likely to vote for social outsiders when they have lower levels of trust in politicians.

An interesting question for future research would be to test the "supply side" of our results, and in particular the prediction that socially radical platforms should be most common when there is little opportunity for politicians to make credible announcements about economic policy. We should therefore expect new parties, parties facing unprecedented economic crises and challenges, and parties that have recently had a change of leadership, to be more likely to show these populist characteristics than established parties under well known leaders facing familiar economic circumstances.

2.5 Appendix

2.5.1 Proofs

Proposition 2

Case where $\varepsilon < 1 - \frac{v}{\theta u}$

Subcase where $c_E \leq \frac{B}{2}$

When $c_E \leq \frac{B}{2}$, we must show that there exists a unique pooling equilibrium which depends on the relative credibility of social and economic platforms. First, note that it is straightforward that a separating equilibrium cannot exist as the candidate not sending the signal would always have an incentive to deviate and send the signal, increasing her payoff doing so.

Let $(0,0)$ be the no-signal strategy profile played by both candidates. The election is then tied and the payoff of both candidates is $\frac{B}{2}$. These strategies are then sequentially rational for the candidates provided that neither of them could increase their payoff by sending the signal. A necessary condition for either candidate to increase their payoff when deviating to $s = 1$ requires that they get elected with probability 1, which would yield respectively a payoff of $B - c_E > \frac{B}{2}$ and $B > \frac{B}{2}$ for the Establishment and outsider candidates.

Therefore, the set of off-the-equilibrium-path beliefs $\phi(1,0)$ which satisfies the no-deviation constraint is such that the rep. voter always prefers to vote for the candidate not sending the signal whenever both strategies $s = 0$ and $s = 1$ are played. Under our assumption that $\phi > \frac{1}{2}$, this is equivalent to

$$U[R, 1|(1,0)] < U[R, 0|(1,0)] \tag{2.15}$$

$$\iff \varepsilon u + \phi(1-\varepsilon)\theta u - v] < \varepsilon u + (1-\phi)(1-\varepsilon)\theta u \tag{2.16}$$

$$\iff \phi < \frac{1 + \frac{v}{(1-\varepsilon)\theta u}}{2} \tag{2.17}$$

$$\iff \varepsilon > 1 - \frac{v}{(2\phi - 1)\theta u} \tag{2.18}$$

Then, we have that the strategy profile $(0,0)$ is a PBE of the game under the set of compatible belief ϕ whenever $\varepsilon > 1 - \frac{v}{(2\phi-1)\theta u}$.

A symmetric argument allows to prove that this equilibrium is unique, and that the pooling equilibrium $(1,1)$ is the unique equilibrium on the parameter space where $\varepsilon < 1 - \frac{v}{(2\phi-1)\theta u}$. $\square$.

Subcase where $c_E > \frac{B}{2}$

When $c_E > \frac{B}{2}$, it can be shown trivially that the separating equilibrium $(1,0)$ is PBE equilibrium of the game. Indeed, both strategies are played in equilibrium, with $\phi(1,0) = 1$, the rep. voter elects the outsider which sends the signal, and the outsider and Establishment payoffs are respectively B and 0, where the Establishment candidate has no incentive to send the signal since lying is too costly for her.

Also, because sending the signal is a strictly dominated strategy for the Establishment candidate, the strategy profile $(1,1)$ is never an equilibrium, and we are left to check that $(0,0)$ does not survive the intuitive criterion.

We know from what precedes that $(0,0)$ can be a PBE as long as the belief of the rep. voter off the equilibrium path $\phi(1,0)$ is such that $\phi < \frac{1 + \frac{v}{(1-\varepsilon)\theta u}}{2}$. However, when $c_E > \frac{B}{2}$, we also have that strategy $s = 1$ is equilibrium dominated for the Establishment candidate under any belief $\phi(0,1)$. Indeed, for any action taken by the rep. voter upon observing the signal, the Establishment candidate will always be worse-off than under the $(0,0)$ equilibrium if he chooses to deviate and send the signal[20]. Therefore, upon observing signal $s = 1$, the representative voter cannot put positive probability weight on the Establishment type and his out-of-equilibrium belief $\phi(1,0)$ must be equal to 1. Then, because the representative voter prefers to elect an Outsider candidate when $\varepsilon < 1 - \frac{v}{\theta u}$, he will vote for the candidate sending the signal, which implies that the outsider candidate would be strictly better-off if she sends the signal than under a $(0,0)$ equilibrium. The pooling equilibrium therefore does not survive the intuitive criterion, and $(1,0)$ is the unique eq. of the game. $\square$

Case where $\varepsilon \geq 1 - \frac{v}{\theta u}$

Note that when $\varepsilon \geq 1 - \frac{v}{\theta u}$, an Establishment candidate is preferred to an Outsider sending the signal s and a separating eq. thus cannot exist because the outsider is always better off choosing not to send no signal. Moreover, we have shown before that a pooling equilibrium will exist where no signal is announced whenever (2.18) is satisfied, and both candidates send the signal otherwise. Yet, in the absence of demand for political outsiders, we have that $\varepsilon \geq 1 - \frac{v}{\theta u}$, which implies $\frac{v}{(1-\varepsilon)\theta u} > 1$ and $\frac{1 + \frac{v}{(1-\varepsilon)\theta u}}{2} > 1$. By definition, $\phi(0,1) \leq 1$, and (2.18) holds for any belief $\phi(0,1) \in [0,1]$. Therefore, a pooling no-signal equilibrium is the unique PBE of the game. $\square$

Proposition 3

Case where $\varepsilon \leq 1 - \frac{v}{\rho\theta u}$

We start with the case where $\varepsilon \leq 1 - \frac{v}{\rho\theta u}$ and there is demand for political outsiders.

Subcase where $\xi \in (0, \xi_l]$

When $\xi \in (0, \xi_l)$ and both candidates can afford to lie about their social preferences, we must show that there exists a unique pooling equilibrium which depends on the relative credibility of social and economic platforms.

First, it is straightforward to see that truth-telling can never be an equilibrium as the liberal candidate always has an incentive to deviate to a conservative platform and tie the election, increasing her payoff doing so.

Let (L, L) be the strategies played by both players. When both candidates play L, the election is tied and the liberal (resp. conservative) candidate gets payoff $\frac{B}{2}$ (resp. $\frac{1}{2}\left[B - (1-q)\xi\gamma_c\right] - ql_c$). These strategies are sequentially rational provided that neither of them could increase her payoff by deviating to a C platform. For neither type $k \in \{l, c\}$ to deviate, it must be that $V_k[L|\sigma(L, L, \mu(L, L)] \geq V_k[C|\sigma(C, L, \mu(C, L)]$.

We first establish that the former constraint is binding for the conservative candidate: Note that the liberal would increase her payoff only if she were to get elected with probability 1 $(\sigma(C, L, \mu(C, L) = 1)$, which would yield a payoff of $B - (1-q)\xi\gamma_l - ql_l > \frac{B}{2}$. At the same time, the conservative candidate would increase her payoff running on a conservative platform if she gets elected with probability at least equal to $\frac{1}{2}$ $(\sigma(C, L, \mu(C, L) = \frac{1}{2})$, which would yield payoff $\frac{B}{2} > \frac{1}{2}\left[B - (1-q)\xi\gamma_c\right] - ql_c$.

Therefore, the set of off-the-equilibrium-path beliefs $\phi(C, L) = p$ which satisfies the no-deviation constraint are such that the rep. voter strictly prefers to vote for a liberal candidate upon observing (C, L), i.e s.t $\sigma(C, L, \mu(C, L) = 0$. Under our assumption that $p > \frac{1}{2}$, this is equivalent to

$$U[C|C, L] < U[L|C, L] \tag{2.19}$$

$$\iff pU^1[C|C] + (1-p)U^1[L|C] > (1-p)U^1[C|L] + pU^1[L|L] \tag{2.20}$$

$$\iff p\left[\varepsilon u + (1-\varepsilon)\rho\theta u\right] + (1-p)\left[\varepsilon u + (1-\xi)v\right] > (1-p)\left[\varepsilon u + (1-\varepsilon)\rho\theta u + \xi v\right] + p(\varepsilon u + v) \tag{2.21}$$

$$\iff \varepsilon > 1 - \frac{v\big(\xi + (2p-1)(1-\xi)\big)}{(2p-1)\rho\theta u} \tag{2.22}$$

Therefore, under the assumption that $p > \frac{1}{2}$, we have that the strategy profile (L, L) is sequentially rational under the set of compatible belief p whenever $\varepsilon > 1 - \frac{v\big(2\xi + (2p-1)(1-\xi)\big)}{(2p-1)\rho\theta u}$ and (L, L) is a PBE of the game.

A symmetric argument allows to prove that this equilibrium is unique, and that (C, C) is the unique equilibrium when $\varepsilon < 1 - \frac{v\big(\xi + (2p-1)(1-\xi)\big)}{(2p-1)\rho\theta u}$. $\square$

Subcase where $\xi \in (\xi_l, 1]$

When $\xi \in (\xi_l, 1]$, it can be shown trivially that truth-telling (C, L) is an equilibrium of the game. Indeed, all strategies are played in equilibrium, with $\phi(C, L) = 1$, and the liberal and conservative payoffs are respectively $V_l[L|\sigma(C, L, \mu(C, L)] = 0$ and $V_c[C|\sigma(L, L, \mu(L, L)] = B$. Also, because lying is too costly for the liberal candidate, she has no incentive to deviate to C, and (C, L) is therefore a PBE.

Because announcing C is a strictly dominated strategy for the liberal candidate, we are left to check that (L, L) does not survive the intuitive criterion: When $\xi > \xi_l$, we have that strategy $s = C$ is equilibrium dominated for the liberal candidate under any belief p. Indeed, for any action (voting rule) taken by the rep. voter upon observing a C platform, the liberal candidate will always be worse-off than under the (L, L) equilibrium if he chooses to deviate to C[21]. Therefore, upon observing platform C, the representative voter cannot put positive probability weight on the liberal type and his out-of-equilibrium belief $\phi(C, L)$ must be such that $p = 1$. Also, because the representative voter prefers to elect a conservative candidate (recall that $\varepsilon \leq 1 - \frac{v}{\rho\theta u}$), he will vote with certainty for the candidate deviating to a C platform. This implies that the conservative candidate would be strictly better-off by deviating from a liberal platform L to a conservative platform C under an (L, L) equilibrium, and that the pooling equilibrium (L, L) does not survive the intuitive criterion. $\square$

Case where $1 - \frac{v}{\rho\theta u} < \varepsilon \leq 1$

Let's know look at the parameter space where ($1 - \frac{v}{\rho\theta u} < \varepsilon \leq 1$) when there exists no signal that will convince the representative voter to vote for a conservative candidate and a liberal candidate is therefore always preferred to a conservative one.

Subcase where $\xi \in (\xi_c, 1]$

If $\xi \in (\xi_c, 1]$, it comes immediately that no pooling equilibrium can exist because lying about their preferences is too costly for both candidates. It is also trivial to check that truth-telling is an equilibrium. Indeed, when both candidates announce their preferred social policy, $\phi(C, L) = 1$, and the voting rule of the rep. voter is $\sigma(C, L, \mu(C, L) = 0$, from which we obtain equilibrium payoffs $V_l[L|\sigma(C, L, \mu(C, L)] = B$ and $V_c[C|\sigma(L, L, \mu(L, L)] = 0$. Also, because lying is too costly for the conservative candidate, she has no incentive to deviate to L, and (C, L) is therefore a PBE.

---

[21]Even if the rep. voter were to elect a liberal candidate running on a conservative platform with certainty, the candidate's payoff would be strictly lower than under the pooling liberal equilibrium: $\xi > \xi_l \Rightarrow$ For any $\mu \in [0, 1]^3$, $V_l[L|\sigma(L, L, \mu(L, L)] > V_l[C|\sigma(C, L, \mu(C, L)]$

Subcase where $\xi \in (0, \xi_c]$

If $\xi \in (0, \xi_c]$, we have to prove that (L, L) is the only equilibrium. First, notice that (C, L) (truth-telling) cannot be an equilibrium because the cost of lying for the conservative candidate is low enough so that she has an incentive to lie and increase her payoff from $V_c[C|\sigma(C, L, \mu(C, L)] = 0$ to $V_c[L|\sigma(L, L, \mu(L, L)] = \frac{1}{2}\Big[B - (1-q)\xi\gamma_c\Big] - ql_c > 0$. Second, the rep. voter's beliefs off the equilibrium path that are compatible with this equilibrium must be such that no candidates has an incentive to deviate to C. From what precedes, we know that the no-deviation condition will be satisfied for beliefs $\phi(C, L) = p$ such that the rep. voter will prefer to vote for a conservative over a liberal platform, which is equivalent to

$$U[C|C, L] < U[L|C, L] \tag{2.23}$$

$$\iff (2p - 1)\Big[(1 - \varepsilon)\rho\theta u - v\Big] < 2(1 - p)\xi v \tag{2.24}$$

When there is no demand for political outsiders, we have that $1 - \frac{v}{\rho\theta u} < \varepsilon \leq 1$, which implies $(2p - 1)\Big[(1 - \varepsilon)\rho\theta u - v\Big] < 0$ under our assumption that $p > \frac{1}{2}$. Hence, (2.24) is always satisfied. By a symmetric argument, it is trivial to show that there exists no off-the-equilibrium-path beliefs p such that (C, C) is sequentially rational, and therefore (L, L) is the only PBE of the game when $1 - \frac{v}{\rho\theta u} < \varepsilon \leq 1$ and $\xi \in (0, \xi_c]$.$\square$

2.5.2 Tables and figures

Tables

Table 2.1: Descriptive statistics

Variable	Mean	Std. Dev.	Min.	Max.
Gov. ensures safety	7.11	2.43	0	10
Gay rights	2.59	2.82	0	10
Accept immig. from different ethnic back.	4.56	2.9	0	10
Follow traditions	6.58	2.68	0	10
Immig. make country worse place to live	4.88	2.24	0	10
Immig. undermine country's culture	4.13	2.48	0	10
Voter's social conservatism (PCA)	4.81	1.74	0	10
Trust in political parties	4.01	2.27	0	10
Social distance	1.96	1.51	0	8.93
Economic distance	3.01	2.05	0	9.91

Source: All variables were standardized on a 0-10 scale for comparability. A higher score indicates more conservative views. N=95047.

