Is intent to migrate irregularly responsive to recent German policy adjustments?*

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February 15, 2024

^{*}Acknowledgments: We are grateful to Medoune Sall, Niklas Murken, Yogam Tchokni, and all members of the CTG survey team for conscientiously implementing the data collection underlying this research, and to Malte Becker and Tobias Heidland for their sample support. Data collection was financially supported by RWI's Economic Policy Lab "Climate Change, Migration and Development" and the Leibniz Collaborative Excellence funding program. We obtained ethics approval from the Comité National d'Ethique pour la Recherche en Santé (CNERS) at Senegal's Ministry of Health and Social Action (amended SEN22/76). This study was registered with a pre-analysis plan in the AEA RCT Registry (AEARCTR-0012573) prior to data collection.

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Abstract

We investigate the extent to which asylum policies that aim to deter individuals from migrating irregularly in fact do so. We specifically consider effects of Germany's recent and high-profile asylum policy adjustments, which include accelerated asylum decision processes, the prospect of asylum processing sites outside of Europe, the introduction of a payment card to replace cash benefits, and an extended waiting period for native-level benefits. To do so we implement a conjoint experiment with 989 men aged 18–40 in four cities in Senegal, a population of most-likely irregular migrants in a country where "l'émigration clandestine" is highly salient. We estimate effects of these policy measures on irregular migration intent as a first-stage outcome. We find that offshoring the asylum process significantly and substantially lowers irregular migration intentions across nearly all types of subjects. Extending the waiting time for native-level benefits only has a small, marginally significant effect on intent, and no effect among the poorest subjects and those that are most motivated to migrate internationally. Neither reducing asylum processing times nor replacing cash benefits with a payment card significantly alters intentions. We note that the presence or absence of an effect does not resolve political and normative questions concerning these policies, which are not the subject of this particular study.

JEL: F22, J61, K37

Keywords: Asylum policy; irregular migration; conjoint experiment

1 INTRODUCTION

More than one million asylum seekers arrived in the European Union in 2023, with Germany as the "foremost destination" receiving about a third of these individuals (EU Agency for Asylum, 2024b). This is the first time this figure has been reached since 2015/2016, when the Syrian civil war led to approximately 1.2 million asylum applications annually in Europe (Eurostat, 2024a). The public and political discourse increasingly suggests that destination countries are strained by the influx of asylum applicants. In response, various European governments are debating and enacting policies to decrease these numbers, expedite asylum procedures, and more efficiently repatriate those whose applications are denied. These strategies notably aim to deter entry by individuals with minimal prospects of receiving asylum.

We present evidence concerning the extent to which elements of such a strategy of deterrence can be effective. We focus on one specific and highly publicized set of measures that the federal and state governments of Germany adopted in late 2023 (Bund und Länder, 2023), including the following four key elements: First, accelerate the processing of asylum applications by three months for origin countries with low acceptance rates. Second, explore the possibility of processing asylum applications outside of Europe. Third, introduce a uniform payment card for asylum seekers' benefits, reducing cash use. Fourth, delay eligibility for native-level benefits from 18 to 36 months. Press reports and statements to the media make clear that these measures have the dual purpose of managing asylum cases that are already in process as well as "deterrence" of individuals not yet en route to Germany (Zimmermann, 2023).

In order to test whether it is plausible to expect such deterrent effects, we designed and implemented a conjoint experiment with a random sample of 989 potential migrants in urban Senegal. Conjoint experiments have in recent years become a standard tool in the social sciences to evaluate factors involved in complex decision-making, perhaps especially so in the field of international migration.¹ Our design enables us to estimate effects of each distinct policy measure on expressed irregular migration intent. While conjoint experiments do not permit an estimation of effects on migration behavior,

¹See Hainmueller, Hopkins and Yamamoto (2014); Jeannet, Heidland and Ruhs (2021); Alrababah et al. (2023); Turkoglu and Weber (2023); Zhirkov and Smilan-Goldstein (2023); Becker, Krüger and Stoehr (2024) and others. In tandem a related body of literature on information provision and processing in migration decision-making has similarly grown in recent years (Tjaden and Dunsch, 2021; Beber and Scacco, 2022; Frohnweiler, Beber and Ebert, 2022; Tjaden and Gninafon, 2022; Morgenstern, 2023; Bah et al., 2023; Frohnweiler, Beber and Ebert, 2024).

intent generally precedes action (Tjaden, Auer and Laczko, 2019). If we are unable to identify effects on intent, it becomes difficult to argue that a policy measure would nevertheless affect actual migration choices.

Senegal is a particularly relevant place to carry out the present study, for two reasons. First, the Western African route, which takes migrants to the Canary Islands, saw the most dramatic growth in irregular border crossings of any of the routes terminating in Europe, with a year-over-year increase of 161% reported in January 2024 (Frontex, 2024). Senegalese individuals constituted the top nationality on this route in 2023. As this issue has threatened to become a theme during the 2024 Senegalese election campaign, President Macky Sall promised action to curtail the number of departures at the end of last year (Africanews, 2023). Irregular migration is a highly salient phenomenon in Senegal, and a strategy that subjects in this context can plausibly consider and reflect on. This is the case in particular for young men in urban areas, who are among those most likely to attempt "la migration clandestine" and which constitute our sample.

Second, most individuals who arrive in Europe from Senegal and file an asylum application have their claim ultimately rejected. This is especially true for Germany, where in 2022 only 7% and in 2023 10% of the Senegalese applicants who received a decision in their case in that year received any kind of permission to stay (Bundesamt für Migration und Flüchtlinge, 2023, 2024*a*).² While this figure has ticked up slightly, and the comparable acceptance rate for the EU as a whole lies significantly higher at 27%, Germany continues to designate Senegal as a "safe country of origin" (Bundesamt für Migration und Flüchtlinge, 2024*b*).³ This means the "default presumption" of an absence of persecution applies, i.e., applicants are presumed to seek permission to stay for economic or other non-protected personal reasons—and these are precisely the type of potential migrants that are meant to be deterred by the kind of policy measures at the center of our study.

