ORIGINAL ARTICLE

(Climate) Migrants welcome? Evidence from a survey experiment in Austria

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Abstract

We study how economic, conflict, and environmental drivers of migration influence immigration acceptance in a receiving country. We carried out an online survey experiment in autumn 2015 with 686 student participants from the University of Innsbruck in Austria. In the survey experiment, respondents state their acceptance for a fictitious migrant from Chad where we vary the following causes of the migration decision: (1) violent conflicts, (2) environmental degradation due to global climate change, (3) environmental degradation due to local overuse, and (4) better economic prospects. We find that respondents support migrants who move because of climate change as much as conflict migrants. Acceptance is lowest for migrants who decide to leave for economic reasons, while it is slightly higher in the case of environmental degradation due to local overuse. Strikingly, a sizable share of respondents (25%) would even reject conflict migrants. Respondents who perceive a negative correlation between welfare, crime rates and job opportunities, and the presence of immigrants display lower immigration acceptance for all motives underlying the migration decision. In addition, we find heterogeneous effects depending on the respondents' gender and political affiliation. Respondents with right-wing party preferences disclose lower acceptance levels for all causes except conflict. Female respondents are more accepting of climate migrants and less of economic migrants than men. This paper informs the debate around the ongoing political and societal polarization in Europe and elsewhere on the acceptance of different types of migrants.

Keywords Survey experiment · Immigration acceptance · Environmental degradation · Climate change

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Introduction

Climate change and migration are both prominent topics of contemporary political and media attention. The combination of these two topics has led to a persistent public narrative of "climate migrants" or "climate refugees," often related to negative future scenarios projecting that masses of people may leave their countries of residence affected by climate change to head towards the Global North (Greussing and Boomgaarden 2017; Heidenreich et al. 2019). Public opinions on immigration have been a strong driver of political decisions in recent years. This became particularly evident during the so-called refugee crisis peaking in 2015/2016 in Europe, a period during which the presence and media attention on the topic of migration became very prominent and which is when we conducted this study. Attitudes towards immigration became a subject of social and political schism, particularly in the context of societal

acceptance, economic assumptions, and integration policies (Esses et al. 2017; Koch et al. 2018). While most scientific literature acknowledges that decisions to migrate are multi-complex and not straight forward to project (Black et al. 2011; Hurlbert et al. 2019; IPCC 2022; Cattaneo et al. 2019), the media often portrays single causes for migration. In this paper, we experimentally investigate how immigration acceptance of respondents in a destination country is shaped by the underlying causes for migration. These results highlight how framing by media or simplistic discourses can affect immigration acceptance.

Some scholars such as Collier (2013) perceive socio-economic reasons, manifesting in poverty and income gaps, as the major drivers leading to a veritable South–North exodus, which is in line with further research classifying "South-North" migration as a symptom of development failure (Bakewell 2008). International migration flows have constantly been rising with about 272 million people living outside their country of birth in 2019, constituting an increase of more than 50 million people within the last decade based on official census data (UN 2019).[1] Already in 1990, the Intergovernmental Panel on Climate Change (IPCC) warned that the most tangible impact of climate change could be migration (IPCC 1990). The most recent IPCC reports even underline that migration can be an effective adaptation strategy to the severe consequences of climate change (Hurlbert et al. 2019; IPCC 2022). While some researchers agree that relocation can be an effective adaptation, this might not always and for everyone be an option and could even lead to "loss and damage" (Warner and Afifi 2014; Klepp 2017; Vinke et al. 2020). While accurate projections are difficult due to the multi-causality, some expect that rising sea-levels, desertification, and increasing temperature will leave millions of people in hazardous environments by the end of the century (Hauer et al. 2020; Xu et al. 2020), which will lead to displacement, mostly within national borders (Rigaud et al. 2018). In line with this finding, most studies project rather regional than international migration movements. However, the consequences are also projected on an inter-regional level. Projections such as the one by Missirian and Schlenker (2017) of an annual increase of 98,000 asylum applications to the EU based on the forecasts of rising global temperatures in this century[2] are contested in general due to

inconsistencies in methodology, data, as well as underlying policy and time framework (Gemenne 2011).

Overall, the interlinkages between push and pull factors of migration are highly complex and further recent studies reject the often portrayed mono-causal link and direction between climate change, environmental degradation, and migration. There is mounting evidence that people living in areas exposed to multiple climate hazards could be deprived of their capacity to migrate and could face displacement in the future (Bell et al. 2021; Steimanis et al. 2021). In this vein, Groth et al. (2020) showed that rural households in Ethiopia face eroding capabilities due to climate hazards which increased inequalities in the ability to use migration as an adaptation strategy. Similarly, Cottier and Salehyan (2021) find that economic deprivation of households due to resource scarcity as a consequence of drought may be a hindrance for migration interfering with the push factors. Adger et al. (2021) show in a cross-country study that perceived increased severity of drought and related increased household insecurity reduce future migration intentions. Koubi et al. (2016a, b) add a further time dimension to this debate by highlighting that individual perceptions of long-term and rather gradual detrimental environmental events, such as droughts, lower the likelihood of local and regional migration, while sudden-onset events, such as floods increase movement.

Our main interest is to find out how differences in the responsibility for environmental degradation shapes acceptance in comparison to conflict migrants and often negatively connotated economic migrants. The terms economic migrant, conflict migrant, and environmental migrant applied in this paper refer to the primary cause of migration and not to any other individual characteristic. Do people in the Global North think climate migrants should enjoy the same protection as conflict migrants? Is acceptance as low as for economic migrants when the countries of origin share responsibility for environmental degradation?

We study these questions using a survey experiment[3] conducted with 686 students from the University of Innsbruck in Austria. Respondents were introduced to the basic story of a fictious person from Chad who plans to move to Austria. Chad was chosen due to the multidimensional migration context and because respondents would not

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[1] At the time of the study, Austria ranked 9th regarding asylum applications in the EU. In relation to its population, it ranked 3rd (EUROSTAT 2018). Syria, Iraq, and Afghanistan have been the top three countries of origin during the study period in Austria and less than half of applications on Austrian territory has been decided positively (BM.I Abteilung III/5 BM.I Abteilung III, 5, 2015).

[2] This projection is estimated using the intermediate representative concentration pathway (RCP) scenario 4.5 where emissions peak around 2040 and then decline. The authors estimate an increase of even 188% (660,000 additional applications per year) using the worst-case scenario, RCP 8.5.