Table 2.2: List of social outsider parties

Country	Party	Conservatism (*galtan* score)
Austria	FPO	9.67
Belgium	VB	9.37
Belgium	FN	9.75
Bulgaria	NOA	9.17
Croatia	HSP	9.38
Denmark	DF	8.92
Finland	SKL	8.10
Finland	PS	9.11
France	MN	9.71
France	MPF	9.00
France	FN	9.80
Germany	DVU	9.82
Germany	AfD	8.69
Germany	REP	9.42
Greece	XA	10.00
Greece	LAOS	9.55
Hungary	MIEP	9.69
Hungary	JOBBIK	9.41
Italy	LN	9.14
Italy	Fdl	9.29
Italy	MS	9.60
Lithuania	DK	9.00
Netherlands	CU	8.78
Netherlands	SGP	9.38
Norway	KrF	8.25
Poland	KNP	8.82
Poland	PiS	9.57
Poland	LPR	10.00
Portugal	CDS-PP	8.90
Slovakia	SNS	9.21
Slovenia	NSI	9.33
Sweden	SD	8.25
Sweden	KD	7.50
Switzerland	SVP/UDC	9.38
Switzerland	EDU/UDF	9.13
Switzerland	LdT	8.25
Turkey	MHP	9.10
Turkey	AKP	9.60
UK	UKIP	9.29
UK	BNP	9.53

Table 2.3: Main results

	(1)	(2)	(3)
Social distance	-7.19***	-6.96***	-4.55***
	(0.11)	(0.11)	(0.21)
Economic distance		-1.76***	-1.71***
		(0.094)	(0.092)
Social_distance × Trust			-0.71***
			(0.055)
Number of cases	38300	38300	38300
χ^2	4230.2	4157.7	4113.3

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, ***

Figures

Figure 2.2: Share of voters left-out
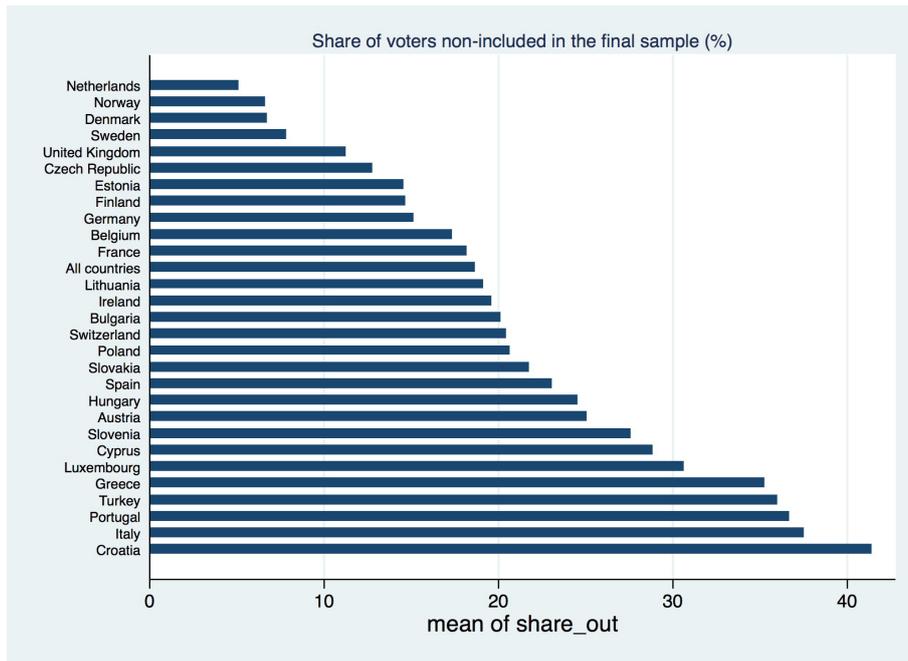
Notes: *Reported share of voters left out of the analysis because they refused to give the name of the party they voted for or because that party was not covered in the CHES database.*

Figure 2.3: Reported share of votes for social outsiders by countries
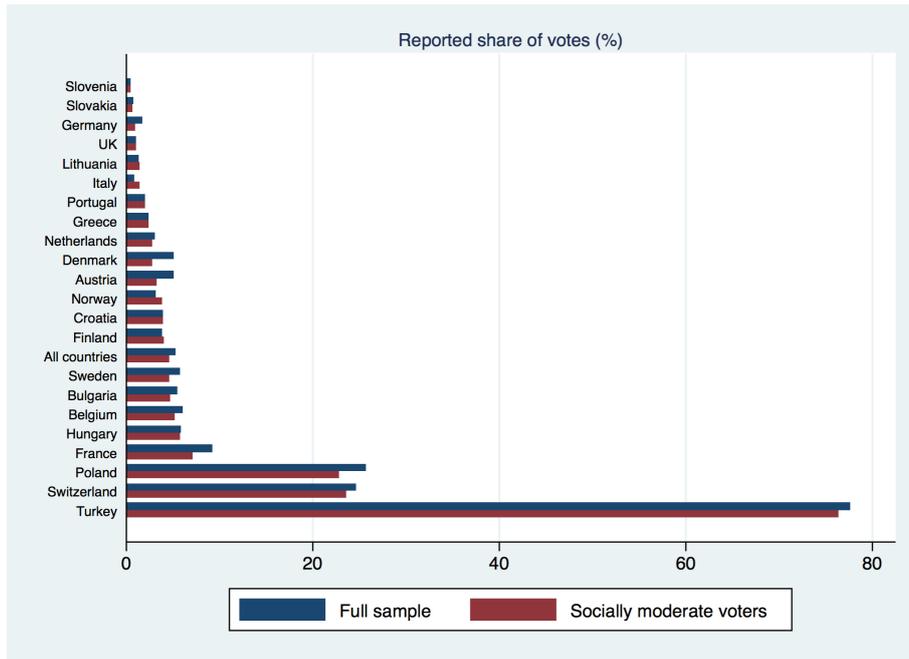
Notes: Reported vote shares across all ESS rounds (2002 - 2016). The outstanding share of voters for conservative parties in Turkey are driven by the lack of mainstream party coverage in the CHES data, the high-non response rate among voters when asked about the party they voted for, and the fact that the main political party and governing force in Turkey, the AKP, is very socially conservative and therefore identified as a social outsider in our model. Our results do not change significantly if Turkey is excluded from the sample.

2.5.3 Supplementary tables

Table 2.4: Sub-sample of countries with voter coverage over 80%

	(1)	(2)	(3)
Social distance	-9.47***	-9.04***	-6.62***
	(0.20)	(0.19)	(0.41)
Economic distance		-1.78***	-1.82***
		(0.17)	(0.17)
Social_distance × Trust			-0.65***
			(0.10)
Number of cases	25860	25860	25860
χ^2	2315.3	2282.5	2331.5

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. The sample includes countries where at least 80% of voters voted for a party that was covered by the CHES survey. * $p < 0.05$, ** $p < 0.01$, ***

Table 2.5: Sub-sample of voters with more moderate views

	(1)	(2)	(3)
Social distance	-7.37***	-7.14***	-4.69***
	(0.16)	(0.16)	(0.30)
Economic distance		-1.77***	-1.72***
		(0.13)	(0.12)
Social_distance × Trust			-0.72***
			(0.081)
Number of cases	19156	19156	19156
χ^2	2047.1	2095.9	2055.3

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. The sample includes individuals in the 5th and 6th of the social conservatism distribution. * $p < 0.05$, ** $p < 0.01$, ***

Table 2.6: Sub-sample of voters who voted on year of ESS survey

	(1)	(2)	(3)
Social distance	-9.36***	-9.05***	-7.11***
	(0.24)	(0.26)	(0.72)
Economic distance		-3.56***	-3.63***
		(0.22)	(0.22)
Social_distance × Trust			-0.41**
			(0.13)
Number of cases	21750	21631	18962
χ^2	1571.8	1246.9	1194.0

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. The sample includes only individuals who voted the year preceding, the same year, or the year after they were surveyed by the ESS. * $p < 0.05$, ** $p < 0.01$, ***

Table 2.7: Main results, trust in politicians

	(1)	(2)	(3)
Social distance	-7.19***	-6.96***	-4.41***
	(0.11)	(0.11)	(0.20)
Economic distance		-1.76***	-1.71***
		(0.094)	(0.092)
Social_distance × Trust			-0.76***
			(0.053)
Number of cases	38300	38300	38239
χ^2	4230.2	4157.7	4142.9

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. The regressions are the same as in the baseline model but use trust in politicians instead of trust in political parties as a measure of political trust. * $p < 0.05$, ** $p < 0.01$, ***

Table 2.8: Main results, alternative def. for social outsiders

	(1)	(2)	(3)
Social distance	-7.52***	-7.43***	-5.23***
	(0.12)	(0.12)	(0.24)
Economic distance		-0.99***	-0.95***
		(0.10)	(0.098)
Social_distance × Trust			-0.65***
			(0.063)
Number of cases	31150	31150	31150
χ^2	3752.2	3697.4	3673.8

Standard errors in parentheses and clustered at the individual (case) level. Sampling design and population weights used. The regressions are the same as in baseline model defining social outsiders as parties that (i) ranked higher that 0.9 on the *galtan* variable or (ii) located at least 3 standard deviations to the right from the mean of voters' social conservatism distribution. * $p < 0.05$, ** $p < 0.01$, ***

Chapter 3

A Cross-Country Exploration of Immigrants' Political Assimilation in Western Europe

JEROME GONNOT

Abstract

This paper documents the evolution of a range of political preferences among first-generation immigrants in Western Europe. The overall aim is to study to what extent and at what pace immigrants adapt to the political norms that prevail in their host countries. I use a cross-national research strategy to compare and analyze attitudes of foreign-born individuals in 16 European countries and find strong empirical support for assimilation over time: On average, the opinion gap between natives and immigrants' political preferences on redistribution, gay rights, EU unification, immigration policies, and trust level in national governments is reduced by 40% within 20 years of residence in the destination country. I also provide evidence that most of this assimilation is driven by immigrants from non-developed countries, and that convergence in political preferences varies significantly across immigrants' economic and cultural background as well as with the size of the immigrant group from their country of origin. Finally, I show that a substantial part of assimilation on gay rights, immigration and political trust is driven by acculturation at the national level where immigrants with longer tenure tend to adapt more to the political preferences of natives in their destination country. These findings shed new light on the timing and magnitude of the political assimilation of first-generation immigrants, with potentially important implications for the political economy of immigration policy.

3.1 Introduction

Modern European countries are witnessing an especially vivid political and social debate about immigrants' assimilation and integration into receiving societies. As policymakers of tradition-ally "immigrant" countries are struggling to integrate already sizable foreign-born populations into the economic, political, and social fabric of the state, the recent refugee crisis has increased concerns among public opinion and the political pressures associated with immigration flows. The COVID-19 pandemic notwithstanding, dealing with the ethnic and cultural heterogeneity associated with immigration is therefore one of the most important challenges that European governments are facing, not least because immigrants' political preferences can significantly alter the design and the political economy of public policies in their host society. To gain a complete understanding of the policy impact of foreign-born populations, and in particular whether or not immigrant voters represent a distinctly different political bloc from their native counterparts, scholars need to address a number of issues. What are the patterns of political assimilation? How do they differ across immigrants of different social, religious, and ethnic backgrounds? How do they differ across host societies and integration policies? What are the implications and consequences for economic and electoral outcomes and public policy? How can institutions help accommodate the political integration of immigrants? The purpose of this paper is to provide a modest but original contribution to this debate by studying the dynamics of the opinion gap between immigrants and natives' political preferences.

Previous literature stresses the important role of cultural transmission in shaping individual preferences. Immigrants often take cultural values with them from their countries of origin, and these cultural and preferential traits translate into specific behaviors that have a wide-ranging, substantial and persistent impact on immigrants' integration. Transmitted culture is a long-lived component of preferences for redistribution (Luttmer and Singhal, 2011; Hammar, 2020), family and social values such as fertility and female labour force participation (Fernandez and Fogli, 2006), living arrangements (Giuliano, 2007), economic behaviour (Guiso et al., 2006; Tabellini et al., 2010; Henrich, 2000), political and civic participation (Alesina and Giuliano, 2011; Aleksynska, 2011), trust (Algan and Cahuc, 2010), electoral choices (Just et al., 2010), tax morale (Kountouris, 2013), or environmental preferences (Litina et al. 2016). Another strand of the large scholarship on immigrants' integration documents the symmetric influence of receiving societies on the attitudes of immigrants and their children at destination. Although assimilation patterns remain highly heterogeneous across destination and origin countries, one of the general findings in this field is that immigrants' attitudes tend to converge with those of native born individuals. In America, immigrants have been found to assimilate with respect to earnings and labour markets (Borjas, 1995; Uhlendorff and Zimmermann, 2006; Hu, 2000), occupational mobility (Chiswick et al., 2005; Green, 1999), participation in welfare programs (Borjas, 2002; Riphahn, 2014), fertility choices (Blau, 1992; Fernandez and Fogli, 2009), or cultural assimilation at large (Abramitzky et al., 2016; Giavazzi et al. 2019). In Europe, sev-eral contributions highlight the convergence to the norm of foreign-born residents in social and

economic outcomes (Algan et al., 2012), interpersonal trust (Dinesen et al., 2010), civic participation (Aleksynska, 2011), gender roles (Breidahl et al., 2016) and social relations (De Palo et al., 2007). At the same time, immigrants' political views on welfare assistance (Dancygier et al., 2006; Reeskens et al., 2015; Schmidt-Catran et al., 2017), political satisfaction and trust in institutions (Maxwell, 2010) are also subject to the influence of European host societies.

In my reading, the previous works provide an essential yet incomplete picture of immigrants' assimilation. While all recognize that the amount of time that immigrants spend in their host country is one of the major factors of integration, with few exceptions, mostly in the US context, these studies focus on intergenerational differences between immigrants and natives and adopt a static framework which fails to address the dynamics of assimilation patterns. Instead, I propose in this paper to track the evolution of first-generation immigrants' preferences over time and provide a chronological account that is more appropriate to study assimilation and ultimately explore the consequences of immigrants' political participation on policy and electoral outcomes[1]. Moreover, focusing on intergenerational differences is not necessarily the most intuitive way of thinking about integration. For instance, first-generation immigrants who emigrated to their country of residence at an early age have hardly been exposed to the culture and institutions of their country of origin prior to relocating. In fact, for many of them, the only channel of cultural transmission from their origin country is likely to be parental influence. These "early" migrants also benefit from increased contact with their host society through schooling and education, which is likely to play a critical part in their socialization process. In this regard, one could expect their integration to be closer to that of second-generation immigrant than a fellow first-generation immigrant who came to live in that same country at the age of 50.

My study therefore treats political assimilation as a dynamic phenomenon. Using data from several rounds of the European Social Survey (ESS), I examine the distance and convergence in preferences between natives and foreign-born immigrants in 16 European countries on the following political issues: Redistribution, gay rights, EU unification, immigration policy, and political trust.

I first investigate whether or not immigrants have the same distribution of preferences as comparably situated natives, and whether this distribution varies with the time spent in the host country.[2] On average, I find that immigrants are slightly more conservative than natives in

---

[1]On this subject, see Aleksynska (2011), whose results show that immigrants' political involvement in the political life of their receiving societies increases with the duration of stay and therefore calls for a dynamic approach to the study of immigrants' political integration.

[2]It is worth noting that the ESS has not been designed to include or oversample immigrants, which might increase the potential for bias in the general analysis. However, previous studies have shown that the ESS sampling method is reliable when it comes to reflect the actual structure of the population between foreign-born and native residents and the actual origin countries of the foreign-born immigrants (Castles and Miller, 2003; De Rooij, 2012). Also, I do not have, for example, panel data on immigrants before and after migration, nor do I have data on their socioeconomic characteristics while still in their sending countries, and therefore the categorization of immigrants by duration of stay is not free from composition concerns. In particular, if cross-country migration decisions are correlated with political preferences, my results could suffer from a self-selection bias. This issue

terms of welfare preferences. They also hold more restrictive views on gay rights, show greater levels of trust in national parliaments and are more supportive of EU unification and open immigration policies. For all political issues but redistribution, the dynamic analysis reveals a gradual disappearance of migrants' original preference patterns, suggesting assimilation through a natural process where they gain access to the same socio-economic opportunities and cultural traits as natives of the host country. Spending 20 years in the destination country - the average tenure of first-generation immigrants in the study - therefore reduces the opinion gap by as much as 40% in matters of immigration, political trust, gay rights and attitudes towards the European Union. In contrast, immigrants' support for redistribution coincide with those of natives after only 5 to 10 years in the destination country.

Next, I build on the segmented assimilation theory (Gordon, 1964; Portes and Zhou, 1994) and look for variations in assimilation patterns across immigrants' background and community size. My intuition is two-fold. First, migrants' origin country and community size at destination may create or remove specific barriers to integration which are associated with lagged or incomplete political assimilation. Second, the economic approach to cultural integration emphasizes the importance of individual incentives and of the opportunity costs associated with different integration patterns (see Lazear, 1999; Bisin and Verdier, 2000, 2001, 2010; Konya, 2005). Immigrants may therefore form endogenous preferences about assimilation based on whether assimilation increases their chances in the host country, which are themselves determined by immigrants' cultural or economic background as well as the size of their social networks. My results show that these characteristics play an important part in shaping both the size of the preference gap and the speed of assimilation. Assimilation is almost exclusively driven by immigrants from non-developed countries, while Western migrants have closer preferences to natives upon arrival and show no sign of convergence whatsoever. Moreover, cultural legacy and religious beliefs strongly influence assimilation: Muslim immigrants hold political opinions that are consistently further away from those of natives than other immigrants, and their views on gay rights remain much more conservative over time. I also find that immigrants that are better equipped to integrate economically and socially - either through language proficiency or access to larger social networks - and for whom the relative value of cultural and political assimilation is relatively lower are much less likely to assimilate than other immigrants.

In the last part of the paper, I examine immigrants' gradual adoption of country-specific cultural norms and conventions. I find that the average political preference in an immigrant's destination country has a large and significant effect on her own preference. Moreover, this effect is greater among immigrants with longer tenure for political preferences on gay rights, immigration, and trust in national parliaments, suggesting acculturation to country-specific norms.