While our experiment focuses on a specific set of policy measures, the results have broad applicability. The hypothesis that institutional frameworks in destination countries influence migration patterns has sparked considerable debate among both the

²This includes both first and final decisions and corresponds to how the Federal Office for Migration and Refugees reports aggregate approval figures.

³The first-decision recognition rate, which the EU appears to report more commonly, is 17% (EU Agency for Asylum, 2024*a*). However, EU statistics show that 45% of final decisions in 2022 permitted Senegalese applicants to stay, and so the comparable overall rate is 27% (Eurostat, 2024*b*,*c*). Figures are for 2022, the last year with fully available data.

public and scholars. Critics argue that stricter policies merely exacerbate hardships for asylum seekers, who will migrate regardless of potential dangers and hardships. Conversely, some posit that lenient asylum policies and benefits for asylum seekers are a draw for a significant number of migrants.

A large body of research has aimed to identify the drivers of international migration, offering relatively robust evidence that factors like income levels and unemployment rates in destination countries, along with migrant networks and cultural similarities, are important "pull factors" (Beine, Bertoli and Fernández-Huertas Moraga, 2016). Few studies specifically address asylum flows. Hatton (2016) provides evidence that conditions in origin countries, including conflict and economic circumstances, are much more important than destination country policies: stringent access and processing policies may decrease asylum applications, but restrictive welfare policies appear to have minimal deterrent effect. Di Iasio and Wahba (2023) finds social networks to be the strongest pull factor for asylum seekers to the EU from 2008–2020, while employment bans have little effect.

The existing literature in this area predominantly utilizes aggregate migration statistics to assess the impact of implemented policies. Since changes in immigration and asylum policies often consist of packages of individual measures, and changes in origin countries may occur in parallel, it is difficult to gauge the absolute and relative effectiveness of specific actions. This is where a conjoint experimental design can be advantageous, as it permits us to isolate effects of specific well-defined policy levers.

Our conjoint experiment produces three main results. First, it shows that offshoring the asylum application process to a third country such as Tunisia or Rwanda significantly reduces irregular migration intentions by more than a quarter of a standard deviation on average. This effect is substantial and significant across virtually all types of subjects, rising to more than a standard deviation in some subgroups. Second, doubling the period of waiting until state-provided benefits equal native entitlements from 18 to 36 months only has a small, marginally significant effect on irregular migration intent, and no effect among the poorest subjects and those that are particularly motivated to migrate internationally. Third, neither reducing asylum processing times nor introducing a payment card system for benefits significantly alters intentions to migrate irregularly. In fact we can be confident within the parameters of the experiment that the introduction of a payment card—a policy change much discussed in Germany—has no effect on subjects' interest in irregular migration. The paper is organized as follows. Section 2 provides additional details concerning irregular migration to the EU and the specific policy measures adopted by Germany's federal and state governments, which are the focus of the conjoint experimental design. We then discuss the sample, experimental design, and estimation strategy in Section 3, followed by estimation results in Section 4. We conclude and reflect on our findings in Section 5.

2 Policy discourse on irregular migration

Between January and November 2023, over one million asylum applications were filed in the EU27, Norway, and Switzerland, a level similar to that during the 2015–16 refugee crisis (EU Agency for Asylum, 2024b). Additionally, more than 4 million Ukrainians received temporary protection in EU countries after the Russian invasion of Ukraine in February 2022 (EU Agency for Asylum, 2024c).

As Europe's most populous country and its largest economy, Germany has been by far the most important destination country for asylum seekers in Europe in recent years, receiving almost one-third of all applications submitted in 2023, or more than 350,000 people. In 2015 and 2016 the numbers were even higher with more than 470,000 and 745,000 people, respectively. Since 2022, an additional 1.1 million Ukrainians have received temporary protection status, straining available resources for hosting asylum seekers (Statista, 2024).

Against this background, the German government decided in late 2023 to tighten its asylum policies. A commission consisting of the German chancellor and the heads of government of all 16 German federal states, which are in charge of organizing accommodation and welfare support for asylum seekers in Germany, issued a resolution on new policy measures (Bund und Länder, 2023). The resolution explicitly states that it aims to "reduce the number of people coming to Europe and Germany who have no prospect of being granted the right to stay, and to ensure that people with the right to stay are distributed throughout the EU in a spirit of solidarity" (Bund und Länder, 2023, 3). The agreement specifies a set of initiatives for the protection of European and German borders, migration deals with origin countries, improvements to accelerate the return process, and cost sharing between the federal and state governments. It also includes a set of policy measures regarding decision processes and government benefits for asylum seekers, which are the focus of this paper. In this study, we closely consider four of the policy measures included in the resolution:

1. Speed up the asylum application decision process.

Asylum procedures for nationals of countries with recognition rates below five percent are to be accelerated, with first decisions to be issued after three instead of six months. Note that even if first decisions are issued quickly, the process until a final decision is reached can take many months: For Senegalese asylum seekers who were issued an unappealable decision in 2022, the average duration from first application to final decision was 28 months. For the purposes of the study, we therefore interpret a potential three-month acceleration of first-instance decision-making as an effective hypothetical processing time reduction from 28 to 25 months.

2. Issue a payment card, no cash for government benefits.

A uniform nationwide payment card is to be introduced, which will replace monthly cash payments for basic necessities upon registration as an asylum seeker. This is meant to reduce the administrative burden on local authorities and help ensure that benefit payments are in fact used for core necessities only.

3. Double the waiting period to receive basic government benefits at the same level as natives.

Asylum seekers will be automatically entitled to native-level basic government benefits after 36 instead of 18 months. During this waiting period, they are entitled to more limited support under the Asylum Seekers' Benefits Act only. A specific objective of this measure is to reduce incentives for secondary migration to Germany from other European countries.