[3] The main virtue of the method is the experimental control over the decision context. The researcher can manipulate one aspect at a time to measure its causal impact on the outcome of interest. The use of monetary or other material incentives and anonymity makes survey experiments less prone to hypothetical bias or social-desirability biases than surveys.

have a pre-formed opinion about immigrants from Chad as there are only few in Austria. General characteristics of the migrant such as name, age, gender, and education, and current economic situations were held constant, while the information related to the driving factors of migration were varied across the treatment groups.[4] Thus, the study design allows for causal conclusions how the different reasons for migration affect immigration acceptance. Violent conflicts (CONFLICT) are expected to be the upper bound, while economic reasons (ECON) are expected to be the lower bound of immigration acceptance levels across treatments. In between, there are the two environmental migration treatments: (i) environmental degradation due to global climate change suggesting a primary responsibility on the side of industrial countries (ENV GLOBAL) and (ii) due to local resource overuse (ENV LOCAL). In ENV GLOBAL, the respondents, coming from a high-income industrialized country, could be influenced by a perceived responsibility for the environmental hazards happening in Chad, while in ENV LOCAL the migrant was to some degree involved in the environmental cause by contributing to resource over-use. In many cases, environmental degradation has multifaceted causes, which go beyond climate change. For instance, low-lying delta regions often subside much faster due to excessive groundwater extraction than sea-levels are rising (Anthony et al. 2015; Auerbach et al. 2015). In this vein, we designed the ENV LOCAL treatment to reflect the public's widespread perceptions and pretextual argument of "mainly local drivers" of migration as an explanation for the rejection of immigrants.[5] The respondents were not actively informed about whether the migrant could in fact legally apply for asylum or not in Austria, to avoid an upfront bias to respond in coherence with the existing legislation. It is important to interpret our findings in the context in which we conducted the survey experiment (October 2015) just 1 month before thousands of refugees arrived at the main train station in Vienna and were warmly welcomed (The Guardian 2015).

Our study contributes to the literature that looks at general attitudes towards immigrants, biased beliefs about immigrants, ethnic minorities, or adherents of religious groups (O'Rourke and Sinnott 2006; Esses et al. 2017; Grigorieff et al. 2020). These studies do not frame public opinions and perceptions in the context of asylum seeking or differentiate between different types of applicants. Furthermore, most

of them have been conducted before the current situation was referred to as a "refugee or migration crisis" (Mayda 2006; Masso 2009; Ceobanu and Escandell 2010; Markaki and Longhi 2013). Thus, there are only very few studies like Bansak et al. (2016), Böhm et al. (2018), Spilker et al. (2020), or Helbling (2020) that investigate particular attributes of asylum seekers that the European public is willing to accept. Spilker et al. (2020) find that people in internal migration receiving urban areas in Vietnam and Kenya do not perceive migrants because of environmental reasons as more deserving than economic migrants. In line with our main hypothesis, Helbling (2020) shows in a survey experiment that support of climate migrants due to droughts and sea-level rise is as high as for political migrants. Our results complement these findings by extending them to another location, time, and most importantly changes in the experimental design to disentangle the role of responsibility of receiving countries and countries of origin in the environmental cause of the migration decision.

A further distinguishing feature of our study is provided by the individual portrayal of the migrant, displaying information on personal motivations and basic personal background, while most other studies look at the variable of migration in a collective or group context (O'Rourke and Sinnott 2006; Esses et al. 2017; Grigorieff et al. 2020). People's empathy and behaviors tend to be more strongly influenced by information, especially in the form of images, on individual human suffering than more statistical information (Slovic et al. 2017). Our study thus makes the distinguishing features of migration decisions more salient and may provide a clearer view on acceptance without the overall tendency to rejection and perceived threat, which may be attributed to an out-group bias, when migration is studied as a group phenomenon.

Literature and hypotheses

In the following, we provide a more general overview of the existing literature on the wide range of determinants of immigration acceptance of people living in receiving countries. Bansak et al. (2016) show in their experiment conducted in 15 European countries that asylum seekers with a high employability and education status, more consistent asylum testimonies, who are perceived as vulnerable, and are rather Christians than Muslims have the highest probability of public acceptance. These results suggest that public acceptance levels are shaped by the potential of future economic contributions, humanitarian concerns, the trustworthiness of asylum claims, and an anti-Muslim bias. In a similar vein, Böhm et al. (2018) investigate economic and psychological determinants of citizens' pro-social behavior towards refugees and find that behavior in favor of refugees

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[4] See Annex S4 for more the instructions that were provided to participants of the survey experiment.

[5] This treatment was chosen to mirror a common perception and a de facto feature of decision-making at immigration institutions and does of course not constitute a de facto assignment of individuals' responsibility for environmental degradation. These contexts are of course much too complex to narrow it down to the role of the individual as displayed in this study context.

becomes less likely if societal costs are incurred and more likely the higher the neediness of the refugee is assessed.

Another strand of the literature, from field of psychology, investigates how personality traits and personal values of people influence the acceptance of migrants. Among those factors are stereotypes, expectations of the migrants' behavior, anticipated outcomes for the citizens in the host country, and a perceived threat to cultural and religious values or even security (Fiske et al. 2002; Piontkowski et al. 2002; Brader et al. 2008; Brown and Zagefka 2011; Vecchione et al. 2012). Vecchione et al. (2012) find high correlations between values such as universalism and security and personality traits and show that these are more important than socio-demographic characteristics when explaining peoples' perceptions towards immigration. These findings are also supported by Hainmueller and Hiscox (2007) who used European Social Survey data and concluded that people with a higher educational background are more likely to accept migrants, regardless of their educational or skill level. Grigorieff et al. (2020) similarly show that the level of knowledge about immigration, such as statistics about the true ratio of migrants within a society increases the acceptance level. Beyond these psychological factors, there is also evidence that people assess migration from an economic cost–benefit perspective. This perspective is very often framed in the context of the migrants' participation in social welfare systems, displaying parts of citizens who reject to share these collective goods that are financed by taxes with migrants (Sides and Citrin 2007; Facchini and Mayda 2009; Card et al. 2012; Kauff and Wagner 2012) (Kauff & Wagner, 2012; Facchini & Mayda, 2009; Sides & Citrin, 2007; Card et al., 2012). Hainmueller and Hiscox (2007) find that immigration has little or at least equivocal effects on employment rates of native workers and their real income. Evidence also suggests that negative attitudes towards immigration appear more correlated with cultural values such as tradition and strong advocacy of concepts of national identity.

Hypotheses

Ethical principles inform our null hypothesis that respondents will equally accept all immigrants independent of the causes for migration. Based on a libertarian perspective, the right to migrate freely should be basic human right as privileges of birth are morally unjust and unmerited, manifesting global inequalities also referred to as the "open border argument" (Nozick 1974; Carens 2013).