This paper is directly related to the empirical research that analyzes the political preferences of immigrants in their host environment. Within this literature, the issue of preferences for redistribution has probably received the most attention. Dancygier et al. (2006) show that

---

will be further discussed in the robustness section of the paper.

immigrants are no more likely to support increased social spending or redistributive measures than natives and find support for hypotheses highlighting selection effects and the impact of the immigration regime. Reeskens et al. (2015) analyse the 2008 "Welfare Attitudes" module of the European Social Survey and find that differences in welfare opinions are primarily explained by the more disadvantaged position of immigrants in society. Moreover, their results suggest that immigrants' views on welfare closely follow those of the non-migrant population of the country they are living in, suggesting strong social integration at the opinion level. Using German longitudinal survey, the findings of Schmidt-Catran et al. (2017) are also consistent with the claim that immigrants' welfare preferences are subject to a socializing effect of the host countries. Turning to political trust, Maxwell (2010) finds that first-generation immigrants have more positive attitudes to national governments in Europe while native-origin and second-generation migrant-origin individuals have similar political trust and satisfaction scores. He interprets these outcomes as a sign that political expectations about the government are highly determined by integration factors related to the stages of migration, and in particular the influence of first-generation migrants' experience of undemocratic regimes in their home country. Using the same data, Algan et al. (2012) documents that the gap in political trust level between first-generation immigrants and natives is exclusively driven by foreign-born individuals with less than 20 years of residence, while second-generation immigrants hold actually more negative opinions of national parliaments. The present study is also related to Roeder's contribution (2018) on immigrants' attitudes toward homosexuality, in which she finds that immigrants in Europe hold overall more negative attitudes than natives, and provides evidence of both intra and inter-generational acculturation of these attitudes with declining importance of origin country context. Finally, a recent paper by Giavazzi et al. (2019) contains a comprehensive analysis of the values and beliefs of different generations of US immigrants. They find that attitudes towards politics and redistribution, sexuality, abortion, religious values show a lower degree of convergence to the prevailing norm than attitudes towards cooperation such as trustworthiness, helpfulness and fairness. Because my paper attempts to characterize the political force that immigrants potentially represent, it also speaks to the literature on immigrants' voting behaviour and electoral participation. Within this literature, my approach builds on Aleksynska (2011), which documents that immigrants actively participate in the life of the receiving societies, increasingly so with the duration of stay, but that the speed of assimilation is different for immigrant groups with different background and origin countries.

My contribution to the study of immigrants' political preferences is innovative in several respects. First, while most existing contributions study the persistence of cultural traits or the convergence in preferences from one generation of immigrants to the next, I focus on a dynamic analysis of first-generation immigrants. I am therefore able to provide a more detailed picture of the speed of political assimilation and quantify the size of the preference gap between immigrants and natives at the time of migration and its evolution over time. Also, I study the differences between natives and immigrants in preferences over national immigration policies and EU sentiment, which, to the best of my knowledge, have not yet been studied in the literature, at least in the European context. Third, I present the first large-scale, cross-country study

on the intra-generational acculturation of immigrants' political preferences using European data.

The rest of the paper is organized as follows. Section 3.2 describes the data used in the analysis. Section 3.3 outlines the estimation strategy and examines results. The last section concludes.

3.2   Data description

I use 5 rounds of the European Social Survey (2010, 2012, 2014, 2016, 2018) and focus on Western European, OECD member states. I also restrict the sample to respondents who were older than 16 and younger than 100 years old at the time of the interview and distinguish between natives and first-generation immigrants. Natives are identified as respondents born in their country of residence with parents also born in their country of residence to avoid the potentially confounding effects of second-generation immigrants, who are excluded from the model. First-generation immigrants are drawn among individuals born outside of their country of residence, and for whom at least one parent was not born in their country of residence. I decide to leave out immigrants born in a foreign country but with both parents born in their current country of residence as members of this group are very likely to be influenced by their parents' cultural origins and therefore not suited for the exploration of the assimilation hypothesis. To capture immigrants' duration of stay in their destination country, I use information provided by the survey from the 2010 round onwards: All foreign-born respondents in the sample are asked about the year they first came to live in their host country. I use the difference between the year respondents were surveyed and the year they claimed to have arrived in the country as a measure of the years of residence spent at destination[3]. Foreign-born whose country of origin and year of arrival in the destination country are not specified are excluded from the analysis. This leads to an overall sample size of 127,000 observations, of which 12,000 first-generation immigrants and 115,000 natives in 16 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Table 3.1 and 3.2 of the Appendix contain the description of this sample.

Individual political and policy preferences on five different issues are measured through an ordinal scale. The first one is redistribution. I use respondents' opinion to the following statement: *"The government should take measures to reduce differences in income levels"*, to which respondents are asked if they strongly agree, agree, neither agree nor disagree, disagree, or disagree strongly. I recode this question on an ascending 4-point scale in the following way: 0 from strongly disagree to 4 for strongly agree[4]. Using an identical scale, the second variable captures political attitudes to homosexuality through respondents' opinion about the following state-

---

[3]The distribution of immigrants' tenure at destination is presented in Figure 3.1.

[4]While the 2008 and 2016 ESS rounds have specific modules on welfare preferences, I choose to use the only question capturing policy preferences for redistribution that is present in all rounds of the survey to maximize the number of first-generation immigrants in the sample.

ment "*Gay men and lesbians should be free to live their own life as they wish*". I use the same rescaling method as for redistribution to construct the associated dependent variable. Third, I investigate attitudes towards European Union through respondents' position about greater unification of the EU from 0 - "*Unification already gone too far*" to 10 - "*Unification must go further*". Fourth, I look at migrants' attitudes to immigration policy through respondents' opinion about the following statement on a 0-3 scale: "*To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here*"[5]. Last, I study trust in political institutions using respondents' level of trust in their residence country's parliament, on a scale from 0 - "*No trust at all*" to 10 - "*Complete trust*".

Table 3.3 and 3.4 summarize the distribution of political preferences for foreign-born and native individuals. Although differences between them are modest in absolute terms, these descriptive statistics suggest that immigrants are slightly more opposed to redistribution and gay rights than Western European natives. They also show markedly higher levels of trust in national parliaments and support for EU unification, and are in favour of more open immigration policies. Among immigrants, those with longer duration at destination have views that are significantly closer to natives as opposed to immigrants with shorter duration, which suggests assimilation with natives at the political level.

3.3 Empirical analysis

First, I report a descriptive analysis of the patterns of convergence in political attitudes between natives and first-generation immigrants in Western Europe. This provides an initial indication of the extent to which immigrants adapt to the political preferences of natives and the speed at which convergence in attitudes takes place. Second, I investigate whether migrants' background and community size matter for political integration. Third, I ran a multivariate analysis limited to immigrants, in which I examine the effect of natives' average preferences on each political issue on immigrants' own political views in the same country.

3.3.1 The opinion gap in political attitudes between migrants and natives

The point of departure of my analysis is the differences in political preferences between immigrants and native-born. I therefore adopt the following specification over the full sample of natives and immigrants:

$$Pref_{ijt} = \alpha + \beta_0 Firstgen_i + \beta_1 Resyears_i + \gamma X_i + \mu_j + \mu_t + \epsilon_{ijt} \qquad (3.1)$$

---

[5]The ESS asks in every round several other questions about individuals' perception of the level of immigration, with mentions to migrants' relative economic position and place of origin. In practice, individual answers to these questions are strongly correlated, and I therefore choose the most neutral of these statements as the reference variable.

where the dependent variable $Pref$ is the preference of individual i surveyed in country j and ESS round t on a specific political issue. My main independent variables are the dummy variable $Firstgen$, which takes value 1 if the respondent is foreign-born, and 0 otherwise, and the continuous variable Res_years, which captures the duration of stay of an immigrant in his or her host country[6]. In all regressions, I control in vector X for several individual socio-economic characteristics such as gender, age, whether or not the respondent is married, years of education, the respondent's assessment of his or her financial situation, the size of the household, individual employment status, whether or not the respondent is a member of an ethnic minority, and religiosity, education level and work status of the respondent's partner, household's income level (based on the income distribution in the residence country) and primary source of income, as well as past unemployment experience. I also include a full set of dummy variables for the country of residence and ESS survey round.

Table 3.6 presents the results of this baseline regression. They confirm the intuition from the descriptive statistics in Table 3.4. On average, there is a significant opinion gap between first-generation migrants and natives across all five political variables. After controlling for socio-economic individual characteristics, first-generation migrants are slightly more opposed to redistribution, have more conservative views towards gay rights, are more supportive of EU unification and open immigration policies, and possess higher levels of trust in their host country's parliament than natives. These differences vary however in magnitudes. The average gap in preferences for redistribution (column 2) is very small and corresponds to 0.05 standard deviation. Ceteris paribus, the marginal effect of being born in a foreign country on attitudes to redistribution is therefore equivalent to moving up from the 5th to the 6th decile of the income distribution[7]. This coefficient is however significant at the 1% level, indicating that upon arrival, migrants coming to live in Western Europe hold generally slightly more conservative views towards redistribution. Contrary to the welfare magnet hypothesis which posits that immigrants are benefit tourists who migrate to take advantage of generous welfare services in the destination country, I therefore observe no support for such a claim, in line with the previous literature (Dancygier, 2006; Algan et al., 2012). Instead, because immigrants represent a self-selected group of people that are willing to uproot themselves to migrate and are often characterized as risk-averse, they may be more likely to believe in effort and individualism and show greater reluctance to state provided financial assistance.

On the other hand, migration status is one, if not the strongest individual predictor of other political attitudes. The opinion gap between natives and immigrants on homosexuality, EU, immigration, and political trust all ranges between 0.2 and 0.3 standard deviation. On gay rights, immigrants have much more restrictive views than natives, which is not surprising if one considers that most of the migrants in the sample come from non-developed, more socially

---

[6]This variable is coded 0 for natives. It therefore applies only to immigrants and is thus effectively an interaction term.

[7]The coefficient - not reported here - associated with individual household income decile rank in model (2) is -0.043.

conservative countries. This effect is equivalent to 1.6 times the effect of gender on attitudes to gay rights, and amounts to a 0.365 gap on a $0-10$ scale - while men score on average 0.22 lower than women on that same issue. Turning to attitudes to EU unification, the marginal effect of being born in a foreign country is almost twice as large as that of living in an urban area[8] and is matched in size only by respondents' perception of their household's income. To the extent that political attitudes towards EU unification reflects political beliefs about internationalism, it comes as no surprise that first-generation migrants who travelled across borders to come and live in Europe are more enthusiastic about European integration. Likewise, because first-generation immigrants experienced the hardship of leaving their home country to go and settle abroad, they are also significantly more in favour of allowing more immigrants to come and live in their destination country: The positive effect of being foreign-born in column 11 is equivalent to having completed 4 additional years of education. Finally, immigrants score 0.6 point higher than natives when asked about their level of trust in national parliaments. Ceteris paribus, this opinion gap corresponds to the difference that exists between individuals at the bottom and at the top of the income distribution. A possible explanation for this substantial gap is that many migrants leave their home country because they are in some way unsatisfied with the existing political regimes. Poor economic outcomes, conflict, political repression or other forms of discrimination are among the several motives for which immigrants may hold particularly negative views about the government of their origin country. At the same time, existing research has documented that first-generation migrants are more optimistic and positive about the government of the country where they have self-consciously chosen to emigrate in hopes of improving their lives (Roder et al, 2012; Maxwell, 2010), and therefore place greater faith in their destination country's political institutions.

As a second step, I turn to assimilation by studying the effect of time spent in the destination country. Controlling for immigrants' duration of stay in the host country gives more information on the timing and structure of the preference gaps. When this regressor is included in the analysis, the coefficient associated with being a first-generation immigrants captures the difference in preferences between natives and freshly arrived immigrants. My results show that the years of residence have a significant and negative effect on the gap between natives and first-generation migrants for all political preferences. While these changes remain modest in absolute terms - in the order of a tenth of a standard deviation -, the effect is quite sizable in relative terms: Spending 20 years - the average residence time of migrants in our sample - reduces the initial preference gap by as much as 40% in matters of redistribution, gay rights and immigration policy and up to 50% for political trust and attitudes to EU unification. For a better grasp of these mechanisms, I analyze the effect of residence time by breaking the first-generation immigrant sample into cohorts and report graphically the results of the following estimation:

---

[8]The corresponding coefficient in column 8 is 0.381, while individuals living in rural areas score 0.2 unit lower than urban dwellers in the same model.

$$Pref_{ijt} = \beta_0 + \beta_k \sum_k Cohort_i^k + \gamma X_i + \mu_j + \mu_t + \epsilon_{ijt} \qquad (3.2)$$

where X contains the same individual control variables as model (3.1)[9]. I break down the immigrants sample into 7 time cohorts, and let $Cohort^k$ be the dummy variable that takes value 1 if an individual belongs to cohort k, and 0 otherwise[10].

The blue lines in the graphs of Figure 3.2 show a strong convergence of political attitudes over time between natives and all first-generation immigrants. With the exception of redistributive preferences, where a statistically significant opinion gap remains between natives and immigrants with more than 45 years spent at destination, it is very modest in size and orders of magnitude smaller than the existing gap between immigrants upon arrival and natives. Another interesting feature of these results is the pace at which convergence in attitudes takes place.

My findings show a very flexible adjustment of redistributive preferences, where immigrants' support for redistribution coincides with those of natives after only 5 to 10 years in the destination country. As discussed previously, immigrants' welfare preferences are relatively close to natives' upon arrival, and a possible explanation for this swift convergence is that immigrants' access to welfare services improves significantly after a few years of residence in their destination country when they obtain legal permanent residency and are therefore entitled to the same benefits as natives[11]. This interpretation is also in line with the findings of Renema et al. (2019) that immigrants are indeed more supportive of spending on welfare to which they perceived they have greater access, and consistent with the contributory nature of many welfare schemes such as unemployment benefits or social security which require individuals to have participated for some years before they can benefit from them.

In contrast, it takes 20 years before any statistically significant change in immigrants' relative attitudes towards gay rights shows up. Political opinions about gay rights have arguably fewer self-interested motives and greater religious and cultural roots than the other political outcomes studied in this paper, which could explain why immigrants' policy preferences take a long time to change.[12]

Surprisingly, I find that foreign-born attitudes towards immigration become more negative over-

---

[9]While being important in predicting political preferences, household income level is missing for almost one fifth of the sample, for both immigrants and native-born. In regressions similar to model (1) without the income variable, coefficients retain their significance, and most of them change only marginally in magnitude. I therefore omit income decile rank in model (2) and all further estimations.

[10]The number of observations for each cohort is available in Table 3.3.

[11]According to many, permanent residency outweighs citizenship as the relevant eligibility criterion for accessing welfare benefits in Europe (see for instance Guiraudon, 2002; or Koopmans, 2010).

[12]This of course assumes away the sexual orientation of respondents, which is not reported in the survey. However, given that sexual orientation is relatively stable, we shall not be concerned with the possibility that migrants' sexual orientation change over time to coincide with that of natives. This pattern could also result from the fact that the ESS question about gay rights is the only dependent variable that does not explicitly refer to the current situation in the host country, leading respondents to express views that are less directly influenced by national contexts.

time and converge to those of natives. Rather than showing solidarity with future potential migrants, they appear to be subject to a club effect as their support for immigration starts to decrease sharply after 10 years in the destination country once their position has become less vulnerable[13].

Finally, the bottom graphs in Figure 3.2 reveal that the opinion gap in trust in national parliaments and attitudes to EU unification is also reduced significantly over time. Whether it is driven by cultural changes or the slow updating of the quality of government and the role played by the European Union is still unclear at this stage. However, political assimilation of attitudes to domestic and international institutions exhibit different trajectories: While no significant difference remains between immigrants and natives after 20 years in terms of support of EU unification, it takes over 45 years before foreign-born individuals' level of trust in national parliaments is the same as natives'.

Before moving further into the analysis, I run the previous regressions excluding immigrants who came to live in their country of residence under the age of 15.[14] The reason is two fold. First, as already mentioned in the introduction, immigrants who came to live at an early age in their country of residence are not only much less exposed to the culture and institutions of their country of origin prior to relocating, but also have increased contact with native society through schooling and education, which is likely to play a critical part in their assimilation[15]. Second, because the ESS surveys individuals aged 15 and older, the distribution of the number of years spent in the country of residence is heavily skewed to the left among these migrants compared to those who came to live at an adult age. This could lead to a compositional bias if those migrants arrived at an early age are only represented in older cohorts (i.e among immigrants that have spent more time in the host country). If these migrants have views that are closer to natives, this would in turn artificially increases convergence in attitudes. The red line in each graph of Figure 3.2 shows that this convergence bias exists but remains very modest in size. The general trend observed for the full sample of immigrants holds when I reduce the sample to those who came to live in their country of residence at an adult age. Convergence in political attitudes is only slightly weaker among these late migrants on matters of homosexuality and EU unification, indicating that some of the most assimilated immigrants have been excluded from the analysis. Besides, there is no significant difference in political orientations whether early migrants are excluded from the sample or not in terms of political trust. The pattern for redistribution preferences for the full sample and the late sample are also remarkably similar, and age at arrival matters little in the pace and extent to which migrants' preferences over immigration policy converge with natives' views.