4. Consider processing asylum applications outside of Europe.

The federal government will examine whether it is possible to carry out asylum procedures and determine any applicable protection status in third countries outside of Europe, while remaining in compliance with the Geneva Refugee Convention and the European Convention on Human Rights.

The extent to which these measures effectively deter potential asylum seekers that may consider migrating irregularly to Europe in general and Germany in particular is unclear, and we now turn to a description of our experimental study that speaks to this question.

3 Study design

3.1 Sample

We conducted the study from November 26 to December 6, 2023, with a sample of 989 individuals in four cities of Senegal: Dakar, Kaolack, St. Louis and Ziguinchor. We focus on Senegal as an important country of origin for irregular migrants arriving in Europe at the time of our data collection. The four sampled cities are national and regional centers of migration. Dakar, Senegal's political capital and economic center, is situated on the western tip of Senegal and by far the country's largest city; Kaolack is a key regional hub in central Senegal's peanut basin; St. Louis and Ziguinchor are the largest cities in northern and southern Senegal, respectively, each in proximity to the coast.

All interviewed subjects are men aged 18–40, because this constitutes the demographic group in Senegal most likely to migrate. We recruited these individuals in two ways. First, in Dakar, St. Louis, and Ziguinchor, we followed up with subjects of a previous data collection conducted in these locations in 2022. These subjects were randomly sampled on the basis of a complete household listing within randomly selected study enumeration areas corresponding to neighborhoods (Becker, Krüger and Stoehr, 2024). We recruited 291 subjects, so just under a third of our total sample, in this manner. Second, we recruited a new sample of 698 men across all four cities using a random walk and household selection procedure, again using randomly selected neighborhoods as our primary sampling units (*quartiers* in Kaolack, St. Louis, and Ziguinchor, and *communes* in Dakar).

3.2 Conjoint experiment

We conducted a single-profile, rating-based conjoint experiment to assess the extent to which irregular migration intent is responsive to policy measures. Participants are asked to complete three tasks, each of which consists of providing a migration intent rating given a single migration policy profile. Each profile contains five attributes. In addition to the four policy dimensions discussed above (asylum application processing time, application location, payment mode of government transfers, and waiting time until entitlement to native-level benefits), we added the chance of an asylum application being granted as a fifth attribute. This adds another key element of destination country decision-making that informs migration choices, and—more importantly for the purposes of our study—it adds a benchmark for interpreting the effect sizes of other policy measures.

Each attribute has two randomly varying levels. For the policy measures of primary interest, these correspond to the status quo and the intended policy change. For the chance of asylum being granted, they correspond roughly to the probability that a Senegalese national's asylum claim is accepted in Germany and the probability with which such a claim is accepted across the EU as a whole. The five attributes and their levels are presented in Table 1 and result in 32 hypothetical policy profiles.

In terms of the experimental procedure, we present each participant with a randomly selected policy profile and then ask the participant to state his interest in migrating irregularly given the policy profile ("Given this set of policies, how interested would you be in trying to migrate irregularly to this country?"). Responses could range from 0 ("Not at all") to 10 ("Very"). We repeat this task three times. In order to help participants understand each policy profile, we use icons to visualize profile content, as shown in Figure S.1 in the Supplementary Materials. For each task, profile-relevant icons were shown on enumerators' tablets and marked on printouts. Upon completion of all tasks, participants receive a short debrief. The complete script as implemented can be found on page S.1 in the Supplementary Materials.

3.3 Randomization and balance

We randomly assigned three treatment profiles to each individual. Assignment was stratified by city. We used a re-randomization algorithm to ensure balance in subjects' age across all treatment profiles for individuals that had previously been interviewed. This only applies to about a third of our sample, as described in section 3.1. For most of our sample, we observed balance-relevant covariates only just prior to the experiment, and so treatment profiles are assigned using a completely randomized design. Random assignment of the fully articulated set of treatment profiles ensures that the random assignment of levels for any particular attribute is exactly balanced across all other attributes, i.e., the randomly assigned levels are uncorrelated across attributes.

Each treatment profile is assigned at most once to each individual, i.e., subjects do

Attribute	Value 1	Value 2
Chance that application to stay after arriving irregularly is granted:	5 out of 100	30 out of 100
Time to decision about application:	25 months	28 months
Location of application process:	Apply upon arrival in Europe in the destination country and wait there for decision	Apply outside of Europe, e.g., in an African country such as Rwanda or Tunisia, and wait there for decision
Monthly government benefits to cover basic necessities during application process in destination country (up to ca. 410 Euro or 270 000 CFA):	Paid in cash	Paid on a prepaid payment card
Waiting period to receive basic government benefits at same level as natives (ca. 500 Euro or 330 000 CFA):	18 months	36 months

Table 1: ATTRIBUTES AND VALUES OF CHOICE EXPERIMENT

Notes: Table shows the different hypothetical policies for irregular migration in the destination country that are presented to the study participants. The column "Attribute" indicates the policy type, and columns "Value 1" and "Value 2" present alternative configurations of the policy type.

not encounter the exact same profile multiple times. Overall and across subjects, each of the 32 treatment profiles is assigned roughly the same number of times. This also means that each attribute value appears with the same frequency.

Balance table 2 provides information on a range of descriptive characteristics for our sample and each specific treatment group and shows that these are in line with what we would expect under randomization. We see some significant imbalances in observable respondent characteristics, but the sizes of these imbalances are small and their frequency is in line with expectations: Across all means comparisons performed in these tables, we observe 12% that indicate significant differences at the 90% level.⁴ We will in any case allow for any of these characteristics to be included as control variables in our estimations below.

⁴Imbalances appear to cluster within certain assigned profile attributes. This is due to the fact that subject characteristics such as age, marital status, and number of children are highly correlated, so that if treatment groups are imbalanced with respect to one such attribute by chance, they are more likely to be imbalanced with respect to other correlated attributes as well. Simulations that take into account these empirical patterns of correlations show that in a completely randomized design the probability of observing at least as many significant differences as we do in tables 2 is 19%, so well within the range of what we could expect to observe.