Null hypothesis—"open borders" (H0): *Participants accept immigration and do not differentiate between the causes of migration and whether it is forced, legal, or voluntary.*

Given that humans do not base their decision on these moral foundations, we hypothesize that conditions under which migration happens affect acceptance in the host country. Firstly, conflict-induced migrants are the only type of migrants who can legally apply and have a good chance to be granted protection based on existing international law. The rejection of this type of migrant is, thus, a human rights violation, perceived from the perspective of procedural justice. Assuming that living space, resources, and capacities of the social systems of hosting countries have a certain limitation, asylum is granted to the people, who need it most. This line of argumentation is coherent with general economic theories about allocating scarce goods and group conflict theory that expects competition over scarce resources to cause conflict between groups, where immigrants are perceived as a threat to resources (Ember and Ember 1992; Homer-Dixon 1994). While political refugees must be granted protection according to the Geneva Convention independent of the associated costs for the host country, other migrants are assessed based on certain criteria. These criteria could include the migrants' economic or social "value" for the hosting society (Osterloh and Frey 2018) or the degree of responsibility behind their decision to migrate. While our study design holds the first argument constant, it provides variations of the second. This leads to the hypothesis that the highest acceptance levels will be observed in the CONFLICT treatment.

Alternative hypothesis 1 (H1): *Acceptance is driven by the legal status of the potential migrant. It is higher for migrants who can legally apply for asylum (CONFLICT) compared to when it is not legal (all other treatments).*

People may differentiate between immigrants based on the individual responsibility underlying the forced movement. Our study captures the responsibility of the migrant but also the responsibility of the recipient. On the side of the migrant, we highlight whether the person, as part of a larger group, contributed to the exploitation of marine resources in the lake Chad. Similarly, the recipient, as part of a larger group, contributed to the emission of CO_2 and thus contributed to global warming and the shrinking of lake Chad. Yet, their actual power in stopping these processes is extremely small and negligible. Yet, perceived responsibilities are distinct from moral or legal responsibilities as they are driven by internalized moral principles guided by emotions and intuitions as proposed by dual-process theory of morality (Greene et al. 2001; Greene and Haidt 2002; Haidt 2013). Especially the treatments might evoke different perceptions about fairness and not doing harm to others. Some of our respondents might feel more responsible for ENV GLOBAL (than ENV LOCAL) as they perceive climate change to be unjust and them being part of a system that created this injustice. This might make them feel morally responsible although their actual moral or legal responsibility might be negligible. Helbling (2020) finds some evidence in line with this argumentation. In a representative German sample, they find that potential immigrants related to causes of

climate change enjoy similar levels of acceptance as political refugees. In both cases, people are forced to leave their home countries and are not perceived as actively involved in the circumstances causing their situation. To single-out the responsibility factor, we include two treatments that vary with whom the responsibility for environmental degradation lies. One should not understand these two treatments as a de facto attribution of responsibility but they reflect often mono-causal media reporting of and public debates about migration causes.

Alternative hypothesis 2 (H2): *Acceptance of migrants who decide to move because of environmental degradation caused by climate change (ENV GLOBAL) is similar to conflict migrants (CONFLICT) and higher than when degradation is caused locally (ENV LOCAL).*

Lastly, studies show that people oppose migrants who are mainly motivated by the better economic opportunities in the destination country (Bansak et al. 2016). As there has been no research on acceptance of migrants who move because of environmental degradation caused by local natural resource overuse, it is unclear whether they will be seen as more or less deserving or legitimate as economic migrants. The perceived deservingness of a potential immigrant could be the decisive factor (Hager and Veit 2019). Citizens in destination countries may perceive environmental migrants as more deserving than economic migrants, as the latter face no disturbances to their livelihoods in their home countries.

Alternative hypothesis 3 (H3): *Acceptance of economic migrants who decide to move to better their economic situation (ECON) is lower than for environmental migrants due to local resource degradation (ENV LOCAL).*

In a nutshell, the four treatments mainly differ in the following aspects: (i) legality to apply for asylum in Austria, (ii) with whom the responsibility for the underlying migration cause lies, and (iii) how "deserving" or in need the potential immigrant is. We expect acceptance level to differ according to the following ranking: CONFLICT > ENV GLOBAL > ENV LOCAL > ECON.

Methodology and data

In contrast to opinion polls and regular surveys, survey experiments have a clear advantage in terms of the degree of control of attribution of effects and thus internal validity, as they randomly assign treatments in a survey context (Atkeson and Alvarez 2018). A common critique is the potential for bias due to the hypothetical nature of the migration scenarios and acceptance decision. However, we are confident that any hypothetical bias would be similar across treatments as we ensured that all treatments present realistic scenarios given the multidimensional migration context in Chad (see treatment description for details). Thus, absolute acceptance

levels might be biased but not any treatment effects, i.e., differences in acceptance levels between treatments. Additionally, we apply robustness tests and control for several socio-demographic and attitudinal questions. Furthermore, as elaborated in the results and discussion sections of this paper, our findings on general and political attitudes are largely coherent with statistics of opinion polls such as the European Social Survey and national election results, which underlies that our results may not be unique to the studied population.

The online survey experiment was conducted with 686 students from different faculties of the University of Innsbruck[6] during October 2015 using the survey software Lime survey. The survey was announced in a regular email newsletter about social-scientific surveys. The newsletter encouraged students to take part in our survey experiment and informed them about the general topic, duration, and payment.[7] It is often criticized that studies are predominantly conducted with students from WEIRD (western, educated, industrialized, rich, and democratic) countries (Henrich et al. 2010). However, understanding attitudes towards immigration of students from a WEIRD country like Austria, which is a likely destination country for future migrants, can offer important insights on the support for a much-needed update of immigration policies that reflect the climate-migration realities we will face. Today's students are tomorrow's future who must manage and adapt to increasing immigration. Descriptive statistics of our subject pool show that the average respondent was 24 years old, and women were more likely to participate (62%). The most frequent countries of origin were either Austria (56%), Germany (19%), or Italy (16%). In addition, we elicited respondents' political party preferences, general perceptions on immigration, religious affiliation, information regarding the neighborhood they live in, exposure to foreigners in their circle of friends, knowledge of the Geneva convention (e.g., who can legally apply for asylum in Austria), and general interest in the topic. As our treatments deliberately omitted information about which migrant could legally apply for asylum in Austria, knowledge of the Geneva convention is important for drawing

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[6] We considered the University of Innsbruck to be an interesting study location in 2015, as the city constituted a major inner EU transit zone, particularly between Hungary, Italy, and Germany for migrants during this period. The situation was very salient particularly at the train stations and on trains en route from Italy, via Austria to Germany.

[7] The E-mail included a link to the questionnaire with the information that it should not take more than 10 to 15 min to complete the 28 questions and a note that all answers are strictly anonymous. In addition, respondents were informed that they take part in a lottery having the chance to win 25 Euro when they finish the survey. A browser cookie was set to make it more difficult for respondents to participate more than once in the survey.

conclusions from our empirical results. Across treatments, 84% of respondents knew whether the migrant could apply for asylum or not. This allows us to test whether respondents draw on knowledge about legal immigration when making their acceptance decision (these results are reported in Supplementary Section S2.2). The summary statistics of these information are reported in Supplementary Table S1.

