# Diversity, Immigration, and Redistribution

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## I. Introduction

Abundant evidence shows that private and public generosity travels much better within ethnic, religious, nationality groups than across. As a result, the scope of the welfare state and redistributive policies could be correlated with the diversity of the population, coming from far-away waves of immigration or recent inflows. This paper first provides a conceptual framework to think about redistributive policies in light of different, perhaps biased, views of immigrants and minorities. Through this lens, it then reviews the recent literature on immigration, diversity, and redistribution.

#### II. A Conceptual Framework

The simple conceptual framework captures how different perceptions, attitudes, and biases about immigrants or minorities can shape preferences for redistribution. Although the exposition focuses on "immigrants" for brevity, everything applies for minorities as well.

**Model:** Immigrants and non-immigrants chose whether to work or not. Their pretax income is z = 1 if they work and zero otherwise. There is a linear tax rate on income  $\tau$ the revenues of which are rebated lump-sum to all agents to finance a transfer  $c_0$ . Disposable income is  $c_1 = c_0 + (1 - \tau)$  for those who work and  $c_0$  for those who do not. Utility is  $u(c - \theta z)$  where  $\theta$  is a parameter shaping the disutility of earning income, such as health status, skill level,<sup>1</sup> or opportunities

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<sup>1</sup>Lower skills make it harder to earn a given amount of income.

in the labor market. This cost of earning income is private information to agents. Let  $P^{N}(\theta)$  be the cumulative distribution function for non-immigrants and  $P^{I}(\theta)$  the CDF for immigrants. The share of immigrants is  $\alpha$ . The fraction of agents who work is thus  $P(1-\tau) = \alpha P^{I}(1-\tau) + (1-\alpha)P^{N}(1-\tau)^{2}$ Let *e* denote the elasticity of *P* with respect to the net-of-tax rate  $(1-\tau)$ .

**Optimal Tax and Redistribution:** Society assigns to each individual i a marginal social welfare weight  $g_i$  that measures the relative social value of \$1 transfer to that individual (see Saez and Stantcheva (2016)). These social welfare weights embody society's redistributive preferences. For instance, if lower-income agents receive a higher social weight, transfers from higher to lower incomes will be socially valuable. Following the straightforward derivations in (see also the Appendix) the optimal tax is:

$$\tau^* = \frac{1 - \bar{g}}{1 - \bar{g} + e} \quad \text{with} \quad \bar{g} = \frac{\int_i g_i z_i di}{\int_i g_i di \cdot \int_i z_i di}$$

the average income-weighted social marginal welfare weight. Because nonworkers have  $z_i = 0$  and workers have  $z_i = 1$ , we have  $\bar{g} = \bar{g}_1 / [P \cdot \bar{g}_1 + (1 - P) \cdot \bar{g}_0]$ where  $P = P(1 - \tau)$ ,  $\bar{g}_1$  is the average weight on workers, and  $\bar{g}_0$  the average weight n non-workers. The optimal tax is lower when the elasticity of income or of the share of people working e is higher as this leads to higher distortionary effects from taxes. It is also lower when  $\bar{q}$  is lower. This occurs when preferences are less redistributive, i.e., when the average weight on those out of work is not as large relative to the average weight on workers.

Suppose that, as widely documented<sup>3</sup> and

<sup>&</sup>lt;sup>2</sup>It is also equal to aggregate income.

 $<sup>^{3}</sup>$ See among others Alesina and Angeletos (2005) and Alesina et al. (2011) who link views of fairness about the role of effort versus luck to preferences for redistribution.

as seen in the policy debate, people dislike "free loaders" and only value the "deserving poor." The "deserving poor" are those who cannot work, even absent any tax and transfer (i.e., agents with  $\theta > 1$ ). There are  $1 - P^{I}(1)$  deserving poor among immigrants and  $1 - P^{N}(1)$  deserving poor among natives. "Free loaders" are those who do not work because of the generosity of the transfer, but who would work if there were no transfers. These are agents with  $1 \ge \theta >$  $1-\tau$  and there are  $P^{I}(1)-P^{I}(1-\tau)$  (respectively,  $P^{N}(1) - P^{N}(1-\tau)$  of them among immigrants (respectively, natives) when the tax is  $\tau$ . This distinction between the free loaders and the deserving poor captures the notion that one can be poor because of a lack of effort (due to the generosity of the tax and transfer system) or bad luck, which is critical when it comes to support for redistribution.

We now discuss how different views of immigrants translate into different demand for redistribution.