---

[13]Although immigrants can face deportation, those who have lived more than 5 to 10 years are in general well settled in their host country and unlikely to face such deportation threats.

[14]These migrants represent around 25% of the entire first-generation migrant sample.

[15]In fact, for an overwhelming majority among them, the only channel of transmission of culture from their origin country is parental influence.

3.3.2 Differences in assimilation patterns across immigrant groups

The main objective of this section is to provide a more complete picture of assimilation by looking at patterns of convergence across immigrants with different backgrounds. To do that, I build on the segmented assimilation literature and look for systematic variation across different sub-groups of immigrants. Because political and economic factors at the origin can affect significantly the way immigrants assimilate (Borjas, 1987), I first split the immigrant sample into sub-samples of developed and non-developed countries of origin[16]. This division potentially reflects the costs of integration, considering that Western migrants have an economic, political, social and cultural background that is closer to Western European natives[17]. Another significant barrier to integration is racial and ethnic discrimination. Contemporary non-white migrants in Europe may face intense discrimination even after living in the host country for a very long time. This discrimination creates numerous social, economic, and political problems for integration. Because the ESS does not ask about respondent's ethnicity, I use religion instead and more specifically Islam - the most stigmatized religion in Europe -. Building on previous evidence highlighting potentially different assimilation patterns for Muslim immigrants (Constant et al., 2006; Bisin et al., 2008), I split the sample between immigrants with Muslim religious denomination and immigrants with none or all other religious belonging. I also look at whether the convergence in political attitudes is stronger for first-generation migrants whose country of origin shared a common language with their destination country. Because linguistic and colonial ties can be regarded as a vector of cultural transmission, I expect immigrants who possess those traits to hold political opinions that are closer to those of Western European[18]. Finally, I investigate the effect of the size of immigrant communities on the political assimilation of their members. On the one hand, immigrants' local context and contact with co-ethnics may shape their political preferences through network effects that help them adjust to their new environment. For instance, economists have found that information about the welfare state and its benefits can be spread through networks and social chains. In particular, increased neighborhood contact with co-ethnics with above-average welfare participation rates may raise individual welfare use (Bertrand, Luttmer, and Mullainathan, 2000; Borjas and Hilton, 1996), which may in turn increase support for government redistribution. In this regard, bigger immigrant community can facilitate assimilation. In contrast, another strand of the economics literature on cultural transmission argues that a bigger community size decreases immigrants' incentives to integrate. The underlying trade-off weighs cultural against economic incentives, which posits that there exists a large enough critical mass of immigrants that if the group maintains its distinct culture then, for any immigrant, the cost of switching culture outweighs the benefits

---

[16]The list of developed countries includes EU-15, Norway, Switzerland, Canada, the USA, Australia, New Zealand, Japan, South Korea, and Israel. All other countries are treated as non-developed.

[17]A further distinction was made between migrants originating from democratic countries VS those coming from non-democratic countries at the time of migration. Due to the high correlation between economic development and the level of democracy, the results were very similar to the analysis conducted on the developed and non-developed samples and are therefore not reported here.

[18]Data on language proximity comes from the CEPII (Centre d'Etudes Prospectives et d'Informations Internationales).

of increased interaction. To the extent that political preferences have an important cultural component, one could expect foreign-born that belong to bigger communities to assimilate less because they have more limited benefits from such assimilation. Following previous studies on community behavior (see Card et al., 2008; Munshi, 2013; Advani et al., 2015; Giavazzi et al., 2019), I split the immigrant sample based on community size. For each foreign-born individual, I compute the share of immigrants from the same origin country living in his or her destination country, and distinguish between those for whom this community represents less or more than 1% of the destination country's total population.[19]

Average opinion gaps are reported in Table 3.7. Taken together, they suggest that immigrants from more developed countries, non-Muslim migrants, and migrants who originate from a country that shares a common language with their destination country have political preferences that are closer to natives on matters of homosexuality, EU, and political trust. Because politics in developed countries is a relatively homogeneous set that includes democracy and free market institutions since the beginning of the post-WWII era, individuals from these countries are arguably more familiar with the functioning of parliamentary democracies, therefore showing more similar levels of trust in parliaments to natives than immigrants from non-developed countries. Also, individuals in developed countries usually have more liberal attitudes to homosexuality, and it is not surprising that their views are not significantly different from those of native-born Western Europeans. Finally, because 85% of migrants from developed countries in the sample are EU citizens, their attitudes towards EU unification are obviously closer to those of fellow EU-citizen, Western European native-born. Turning to the opinion gap across religious sub-groups, most of Muslim immigrants come from countries ruled by undemocratic political regimes, sometimes where political institutions have collapsed or failed so badly that they represent one of the main reasons why immigrants chose to emigrate in the first place. As a result, immigrants' preferences continue to be influenced by the quality of government and institutions in their origin country even when living in their host country, which leads to relatively better opinions about Western political institutions, either national - country parliaments - or international - the European Union -. It is also very intuitive that these migrants hold significantly more conservative views on gay rights if one considers that Islam strongly prohibits homosexuality. Moreover, Table 3.7 indicates that immigrants who come from a country that shares a common language with their destination country are also more likely to hold preferences that are close to European natives. This is reflected for instance by the coefficients on preferences about redistribution and gay rights, as well as the coefficients associated with immigrants' perception of political institutions, both domestic and European. Finally, no clear patterns emerge for immigrants that belong to larger communities and networks. The opinion gaps for redistributive preferences are remarkably similar, and while immigrants with larger

---

[19]I use 2010 national Census data provided by the OECD International Migration Database. I group immigrants from Czech Republic, Slovakia and former Czechoslovakia into a single group. Moreover, I also exclude from the analysis immigrants whose country of birth is listed as $USSR$ because the ESS does not report which of the former soviet states these immigrants came from.

communities retain significantly higher levels of trust in national parliaments, they are in contrast much closer to natives in terms of support for EU unification, and their views are on average not statistically different from other immigrants on gay rights and immigration.

I now replicate the dynamic analysis of model 3.2 on the sub-groups of immigrants.[20] Figure 3.3, 4, 5, and 6 respectively contains the results of this analysis for immigrants subgroups based on economic development, religion, language, and community size.

First, no significant differences exist between the various sub-groups of migrants under study at the time of arrival on preferences for redistribution. While migrants belonging to smaller communities and those who do not share a common language with their destination country appear less supportive of redistribution upon arrival, the confidence interval of their respective sub-groups is too large to draw any conclusions about their relative preferences that would pass the test of statistical significance. No distinctive pattern of assimilation therefore emerges for any of the subgroups under consideration, and the evidence points towards an assimilation process where migrants' cultural and social background plays a relatively small part.

Policy preferences on gay rights paint a very different picture. Upon arrival, immigrants from developed countries exhibit no significant differences with natives, and this gap remains statistically insignificant over time (see Figure 3.3). This suggests that immigrants from non-developed countries are the main group driving the general convergence on attitudes to gay rights. Across religious sub-groups, a striking pattern emerges from Fig. 4. Muslim foreign-born are not only significantly more opposed to gay people living their life as they wish than non-Muslim first-generation migrants, but they also show no sign of assimilation. While the views of non-Muslim migrants slowly catch up to natives', those of Muslim immigrants remain about 1 point lower on a 0-4 scale throughout.

On political trust in national parliaments, immigrants coming from a developed country assimilate faster but this is mostly the product of smaller initial differences at the time of migration. Moreover, because Muslim migrants are more likely to suffer from discrimination, one would expect that they show lower levels of trust in government as a result. Yet, my findings point in the opposite direction. Although some convergence with natives is taking place, they exhibit consistently higher levels of trust in political institutions than other immigrants, at least 1 point higher on the 0-10 scale regardless of the number of years spent in their destination country. On the other hand, non-Muslim immigrants assimilate completely after 35 years of residence. As outlined previously, a plausible explanation is that Muslim immigrants judge the quality of government and political institutions based on the previous experience of their home states, which are often ruled by undemocratic regimes. A similar pattern is also visible when we turn to community size. Immigrants from smaller communities strongly assimilate while the relative level of trust in national parliaments changes little among immigrants living among numerous co-ethnics.

On immigration policies, Figure 3.3 reveals that the preferences of immigrants from devel-

---

[20]Because the number of observations in each sub-group is smaller than in the full sample used in model 2, the number of cohorts is reduced from 7 to 5 groups.

oped countries are relatively closer to those of natives upon arrival but never close the gap with them[21]. On the other hand, immigrants from less developed countries are significantly more supportive of immigration at the time of migration but this support decreases over time to the point where they hardly show any differences with natives after 35 years, driving the general convergence in attitudes observed in Figure 3.2. A possible intuition behind these patterns of convergence is the different nature of migration for individuals from developed and non-developed countries. Indeed, immigrants from developed countries are less subject to re-emigration,[22] which could explain why their opinion on border control and immigration policy remain more liberal than those of other foreign-born residents. Attitudes towards EU unification confirms the previous intuition. Although their views are significantly closer to those of natives upon arrival, migrants from developed countries show no sign of assimilation while support for EU unification decreases significantly among immigrants coming from non-developed countries.

On a more general level, the heterogeneity across different subgroups of immigrants provides valuable insight on the drivers of political assimilation.

Upon arrival, immigrants from developed countries, non-Muslim immigrants, and immigrants sharing a common language hold political views that are closer to those of natives than other immigrants, which highlight the role played by cultural proximity.[23]

Moreover, the dynamic analysis provides empirical support for the economic models of cultural integration with endogenous preferences. As suggested previously, the difference in convergence patterns between immigrants from developed and non-developed countries can be explained by group-specific incentives to assimilate. First, immigrants from developed countries have a lower intended duration of stay in their residence country and a higher propensity among the former to re-emigrate, which reduce the relative value of integration. Second, origin country characteristics make it more costly for migrants from non-developed countries to return to their home state and more difficult to reverse the migration, which in turn enhance their assimilation process (Jasso and Rosenzweig, 1986; Portes and Rumbaut, 1996).

I also find that immigrants that are part of a community that represents less than 1% of the destination country's population start assimilating sooner than other immigrants. In particular, my findings indicate that the general reduction in the opinion gap observed after 20 years spent in the destination country in section 3.3.1 is driven almost exclusively by those immigrants belonging to smaller communities[24]. To a lesser extent, slower convergence in political preferences

---

[21]The fact that immigrants from developed countries are less supportive of open immigration policies than migrants from non-developed countries upon arrival can be explained by the fact that many of them come from countries with a large share of foreigner residents where immigration policy itself is a contentious issue.

[22]See for instance Bratsberg et al. (2007), who show that the retention rate of immigrants from OECD countries is below 30% while that for immigrants from non-Western countries is above 75%.

[23]Although the present analysis does not allow to disentangle elements of preferences that reflect the current economic and institutional environment from those that reflect culture, it does not affect the general conclusion that cultural background matters for political assimilation.

[24]Because of the scarcity of historical data on immigrants' birth country, the relative size of immigrant communities is measured in 2010. My proxy of community size is therefore potentially problematic for immigrants who migrated a long time ago, when the number of immigrants from the same country of origin was significantly

is observed among immigrants whose country of origin shares a common language with their destination country. Because language proficiency and access to larger social networks increase immigrants' chances in the host country, it is possible that this slower convergence reflects the lower relative value of cultural and political assimilation for these immigrants.[25]

3.3.3 The role of host societies

The previous section suggests that immigrants' institutional, cultural, and religious background as well as the size of their community are important drivers of the preference gap with natives and potentially reflect the cost and benefit structure of assimilation. In this section, I investigate a different aspect of the key mechanisms driving assimilation. In light of the fact that the political assimilation of foreign-born immigrants is almost exclusively driven by individuals from non-developed countries outside Europe, I ask the following question: Does assimilation result from destination country effects and immigrants' gradual adoption of country-specific cultural norms and conventions, or do migrants adjust to a set of institutions and opportunity structures that are not specific to their country of residence, but rather the product of Western Europe's cultural, political and economic heritage, such as free-market economies, democratic institutions, multicultural societies, and general distrust in modern-day democratic politics, both domestically and at the European level? To answer this question, I look at the role played by destination country-specific culture and institutions through acculturation, i.e. the tendency of immigrants to adapt over time to the political preferences of natives in their destination country.

Because of the limited number of countries in the study, using a regression such as (3.1) on the immigrant sample and including measures of national mean political preferences and other institutional and economic characteristics at the country level is problematic. If included one at a time, these measures will capture all other unobserved country effects, and their own effect will not be identified. If, instead, they are included into regressions together, the problem is their high collinearity and limited variation. To tackle this issue, I adopt the two-stage methodology formalized by Card and Krueger (1992), and applied to studying culture transmission by Blau (1992), Fernandez and Fogli (2009), and Aleksynska (2011). In the first stage, I estimate the following regression for immigrants with destination country fixed effects:

---

different than in 2010. However, the birth country composition of foreign-born populations in the sample is highly correlated overtime. Because my measure of community size depends ultimately on the relative size of these populations, this reduces the risk of misallocation between small and big immigrant communities. Also, the main difference in assimilation across communities regards immigrants with shorter tenure - i.e less than 20 years since migration -, for which the 2010 Census data is a more accurate proxy of the actual composition of the foreign-born population than for immigrants with longer tenure.

[25]The literature has found that language proficiency has a positive effect on employment probabilities of immigrants (see Dustmann et al. (2003), and that migrant networks can lead to better economic prospects when the corresponding community is well-established (Colussi, 2015; Beaman, 2012).

$$Pref_{ijtk} = \alpha + \gamma X_i + \delta_{jtk} + \epsilon_{ijtk} \qquad (3.3)$$

To make sure that I am able to isolate the effect of national political culture on immigrants' preferences, the X vector includes all individual controls from model (3.1), as well as several migrant-specific additional controls that are likely to influence political opinions. In particular, I know from what precedes that cross-national differences in immigrants' attitudes could originate from composition effects, especially in terms of the origin and religion of immigrants. I therefore include a categorical variable to control for the region of origin of immigrants[26] as well as a full set of dummy variable controlling for religious affiliation. I also control for whether migrants have the citizenship of their country of residence, and whether they possess EU citizenship or not.

Coefficient δ_{jtk} captures destination country effects that are both time and cohort specific. These regressions are estimated separately for each survey round t because of the country-specific shocks on political preferences between 2010 and 2018.[27] Also, to capture the differentiated effect of destination country preferences on immigrants with more or less residence time, I split the immigrants sample into 2 cohorts using the median tenure among immigrants. The subindex k distinguishes between migrants that have lived less or more than 15 years in the destination country. I also restrict the sample to country-year pairs for which I have at least 25 observations in each sub-group of immigrants[28].

In the second stage, the vectors of coefficients on destination country effects δ are regressed on destination country variables in a pooled regression with all survey rounds, in order to explain ceteris paribus differences in political preferences:

$$\delta_{jtk} = \beta_0 + \beta_{1k}\overline{Pref}_{jt} + \beta_2 C_{jt} + \mu_t + \epsilon_{jtk} \qquad (3.4)$$

where δ is the coefficient on the dummy variable for cohort k, destination country j in survey round t estimated from equation (3.3), $\overline{Pref}_{jt}$ are natives' average political preferences in year t and C_{jt} are destination country variables that include time-specific destination country per capita GDP and share of foreign-born population[29]. Regressions are estimated by weighted least

---

[26]These groups are Africa, South Asia, East Asia, MENA, Western Europe and Anglo-Saxon countries, Southern Europe, and South America and the Caribbean. A detailed list of immigrants by country of birth is available in Table 3.10.

[27]Prominent examples of major international events that had country-specific political consequences include the 2008 economic and financial crisis, the 2015 refugee crisis, or Brexit.

[28]Immigrants from Finland (rounds 2010, 2014, 2016), Italy (2012), Norway (2016), and Portugal (2014, 2016) were therefore excluded from the analysis because too few migrants were surveyed to permit meaningful analysis. Estimating baseline model (1) with the resulting sample yields very similar results to the original one.