	Highe	r asylum cha	nce	Shorter asylum decision		Asylum outside EU		Payment card		Benefits after 36m		m			
	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.
Demographic:	27.1	26.7	0.43	26.8	27.0	-0.16	27.1	26.8	0.32	26.8	27.0	-0.23	26.8	27.0	-0.20
Married	(6.84) 0.27	(6.64) 0.22	[0.08] 0.06	(6.72) 0.25	(6.77) 0.24	[0.53] 0.01	(6.73) 0.25	(6.75) 0.24	[0.20] 0.00	(6.64) 0.23	(6.84) 0.26	[0.36]	(6.67) 0.23	(6.82) 0.26	[0.42] -0.03
Head of HH	$(0.45) \\ 0.18$	(0.41) 0.15	[0.00] 0.03	$(0.43) \\ 0.18$	$(0.43) \\ 0.16$	$[0.41] \\ 0.02$	(0.43) 0.18	$(0.43) \\ 0.16$	[0.76] 0.02	(0.42) 0.16	$(0.44) \\ 0.17$	[0.07] -0.01	$(0.42) \\ 0.17$	$(0.44) \\ 0.17$	[0.05] 0.00
Has own children	$(0.39) \\ 0.68$	$(0.36) \\ 0.52$	[0.03] 0.15	$\binom{(0.38)}{0.59}$	(0.37) 0.61	[0.26] -0.02	$(0.38) \\ 0.60$	$(0.37) \\ 0.60$	[0.21] -0.01	$\binom{(0.37)}{0.57}$	$(0.38) \\ 0.63$	[0.61] -0.05	$(0.38) \\ 0.57$	$(0.37) \\ 0.63$	[0.78] -0.05
HH members	(1.30) 11.2	$(1.11) \\ 10.9$	[0.00] 0.29	(1.15) 11.0	(1.28) 11.1	[0.67] -0.12	(1.25) 11.3	$(1.18) \\ 10.8$	[0.88] 0.53	$(1.19) \\ 11.2$	$(1.24) \\ 10.9$	$[0.24] \\ 0.33$	$(1.18) \\ 10.8$	$(1.25) \\ 11.4$	[0.24] -0.56
Born elsewhere	(6.66) 0.23	(6.12) 0.23	[0.22] -0.00	(6.23) 0.23	(6.55) 0.23	[0.61] -0.00	(6.69) 0.23	(6.09) 0.22	$\begin{bmatrix} 0.02 \\ 0.01 \end{bmatrix}$	(6.43) 0.23	(6.35) 0.22	$[0.16] \\ 0.01$	$(6.19) \\ 0.23$	(6.59) 0.23	[0.02] -0.00
Education:	(0.42)	(0.42)	[0.75]	(0.42)	(0.42)	[1.00]	(0.42)	(0.42)	[0.42]	(0.42)	(0.42)	[0.60]	(0.42)	(0.42)	[0.95]
None	(0.35) 0.22	(0.31) 0.22	[0.00]	(0.13) (0.34) 0.21	(0.32) 0.23	[0.22]	(0.36) 0.21	(0.31)	[0.00]	(0.34) 0.21	(0.32)	[0.20]	(0.32) (0.21)	(0.34) 0.22	[0.30]
Middle school	(0.41) 0.23	(0.41) 0.22	[0.87]	(0.41)	(0.42) 0.22	[0.18]	(0.41)	(0.42) 0.23	[0.23]	(0.41)	(0.42) 0.22	[0.48]	(0.41)	(0.42) 0.21	[0.64]
Secondary school	(0.42) 0.21	(0.42) 0.23	[0.94] -0.02	(0.42) 0.23	(0.42) 0.21	[0.57] 0.02	(0.41) 0.21	(0.42) 0.23	[0.27] -0.02	(0.42) 0.22	(0.42) 0.22	[0.63] 0.00	(0.43) 0.22	(0.41) 0.22	[0.05] -0.00
Post secondary	(0.41) 0.19	(0.42) 0.21	[0.31] -0.02	(0.42) 0.19	(0.41) 0.21	[0.17] -0.02	(0.41) 0.21	(0.42) 0.19	[0.22] 0.02	(0.41) 0.19	(0.41) 0.21	[0.90] -0.02	(0.41) 0.19	(0.42) 0.21	[0.80] -0.01
Other	$(0.39) \\ 0.01$	$(0.40) \\ 0.01$	[0.30] -0.00	$(0.39) \\ 0.01$	$(0.41) \\ 0.01$	[0.09] 0.00	$(0.41) \\ 0.01$	$(0.39) \\ 0.02$	[0.25] -0.01	$(0.39) \\ 0.01$	$(0.41) \\ 0.01$	$\begin{bmatrix} 0.23 \\ 0.00 \end{bmatrix}$	$(0.39) \\ 0.02$	$(0.40) \\ 0.01$	$[0.34] \\ 0.01$
Vocational training	(0.11) 0.52	(0.12) 0.53	[0.48] -0.02	(0.12) 0.53	(0.11) 0.52	[0.84] 0.01	(0.10) 0.53	(0.13) 0.51	$\begin{bmatrix} 0.13 \\ 0.02 \end{bmatrix}$	(0.12) 0.52	(0.11) 0.53	[0.41] -0.01	(0.13) 0.53	(0.09) 0.51	[0.06] 0.02