Attrition and treatment balance

A total of 1197 students opened the survey, out of whom 686 fully completed it and 511 aborted the survey at some point. Compared to previous surveys conducted on different topics, this is an outstandingly high response rate for an online survey at the University of Innsbruck, speaking for high interest in the topic, as the monetary incentive was rather below standard for the department of economics.[8] Overall, about 57% of students completed the survey with no systematic differences in non-completed surveys between treatments ($M_{POL}=0.56$, $M_{ECON}=0.56$, $M_{ENV\ GLOBAL}=0.57$, $M_{ENV\ LOCAL}=0.59$; Kruskal–Wallis test $chi^2(3)=0.73$, $p=0.87$). In addition, we find no significant differences in terms of the observed socio-demographics across treatments (see Supplementary Table S2). This provides confidence about the internal consistency of our treatment effects. Unfortunately, due to limitations of the software used, we do not have any information at which point respondents aborted the survey nor any individual characteristics of those respondents to investigate differences to the respondents who completed the survey experiment.

Experimental treatments

We chose Chad as the origin country of our potential immigrant as the multidimensional migration context (regional conflicts, economic crisis, climate/ environmental change) provides relatable scenarios for all four treatments. Chad is currently ranked last on the World Bank's Human Capital Index, implying very low opportunities regarding health and education services and prospects. The economy is assessed as highly vulnerable to the aforementioned regional and environmental insecurity as well as to oil price volatility being an active producer of the commodity since 2003 (World Bank 2020). Since independence in 1960, Chad has been plagued by political and social instability due to conflict between ethnic and religious groups, which are further fueled by conflicts in the larger region. Since 2014, the region has witnessed a severe increase in violence, mostly

driven by terror attacks by Boko Haram targeting civilians in the Lake Chad Basin. Consequently, the number of internally displaced people (IDPs) was at a high level with 108.000 individuals at the time of the study and ever more so since with 176,000 IDPs in 2020 (IDMC 2021). In addition to these conflict-related drivers of migration, increasing temperatures and reduced rainfalls are causing desertification, which is particularly tangible in the desiccation of Lake Chad (UNEP 2018), and intensified droughts.[9]

Lastly, actual migration numbers from Chad to Austria have been extremely low[10] over the last years, decreasing the likelihood that acceptance levels in our study are driven by respondents' specific experiences with immigrants from Chad or general stereotypes.

Respondents received the same basic information about Chad and the potential migrant to ensure comparability across treatments. To avoid misunderstandings in terminology, the term migrant was used throughout all treatments. A map of the Sahel-Belt and its surroundings was provided to help respondents visualize the country context. Respondents read the basic story of a fictious migrant called Mbaya who is a 26-year-old married Muslim from around Lake Chad with two children. He studied business administration but only found employment as a fisherman. So far, Mbaya enjoyed a relatively stable and economically independent life given the circumstances and living conditions in Chad. Common to all treatments is the information that the individual plans to migrate, even though he knows that he cannot legally enter Austria without a working permit or in the context of a family reunification.

After respondents received the information about the context and characteristics of Mbaya, they were randomly allocated to one of the four treatments with a fixed probability.

Conflict migrant treatment (CONFLICT). The information specific to this treatment highlighted that the consequences of the civil war and violent conflicts around Lake Chad have forced Mbaya to move. The existing legislation for asylum in Austria was not mentioned to avoid a bias in contrast to the other treatments.[11]

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[8] In a survey experiment conducted in 2014 and 2015 at the University of Innsbruck, see Vollan et al. (2017), 589 students responded in total (353 complete and 236 incomplete surveys).

[9] Lake Chad is home to over 20 million people from eight different countries who derive direct or indirect livelihoods from the lake. As a result of decreased rainfall and increased water usage, Lake Chad decreased by 95% since 1963 (UNEP 2018).

[10] In 2015, three asylum applications from Chad to Austria were registered (BM.I Abteilung III/5 BM.I Abteilung III, 5, 2015).

[11] Between 2010 and 2013 all people who flew from the civil war in Chad were granted asylum across the globe. In 2015, attacks by armed groups around Lake Chad were increasing and led to the declaration of a state emergency. Thus, in 2018, still 30% of all migrants from Chad that applied for asylum were also granted asylum (https://www.worlddata.info/africa/chad/asylum.php; https://reporting.unhcr.org/node/2533?y=2015#year).

Economic migrant treatment (ECON). Respondents received information that Mbaya decided to move to Austria to improve his economic prospects and to find a job in his academic profession instead of working as a fisherman.

Environmental migrant due to climate change (ENV GLOBAL). Respondents received information that climate change has forced Mbaya to move to Austria due to the shrinking of Lake Chad and degrading fishing opportunities. The main driver for the desiccation of Lake Chad are climate change-induced droughts for which countries in the Global North are largely responsible by emitting greenhouse gases. The information suggested that Mbaya was not responsible for this externally induced situation.

Environmental migrant (ENV LOCAL). Respondents received information that Mbaya and other citizens do not stick to regulatory rules regarding fishing and agricultural policies that would help to ensure sustainable use of the natural resources. Therefore, income opportunities for fishing have been decreasing over time, forcing Mbaya to move. Compared to the ENV GLOBAL treatment, the information suggested an active involvement and certain degree of internal responsibility of the situation.

The exact information provided to respondents can be found in the Supplementary Materials Section S3.

Estimation strategy

The outcome variable of interest is the level of acceptance measured on an 8-point Likert scale, ranging from "completely against" to "completely support."[12] We estimate the average treatment effect (ATE) on the level of acceptance with CONFLICT as the reference group, which is the only treatment where Mbaya should be accepted unconditionally. Other explanatory variables are included in the vector X_i, including all behavioral, attitudinal, and socio-demographic covariates. Equation (1) shows the impact of each treatment on the level of acceptance relative to the CONFLICT treatment (omitted group):

$$Acceptance_i = \alpha + \beta_1 * ECON_i + \beta_2 * ENVGLOBAL_i$$
$$+ \beta_3 * ENVLOCAL * + \beta_4 * X_i + \varepsilon_i \quad (1)$$

We carry out various robustness checks such as an ordered logit model to account for the underlying structure of the dependent variable (Table S3) and apply a binary specification of acceptance (Table S4). The main results presented are robust to these model variations.

Results

The empirical analysis consists of two parts, starting with the main treatment effects before investigating the determinants of immigration acceptance and heterogeneous effects. Subsequently, we explore if respondents' characteristics can explain their acceptance levels. Finally, we examine heterogeneity depending on respondents' gender and political party preferences.