[29]Natives' mean score in country j and round t on a given political issue is computed using the average across native respondents, weighted by design weights.

squares, with first-stage inverse sampling variances of the estimated effects serving as weights[30]. Coefficient β_{1k} then captures the cohort-specific marginal effect of natives' mean political preferences as predictor of immigrants political preferences in the destination country.[31]

Before discussing the results of model (3.3) and (3.4), I provide in Table 3.8 a preliminary estimation on the full sample of immigrants - i.e where all immigrants are pooled into a unique time cohort -. Panel A provides an example of coefficients on destination-country fixed effect δ from the first-stage regression in the 2012 ESS round. Panel B summarizes second-stage results for the full sample of immigrants based on first-stage destination country coefficients pooled across survey rounds. For each political preference, the first specification presents the results including only a measure of natives' mean political preferences as explanatory variables while the second specification presents the results when destination country per capita GDP and the share of foreign-born population are added. In the absence of controls, the mean preference variable is positive and highly significant for all political items, and the R2 values are sizable, indicating that variation in destination country mean political preferences explains an important proportion of the variation in the coefficients that captures immigrants' country-specific preferences. Moreover, regressions with controls show that among destination country variables, natives' mean political preferences remain extremely important in explaining first-stage destination-country fixed effects.

In the next table (Table 3.9), I run the analysis corresponding to model 3.3 and 3.4 where I distinguish between immigrants with respectively less and more than 15 years of residence in their destination country. I find that the explanatory power of natives' mean political preferences increases significantly with tenure for three of the five dependent variables. The coefficient is more than twice as large for attitudes to gay rights, and a sizable, although less spectacular gap, exists for preferences on immigration policies (1.7 times larger) and trust in national parliaments (1.2 times larger). These differences suggest that an acculturation of immigrants' preferences to country-specific norms takes place on these issues. The acculturation of immigrants' preferences on social issues such as homosexuality and immigration is not surprising and reflects the diversity of opinions in Western Europe, which are themselves the product of cultural and religious traditions and immigration history[32]. On the other hand, acculturation of political trust may seem counter-intuitive at first since little variation exists across Western Europe democracies in terms of political regimes. It is however consistent with the cultural theories on political trust, which hypothesize that trust in political institutions originates outside the political sphere in long-standing and deeply seated cultural beliefs about people.[33]

---

[30]This allows to control for possible within country correlation of regression errors in the first-stage.

[31]The results are robust to using the mean tenure (20 years of residence) as a threshold and to the inclusion of country-year survey rounds with less than 25 immigrant observations.

[32]For instance, while all European countries have received an increasing number of immigrants in the past decade, Scandinavian and Northern European countries are historically regarded as immigration countries, whereas Southern European states such as Portugal, Italy, and Spain are mostly considered as emigration countries.

[33]see Inglehart, 1997; Putnam, 1993), and the findings of Dinesen et al. (2010), who show that an intergenera-

In contrast, Table 3.9 indicates that no acculturation takes place in the long-run for preferences over redistribution and attitudes to EU unification. The explanatory power of natives' mean political preferences on immigrants' support for redistribution increases slightly with tenure, but this increase is far from significant. In line with the interpretation suggested in section 3.3.1, this result lends support to the idea of a flexible adjustment of immigrants' attitudes to redistribution, where foreigners gain access to welfare services and face the same opportunity structures as native-born individuals after a few years of residence in their destination country. Thus, I hypothesize that natives' attitudes towards redistribution may predict cross-national differences in immigrants' attitudes through self-selection rather than changes in cultural values in the long run. Moreover, the strong assimilation of preferences towards EU unification observed in Section 3.3.1 does not seem to be driven by country-specific attitudes. The coefficient associated with natives' mean preferences is slightly lower for immigrants with longer tenure and the difference between both cohorts is nowhere near statistical significance. Two distinct channels can potentially explain this result. First, it is likely that the perception of EU institutions as whole influences immigrants' political attitudes about greater unification. In this context, international political institutions are often regarded as responsible for individual economic outcomes, and assimilation could then simply reflect the general distrust in traditional political institutions that has accompanied the rise of populism and anti-EU rhetoric in Western Europe over the past 20 years. A second possibility is that over time, migrants develop an attachment to their country of residence which, in turn, favors nationalistic feelings and more hostile views towards the EU, regardless of their destination country.

This last section documents the long-term acculturation of immigrants' political preferences about gay rights, immigration, and political trust to country-specific norms and conventions. I shall stress that in the current framework, it is not possible to claim with certainty that this acculturation is driven by an actual shift in cultural beliefs. Indeed, while cross-country differences suggest that political preferences may have an important cultural component, they are also determined by contextual and institutional determinants. For instance, I would expect differences in political preferences to be influenced by economic, political, or social aspects of the environment and reflected in the national policies associated with each of these preferences. If this is the case, I cannot rule out the possibility that migrants slowly update information about the current context in their destination country, and that my estimates are simply picking up this slow updating rather than the true effect of cultural changes. Unfortunately, testing the role played by each of these mechanism is not possible with the ESS data. It therefore remains an important question but one that lies outside the scope of this paper.

---

tional acculturation of trust takes place among non-western foreign-born individuals upon migrating to Western Europe

3.3.4 Robustness to self-selection bias

A primary concern when examining the preferences of immigrants is selection. Cross-country migration decisions are clearly non-random, and my primary issue here regards out-migration and the possibility that migrants with preferences closer to natives stay longer in their country of residence, which would bias my results. In fact, in a recent report, the OECD (2008) estimates that, depending on the countries and time periods considered, 20 to 50 percent of immigrants leave their host country within the first five years after arrival. In 2011, for some of the countries under consideration in this study, foreign-born outflows stood respectively at a ratio of 41 percent, 64 percent, and 76 percent for the United Kingdom, Germany, and Spain. In the case of Europe, close to 50 percent of the original arrival cohort has left the destination country ten years after arrival. If temporary migrants are negatively self-selected with respect to their opinion gap with natives, the tenure effect that I identify in the general analysis would reflect this self-selection mechanism rather than political assimilation.

Ideally, I would have longitudinal data to control for these cohort effects. In the absence of such data, I turn to the existing literature on temporary migration. This literature identifies several individual characteristics of return migrants in Europe which indicate that we should not be too concerned with the possibility that the previous results are driven by self-selection of less integrated foreign-born individuals into return migration. First, immigrants from poorer countries outside Europe are less likely to depart. For instance, in Norway, although the average re-emigration rate after five years is about 50%, the retention rate of immigrants from OECD countries is below 30% while that of immigrants from non-Western countries is above 75% (Bratsberg et al., 2007). Likewise, in Sweden, the probability that an immigrant will leave the country is lower amongst immigrants from Africa, Asia and Eastern Europe (Nekby, 2006). Against this backdrop, my analysis shows that convergence in political attitudes is primarily driven by immigrants from non-developed countries, which are therefore the least subject to return migration. If self-selection was indeed driving the results, I would estimate a comparatively stronger assimilation effect among Western-born immigrants, who are relatively more likely to re-emigrate than migrants from less developed countries. Second, the return rate in OECD countries after five years is not much higher than the return rate after three years among working-age immigrants, suggesting that immigrants who leave their country of destination do so relatively shortly after arrival. This result is largely explained by the fact that, in many European countries, an immigrant can obtain a long-term residence permit after five years of residence, or even take out the nationality of the host country. More generally, the longer a migrant stays in the host country, the less likely he or she is to return home or emigrate to a third country (OECD, 2008; Nekby, 2006). In contrast, my findings indicate that the convergence of immigrants and natives' political preferences goes on for several decades after the time of migration and is therefore not particularly prone to selection effects that may occur during the first years of residence in the host country[34]. Finally, the re-emigration rate of highly

---

[34]This, in turn, would be problematic if most of the assimilation took place between the first and second cohorts of our sample, i.e between immigrants with less than 5 years of residence and those with 6 to 10 years of residence. One exception is redistributive preferences, for which I cannot exclude that the interpretation of the

skilled immigrants is above the average (OECD, 2008), and immigrants with higher earnings have shorter intended stay: Data from the US New Immigrant Survey (NIS) and the German Socio-economic Panel (SOEP) have shown that working-age immigrants with higher level of education were significantly less likely to report an intention to stay permanently than their less educated counterparts, suggesting that immigrants' plans to return differ along the distribution of pre-migration education (see Dustmann, 2003). I ran separate analyses for low and high educated migrants, and found that while high-educated migrants converge more rapidly to natives' views on matters of homosexuality, trust, and immigration, assimilation remains strong and statistically significant among low-skill migrants, indicating that my general effect is not primarily driven by the self-selection of more skilled migrants into return migration.

3.4   Conclusion

As the proportion of immigrants is growing in developed countries, they increasingly influence the scope, shape, and directions of the political life of receiving communities. This paper documents the political assimilation of immigrants and therefore contributes to the understanding of the potential political and electoral consequences of these demographic changes. It presents a descriptive analysis of first-generation immigrants' political preferences on redistribution, homosexuality, immigration, political trust and attitudes to EU unification, and builds on assimilation theory and economic models of cultural transmission to inform the interpretation of the results.

For all political outcomes with the exception of redistribution, I find that immigrants hold on average much different views from natives, and that migration status has a greater effect on these preferences than any other individual traits I am able to control for. In particular, foreign-born immigrants hold more restrictive views on gay rights but show greater levels of trust in national parliaments and are more supportive of EU unification and open immigration policies. Moreover, I find strong empirical support in favour of assimilation: The preference gap between immigrants and natives gradually closes over time as immigrants' preferences converge to the norm, and the residual difference in preferences for immigrants with the longest tenure is negligible. In contrast, at the time of migration, immigrants are only slightly more conservative than European natives, and these differences disappear after only a few years in the destination country. My findings also suggest that differences in migrants' religious, linguistic and economic background play an important role in shaping both the size of the preference gap with natives and the speed of assimilation. Political assimilation is almost exclusively driven by immigrants from non-developed countries, and religious beliefs play an important part in this assimilation process. Muslim immigrants hold political opinions that are consistently more distant from those of natives than non-religious immigrants or immigrants who belong to another religious denomination, and remain much more conservative than natives on the issue of gay rights over time. I also find that immigrants with greater language proficiency or access to

results may suffer from this bias.

larger social networks are less likely to assimilate, suggesting that immigrants may form endogenous preferences about the relative value of cultural and political assimilation, in line with the economic literature on cultural transmission. Finally, I show that assimilation of preferences on gay rights, immigration policy and trust in national parliaments is driven by acculturation to country-specific norms, while the convergence patterns of attitudes to EU unification in the long run cannot be explained by national specificities.

Throughout the analysis, the nature of political preferences appears to have a significant impact on the way immigrants assimilate beside individual characteristics and host countries' environment. On the one hand, they reflect the economic and social integration of immigrants and their access to the same opportunities as natives. At the same time, they also have large cultural underpinnings, which traditionally take longer to evolve. In the current setting, I cannot however disentangle the role played by each of these channels. More research in this direction is necessary.

From a policy perspective, my study informs the design of naturalization and citizenship policies, which are, with very few exceptions, the only way to become eligible to vote in national elections in Western Europe. By providing a detailed account of the chronological changes in political preferences between natives and first-generation immigrants, this paper helps policy makers in receiving countries to estimate how the conditions and timing of access to naturalization and citizenship can affect the consequences of foreign-born residents on electoral and political outcomes.[35]

Last, this paper and the extant literature have documented the influence of European political norms on the preferences of first-generation immigrants from outside Europe. One may ask symmetrically whether immigrants who bring with them the culture of their origin country are in a position to influence natives at destination. Tabellini and Giuliano (2020) go some way towards answering this question and find that immigration left its footprint on American ideology via cultural transmission at the time of the New Deal. This paper neither intends to, nor can provide an answer to this question in the European context. However, whether such influence and transformation of existing societies are indeed taking place is an important issue for further research.

---

[35]In practice, second-generation immigrants born in Western Europe are de facto eligible to naturalization before they reach the age of voting, both in jus soli countries and those with a mixed citizenship regime. The consequences of immigrants' political integration are therefore directly and substantially impacted by citizenship policies through the size and composition of the foreign-born population that they add to the franchise.

3.5 Appendix

3.5.1 Tables and figures

Table 3.1: Sample statistics, Destination countries

Destination country	Total number of obs.	Native-born % of sample	Foreign-born as % of sample	Percent of foreign-born with over 20 yrs. of residence	Number of ESS rounds
Austria	7,734	89.67	10.33	55.07	4
Belgium	8,223	86.87	13.13	42.04	5
Denmark	4,486	93.89	6.11	53.65	3
Finland	9,441	97.22	2.78	22.52	5
France	8,785	90.27	9.73	64.56	5
Germany	13,243	90.11	9.89	53.66	5
Greece	2,429	91.68	8.32	24.75	1
Ireland	11,346	87.75	12.25	19.06	5
Italy	5,291	94.37	5.63	30.54	3
Netherlands	8,364	91.98	8.02	60.51	5
Norway	6,895	93.62	6.38	37.27	5
Portugal	6,212	95.64	4.36	33.58	4
Spain	6,929	91.15	8.85	15.17	4
Sweden	6,237	88.26	11.74	60.11	4
Switzerland	6,782	74.3	25.7	52.21	5
United Kingdom	9,940	90.96	9.04	39.82	5
Average	7,646	90.49	9.52	41.5	

Table 3.2: Dependent variables

Redistribution			Gay rights			Political trust			EU attitudes			Immigration		
Scale	Natives	Foreign-born	Scale	Natives	Foreign-born	Scale	Natives	Foreign-born	Scale	Natives	Foreign-born	Scale	Natives	Foreign-born
0	2.42 %	2.76 %	0	2.24 %	6.66 %	0	8.96 %	5.64 %	0	7.25 %	6.17 %	0	6.72 %	2.74 %
1	11.15 %	11.62 %	1	4.14 %	7.77 %	1	4.18 %	2.83 %	1	4.27 %	3.36 %	1	22.32 %	16.03 %
2	14.79 %	15.76 %	2	8.66 %	12 %	2	7.4 %	5.47 %	2	7.62 %	6.51 %	2	49.27 %	52.88 %
3	44.13 %	44.7 %	3	38.18 %	36.47 %	3	10.44 %	8.33 %	3	10.26 %	7.88 %	3	21.68 %	28.35 %
4	27.51 %	25.16 %	4	46.78 %	37.6 %	4	10.64 %	8.47 %	4	9.89 %	7.56 %			
						5	17.79 %	19.66 %	5	23.33 %	23 %			
						6	13.04 %	12.55 %	6	10.21 %	10.2 %			
						7	13.69 %	15.44 %	7	10.52 %	11.69 %			
						8	9.52 %	12.77 %	8	9.03 %	11.62 %			
						9	2.78 %	4.64 %	9	3.01 %	4.53 %			
						10	1.55 %	4.2 %	10	4.62 %	7.47 %			

Notes: Cross-tabulations account for survey design and population weights. The categories for all dependent variables have been reordered to run from conservative to liberal or negative to positive attitudes.

Table 3.3: Descriptive Statistics - Immigrants

Destination country	Obs.
Austria	799
Belgium	1,080
Denmark	274
Finland	262
France	855
Germany	1,390
Greece	202
Ireland	1,390
Italy	298
Netherlands	671
Norway	440
Portugal	271
Spain	613
Sweden	732
Switzerland	1,743
United Kingdom	899
Tenure (Years of residence)	*Obs.*
Less than 5	1,796
6-10	1,904
11-15	1,777
16-20	1,427
21-30	1,871
31-55	1,674
More than 45	1,390
Region of origin	*Obs.*
Africa	930
South Asia	667
East Asia	447
Eastern Europe and Central Asia	2,801
MENA	1,621
South America	956
Southern Europe	779
Western Europe and Anglo-Sax.	3,644
Total	*11,839*

Table 3.4: Political preferences - Natives and first-generation immigrants

	Redistribution (0-4)	Homosexuality (0-4)	EU attitudes (0-10)	Immigration (0-3)	Trust (0-10)
Natives	2.86	3.26	5.09	1.90	4.41
Foreign-born	2.82	2.83	5.53	2.08	5.21
Of which					
- Less than 20 years of residency	2.80	2.78	5.86	2.14	5.41
- More than 20 years of residency	2.86	2.88	5.12	2.00	4.96

Source: Own calculations based on the ESS using survey design and population weights. For all dependent variables, the table presents the weighted average. T-tests show that differences in mean values are significant at 1% between foreign-born and natives, and between foreign-born individuals with less than 20 years and more than 20 years of residency.