Fluent in French	(0.50) 0.58	(0.50) 0.59	[0.41] -0.01	(0.50) 0.59	(0.50) 0.59	[0.66] 0.01	(0.50) 0.58	(0.50) 0.60	[0.32] -0.02	(0.50) 0.58	(0.50) 0.60 (0.40)	[0.55] -0.02	(0.50) 0.58 (0.40)	(0.50) 0.60	[0.26] -0.03
Socioeconomic:	(0.49)	(0.49)	-0.00	(0.49)	(0.49)	-0.01	(0.49)	(0.49)	0.00	(0.49)	(0.49)	-0.01	(0.49)	(0.49)	0.01
No. of months with insufficient food (HH)	(0.49) 1.89	(0.49) 2.06	[0.79] -0.16	(0.49) 1.96	(0.49) 2.00	[0.49] -0.04	(0.49) 1.90	(0.49) 2.04	[0.95] -0.14	(0.49) 1.92	(0.49) 2.04	[0.73] -0.12	(0.49) 2.03	(0.49) 1.92	[0.69] 0.11
Individual income (in CFA)	(2.50) 103338	(2.75) 101810	[0.09] 1528	(2.66) 106779	(2.60) 98441	[0.68] 8338	(2.50) 104283	(2.74) 100976	[0.14] 3307	(2.57) 100464	(2.69) 104635	[0.22] -4172	(2.69) 98689	(2.57) 106594	[0.24] -7906
Community:	(158161)	(178519)	[0.81]	(188524)	(146832)	[0.19]	(139604)	(191827)	[0.61]	(157286)	(179394)	[0.51]	(149904)	(186331)	[0.22]
Fools safe	(0.39)	(0.40)	[0.52]	(0.40)	(0.40) (0.47)	[0.95]	(0.38)	(0.41) 0.45	[0.01]	(0.39)	(0.40) 0.47	[0.15]	(0.40)	(0.40)	[0.84]
Disagrees: authorities work in best interest	(0.50) 0.63	(0.50) 0.62	[0.47] 0.02	(0.50) 0.62	(0.50) 0.63	[0.60]	(0.50) 0.61	(0.50) 0.64	[0.25] -0.03	(0.50) 0.62	(0.50) 0.63	[0.34] -0.01	(0.50) 0.61	(0.50) 0.64	[0.48]
City interview:	(0.48)	(0.49)	[0.30]	(0.49)	(0.48)	[0.61]	(0.49)	(0.48)	[0.13]	(0.49)	(0.48)	[0.53]	(0.49)	(0.48)	[0.07]
Dakar	$\begin{array}{c} 0.35 \\ (0.48) \end{array}$	$ \begin{array}{c} 0.34 \\ (0.47) \end{array} $	0.01 [0.67]	$ \begin{array}{c} 0.33 \\ (0.47) \end{array} $	$ \begin{array}{c} 0.36 \\ (0.48) \end{array} $	-0.02 [0.23]	0.35 (0.48)	$ \begin{array}{c} 0.34 \\ (0.47) \end{array} $	0.01 [0.52]	0.35 (0.48)	$ \begin{array}{c} 0.34 \\ (0.47) \end{array} $	0.01 [0.64]	$ \begin{array}{c} 0.35 \\ (0.48) \end{array} $	$ \begin{array}{c} 0.34 \\ (0.47) \end{array} $	0.01 [0.54]
Kaolack	(0.23) (0.42)	(0.22) (0.42)	[0.00][0.94]	(0.23) (0.42)	(0.22) (0.41)	0.01 [0.41]	(0.22) (0.41)	(0.23) (0.42)	-0.01 [0.35]	(0.23) (0.42)	(0.22) (0.42)	0.00 [0.89]	(0.22) (0.41)	(0.23) (0.42)	-0.02 [0.25]
St. Louis	0.21 (0.41)	(0.20) (0.40)	0.02 [0.26]	(0.20) (0.40)	(0.21) (0.41)	-0.01 [0.73]	(0.22 (0.41)	(0.19) (0.40)	0.02 [0.12]	(0.20) (0.40)	(0.21) (0.41)	-0.02 [0.25]	(0.20) (0.40)	0.21 (0.41)	-0.02 [0.23]
Ziguinchor Migratod in past year	(0.21) (0.41)	(0.24) (0.43)	[0.10]	(0.23) (0.42)	(0.22) (0.41)	[0.38]	(0.21) (0.41)	(0.23) (0.42)	[0.18]	(0.23) (0.42)	(0.22) (0.42)	[0.66]	(0.24) (0.43)	(0.21) (0.41)	[0.10]