Acceptance levels across treatments

Figure 1 panel "**a**" plots the average acceptance levels across treatments. We do not see any evidence that respondents are mainly guided by ethical considerations as hypothesized under our null of open borders. Acceptance levels differ substantially across treatments. On average, acceptance in the CONFLICT treatment is highest with a median of six ("support") and lowest ("rather against") in the ECON treatment, suggesting that the factor of legality could matter. Indeed, the results show it is rather with whom the responsibility lies for the migration cause than legality that drive immigration acceptance, as acceptance in ENV GLOBAL is comparable to CONFLICT (mean $\mu_{CONFLICT} = 5.52$ and $\mu_{ENV\ GLOBAL} = 5.53$, Mann–Whitney U, $z_{355} = -0.26$, $p = 0.80$) and significantly higher than in ENV LOCAL ($\mu_{difference} = 0.67$, Mann–Whitney U, $z_{463} = 4.07$, $p = 0.00$). Lastly, the results show that respondents think that migrants who move due to environmental degradation caused locally are slightly more deserving than economic migrants ($\mu_{difference} = -0.22$, Mann–Whitney U, $z_{331} = -2.02$, $p = 0.04$). To sum up, the results are in line with our second and third alternative hypothesis indicating that with whom the responsibility for the environmental degradation lies is more important than de facto legal protection rights.

Result 1: *Acceptance of immigrants does not depend on whether the migrant could legally apply for asylum but rather with whom the responsibility lies for the migration cause.*

In a next step, we group respondents into four categories to investigate polarization of immigration attitudes: (i) "against" (acceptance below 4), (ii) "rather against" (acceptance equal to 4), (iii) "rather support" (acceptance equal to 5), and (iv) "support" (acceptance above 5). We see that nearly half of the respondents across all treatments do not have a strong opinion (i.e., "rather against" or "rather support") of whether they are in support or against the migrant legally immigrating to Austria.[13] Figure 1 panel "**b**"

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[12] "Would you rather refuse or rather advocate that he can migrate to Austria by legal means?".

[13] Overall, about 44% of respondents are undecided, 26% ($n = 181$) would "5 = rather accept," while 18% ($n = 122$) are "4 = rather against" the immigrant moving legally to Austria.

Fig. 1 Panel **a** shows average immigration acceptance (8-point Likert scale) with 95% confidence intervals across the four treatments groups: conflict migrant (CONFLICT), economic migrant (ECON), environmnetal migrant due to climate change (ENV GLOBAL), environmental migrant (ENV LOCAL). Panel **b** shows the polarization in acceptance levels across treatments by clustering responses into four categories: '<4 against', '4=rather against', '5=rather support' & '>5 support'
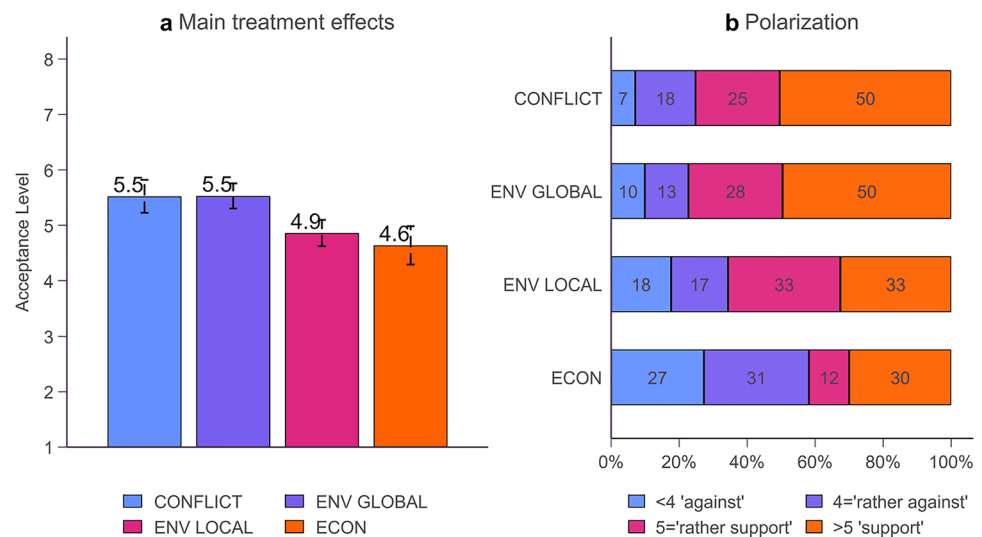
strikingly reveals that 7% ($n = 8$) of respondents in the CONFLICT treatment would be willing to deny an international human right and another 18% ($n = 20$) would rather deny it. On the other extreme, there are respondents, who would support open-borders. About 30% ($n = 33$) of respondents in the ECON treatment would accept the migrant with similar support levels of 33% ($n = 72$) for ENV LOCAL and even 50% ($n = 120$) in ENV GLOBAL. In addition, there is a relatively large share of respondents, who take rights-based decisions, i.e., they reject immigration that has no legal grounds and therefore support conflict migrants and reject all other migration causes as legitimate. The share of rights-based respondents is highest in the CONFLICT treatment with 50%, followed by ECON (27%), ENV LOCAL (18%), and ENV GLOBAL (10%). A potential explanation beyond pure preferences to reject conflict migrants could be that respondents are not aware of the legal protection rights. However, only one respondent in the CONFLICT treatment stated that migrants due to political persecution, civil wars, or violent conflicts could not legally apply for asylum in Austria. This respondent "rather supported" the immigrant's application anyway. Thus, a lack of familarity with the legal context does not explain why 25% of respondents in the CONFLICT treatment would rather deny an international human right.

Result 2: *The largest share of respondents (45%) does not have a strong opinion on whether they should support or reject non-conflict migrants, while 39% would support open-borders. However, one-quarter of respondents would rather reject conflict migrants, which cannot be explained by a lack of knowledge of existing legislation.*

Furthermore, we see relatively high levels of support for economic migrants. While we hold the individual characteristics of the fictious migrant fixed, the perceived welfare implications (Clemens 2011) of migrants coming to Austria could vary between respondents. Comparing acceptance levels of respondents based on how they perceive immigration welfare impacts, we find that acceptance is significantly higher for respondents who think immigrants positively contribute to the welfare state ($\mu_{contribute} = 5.6$ and $\mu_{costly} = 4.2$, $SE_{diff} = 0.14$, $t_{684} = 9.95$, $p = 0.00$). However, this gap is significantly smaller in the ECON treatment and not statistically significant at the 5% level ($\mu_{contribute} = 4.84$ and $\mu_{costly} = 4.2$, $SE_{diff} = 0.38$, $t_{108} = 1.82$, $p = 0.07$). This indicates that respondents in the ECON treatment potentially see economic migrants as less of a burden to the welfare state than other types of migrants. For more details about perceived welfare impacts across treatments (see Supplementary Figure S2).