Table 3.5: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Individual characteristics (Full sample)					
Foreign-born	0.1	0.3	0	1	122337
Age	50.02	18.45	16	100	122337
Male	0.48	0.5	0	1	122337
Married	0.48	0.5	0	1	122337
Years of education completed	12.93	4.29	0	54	122337
Lives in rural area	0.39	0.49	0	1	122337
Log household size	0.8	0.53	0	2.94	122337
In the labour force and employed	0.53	0.5	0	1	122337
Concerns about hh income	1.84	0.82	1	4	122337
Religiosity (0-10) scale	4.47	3.02	0	10	122337
Member of ethnic minority	0.04	0.19	0	1	122337
Income level (decile rank)	5.32	2.78	1	10	102413
Ever unemployed and seeking work for over 3 months	0.28	0.45	0	1	122337
Partner doing last 7 days: paid work	0.35	0.48	0	1	122337
EU citizen	0.97	0.17	0	1	122337
Citizen of host country	0.95	0.22	0	1	122322
Main source of income:					
- Wage and salaries	0.57	0.5	0	1	122337
- Self-employed	0.07	0.26	0	1	122337
- Pensions	0.27	0.44	0	1	122337
- Unemployment benefits	0.03	0.17	0	1	122337
- Social benefits	0.04	0.19	0	1	122337
- Investments	0.01	0.08	0	1	122337
- Other sources of inc.	0.01	0.12	0	1	122337
Political attitudes:					
Redistribution	2.83	1.03	0	4	120908
Gay rights	3.2	0.96	0	4	120716
Trust in national parliament	4.79	2.53	0	10	120109
EU unification	4.92	2.59	0	10	89709
Support for immig.	1.88	0.82	0	3	120033
Individual characteristics (Immig. sample)					
Years of residence in host country	21.73	16.93	1	89	11839
Developed origin country	0.3	0.46	0	1	11839
Muslim	0.16	0.37	0	1	11778
Common official language	0.31	0.46	0	1	11746
Community size (% of birth country group in tot pop.)	0.32	0.47	0	1	11839
Country characteristics					
Log of gdp	10.47	0.38	9.71	11.16	16
Unemployment (%)	9.18	4.77	3.85	23.08	16
Share of foreign-born (%)	8.91	4.67	3.58	23.32	16

Table 3.6: Opinion Gap between First-Generation Immigrants and Natives

	Redistribution			Homosexuality			EU attitudes		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Foreign born	-0.004	-0.047***	-0.120***	-0.470***	-0.365***	-0.558***	0.481***	0.381***	0.775***
	(0.016)	(0.018)	(0.027)	(0.019)	(0.018)	(0.030)	(0.048)	(0.054)	(0.085)
Yrs in country			0.003***			0.008***			-0.016***
			(0.001)			(0.001)			(0.003)
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
N	102073	102073	102073	101957	101957	101957	78194	78194	78194
r2	0.046	0.091	0.092	0.059	0.166	0.168	0.063	0.103	0.104

	Immigration			Trust		
	(10)	(11)	(12)	(13)	(14)	(15)
Foreign born	0.119***	0.139***	0.236***	0.688***	0.641***	1.155***
	(0.011)	(0.013)	(0.020)	(0.039)	(0.044)	(0.069)
Yrs in country			-0.004***			-0.021***
			(0.001)			(0.002)
Controls	No	Yes	Yes	No	Yes	Yes
N	101329	101329	101329	101487	101487	101487
r2	0.087	0.160	0.161	0.095	0.161	0.163

Individual controls include age, gender, marital status, years of education, whether the respondent lives in a rural or urban area, household size, employment status of the respondent and the respondent's partner, household's income level (decile rank), primary income source, past unemployment experience, respondent's feelings about household's income, religiosity, whether the respondent is a self-declared member of an ethnic minority. All regressions include dummies for country of residence and ESS survey round and account for survey design and population weights. Robust standard errors in parentheses. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 3.7: Opinion Gap and Immigrants' Background

	Redistribution	Homosexuality	EU attitudes	Immigration	Trust	**Immig. obs.**
Origin: Non-developed	-0.0423**	-0.486***	0.428***	0.140***	0.755***	8,318
	(0.0184)	(0.0201)	(0.0574)	(0.0136)	(0.0469)	
Origin: Developed	0.0334	0.0175	0.360***	0.173***	0.215***	3,521
	(0.0289)	(0.0249)	(0.0885)	(0.0193)	(0.0683)	
Non-muslim	-0.0313*	-0.291***	0.386***	0.141***	0.564***	9,900
	(0.0168)	(0.0174)	(0.0531)	(0.0122)	(0.0421)	
Muslim	0.0153	-0.893***	0.656***	0.200***	1.193***	1,878
	(0.0381)	(0.0455)	(0.111)	(0.0282)	(0.102)	
No common language	-0.0495***	-0.410***	0.423***	0.136***	0.661***	8,150
	(0.0190)	(0.0205)	(0.0624)	(0.0141)	(0.0490)	
Common language	0.00628	-0.304***	0.269***	0.181***	0.584***	3,596
	(0.0286)	(0.0306)	(0.0779)	(0.0197)	(0.0686)	
Small community	-0.0209	-0.364***	0.481***	0.158***	0.580***	8,084
	(0.0182)	(0.0193)	(0.0576)	(0.0133)	(0.0464)	
Large community	-0.0289	-0.410***	0.226***	0.123***	0.850***	3,755
	(0.0281)	(0.0312)	(0.0826)	(0.0206)	(0.0690)	
Individual controls	Yes	Yes	Yes	Yes	Yes	

Each cell represents a separate regression, in which column heading denotes the independent variable, and row heading denotes the sub-sample of migrants included in the regression with the native-born sample. The coefficients are reported for the foreign-born dummy variable. The last column indicates the number of migrants in each sub-group. All regressions include dummies for country of residence and ESS survey round and account for survey design and population weights. Robust standard errors in parentheses. * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.8: The Role of Destination Countries

Panel A: Example of a first stage regression (2012 survey round, full sample)

	Redistribution	Homosexuality	Trust	EU attitudes	Immigration
Belgium	0.131	-0.459***	0.173	0.513	0.152
	(0.167)	(0.171)	(0.325)	(0.384)	(0.114)
Denmark	-0.324*	-0.390**	1.308***	1.409***	0.270**
	(0.189)	(0.175)	(0.409)	(0.461)	(0.125)
Finland	0.025	-0.859***	0.042	-0.656	0.092
	(0.279)	(0.301)	(0.509)	(0.534)	(0.173)
France	0.385**	-0.586***	-0.962***	-0.031	0.190*
	(0.181)	(0.168)	(0.357)	(0.384)	(0.115)
Germany	0.436***	-0.665***	0.040	0.506	0.509***
	(0.151)	(0.149)	(0.313)	(0.378)	(0.108)
Ireland	0.399**	-0.109	-1.679***	-0.500	-0.072
	(0.198)	(0.159)	(0.389)	(0.450)	(0.146)
Norway	-0.138	-0.410**	0.870**	-0.091	0.452***
	(0.188)	(0.174)	(0.368)	(0.405)	(0.128)
Portugal	0.357*	-0.349	-1.366***	1.107	0.315
	(0.184)	(0.243)	(0.526)	(0.789)	(0.226)
Spain	0.501**	-0.303	-1.538***	1.469***	0.315**
	(0.199)	(0.189)	(0.474)	(0.480)	(0.158)
Sweden	0.600***	-0.556***	0.611*	0.209	0.519***
	(0.154)	(0.145)	(0.320)	(0.376)	(0.107)
Switzerland	0.361**	-0.633***	1.526***	0.117	0.286***
	(0.152)	(0.150)	(0.293)	(0.356)	(0.105)
United Kingdom	0.254	-0.438***	-0.987***	-1.136***	-0.037
	(0.173)	(0.158)	(0.356)	(0.391)	(0.120)
Obs.	2301	2307	2176	2193	2288
r2	0.108	0.226	0.206	0.088	0.124

Regressions account for survey design weights and include the full set of controls from model 1 as well as region of origin, religious affiliation, citizenship of residence country and EU citizenship. Omitted residence country for this and all other first-stage regressions: Netherlands. Austria and Greece were not surveyed by the ESS in 2012. Italy is excluded from the analysis in 2012 because too few migrants were surveyed to permit meaningful analysis.

Panel B: Second stage regression (full-sample)

	Redistribution		Homosexuality		EU attitudes		Immigration		Trust	
Natives' pref.	0.734***	0.655***	0.491***	0.553***	0.682***	0.613***	0.286***	0.328***	0.792***	0.754***
	(0.060)	(0.069)	(0.103)	(0.112)	(0.112)	(0.112)	(0.063)	(0.068)	(0.041)	(0.049)
log GDP		-0.269**		-0.182		-0.841*		-0.116		-0.073
		(0.110)		(0.139)		(0.438)		(0.108)		(0.293)
Share of for.		0.009**		0.007		0.003		-0.003		0.027***
		(0.004)		(0.006)		(0.017)		(0.004)		(0.010)
Obs.	56	56	56	56	43	43	56	56	56	56
r2	0.783	0.812	0.455	0.477	0.516	0.576	0.356	0.408	0.895	0.912

All regressions include year dummy variables. Dependent variable: Corresponding destination country fixed effect from the first-stage. Estimation method: weighted least squares; with first-stage inverse sampling variances of the estimated fixed effects as weights. Missing country-year pairs: Finland (2010, 2014, 2016), Italy (2012), Norway (2016), Portugal (2014, 2016) * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 3.9: Acculturation to Destination Country's Political Preferences

	Redistribution		Homosexuality		EU attitudes		Immigration		Trust	
Tenure	Less than 15 yrs	More than 15 yrs	Less than 15 yrs	More than 15 yrs	Less than 15 yrs	More than 15 yrs	Less than 15 yrs	More than 15 yrs	Less than 15 yrs	More than 15 yrs
Natives' mean pref.	0.594***	0.648***	0.346**	0.747***[a]	0.672***	0.604***	0.243***	0.420***[b]	0.697***	0.842***[b]
	(0.130)	(0.104)	(0.150)	(0.124)	(0.136)	(0.119)	(0.088)	(0.070)	(0.099)	(0.082)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	56	56	56	56	56	56	43	43	56	56
r2	0.581	0.581	0.383	0.383	0.593	0.593	0.424	0.424	0.842	0.842

All regressions include year dummy variables and control for log of GDP and foreign population. Dependent variable: Cohort-specific destination country fixed effect from first-stage. Estimation method: weighted least squares; with first-stage inverse sampling variances of the estimated fixed effects as weights. For each dependent variable, coefficients for both cohort are estimated in a single regression. a: T-test for difference in coefficients between cohorts is significant at the 5% level. b: T-test for difference in coefficients between cohorts is significant at the 10% level. Missing country-year pairs: Finland (2010, 2014, 2016), Italy (2012), Norway (2016), Portugal (2014, 2016) * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.10: Immigrants - Country of origin

Country of origin	Obs.	Country of origin	Obs.	Country of origin	Obs.
AE	1	GN	22	NO	52
AF	72	GP	2	NP	19
AG	1	GQ	7	NZ	14
AL	214	GR	61	PA	2
AM	30	GT	4	PE	77
AN	4	GW	12	PF	1
AO	71	GY	7	PG	1
AR	73	HK	9	PH	94
AS	1	HN	7	PK	178
AT	125	HR	141	PL	899
AU	30	HT	6	PR	2
AW	10	HU	118	PS	7
AX	2	ID	73	PT	303
AZ	5	IE	105	PY	13
BA	279	IL	14	RE	6
BD	33	IM	1	RO	471
BE	74	IN	307	RS	160
BF	6	IO	1	RU	224
BG	100	IQ	144	RW	21
BI	9	IR	141	SA	9
BJ	6	IS	21	SC	1
BN	3	IT	411	SD	13
BO	37	JE	1	SE	97
BQ	4	JM	38	SG	5
BR	222	JO	6	SI	34
BW	1	JP	31	SK	56
BY	19	KE	39	SL	8
CA	26	KG	21	SN	47
CD	51	KH	8	SO	78
CF	5	KM	5	SR	80
CG	41	KP	4	ST	8
CH	43	KR	17	SV	6
CI	34	KW	6	SX	1
CL	58	KZ	125	SY	93
CM	31	LA	5	RS	16
CN	92	LB	53	TD	4
CO	81	LC	3	TG	14
CR	2	LI	2	TH	68
CU	28	LK	65	TJ	7
CV	63	LR	2	TL	2
CW	25	LS	1	TM	2
CY	4	LT	98	TN	99
CZ (Rep.)	94	LU	8	TR	473
CZ	24	LV	62	TT	4
DE	777	LY	4	TW	3
DJ	3	MA	468	TZ	12
DK	71	MD	34	TL	2
DM	3	ME	7	UA	87
DO	39	MG	20	UG	10
DZ	198	MK	95	US	144
EC	77	ML	8	USSR	241
EE	81	MM	1	UY	14
EG	45	MN	3	UZ	13
ER	28	MO	2	VE	42
ES	51	MQ	4	VN	63
ET	23	MR	4	XK	141
FI	128	MT	3	YE	1
FO	8	MU	17	YT	2
FR	342	MW	2	YG	75
GA	7	MX	32	ZA	68
GB	562	MY	22	ZM	4
GD	3	MZ	23	ZW	34
GE	21	NE	4		
GF	1	NG	105		
GH	38	NI	4		
GL	4	NL	204		
GM	11	NO	52		

Figures

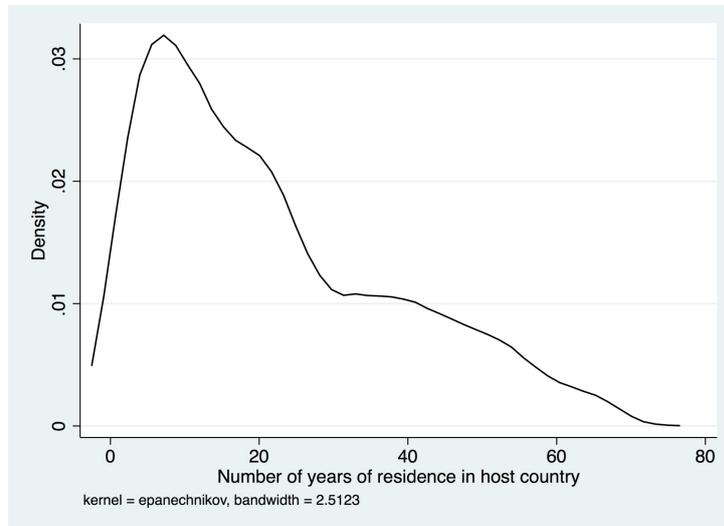Figure 3.1: Tenure in destination country (First-generation immigrants)

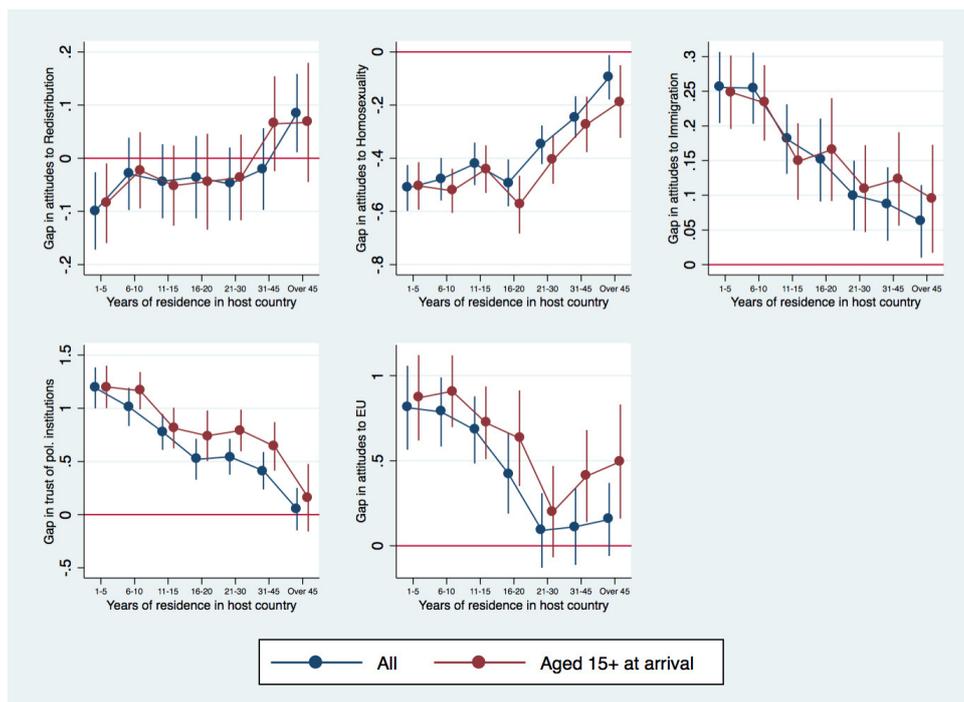Figure 3.2: Convergence in political attitudes: Full sample