Actual composition of immigrants: A first scenario occurs if people care equally about non-immigrants and immigrants. The social marginal welfare weights are then set based on the attitudes towards workers, free loaders, and the deserving poor only, without regard for immigrant status. Workers obtain a standard (utilitarian) weight equal to their marginal utility from consumption  $g_i = u'(c_1 - \theta_i)$  if  $z_i = 1$ , as do the deserving poor with  $g_i = u'(c_0)$ if  $z_i = 0$  and  $\theta_i \ge 1$ . Free-loaders obtain a weight of  $g_i = 0$  if  $z_i = 0$  and  $\theta_i < 1$ . We then have  $\bar{g}_0 = u'(c_0) \cdot (\alpha(1 - P^I(1)) + (1 - \alpha)(1 - P^N(1))/(1 - P))$ , as only a fraction of the non-workers are deserving. The higher the share of deserving poor, the more transfers to those out of work are considered socially valuable, and the higher the optimal tax and thus redistribution are.

The effect of an increase in immigration in this scenario depends only on how it changes the composition of those out of work. If there is a disproportionate share of free loaders who stop working because of the generosity in the welfare system of the receiving country, support for redistribution would be reduced. But this is only because people dislike free-loaders in general, not because they are biased against immigrants per se.<sup>4</sup>

Bias against immigrants: Suppose next that people put lower social weight on immigrants who are deserving poor, equal to  $\beta u'(c_0)$  with  $\beta < 1.5$  In this case,  $\bar{g}_0 = u'(c_0) \cdot (\alpha \beta (1 - P^I(1)) + (1 - \alpha)(1 - P^I(1))) + (1 - \alpha)(1 - P^I(1)) + (1 - \alpha)(1 - \alpha)(1 - P^I(1)) + (1 - \alpha)(1 - \alpha)$  $P^{N}(1)))/(1-P(1-\tau))$  which is lower than before as the immigrant deserving poor are discounted. An increase in the share of immigrants can reduce support for redistribution, even if the composition of immigrants in terms of deserving poor and free loaders is the same as (or even better than) that of natives. If the discount factor  $\beta$  on immigrants is sufficiently small, then support for redistribution will always decrease when the share of immigrants increases, even if all immigrants are deserving poor.<sup>6</sup> The weight  $\beta$  may depend on characteristics of the immigrants, such as their religion, cultural distance to the receiving country, and origin.

Misperceptions of immigrants: Perceptions of immigrants may not be in line with reality, as shown in Alesina, Miano and Stantcheva (2019). Thus, the social welfare weights and hence support for redistribution depend not on the *true* characteristics, but on the *perceived* ones. Even if people do not per se dislike immigrants ( $\beta = 1$ ), misperceptions can reduce support for redistribution. There can be misperceptions in the perceived share of immigrants,  $\hat{\alpha}$  and in the composition of immigrants  $\hat{P}^{I}(\theta)$ . If people perceive more freeloaders among immigrants and a higher reliance of immigrants on the welfare state

 $<sup>^4{\</sup>rm Conversely},$  if the inflow of immigrants increases the share of deserving poor, this should increase support for redistribution.

 $<sup>^{5}</sup>$ Working immigrants receive the same positive weight as before because they bring in revenues on net, the same way as natives. We can also consider the case in which the weight is also discounted on working immigrants.

<sup>&</sup>lt;sup>6</sup>This occurs if  $\beta < (1 - P^N(1))$ . In general, support for redistribution will decrease in the share of immigrants as long as  $\beta(1 - P^I(1)) < (1 - P^N(1))$ , i.e., if  $\beta$  is sufficiently low and/or the share of deserving poor among immigrants is not too high.

(as is documented in Alesina, Miano and Stantcheva (2019)) their support for redistribution will be lower. If people perceive a higher share of immigrants, support for redistribution will be lower as long as they also believe – rightly or wrongly– that there are more free-loaders among immigrants than among non-immigrants (i.e.,  $(1 - \hat{P}^{I}(1)) < (1 - \hat{P}^{N}(1))$ ).

The share of immigrants is also a policy variable that can be affected

Reinforcement between misperceptions and biases: Misperceptions and biases against immigrants can interact and reinforce each other. For instance, an increase in the share of immigrants reduces support for redistribution if  $\bar{\beta}(1-\hat{P}^{I}(1)) < \hat{P}^{I}(1)$  $(1 - \hat{P}^N(1))$ . If the bias against immigrants is already high ( $\beta$  is low) even a small over-estimation of the share of free-loaders among immigrants can tilt preferences towards less redistribution. Similarly, if the bias against immigrants is high (or if the perceived share of free-loaders is high), even a small over-estimation of the share of immigrants  $\hat{\alpha}$  can reduce support for redistribution.