Perceived consequences of immigration determine acceptance levels

As mentioned above, we also estimate treatment effects on immigration acceptance using multivariate ordinary least square (OLS) regressions controlling for the influence of a combination of attitudes towards immigration, political orientation, and socio-demographic variables. The main treatment effects are robust in size and significance to the inclusion of all those explanatory variables. We find that immigration acceptance is lower for respondents who perceive the consequences of immigration (welfare, safety, job market) as negative. On top of these effects, right-wing voters have the most negative attitudes towards immigration. Table 1 shows the regression results, where we gradually introduce controls to determine their relative importance. Column (1) shows the baseline results without any added control variables. Acceptance levels are significantly lower by nearly one point on the 8-point acceptance scale in the ECON treatment (coefficient $\beta = -0.89$; $p = 0.00$; 95% CI $= -1.34, -0.43$) and by 0.6 points in the ENV LOCAL treatment ($\beta = -0.66$; $p = 0.00$;

Table 1 Determinants of immigration acceptance

DV: immigration acceptance	(1)	(2)	(3)	(4)
Treatments				
ENV GLOBAL	0.01 (0.19)	−0.01 (0.19)	0.02 (0.16)	0.02 (0.16)
ENV LOCAL	−0.66*** (0.19)	−0.67*** (0.19)	−0.60*** (0.16)	−0.58*** (0.16)
ECON	−0.89*** (0.23)	−0.90*** (0.23)	−0.94*** (0.22)	−0.96*** (0.22)
Socio-demographics				
Female (=1)		0.30** (0.15)	−0.03 (0.13)	−0.06 (0.13)
Single (=1)		−0.11 (0.14)	−0.07 (0.12)	−0.07 (0.12)
Age		0.00 (0.01)	−0.01 (0.01)	−0.01 (0.01)
Religious (=1)		−0.28* (0.15)	−0.11 (0.13)	−0.12 (0.13)
Foreign friends (=1)		0.51*** (0.19)	0.17 (0.18)	0.18 (0.18)
Index: neighborhood (1, 5)		−0.37*** (0.12)	−0.14 (0.10)	−0.12 (0.10)
Immigration perception				
Immigrants steal jobs (=1)			−0.96*** (0.29)	−0.81*** (0.30)
Immigrants increase crime rate (=1)			−0.27** (0.13)	−0.24* (0.14)
Immigrants cost the welfare state (=1)			−0.66*** (0.16)	−0.58*** (0.16)
Index: immigration factors (0, 8)			−0.29*** (0.05)	−0.26*** (0.05)
Asylum pleas outside the EU (=1)			−0.27** (0.13)	−0.25* (0.13)
Party preference				
Left voter (=1)				0.07 (0.14)
Right voter (=1)				−0.62** (0.30)
No party preference (=1)				−0.16 (0.22)
Constant	5.52*** (0.15)	5.93*** (0.44)	7.06*** (0.39)	6.97*** (0.41)
F-test: socio-demographics		0.00	0.72	0.72
F-test: immigration perception			0.00	0.00
F-test: party preferences				0.18
Observations	686	686	686	686
R-squared	0.04	0.08	0.28	0.29
Adjusted R-squared	0.04	0.07	0.27	0.27

The dependent variable in the OLS regressions is acceptance and ranges from 1, "refuse completely," to 8, "support completely." The conflict migrant treatment (CONFLICT) is used as the reference group for estimating the effects of the econmic migrant (ECON), environmnetal migrant due to climate change (ENV GLOBAL), and environmental migrant (ENV LOCAL) treatments. Party preferences are grouped together as follows: (i) centrist (Social Democratic Party, Austrian People's Party, the New Austria and Liberal Forum) left (the Greens, Communist Party Austria, Pirate Party) and (ii) right (Freedom Party, Team Stronach, Alliance for the future of Austria). Centrist voters are the comparison group for party preference effects. All results are robust to using more appropriate, but harder to interpret, ordered logit regressions (Supplementary Table S3) or using a binary acceptance variable (Supplementary Table S4). Robust standard errors in parentheses ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

95% CI $= −1.04, −0.28$) compared to the CONFLICT treatment. Acceptance levels for the ENV GLOBAL treatment are of similar size as in CONFLICT ($\beta = 0.01$; $p = 0.97$; 95% CI $= −0.37, 0.38$). Controlling for socio-demographics (column 2) explains 4% additional variation in acceptance levels compared to the model only including the treatment dummies (compare R^2 of models 1 and 2).

Further including individual perceptions of immigration impacts (column 3) takes away the jointly significant effect of socio-demographics ($F_{(6, 671)} = 0.62$, $p = 0.72$), for instance, the gender differences that have been reported in previous studies (Semyonov and Glikman 2009; Ponce 2017). Controlling for immigration perceptions, female respondents do not display more pro-social attitudes towards immigration than men. The perceived immigration implications, such as welfare impacts or increases in crime rates, are significant explanatory factors of acceptance ($F_{(5, 671)} = 40.19$, $p = 0.00$) and drastically increase the model fit ($R^2 = 0.3$). Respondents, who are more demanding of the migrant (education, language skills, etc.), show significantly lower acceptance ($\beta = −0.29$; $p = 0.00$; 95% CI $= −0.39, −0.19$). Also, respondents who believe that immigrants are costly to the welfare system ($\beta = −0.67$; $p = 0.00$; 95% CI $= −0.98, −0.35$), increase the crime rates ($\beta = −0.27$; $p = 0.04$; 95% CI $= −0.53, −0.01$), or constitute a competing factor on the job market ($\beta = −0.96$; $p = 0.00$; 95% CI $= −1.53, −0.38$) display lower acceptance.

Controlling for respondents' political party preferences (column 4) does not change the previous estimates and treatment effects considerably. Party preferences are strongly correlated with attitudes towards immigration explaining why they do not add much explanatory power. However, there are significant differences in immigration perceptions across political party preferences (see Supplementary Table S5). Still, respondents identifying with right-wing parties display lower acceptance levels than the rest of the sample controlling for socio-demographics and immigration perceptions ($\beta = -0.62$; $p = 0.04$; 95% CI $= -1.22, -0.02$).

Result 3: *The perceived consequences of immigration such as welfare impacts, increases in crime, and implications for the job market are the main drivers of acceptance. Respondents that perceive these impacts to be negative show significantly lower acceptance levels. On top of these effects, respondents who identify with right-wing parties are less accepting.*

Heterogeneity by gender and political party preference

Lastly, we explore heterogeneous treatment responses by gender and right-wing party preferences. Table 2 shows the interaction effects between treatments and (i) respondents'

gender (column 1) and (ii) political party preferences (column 2). Female respondents tend to display lower acceptance towards economic migrants but are more accepting towards climate change migrants. The effect of the ECON treatment is more negative for women compared to men (interaction $\beta = -0.86$; $p = 0.06$; 95% CI $= -1.76, 0.05$). Female respondents show significantly higher acceptance in the ENV GLOBAL treatment than male respondents (interaction $\beta = 0.74$ $p = 0.03$; 95% CI $= 0.06, 1.43$). Thus, the findings that acceptance of climate change migrants is as high as for conflict migrants seem to be largely driven by female respondents in our sample. The interaction effects for party preferences indicate that voters of the right-wing spectrum have substantially lower acceptance towards the migrant in ECON and ENV LOCAL than respondents with other party preferences. Respondents with right-wing party preferences show only for conflict migrants' comparable acceptance levels than the rest of the sample.