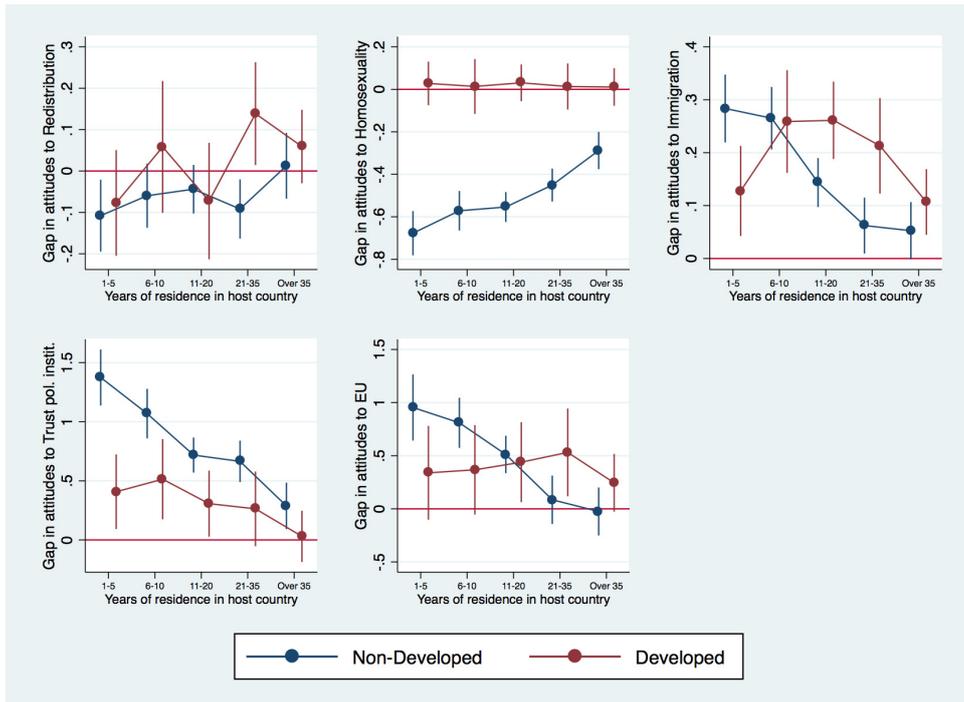Figure 3.3: Convergence in attitudes: Developed vs non-developed

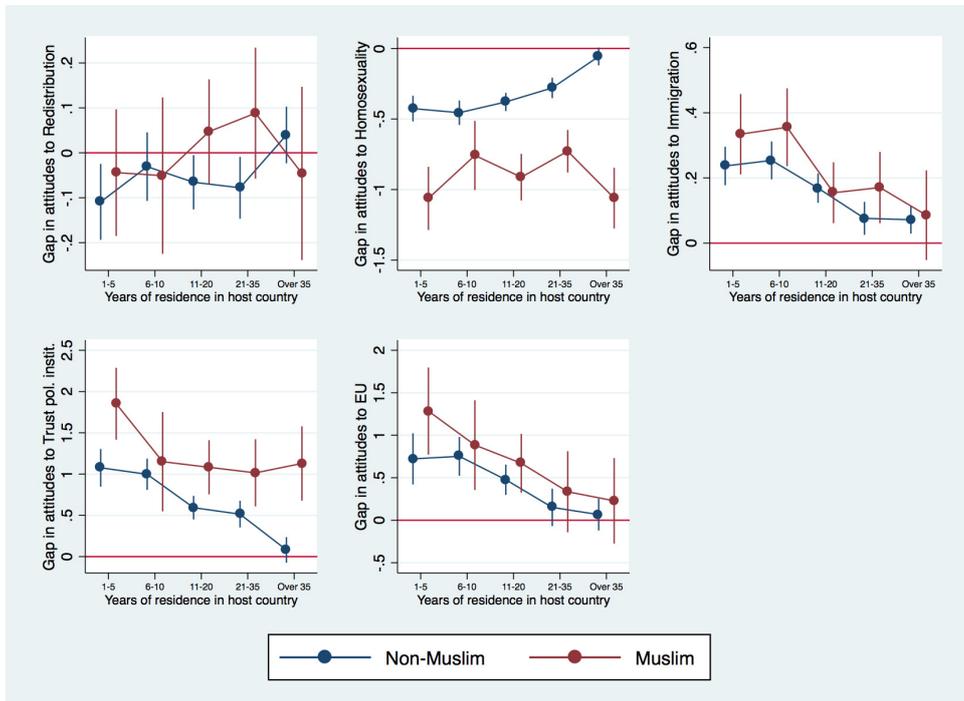Figure 3.4: Convergence in attitudes: Religion

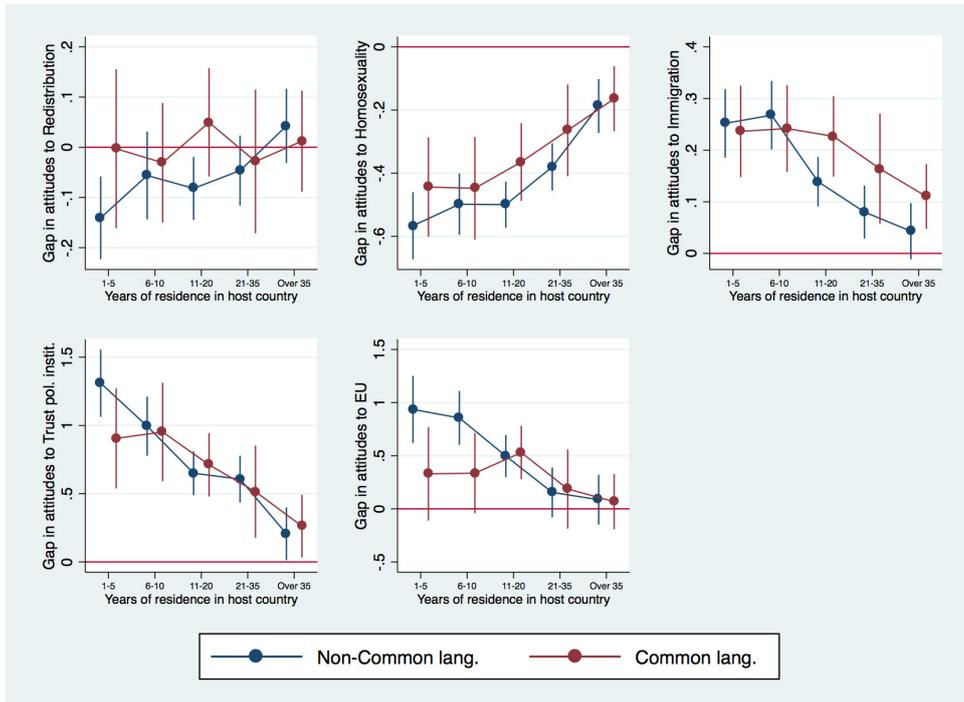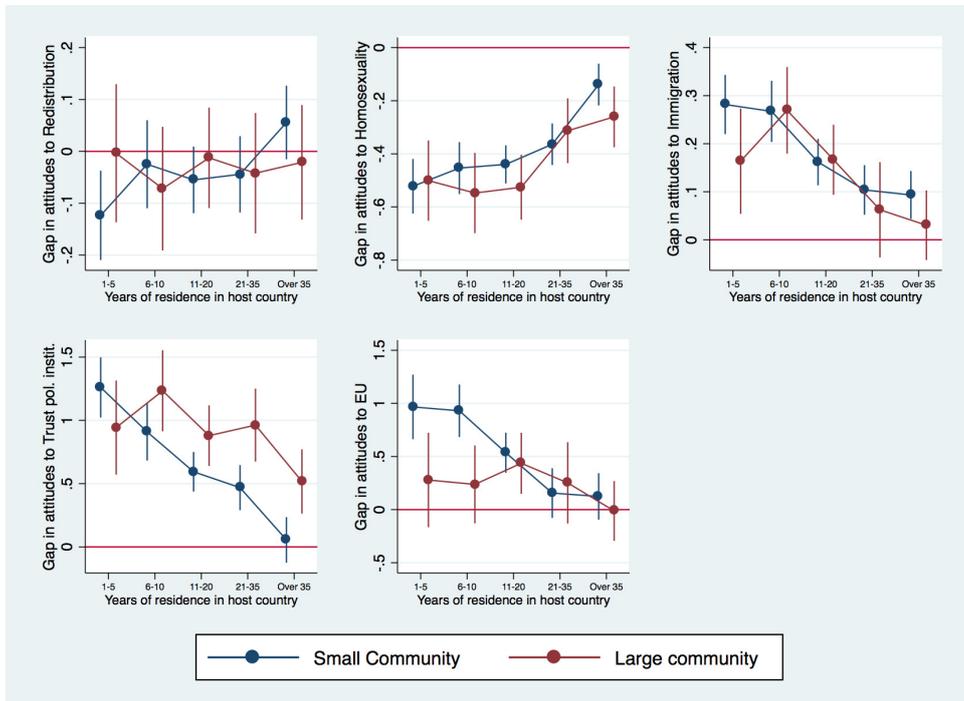Figure 3.5: Convergence in attitudes: Common language

Figure 3.6: Convergence in political attitudes: Community size

Bibliography

[1] Ran Abramitzky, Leah Platt Boustan, and Katherine Eriksson. *Cultural assimilation during the age of mass migration*. Tech. rep. National Bureau of Economic Research, 2016.

[2] Burton A Abrams and Russell F Settle. "Women's suffrage and the growth of the welfare state". In: *Public Choice* 100.3-4 (1999), pp. 289–300.

[3] Daron Acemoglu, Georgy Egorov, and Konstantin Sonin. "A political theory of populism". In: *The Quarterly Journal of Economics* 128.2 (2013), pp. 771–805.

[4] Daron Acemoglu and James A Robinson. "Why did the West extend the franchise? Democracy, inequality, and growth in historical perspective". In: *The Quarterly Journal of Economics* 115.4 (2000), pp. 1167–1199.

[5] Arun Advani and Bryony Reich. *Melting pot or salad bowl: the formation of heterogeneous communities*. Tech. rep. IFS Working Papers, 2015.

[6] Mariya Aleksynska. "Civic participation of immigrants in Europe: Assimilation, origin, and destination country effects". In: *European Journal of Political Economy* 27.3 (Sept. 2011), pp. 566–585.

[7] Alberto Alesina. *The political economy of macroeconomic stabilizations and income inequality: myths and reality*. Cambridge, Mass: MIT Press, 1998.

[8] Alberto Alesina and George-Marios Angeletos. "Fairness and redistribution". In: *American economic review* 95.4 (2005), pp. 960–980.

[9] Alberto Alesina and Paola Giuliano. "Family ties and political participation". In: *Journal of the European Economic Association* 9.5 (2011), pp. 817–839.

[10] Alberto Alesina and Paola Giuliano. "Preferences for redistribution". In: *Handbook of social economics*. Vol. 1. Elsevier, 2011, pp. 93–131.

[11] Alberto Alesina, Howard Rosenthal, et al. *Partisan politics, divided government, and the economy*. Cambridge University Press, 1995.

[12] Yann Algan and Pierre Cahuc. "Inherited trust and growth". In: *American Economic Review* 100.5 (2010), pp. 2060–92.

[13] Yann Algan et al. "The European trust crisis and the rise of populism". In: *Brookings Papers on Economic Activity* 2017.2 (2017), pp. 309–400.

[14] Jeffrey S Banks. "A model of electoral competition with incomplete information". In: *Journal of Economic Theory* 50.2 (1990), pp. 309–325.

[15] Jeffrey S Banks and Rangarajan K Sundaram. "repeated elections model". In: *Political economy: Institutions, competition and representation: Proceedings of the seventh international symposium in economic theory and econometrics*. Vol. 7. Cambridge University Press. 1993, p. 295.

[16] Alan Barrett et al. "The welfare use of immigrants and natives in Germany: the case of Turkish immigrants". In: *international Journal of manpower* (2013).

[17] Lori A Beaman. "Social networks and the dynamics of labour market outcomes: Evidence from refugees resettled in the US". In: *The Review of Economic Studies* 79.1 (2012), pp. 128–161.

[18] Sascha O Becker, Thiemo Fetzer, and Dennis Novy. "Who voted for Brexit? A comprehensive district-level analysis". In: *Economic Policy* 32.92 (2017), pp. 601–650.

[19] Roland Benabou and Jean Tirole. "Belief in a just world and redistributive politics". In: *The Quarterly journal of economics* 121.2 (2006), pp. 699–746.

[20] Graziella Bertocchi. "The enfranchisement of women and the welfare state". In: *European Economic Review* 55.4 (2011), pp. 535–553.

[21] Graziella Bertocchi and Chiara Strozzi. "The evolution of citizenship: Economic and institutional determinants". In: *The Journal of Law and Economics* 53.1 (2010), pp. 95–136.

[22] Marianne Bertrand, Erzo FP Luttmer, and Sendhil Mullainathan. "Network effects and welfare cultures". In: *The Quarterly Journal of Economics* 115.3 (2000), pp. 1019–1055.

[23] Timothy Besley and Stephen Coate. "An economic model of representative democracy". In: *The Quarterly Journal of Economics* 112.1 (1997), pp. 85–114.

[24] Alberto Bisin and Thierry Verdier. ""Beyond the melting pot": cultural transmission, marriage, and the evolution of ethnic and religious traits". In: *The Quarterly Journal of Economics* 115.3 (2000), pp. 955–988.

[25] Alberto Bisin and Thierry Verdier. ""Beyond the melting pot": cultural transmission, marriage, and the evolution of ethnic and religious traits". In: *The Quarterly Journal of Economics* 115.3 (2000), pp. 955–988.

[26] Alberto Bisin and Thierry Verdier. "The economics of cultural transmission and the dynamics of preferences". In: *Journal of Economic theory* 97.2 (2001), pp. 298–319.

[27] Alberto Bisin et al. "Are Muslim immigrants different in terms of cultural integration?" In: *Journal of the European Economic Association* 6.2-3 (2008), pp. 445–456.

[28] Francine D Blau. "The fertility of immigrant women: Evidence from high-fertility source countries". In: *Immigration and the work force: Economic consequences for the United States and source areas*. University of Chicago Press, 1992, pp. 93–134.

[29] George J Borjas. "Assimilation and changes in cohort quality revisited: what happened to immigrant earnings in the 1980s?" In: *Journal of labor economics* 13.2 (1995), pp. 201–245.

[30] George J Borjas. "Welfare reform and immigrant participation in welfare programs". In: *International Migration Review* 36.4 (2002), pp. 1093–1123.

[31] Bernt Bratsberg, Oddbjørn Raaum, and Kjetil Sørlie. "Foreign-born Migration to and from Norway". In: *International Migration, Economic Development and Policy* (2007), pp. 259–291.

[32] Karen N. Breidahl and Christian Albrekt Larsen. "The myth of unadaptable gender roles: Attitudes towards women's paid work among immigrants across 30 European countries". In: *Journal of European Social Policy* 26.5 (Dec. 2016), pp. 387–401.

[33] Steven Callander and Simon Wilkie. "Lies, damned lies, and political campaigns". In: *Games and Economic Behavior* 60.2 (2007), pp. 262–286.

[34] David Card, Christian Dustmann, and Ian Preston. "Immigration, wages, and compositional amenities". In: *Journal of the European Economic Association* 10.1 (2012), pp. 78–119.

[35] David Card and Alan B Krueger. "Does school quality matter? Returns to education and the characteristics of public schools in the United States". In: *Journal of political Economy* 100.1 (1992), pp. 1–40.

[36] David Card, Alexandre Mas, and Jesse Rothstein. "Tipping and the Dynamics of Segregation". In: *The Quarterly Journal of Economics* 123.1 (2008), pp. 177–218.

[37] Francesco Caselli and Massimo Morelli. "Bad politicians". In: *Journal of Public Economics* 88.3-4 (2004), pp. 759–782.