domestically	0.28 (0.45)	0.26	0.02	0.26	0.28 (0.45)	-0.02	0.28 (0.45)	0.25 (0.43)	0.03	0.26 (0.44)	(0.27)	-0.01	0.27	0.27 (0.44)	-0.00
internationally	0.06	0.07 (0.25)	-0.01	0.07	0.06	0.01	0.06	0.07	-0.00	0.06	0.06	-0.00	0.07	0.06	0.00
to Europe	(0.00')	0.00 (0.05)	-0.00 [0.44]	0.00 (0.06)	0.00	0.00	0.00 (0.06)	0.00 (0.03)	0.00 [0.08]	0.00 (0.06)	0.00 (0.03)	0.00	0.00 (0.04)	0.00 (0.05)	-0.00 [0.37]
irregularly	(0.09) (0.28)	0.07 (0.26)	0.02 [0.11]	0.08 (0.28)	(0.08) (0.27)	0.00 [0.62]	0.08 (0.28)	$ \begin{array}{c} 0.08 \\ (0.27) \end{array} $	0.01 [0.53]	(0.08) (0.26)	0.09 (0.28)	-0.01 [0.25]	(0.08) (0.27)	0.08 (0.28)	-0.00 [0.74]
Intents to migrate domestically (wants to)	0.52	0.55	-0.02	0.54	0.54	-0.00	0.53	0.54	-0.01	0.53	0.54	-0.01	0.53	0.54	-0.01
internationally (wants to)	(0.50) 0.82	$(0.50) \\ 0.83$	[0.19] -0.01	(0.50) 0.82	$(0.50) \\ 0.83$	[0.95] -0.01	(0.50) 0.83	$(0.50) \\ 0.82$	$[0.43] \\ 0.02$	(0.50) 0.82	$(0.50) \\ 0.83$	[0.55] -0.01	$(0.50) \\ 0.81$	$(0.50) \\ 0.84$	[0.70] -0.03
internationally (likely to)	(0.39) 0.42	$(0.38) \\ 0.43$	[0.49] -0.02	$(0.39) \\ 0.43$	(0.37) 0.42	[0.31] 0.01	$(0.37) \\ 0.43$	$(0.39) \\ 0.42$	[0.25] 0.01	(0.38) 0.42	$(0.38) \\ 0.43$	[0.71] -0.00	$(0.39) \\ 0.41$	$(0.37) \\ 0.44$	[0.04] -0.03
HH member migrated irregularly in past year	(0.49) 0.27	(0.50) 0.29	[0.35] -0.02	(0.50) 0.28	(0.49) 0.28	[0.50] -0.01	(0.49) 0.27	(0.49) 0.29	[0.66] -0.02	(0.49) 0.28	(0.49) 0.28	[0.85] -0.00	(0.49) 0.28	(0.50) 0.28	0.09]
EU as preferred international destination	(0.44) 0.38	(0.45) 0.40	[0.29] -0.02	(0.45) 0.40	(0.45) 0.39	[0.56] 0.01	(0.45) 0.39	(0.45) 0.39	[0.35] 0.00	(0.45) 0.41	(0.45) 0.37	[0.98] 0.04	(0.45) 0.39	(0.45) 0.40	[0.77] -0.00
Prepared for international migration	(0.49) 0.57 (0.50)	(0.49) 0.60 (0.40)	[0.25] -0.03 [0.00]	(0.49) 0.59 (0.49)	(0.49) 0.58 (0.40)	0.00	(0.49) 0.58 (0.49)	(0.49) 0.59 (0.40)	[0.93] -0.02 [0.20]	(0.49) 0.59 (0.49)	(0.48) 0.58 (0.40)	[0.03] 0.01 [0.76]	(0.49) 0.58 (0.49)	(0.49) 0.59 (0.49)	[0.81] -0.01 [0.62]
No. of preparations	(0.50) 1.41 (1.62)	(0.49) 1.48 (1.63)	-0.06 [0.28]	(0.49) 1.45 (1.62)	(0.49) 1.44 (1.63)	0.01	(0.49) 1.45 (1.67)	(0.49) 1.44 (1.59)	0.01	(0.49) 1.46 (1.64)	(0.49) 1.43 (1.62)	0.03	(0.49) 1.43 (1.63)	(0.49) 1.46 (1.63)	-0.03
No. of contacts abroad	4.01	3.67	0.34	3.68	4.00	-0.31	4.13	3.57	0.56	3.68	(1.02) 4.00 (5.97)	-0.32	3.73	3.96	-0.24
No. of contacts in Europe	3.04 (4.83)	(4.38)	0.32 [0.06]	2.78 (4.70)	2.98 (4.52)	-0.19 [0.26]	3.13 (5.02)	2.65 (4.19)	[0.01] [0.48] [0.00]	2.74 (4.49)	3.02 (4.72)	-0.28 [0.10]	2.79 (4.71)	2.97 (4.50)	-0.18 [0.30]
Prob. random assign. produces $>=$ sig. t-tests			0.052			0.857			0.102			0.857			0.102