Result 4: *Female respondents display lower acceptance of economic migrants and higher acceptance of climate change migrants than male respondents. Respondents with right-wing party preferences show significantly lower acceptance levels than all other respondents, except for conflict migrants.*

Table 2 Heterogeneous treatment effects by gender and party preference

DV: immigration acceptance	(1)	(2)
Treatments		
ENV GLOBAL	−0.44 (0.30)	0.09 (0.17)
ENV LOCAL	−0.69** (0.33)	−0.49*** (0.17)
ECON	−0.47 (0.40)	−0.88*** (0.23)
Female (= 1)	−0.22 (0.29)	
Interaction: ENV GLOBAL*Female	0.74** (0.35)	
Interaction: ENV LOCAL*Female	0.16 (0.37)	
Interaction: ECON*Female	−0.86* (0.46)	
Right voter (= 1)		0.12 (0.39)
Interaction: ENV GLOBAL* Right voter		−0.70 (0.52)
Interaction: ENV LOCAL* Right voter		−0.98* (0.52)
Interaction: ECON*Right voter		−1.55*** (0.59)
Constant	7.00*** (0.44)	6.87*** (0.41)
Controls	Yes	Yes
F-test: interaction with ENV GLOBAL	0.05	0.54
F-test: interaction with ENV LOCAL	0.00	0.00
F-test: interaction with ECON	0.00	0.00
Observations	686	686
R-squared	0.31	0.30
Adjusted *R*-squared	0.29	0.27

The dependent variable in the OLS regressions is acceptance and ranges from 1 "refuse completely" to 8 "support completely." The conflict migrant treatment (CONFLICT) is used as the reference group for estimating the effects of the econmic migrant (ECON), environmnetal migrant due to climate change (ENV GLOBAL), and environmental migrant (ENV LOCAL) treatments. Control variables include socio-demographics, immigration perception, and party preferences. Robust standard errors in parentheses
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Discussion

Migration is without a doubt one of the biggest global challenges of today's reality and is a highly polarizing topic. We find that migrants have a significantly higher probability of being accepted if they are forced to leave because of conflict than those who wish to live in Austria to improve their economic situation. This is in line with previous results showing that people show the least support with migrants motivated by economic opportunities (Bansak et al. 2016; Hager and Veit 2019; Helbling 2020). More interestingly, our study suggests that migrants moving due to environmental reasons based on external factors and implying responsibilities of industrial countries, inducing climate change, enjoy as much legitimacy, and support as conflict migrants. Our results suggest that conflict-induced migration and migration induced by impacts of climate change may be both classified as victims of larger global interdependencies and related responsibilities. This interpretation is supported by the results of Helbling (2020), who shows that climate-induced migrants receive as much acceptance as political refugees.

Relation to the debate on "climate" refugees

Our findings are in line with the often-used informal framing of climate migrants as "climate refugees" deserving of protection and the public discourse around the restrictions of migration law, only granting conflict migrants a legal status. Overall, our study contributes to the literature showing that deservingness of the migrant plays a crucial role for acceptance (Bansak et al. 2016; Böhm et al. 2018; Hager and Veit 2019) and adds to it by highlighting the importance of perceived responsibility for the underlying (climate related) migration causes of hosting countries. The current international refugee identification system, based on the UN Geneva Convention, was developed in light of the challenges after the Second World War and is based on the concept of nation states that need to protect their boundaries.[14] In the context of global developments and risks which do not stop at borders such as climate change, natural hazards, or pandemics, the Geneva Convention does not hold. Understanding the underlying reasons for different immigration preferences in hosting countries will provide insights into the perceived, non-material, social costs, and benefits of immigration. These insights could inform the policy debate on how to deal with immigration in a way which ensures sufficient protection of displaced people and receives public support in receiving countries.

The findings of this paper provide interesting insights for policymakers regarding the promotion of positive attitudes towards applicants for immigration, particularly in the case of climate-induced migration, which is not yet legally regulated. One overall policy recommendation that can be drawn from our results is that acceptance for migrants may be higher if the underlying cause of their decision to migrate is related to intertwined global challenges, often at least partly (historically) induced by industrial countries. This finding could be extrapolated to policymakers also as an important insight that contextual information and education about the migration cause may lead to a higher (or lower) acceptance. Given the multiple causes of migration, global changes are almost always affecting the livelihood and thus the decision to migrate. Thus, framing the admission of migrants and refugees as a common or global responsibility, which is not detached from the history and actions of recipient countries may evoke more compassion and acceptance. Given that acceptance for these migrants is higher one could also intensify working on international treaties to support affected people. A second general insight about migration can be gained from the perceptions held by respondents about the consequences of immigration for the receiving country. Negative attitudes towards immigrants are often not supported by the empirical evidence, for example, effects on employment rates for native workers and their incomes (Hainmueller and Hiscox 2007). In times where the welfare state is aging and migration is projected to continue to shrink, we find that many respondents nonetheless perpetuate wrong stereotypes regarding job losses, criminality, or costs to society. Clearly, the public discourse needs to change. Politicians fear not to be reelected and some fear to admit that without migration societies in the Global North cannot exist as they currently do (e.g., the share of foreign passport holders is above 30% in sectors like agriculture, gastronomy, shipping companies, meat-processing industry, construction). These trends will further increase especially in the service and health care sectors.

However, it will not only be important to focus on acceptance in the Global North as most climate-induced migrants will only move short distances or not at all (Koubi et al. 2016a, b; Bell et al. 2021). Here, acceptance of migrants may differ given that people living in receiving (urban) areas are to a lesser degree responsible for the underlying reason of migration compared to the Global North. Evidence from Vietnam and Kenya suggests that people in urban areas do not differentiate between climate and economic migrants (Spilker et al. 2020). These findings show the importance

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[14] The United Nations classifies migrants into four broad categories: migrant workers, refugees and forcibly displaced people, asylum seekers, and internally displaced persons (IDPs). In public and political discourse, refugees are at the center of attention, but the lines between the different categories are often blurred. According to common definitions, as also promoted by the UN, refugees are individuals, who suffer from a "well-founded fear of being persecuted" while further categories of migrants are classified along the degree of voluntariness underlying their decision to move.

of not only focusing on international migration but also needing to shift to providing adequate support to climate-vulnerable countries for adaptation and facilitating internal movements.