Misperceptions against immigrants or minorities with no biases could in principle be corrected with better information. However, biases themselves could, first, generate, and, second, perpetuate misperceptions. Biases (e.g. racism) could be the reason perceptions about some minority or immigrant groups are different from those of natives. Second, biases could prevent people from looking for accurate information or seeing their views challenged and make them prone to tribal thinking and confirmation bias. The evidence in Section V confirms this interaction by showing that factual information is not very effective and that those who are least accurate about immigrants are also less willing to pay for information.

We now turn to the literature showing that a mix of these factors is at play.

#### III. Racial Diversity and Redistribution

Studies have shown consistently that people prefer giving to their racial group. Luttmer (2001) uses the General Social Survey to establish that individuals increase their support for welfare spending if the share of local recipients from their own racial group is higher. Fong and Luttmer (2009) show that racial group loyalty plays a role even in private charity. They vary the race, income, and worthiness of Hurricane Katrina victims shown (randomly) to a representative sample of US adults. While race has no effect on giving, respondents who say they feel closer to their racial or ethnic group donate more when victims are shown to be of the same race. Alesina and Glaeser (2004) demonstrate that the generosity of a major welfare program the AFDC is inversely correlated with the percentage of population in the state which is black, after controlling for income of the sate level.

There is also evidence for misperceptions in the composition of minority groups. Gilens (1995) argues that white respondents oppose welfare and targeted transfers to low-incomes because of racial attitudes, in particular, negative views of black Americans with one of the main racial prejudices being the stereotype that "black people are lazy" and that welfare disproportionately goes to minorities which is again captured in the model by a misperception of the distribution of types for minorities and non-minorities. Gilens (1996) shows that respondents exaggerate the association between race and poverty: the median respondent believed that 50-55% of all poor are black, while the accurate number was 29%. Consistent with this bias in views and over-estimation of the share of freeloaders, Alesina et al. (2011) find using the General Social Survey that white respondents are much less favorable to redistribution than white ones, even after controlling for a range of individual socio-economic characteristics. In new work, Alesina, Ferroni and Stantcheva (2019) also oversample black respondents to tease out in more detail their own considerations about redistribution and attitudes towards other groups. This evidence implies that white respondents discount the welfare of racial groups other than their own ( $\beta < 1$ ) and/or that they systematically perceive other racial groups (here, black people) to feature more free-loaders than their own. Politicians who are against redistribution may play the race card linking race issues to redistributive policies.

Boustan (2017) studies the "white flight" that followed the Great Migration of black Americans from South to North in the U.S. between 1915 and 1930. She argues convincingly that, in addition to the wish to live in more racially homogeneous communities, fiscal considerations also played a major role as "moving to the suburbs allowed whites household to isolate themselves form the changing bundle of local public goods and fiscal obligation offered in the central cities." (pages 224-25). Boustan's results are consistent with those in Alesina, Baqir and Hoxby (2004) for more recent periods, showing that the endogenous segmentation of cities is influenced by the desire to create more racially homogenous communities and the decision to provide a different bundle of public goods. The effect of the desire for racial homogeneity on the formation of jurisdictions is shown to be stronger than the effect of income homogeneity (i.e., the widely documented phenomenon in urban economics whereby the rich try to move away from the poor.) Alesina, Baqir and Easterly (1999) show that, in more racially and ethnically fragmented cities, the provision of productive and redistributive public goods (roads, hospitals, schools, etc.) is lower.

### IV. Immigration and Redistribution

Large flows of immigrants have fostered diversity in the U.S. and, more recently, in Europe. In the U.S., mass migration of about 30 million Europeans took place between 1850 and WWI. For that period in which the federal welfare state was minimal and cities were mostly independent fiscal units responsible for the provision of public goods, Tabellini (2018) finds that cities which received more European immigrants – specifically Catholic and Jewish immigrants – between 1910 and 1930 reduced their tax rates and public spending, especially on education. An inflow of Protestant immigrants generated no such effect, highlighting that increasing diversity (here, in religious affiliations) was critical to a reduction in redistribution. Further evidence on this migration wave is reviewed in Abramitzky and Boustan (2017).

Alesina and Glaeser (2004) argue that one of the main reasons why Western Europe has a more generous welfare state than the US is the relative ethnic homogeneity of European countries. Recent flows of immigration in Europe may also have changed attitudes towards redistribution. When studying these effects, a key endogeneity issue is the so-called "welfare magnet" effect, whereby immigrants may select into receiving countries with more generous welfare systems. Even then, it is not obvious in which direction the magnet effects would bias the results. In places where the welfare system is more generous, natives may presumably value redistribution more as well (have higher  $q_i$  for low-income individuals all together). Or they may perceive particularly high costs from spreading welfare to additional immigrants (at higher redistribution and tax levels the elasticity emay already be very high).