Table 2: Summary statistics of background characteristics by treatment group

TABLE 2 CONTINUED

-	Higher asylum chance Sh		Shorter	r asylum d	lecision	Asyl	um outsid	e EU	P	ayment ca	rd	Benefits after 36m			
	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.	No	Yes	Diff.
How many in 100 are allowed to stay? $0-5$	0.06	0.05	0.01	0.06	0.06	0.00	0.06	0.06	0.01	0.06	0.06	0.00	0.06	0.06	0.00
5-10	$(0.24) \\ 0.10$	(0.23) 0.11	[0.25] -0.01	(0.24) 0.11	(0.23) 0.10	$\begin{bmatrix} 0.94 \\ 0.01 \end{bmatrix}$	$(0.24) \\ 0.11$	(0.23) 0.11	[0.49] -0.00	(0.24) 0.11	(0.23) 0.11	$\begin{bmatrix} 0.72 \\ 0.00 \end{bmatrix}$	(0.24) 0.12	(0.23) 0.10	$\begin{bmatrix} 0.81 \\ 0.02 \end{bmatrix}$
10-20	(0.31) 0.13	(0.31) 0.12	[0.59] 0.00	(0.32) 0.13	(0.30) 0.12	$\begin{bmatrix} 0.41 \\ 0.01 \end{bmatrix}$	(0.31) 0.12	(0.31) 0.13	[0.92] -0.00	(0.31) 0.13	(0.31) 0.12 (0.22)	[0.86] 0.01	(0.32) 0.13 (0.24)	(0.29) 0.12	[0.05] 0.01
20-30	(0.33) 0.10 (0.20)	(0.33) 0.11 (0.21)	-0.01	(0.34) 0.10 (0.20)	(0.33) 0.10 (0.20)	-0.00	(0.33) 0.10	(0.33) 0.10 (0.20)	-0.00	(0.33) 0.09 (0.20)	(0.33) 0.11 (0.21)	[0.61] -0.02	(0.34) 0.10	(0.33) 0.10 (0.21)	-0.01
30-40	0.07	0.06	0.00	0.07	0.06	0.01	0.06	0.07	-0.01	0.06	0.07	-0.01	0.06	0.07	-0.01
40-50	(0.25) 0.10 (0.20)	(0.24) 0.10 (0.20)	0.00	0.09	$\begin{pmatrix} 0.24 \\ 0.10 \\ (0.20) \end{pmatrix}$	-0.00	(0.23) 0.10	(0.26) 0.10 (0.20)	0.00	$\begin{pmatrix} 0.24 \\ 0.10 \\ (0.20) \end{pmatrix}$	(0.25) 0.10 (0.20)	-0.00	(0.24) 0.09 (0.20)	(0.25) 0.10 (0.21)	-0.02
50-60	(0.30) 0.09 (0.28)	(0.29) 0.08 (0.28)	0.00	(0.29) 0.08 (0.27)	(0.30) 0.09 (0.20)	-0.01	(0.30) 0.08 (0.27)	(0.29) 0.09 (0.29)	-0.01	(0.29) 0.08 (0.27)	(0.30) 0.09 (0.28)	-0.01	(0.29) 0.09 (0.28)	(0.31) 0.08 (0.27)	0.01
60-70	(0.28) 0.03 (0.16)	(0.28) 0.02 (0.15)	0.00	(0.27) 0.02 (0.15)	(0.29) 0.03 (0.17)	-0.01	(0.27) 0.03 (0.16)	(0.29) 0.02 (0.15)	0.00	(0.27) 0.03 (0.16)	(0.28) 0.03 (0.16)	-0.00	(0.28) 0.02 (0.15)	(0.27) 0.03 (0.16)	-0.00
70-80	(0.10) (0.05) (0.22)	(0.13) 0.04 (0.21)	0.00	(0.13) 0.04 (0.20)	(0.17) 0.05 (0.22)	-0.01	0.05	(0.13) 0.04 (0.21)	0.00	0.05	(0.10) 0.04 (0.20)	0.01	0.05	(0.10) 0.04 (0.21)	0.00
80-90	0.04	0.04	-0.01	0.05	0.03	0.01	0.04	0.04	-0.00	0.04	0.04	-0.00	0.03	0.05	-0.01
90-100	(0.19) 0.10 (0.20)	(0.20) 0.10 (0.20)	-0.00	0.09	0.11	-0.01	0.10	(0.20) 0.10 (0.20)	0.00	(0.19) 0.10 (0.20)	(0.20) 0.10 (0.20)	0.00	(0.18) 0.10 (0.20)	(0.21) 0.10 (0.20)	-0.00
Don't know	(0.30) 0.15 (0.26)	(0.30) 0.15 (0.26)	0.00	(0.29) 0.15 (0.26)	(0.31) 0.15 (0.26)	-0.00	(0.30) 0.16 (0.27)	(0.30) 0.14 (0.25)	$\begin{bmatrix} 0.74 \\ 0.02 \\ 0.12 \end{bmatrix}$	(0.30) 0.16	(0.30) 0.14 (0.25)	0.01	(0.30) 0.15 (0.26)	(0.30) 0.15 (0.26)	0.01
Eligible for state-benefits as asylum seeker? $\rm Yes$	0.44	0.43	0.01	0.42	0.44	-0.02	0.43	0.43	0.00	0.42	0.44	-0.02	0.43	0.43	-0.00
No	(0.50) 0.42	(0.49) 0.44	[0.45] -0.02	(0.49) 0.45	(0.50) 0.41	$\begin{bmatrix} 0.20 \end{bmatrix} \\ 0.04 \end{bmatrix}$	(0.50) 0.43	(0.50) 0.44	-0.01	(0.49) 0.45	(0.50) 0.42	0.03	(0.50) 0.42	(0.50) 0.44	-0.02
Don't know	(0.49) 0.14	(0.50) 0.13	0.26	(0.50) 0.13	(0.49) 0.14	-0.02	(0.49) 0.14	(0.50) 0.13	0.00	(0.50) 0.13	(0.49) 0.14	-0.01	(0.49) 0.15	(0.50) 0.12	0.24
Differences in benefits across countries?	(0.35)	(0.34)	[0.58]	(0.33)	(0.35)	[0.20]	(0.34)	(0.34)	[0.76]	(0.34)	(0.35)	[0.64]	(0.35)	(0.33)	[0.05]
res	(0.44) (0.50) 0.27	(0.50) 0.26	[0.04] [0.04] 0.01	(0.45) (0.50) 0.26	(0.46) (0.50) 0.27	[0.73] -0.01	(0.45) (0.50) 0.27	(0.46) (0.50) 0.26	[0.37] 0.01	(0.46) (0.50) 0.27	(0.45) (0.50) 0.27	[0.74] -0.00	$(0.50) \\ 0.25$	(0.45) (0.50) 0.28	[0.26] -0.03