Embedding the results in the temporal context

We show that opinions about immigration were not highly polarized at the beginning of the "crisis" in 2015, as most respondents were still undecided about the issue. The development of the public discourse after we conducted the survey experiment shows that right-wing parties seem to have been more successful in capturing the attention of the undecided middle in Austria, as the election results in Innsbruck (2017) and the national assembly elections (2017) show (see Supplementary Table S2.5). One common critique is that results from studies conducted with students lack external validity. There are indeed some significant differences in the political party affiliation reported by our sample compared to these election results, particularly displaying a considerably higher support of the Green party and considerably lower support for the right-wing party FPÖ. Thus, with our sample, we rather underestimate the share of respondents who would reject conflict migrants (lower share of right-wing voters), while we might not overestimate acceptance levels due to the higher share of left-wing voters (Greens) in our sample as these show similar acceptance levels as centrist voters (see Table 1). In addition, most of our results are in line with perceptions expressed in representative public opinion polls implemented at the time of the study period. In a study on welcoming culture in Germany, for instance, 80% of respondents expressed that they expect a severe burden for the social schemes due to immigration.[15] Seventy-two percent perceive migration as a driver of crime and conflicts between locals and migrants but nevertheless welcome refugees (Bertelsmann Stiftung 2017). These comparisons should be taken with caution, given that the 2 years between our study and these elections were quite affected by the public discourse about the "refugee crisis."

Furthermore, perceptions about welfare costs, employment, and crime rates affect acceptance levels. Osterloh and Frey (2018) argue for an immigration fee for all migrants independent of the reasons for migration. They see countries rather as clubs or collectives, with an entrance fee to gain access to the provided "public" goods. Therefore, it is required to protect the welfare of the in-group, referring to all citizens that helped build that nation's institutions, social norms, and values. Based on this communitarian

perspective, migrants are welcome if they are net contributors to the welfare state. This line of argumentation could lead to the assumption that migrants, who seem to be more likely to be in a position to contribute to the welfare state by engaging in the economy and paying taxes like ECON may be rather accepted. A detrimental factor to acceptance could be the assumption of increased competition on the job market. We tested this perception by asking respondents whom they consider "to take more from the Austrian state (social benefits etc.) than they contribute to it" (see Annex 3.1 for descriptive statistics). Interestingly, the migrants perceived as the highest potential contributors are ENV GLOBAL and CONFLICT in line with the highest overall acceptance rates. This could be an interesting insight that the "communitarian entrance fee" as suggested by Osterloh and Frey (2018) does not need to be monetary but rather value based and normative. Further research could shed light here on the details of the anticipated societal contribution by environmental and conflict-induced migrants. Interestingly, the subjective perception of high crime rates due to immigration pictures a trend, which is contrary to official statistics. In Austria, crime rates have shown a constant downward trend since 2010, with a particular drop of 5.4% for 2017 compared to 2016. While the absolute number of crimes committed by asylum seekers has been slightly rising, relative figures show a clearly decreasing trend (Bundeskriminalamt 2018). It is important to also consider a differentiation here between crime rates attributed to asylum applicants and other immigrants, who are resident legally or not. Bianchi et al. (2012) examined the empirical relationship between immigration and crime across Italian provinces and find that rates increased only for robbery and an insignificant effect on the overall national crime rate. Mastrobuoni and Pinotti (2015) find in their recent analysis of the correlation between legal status of immigrants and crime rates that immigrants accepted for asylum are significantly less likely to be involved in criminal activities due to alternative (legal) income opportunities. The subjective impression that crime rates are on the rise particularly for more severe types of crime such as heavy assault, sexual harassment, or even homicide, may be fueled by certain political movements or types of media, perverting statistics, and promoting particularly catchy and scaremongering headlines. Confirmation bias, as described by Haidt (2012), is a potential explanatory factor of the widespread ignorance of these study results, describing the cognitive phenomenon that people seek information, which likely confirms their preset believes leading to further manifestation of polarization, also a fundamental driver of conspiracy theories. It will be critical for managing immigration and integration of migrants in the future that the discourse is conducted in a more differentiated and evidence-based manner instead of strengthening and provoking a deeper divide.

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[15] This finding is a 15% increase compared to previous similar surveys conducted in 2012 and 2015 (Bertelsmann Stiftung 2017).

Study limitations

There are several limitations which need to be considered when interpreting the results from this study. First, the subject pool of university students constitutes a rather homogenous and politically liberal social group compared to a broader sample of the society. d'Hombres and Nunziata (2016) show in their paper a positive effect of higher education levels on reported attitude toward diversity and on the assessment of immigration's role in host countries. Similar findings were also presented in the European Social Survey (ESS 2018), showing that 66% of highly educated young people are proponents of the acceptance and support of immigrants (regardless of their background). This finding is also in line with the overall high acceptance levels across the treatments. Further research could shed more light on immigration acceptance across different populations, for example, differentiating between rural and urban populations or high-, medium-, and low-income migration destination countries. Second, respondents might interpret the scenarios they were confronted with differently compared to how we describe them and interpret them in the paper. For example, we did not explicitly mention whether the person described in the scenario could legally apply for asylum or not to avoid demand effects. We do not think this is a big issue as almost three quarters of all respondents know whether the migrant would be legally allowed to apply for asylum. In addition, some people might selectively focus only on specific aspects presented in the scenarios. Given that the treatment effects all point in the expected directions gives us confidence that respondents paid attention to the important informational aspects in each scenario such as the variation in responsibility for the migration cause.

In terms of methodological choices, there are some considerations that need be. Firstly, the scenarios are phrased in a way illustrating that the fictious migrant has not yet left his country of origin but only plans to migrate. Thus, the effort of the actual migration, often linked to emotional images, such as illegal migration corridors via the sea or the threat of being caught in activities of human trafficking in transitional territories such as Libya, may not be included in the acceptance decision. Further research could fill these gaps by adapting the scenario to an actual immigrant, present in the country of destination and waiting for the decision on his case. Lastly, we only measure acceptance of one specific migrant, which could lead to higher acceptance levels compared to a situation where respondents would be confronted with statistical information on asylum applications. Slovic et al. (2017) have shown the power of single iconic images in capturing attention of human crisis compared to statistical information. Including images of a hypothetical migrant in our scenarios might further increase empathy and thus acceptance levels.

Conclusion

This paper examined different underlying reasons and motivations of immigration acceptance. In a survey experiment, conducted with students at the University of Innsbruck in 2015—a peak period of the proclaimed "refugee crisis"—we tested different treatments covering political, economic, and environmental reasons for migration. Among environmental migrants, a further differentiation is made between environmental degradation due to climate change caused by countries of the Global North and unsustainable use of natural resources in the country of origin. The major finding is that climate-induced environmental migrants are seen as legitimate as political migrants, while environmental migrants due to local resource overuse enjoy support closer to economic migrants. This finding is coherent with the publicly often-used terminology referring to climate migrants as climate refugees and feeds into the ongoing political debate about the restriction of permission for legal asylum to refugees covered by the Geneva Convention. UN agencies have repeatedly advocated a formal admission of climate and disaster migrants as refugees. Overall, the results underline these claims and may be an indication that the introduction of a legal category beyond the current framework is likely to find substantial public support in the line of the egalitarian argumentation that all people on earth are equally worthy, and any policies that are not benefitting the least advantaged are not acceptable.

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