Natural experiments can help. Taking advantage of the Swedish refugee placement program which randomly assigned refugees in various localities in Sweden, Dahlberg, Edmark and Lundqvist (2012) identify a negative impact of refugees on reduced support for redistribution, especially among high-income earners. Chevalier et al. (2018) exploit the arrival of eight million forced immigrants in West Germany after WWII that were on average poorer and had full voting rights. In response, local governments persistently raised local taxes and welfare spending, but reduced spending on infrastructure and housing.

Natural experiments are not always available and do not allow for a systematic analysis of several countries. This is why Alesina, Murard and Rapoport (2019) as-

semble a dataset on the number and origins of immigrants for 140 regions in 16 European countries and combine it with perception data from the European Social Survey (ESS). Their analysis proceeds at the regional level, which allows them to include country fixed effects and is based on the assumption that most welfare policies are decided at the national, not local level, reducing the endogeneity due to the welfare magnet effect within countries.<sup>7</sup> At the regional level, exposure to immigrants increases the perceived number of immigrants at the national level. Accordingly, natives' support for redistribution is strongly and negatively correlated with the share of immigrants in their region, but only for respondents who are center or right-wing. In fact, the decline in support for redistribution from a one-quintile increase in the regional immigrants' share has an effect that is half as large as that of a one-quintile increase in household income. The size of the effect is larger for immigrants from the Middle-East and North-Africa and is larger in countries with already existing more generous welfare states (e.g.: Scandinavian countries and France rather than the U.K. or Ireland).

# V. Perceptions of Immigration and Redistribution

A more recent strand of the literature focuses on perceptions of immigrants and uses experimental treatments to establish causality between perceptions and support for redistribution. Alesina, Miano and Stantcheva (2019) run large-scale surveys and online experiments on representative samples of natives in Germany, France, Italy, Sweden, the UK, and the U.S to, first, elicit the perceptions and attitudes towards immigrants, and, second, test the effects of information and narratives about immigrants on support for redistribution. Consistently, natives have striking misperceptions about the number and composition of immigrants. In all countries, respondents starkly overestimate the share of immigrants. For instance, in the U.S., the actual number of legal immigrants is 10%, but the average perception is 36%; European have similar misperceptions.<sup>8</sup> Respondents believe immigrants are also more likely to come from culturally distant regions, overestimate the share of Muslim immigrants, immigrants from the Middle East and North Africa, and underestimate the share of Christian immigrants. Respondents also believe immigrants are less educated, more likely to be unemployed, and more reliant on the welfare state than is the case. Indicative of bias is that a significant share of respondents say that "Mohammad" who is identical to "John" in all respects (income, family situation, age) is more likely to receive more transfers and pay less taxes than John. The natives with the largest misperceptions are those with a low level of education, those who work in sectors more exposed to immigrants, and right-wing respondents.

Experimentally, respondents who are primed to think about immigrants in a randomized manner, simply by being asked questions about immigration before those about redistribution policies become less supportive redistribution. The reduction in support for redistribution is strongest among the aforementioned groups with the most negative views of immigrants. Respondents are also randomly subjected to one of two types of treatment: 1) informational treatments that provide accurate information on either the share or the origins of immigrants and 2) a narrative treatment conveying a day in the life of a very hardworking immigrant. Information does not actually help – if anything, it makes the immigration issue more salient, which reduces support for redistribution. The anecdotal narrative works somewhat, but not much, to improve support for redistribution.

These results are consistent with misperceptions about the share and composition of immigrants, their representation among the

<sup>&</sup>lt;sup>7</sup>This assumption is more appropriate for highlycentralized countries such as France, and less so for federal countries such as Germany.

<sup>&</sup>lt;sup>8</sup>Even including second-generation immigrants in the share of immigrants does not reduce the gap sufficiently.

poor, and their reliance on the welfare state, but also with a bias against immigrants per se. The interplay between misperceptions and bias highlighted in the model are apparent in this study as well. Respondents are provided with the opportunity to pay (a randomized amount) to receive the accurate information about immigrants. Even conditional on income and a range of personal characteristics, those with the largest misperceptions are less willing to pay for information, suggesting that they are less willing to learn, which could explain their misperceptions to start with. Right-wing respondents, who hold more negative views about immigrants in general are also less willing to pay.

While misperceptions could in principle be corrected, biases pose a much larger challenge and can perpetuate misperceptions. Future research in how to correct misperceptions in light of existing biases is needed.

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