[38] Barry R Chiswick, Yew Liang Lee, and Paul W Miller. "A longitudinal analysts of immigrant occupational mobility: A test of the immigrant assimilation hypothesis". In: *International Migration Review* 39.2 (2005), pp. 332–353.

[39] Italo Colantone and Piero Stanig. "Global competition and Brexit". In: *BAFFI CAREFIN Centre Research Paper* 2016-44 (2016).

[40] Tommaso Colussi. "Migrant networks and job search outcomes: Evidence from displaced workers". In: (2015).

[41] Amelie F Constant et al. "Clash of cultures: Muslims and Christians in the ethnosizing process". In: (2006).

[42] Ernesto Dal Bó and Rafael Di Tella. "Capture by threat". In: *Journal of Political Economy* 111.5 (2003), pp. 1123–1154.

[43] Rafaela Dancygier and Elizabeth N. Saunders. "A New Electorate? Comparing Preferences and Partisanship between Immigrants and Natives". In: *American Journal of Political Science* 50.4 (Oct. 2006), pp. 962–981.

[44] Daniel Degen, Theresa Kuhn, and Wouter van der Brug. "Granting immigrants access to social benefits? How self-interest influences support for welfare state restrictiveness". In: *Journal of European Social Policy* 29.2 (May 2019), pp. 148–165.

[45] Domenico Depalo, Riccardo Faini, and Alessandra Venturini. "The social assimilation of immigrants". In: (2006).

[46] Rafael Di Tella and Julio J Rotemberg. "Populism and the return of the "paranoid style": Some evidence and a simple model of demand for incompetence as insurance against elite betrayal". In: *Journal of Comparative Economics* 46.4 (2018), pp. 988–1005.

[47] Peter Thisted Dinesen and Marc Hooghe. "When in Rome, Do as the Romans Do: The Acculturation of Generalized Trust among Immigrants in Western Europe". In: *International Migration Review* 44.3 (Sept. 2010), pp. 697–727.

[48] Jim Dolmas and Gregory W Huffman. "On the political economy of immigration and income redistribution". In: *International Economic Review* 45.4 (2004), pp. 1129–1168.

[49] David Dorn, Gordon Hanson, Kaveh Majlesi, et al. *Importing political polarization? The electoral consequences of rising trade exposure.* Tech. rep. National Bureau of Economic Research, 2016.

[50] Rudiger Dornbusch and Sebastian Edwards. "The macroeconomics of populism". In: *The macroeconomics of populism in Latin America*. University of Chicago Press, 1991, pp. 7–13.

[51] Rudiger Dornbusch and Sebastian Edwards. *The macroeconomics of populism in Latin America*. University of Chicago Press, 2007.

[52] Christian Dustmann. "Return migration, wage differentials, and the optimal migration duration". In: *European Economic Review* 47.2 (2003), pp. 353–369.

[53] Christian Dustmann and Francesca Fabbri. "Language Proficiency and Labour Market Performance of Immigrants in the UK". In: *The Economic Journal* 113.489 (July 2003), pp. 695–717.

[54] Christian Dustmann and Joseph-Simon Görlach. "The Economics of Temporary Migrations". In: *Journal of Economic Literature* 54.1 (Mar. 2016), pp. 98–136.

[55] Christian Dustmann et al. "Europe's trust deficit". In: *Causes and Remedies. London: Centre for Economic Policy Research* (2017).

[56] David C Earnest. "The enfranchisement of resident aliens: variations and explanations". In: *Democratization* 22.5 (2015), pp. 861–883.

[57] Raquel Fernández and Alessandra Fogli. "Fertility: The role of culture and family experience". In: *Journal of the European economic association* 4.2-3 (2006), pp. 552–561.

[58] Patricia Funk and Christina Gathmann. "What women want: Suffrage, gender gaps in voter preferences and government expenditures". In: *Gender Gaps in Voter Preferences and Government Expenditures (July 2006)* (2006).

[59] Francesco Giavazzi, Ivan Petkov, and Fabio Schiantarelli. "Culture: persistence and evolution". In: *Journal of Economic Growth* 24.2 (June 2019), pp. 117–154.

[60] Noam Gidron and Bart Bonikowski. "Varieties of populism: Literature review and research agenda". In: (2013).

[61] Paola Giuliano. "Living arrangements in western europe: Does cultural origin matter?" In: *Journal of the European Economic Association* 5.5 (2007), pp. 927–952.

[62] Milton Myron Gordon. *Assimilation in American life: The role of race, religion, and national origins*. Oxford University Press on Demand, 1964.

[63] David A Green. "Immigrant occupational attainment: Assimilation and mobility over time". In: *Journal of Labor Economics* 17.1 (1999), pp. 49–79.

[64] Avner Greif and Guido Tabellini. "Cultural and institutional bifurcation: China and Europe compared". In: *American economic review* 100.2 (2010), pp. 135–40.

[65] Virginie Guiraudon. "Including foreigners in national welfare states: Institutional venues and rules of the game". In: *Restructuring the welfare state: Political institutions and policy change.* Springer, 2002, pp. 129–156.

[66] Luigi Guiso, Paola Sapienza, and Luigi Zingales. "Does culture affect economic outcomes?" In: *Journal of Economic perspectives* 20.2 (2006), pp. 23–48.

[67] Luigi Guiso et al. *Demand and supply of populism.* Centre for Economic Policy Research London, UK, 2017.

[68] Olle Hammar. "It's Where You're From, It's Where You're At: Culture, Individualism and Preferences for Redistribution". In: (2019).

[69] Joseph E Harrington. "The Impact of Fteelection Pressures on the Fulfillment of Campaign Promises". In: *Games and Economic Behavior* 5 (1993), pp. 71–97.

[70] Friedrich Heckmann and Dominique Schnapper. *The integration of immigrants in European societies: National differences and trends of convergence.* Vol. 7. Walter de Gruyter GmbH & Co KG, 2016.

[71] John F Helliwell and Robert D Putnam. "Economic growth and social capital in Italy". In: *Eastern economic journal* 21.3 (1995), pp. 295–307.

[72] Joseph Henrich. "Does culture matter in economic behavior? Ultimatum game bargaining among the Machiguenga of the Peruvian Amazon". In: *American Economic Review* 90.4 (2000), pp. 973–979.

[73] Wei-Yin Hu. "Immigrant earnings assimilation: estimates from longitudinal data". In: *American Economic Review* 90.2 (2000), pp. 368–372.

[74] Ronald Inglehart. *Modernization and postmodernization: Cultural, economic, and political change in 43 societies.* Princeton university press, 1997.

[75] Ronald F Inglehart and Pippa Norris. "Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash". In: (2016).

[76] Iñigo Iturbe-Ormaetxe and J Gabriel Romero. "Financing public goods and attitudes toward immigration". In: *European Journal of Political Economy* 44 (2016), pp. 159–178.

[77] William Jack and Roger Lagunoff. "Dynamic enfranchisement". In: *Journal of Public Economics* 90.4-5 (2006), pp. 551–572.

[78] Guillermina Jasso and Mark R Rosenzweig. "Family reunification and the immigration multiplier: US immigration law, origin-country conditions, and the reproduction of immigrants". In: *Demography* 23.3 (1986), pp. 291–311.

[79] Aida Just and Christopher J Anderson. "Immigrants, citizenship and political action in Europe". In: *British Journal of Political Science* 42.3 (2012), pp. 481–509.

[80] Cristóbal Rovira Kaltwasser et al. *The Oxford handbook of populism.* Oxford University Press, 2017.

[81] Navin Kartik and R Preston McAfee. "Signaling character in electoral competition". In: *American Economic Review* 97.3 (2007), pp. 852–870.

[82] István Kónya. "Minorities and majorities: a dynamic model of assimilation". In: *Canadian Journal of Economics/Revue canadienne d'économique* 38.4 (2005), pp. 1431–1452.

[83] Ruud Koopmans. "Trade-offs between equality and difference: Immigrant integration, multiculturalism and the welfare state in cross-national perspective". In: *Journal of ethnic and migration studies* 36.1 (2010), pp. 1–26.

[84] Anna Maria Koukal, Reiner Eichenberger, Patricia Schafera, et al. *Enfranchising Foreigners: What Drives Natives' Willingness to Share Power?* Tech. rep. Center for Research in Economics, Management and the Arts (CREMA), 2019.

[85] Yiannis Kountouris and Kyriaki Remoundou. "Is there a cultural component in tax morale? Evidence from immigrants in Europe". In: *Journal of Economic Behavior & Organization* 96 (2013), pp. 104–119.

[86] Edward P Lazear. "Culture and language". In: *Journal of political Economy* 107.S6 (1999), S95–S126.

[87] Woojin Lee, John Roemer, and Karine Van der Straeten. "Racism, xenophobia, and redistribution". In: *Journal of the European Economic Association* 4.2-3 (2006), pp. 446–454.

[88] Anastasia Litina, Simone Moriconi, and Skerdilajda Zanaj. "The cultural transmission of environmental values: A comparative approach". In: *World development* 84 (2016), pp. 131–148.

[89] Alessandro Lizzeri and Nicola Persico. "Why did the elites extend the suffrage? Democracy and the scope of government, with an application to Britain's "Age of Reform"". In: *The Quarterly Journal of Economics* 119.2 (2004), pp. 707–765.

[90] Humberto Llavador and Robert J Oxoby. "Partisan competition, growth, and the franchise". In: *The Quarterly Journal of Economics* 120.3 (2005), pp. 1155–1189.

[91] Marcel Lubbers et al. "Migrants' support for welfare state spending in Denmark, Germany, and the Netherlands". In: *Social Policy & Administration* 52.4 (July 2018), pp. 895–913.

[92] Erzo F. P Luttmer and Monica Singhal. "Culture, Context, and the Taste for Redistribution". In: *American Economic Journal: Economic Policy* 3.1 (Feb. 2011), pp. 157–179.

[93] Erzo FP Luttmer and Monica Singhal. "Culture, context, and the taste for redistribution". In: *American Economic Journal: Economic Policy* 3.1 (2011), pp. 157–79.

[94] Fabio Mariani. "The political economy of naturalization". In: *Canadian Journal of Economics/Revue canadienne d'économique* 46.2 (2013), pp. 656–688.

[95] Borja Martinovic, Frank van Tubergen, and Ineke Maas. "Changes in immigrants' social integration during the stay in the host country: The case of non-western immigrants in the Netherlands". In: *Social Science Research* 38.4 (Dec. 2009), pp. 870–882.

[96] Rahsaan Maxwell. "Evaluating Migrant Integration: Political Attitudes across Generations in Europe ¡sup/¿". In: *International Migration Review* 44.1 (Mar. 2010), pp. 25–52.

[97] Rahsaan Maxwell. "Trust in government among British Muslims: the importance of migration status". In: *Political Behavior* 32.1 (2010), pp. 89–109.

[98] Anna Maria Mayda. "Who is against immigration? A cross-country investigation of individual attitudes toward immigrants". In: *The review of Economics and Statistics* 88.3 (2006), pp. 510–530.

[99] Karin Mayr. "Immigration and income redistribution: a political economy analysis". In: *Public Choice* 131.1-2 (2007), pp. 101–116.

[100] Jacques Melitz and Farid Toubal. "Native language, spoken language, translation and trade". In: *Journal of International Economics* 93.2 (July 2014), pp. 351–363.

[101] Allan H Meltzer and Scott F Richard. "A rational theory of the size of government". In: *Journal of political Economy* 89.5 (1981), pp. 914–927.

[102] Matthias Messner and Mattias K Polborn. "Paying politicians". In: *Journal of Public Economics* 88.12 (2004), pp. 2423–2445.

[103] Simone Moriconi, Giovanni Peri, and Riccardo Turati. "Immigration and voting for redistribution: Evidence from European elections". In: *Labour Economics* 61 (2019), p. 101765.

[104] Cas Mudde and Cristóbal Rovira Kaltwasser. *Populism: A very short introduction.* Oxford University Press, 2017.

[105] Jan-Werner Müller. *What is Populism?* University of Pennsylvania Press., 2016.

[106] Kaivan Munshi. "Community networks and the process of development". In: *Journal of Economic Perspectives* 28.4 (2014), pp. 49–76.

[107] Lena Nekby. "The emigration of immigrants, return vs onward migration: evidence from Sweden". In: *Journal of Population Economics* 19.2 (2006), pp. 197–226.

[108] Pippa Norris and Ronald Inglehart. *Cultural backlash: Trump, Brexit, and authoritarian populism.* Cambridge University Press, 2019.

[109] Francesc Ortega. "Immigration, citizenship, and the size of government". In: *The BE Journal of Economic Analysis & Policy* 10.1 (2010).

[110] Alkis Henri Otto and Max Friedrich Steinhardt. "Immigration and election outcomes—Evidence from city districts in Hamburg". In: *Regional Science and Urban Economics* 45 (2014), pp. 67–79.

[111] Alejandro Portes and Rubén G Rumbaut. *Immigrant America: a portrait.* Univ of California Press, 2006.

[112] Alejandro Portes and Min Zhou. "The new second generation: Segmented assimilation and its variants". In: *The annals of the American academy of political and social science* 530.1 (1993), pp. 74–96.

[113] OECD Publishing. *International Migration Outlook SOPEMI: 2008 Edition.* Organisation for Economic Co-operation and Development, 2008.

[114] Assaf Razin and Efraim Sadka. "Unskilled migration: a burden or a boon for the welfare state?" In: *The Scandinavian Journal of Economics* 102.3 (2000), pp. 463–479.

[115] Assaf Razin, Efraim Sadka, and Phillip Swagel. "Tax burden and migration: a political economy theory and evidence". In: *Journal of Public Economics* 85.2 (2002), pp. 167–190.

[116] Tim Reeskens and Wim van Oorschot. "Immigrants' Attitudes towards Welfare Re-distribution. An Exploration of Role of Government Preferences among Immigrants and Natives across 18 European Welfare States". In: *European Sociological Review* 31.4 (Aug. 2015), pp. 433–445.

[117] Jeanette AJ Renema and Marcel Lubbers. "Immigrants' support for social spending, self-interest and the role of the group: A comparative study of immigrants in The Nether-lands". In: *International Journal of Social Welfare* 28.2 (2019), pp. 179–195.

[118] Antje Röder. "Immigrants' Attitudes toward Homosexuality: Socialization) Religion, and Acculturation in European Host Societies". In: *International Migration Review* 49.4 (2015), pp. 1042–1070.

[119] Antje Röder and Peter Mühlau. "Low expectations or different evaluations: what explains immigrants' high levels of trust in host-country institutions?" In: *Journal of Ethnic and Migration Studies* 38.5 (2012), pp. 777–792.

[120] Dani Rodrik. "Populism and the Economics of Globalization". In: *Journal of international business policy* 1.1-2 (2018), pp. 12–33.

[121] John E Roemer, Woojin Lee, and Karine Van der Straeten. *Racism, xenophobia, and distribution: Multi-issue politics in advanced democracies.* Harvard University Press, 2007.

[122] John E Roemer and Karine Van der Straeten. "The political economy of xenophobia and distribution: The case of Denmark". In: *Scandinavian Journal of Economics* 108.2 (2006), pp. 251–277.

[123] Kenneth Rogoff and Anne Sibert. "Elections and macroeconomic policy cycles". In: *The review of economic studies* 55.1 (1988), pp. 1–16.

[124] Kenneth F Scheve and Matthew J Slaughter. "Labor market competition and individual preferences over immigration policy". In: *Review of Economics and Statistics* 83.1 (2001), pp. 133–145.

[125] Alexander W. Schmidt-Catran and Romana Careja. "Institutions, culture and migrants' preference for state-provided welfare. Longitudinal evidence from Germany". In: *Journal of European Social Policy* 27.2 (May 2017), pp. 197–212.

[126] Alois Stutzer and Michaela Slotwinski. "Power Sharing at the Local Level: Evidence on Opting-In for Non-Citizen Voting Rights". In: (2019).

[127] Rafael Di Tella and Robert MacCulloch. *Why doesn't Capitalism flow to Poor Countries?* Tech. rep. National Bureau of Economic Research, 2007.

[128] Arne Uhlendorff and Klaus F Zimmermann. "Unemployment dynamics among migrants and natives". In: *Economica* 81.322 (2014), pp. 348–367.

[129] Thierry Verdier et al. *Cultural integration of immigrants in Europe.* Oxford University Press, 2012.

[130] Kåre Vernby. "Inclusion and public policy: Evidence from Sweden's Introduction of Noncitizen suffrage". In: *American Journal of Political Science* 57.1 (2013), pp. 15–29.