Don't know	$_{0.29}^{(0.44)}$	$_{0.26}^{(0.44)}$	$[0.69] \\ 0.03$	$_{0.28}^{(0.44)}$	$_{0.27}^{(0.44)}$	$[0.66] \\ 0.01$	$_{0.28}^{(0.44)}$	$_{0.27}^{(0.44)}$	$[0.69] \\ 0.01$	$_{0.28}^{(0.44)}$	$_{0.28}^{(0.44)}$	[0.98] -0.00	$_{0.28}^{(0.43)}$	$_{0.27}^{(0.45)}$	$[0.06] \\ 0.01$
In which country are benefits highest? Germany	(0.46) 0.10	(0.44) 0.10	[0.06] 0.01	(0.45) 0.11	(0.44) 0.08	[0.40] 0.03	(0.45) 0.11	(0.45) 0.09	[0.63] 0.02	(0.45) 0.10	(0.45) 0.10	[0.82] 0.00	(0.45) 0.09	(0.44) 0.11	[0.50]
Austria	(0.30) 0.00	$(0.29) \\ 0.00$	[0.75] 0.00	(0.31) 0.00	$(0.28) \\ 0.00$	[0.11] -0.00	$(0.31) \\ 0.00$	$(0.29) \\ 0.00$	[0.29] 0.00	$(0.30) \\ 0.00$	(0.30) 0.00	[0.89] 0.00	$(0.28) \\ 0.00$	(0.31) 0.00	[0.18] -0.00
Belgium	$(0.06) \\ 0.01$	$(0.04) \\ 0.02$	[0.50] -0.01	$(0.00) \\ 0.01$	(0.07) 0.02	[0.09] -0.01	$(0.06) \\ 0.02$	$(0.04) \\ 0.02$	[0.50] 0.00	$(0.05) \\ 0.02$	$(0.04) \\ 0.01$	[0.57] 0.00	$(0.04) \\ 0.02$	$(0.06) \\ 0.01$	[0.50] 0.01
Denmark	$(0.10) \\ 0.00$	$(0.14) \\ 0.00$	$[0.20] \\ 0.00$	$(0.10) \\ 0.00$	$(0.14) \\ 0.00$	[0.14] -0.00	$\binom{(0.12)}{0.00}$	$\binom{(0.12)}{0.00}$	[0.97] -0.00	$\binom{(0.13)}{0.00}$	$\binom{(0.12)}{0.00}$	$[0.84] \\ 0.00$	$(0.14) \\ 0.00$	$(0.10) \\ 0.00$	$[0.19] \\ 0.00$
Spain	$(0.06) \\ 0.39$	$(0.04) \\ 0.40$	[0.50] -0.01	$(0.04) \\ 0.39$	$(0.05) \\ 0.41$	[0.58] -0.01	$_{0.37}^{(0.00)}$	$(0.06) \\ 0.42$	[0.10] -0.05	$\binom{(0.05)}{0.38}$	$(0.04) \\ 0.42$	[0.57] -0.04	$(0.06) \\ 0.39$	$(0.00) \\ 0.41$	[0.10] -0.02
France	$_{0.15}^{(0.49)}$	$_{0.16}^{(0.49)}$	[0.69] -0.01	$_{0.14}^{(0.49)}$	$_{0.17}^{(0.49)}$	[0.61] -0.03	$_{0.15}^{(0.48)}$	$_{0.16}^{(0.49)}$	[0.05] -0.01	$_{0.16}^{(0.49)}$	$_{0.15}^{(0.49)}$	$[0.18] \\ 0.01$	$_{0.16}^{(0.49)}$	$_{0.14}^{(0.49)}$	$[0.39] \\ 0.02$
Italy	$(0.36) \\ 0.09$	$(0.37) \\ 0.10$	[0.65] -0.02	$(0.35) \\ 0.11$	$(0.38) \\ 0.08$	$[0.11] \\ 0.03$	$(0.36) \\ 0.08$	$(0.37) \\ 0.11$	[0.55] -0.02	$(0.37) \\ 0.09$	$(0.36) \\ 0.10$	[0.49] -0.01	$(0.37) \\ 0.10$	$(0.35) \\ 0.10$	$[0.32] \\ 0.00$
Poland	$(0.28) \\ 0.00$	$\begin{pmatrix} 0.30 \\ 0.00 \end{pmatrix}$	[0.28] -0.00	$\begin{pmatrix} 0.31 \\ 0.00 \end{pmatrix}$	(0.27) 0.00	[0.06] -0.00	$(0.28) \\ 0.00$	$\begin{pmatrix} 0.31 \\ 0.00 \end{pmatrix}$	[0.15] -0.00	$(0.29) \\ 0.00$	$(0.30) \\ 0.00$	[0.75] -0.00	$(0.29) \\ 0.00$	$(0.29) \\ 0.00$	[0.97] -0.00
Portugal	$(0.04) \\ 0.02$	$(0.05) \\ 0.03$	[0.63] -0.00	$(0.04) \\ 0.03$	$(0.05) \\ 0.02$	$[0.58] \\ 0.01$	$(0.00) \\ 0.02$	$(0.06) \\ 0.03$	[0.10] -0.00	$(0.04) \\ 0.03$	$(0.05) \\ 0.02$	$[0.56] \\ 0.01$	$(0.00) \\ 0.03$	$(0.07) \\ 0.01$	$\begin{bmatrix} 0.07 \\ 0.02 \end{bmatrix}$
United Kingdom	$(0.15) \\ 0.04$	$(0.16) \\ 0.04$	[0.58] 0.00	$(0.16) \\ 0.04$	$(0.15) \\ 0.04$	$\begin{bmatrix} 0.55 \\ 0.00 \end{bmatrix}$	$(0.15) \\ 0.04$	$(0.16) \\ 0.04$	$\begin{bmatrix} 0.58 \\ 0.00 \end{bmatrix}$	$(0.17) \\ 0.05$	$(0.14) \\ 0.04$	$\begin{bmatrix} 0.39 \\ 0.01 \end{bmatrix}$	$(0.18) \\ 0.04$	$(0.12) \\ 0.04$	$\begin{bmatrix} 0.02 \\ 0.00 \end{bmatrix}$
Switzerland	$(0.21) \\ 0.03$	$(0.20) \\ 0.02$	[0.76] 0.01	$(0.20) \\ 0.02$	$(0.20) \\ 0.02$	[0.82] -0.01	$(0.21) \\ 0.03$	$(0.20) \\ 0.01$	$[0.76] \\ 0.03$	$(0.21) \\ 0.03$	$(0.19) \\ 0.01$	$\begin{bmatrix} 0.52 \\ 0.01 \end{bmatrix}$	$(0.20) \\ 0.02$	$(0.20) \\ 0.02$	[0.99] -0.00
Sweden	(0.16) 0.01	(0.12) 0.01	$\begin{bmatrix} 0.20 \\ 0.00 \end{bmatrix}$	(0.13) 0.01	(0.15) 0.00	$\begin{bmatrix} 0.37 \\ 0.00 \\ 0.20 \end{bmatrix}$	(0.18) 0.00	(0.08) 0.01	[0.00] -0.00	(0.16) 0.00	(0.12) 0.01	[0.18] -0.00	(0.14) 0.01	(0.14) 0.00	[0.94] 0.01
Other	(0.09) 0.01	(0.07) 0.00 (0.05)	0.00	(0.09) 0.00 (0.04)	(0.07) 0.01 (0.00)	[0.30] -0.01	(0.07) 0.00 (0.07)	(0.09) (0.00)	[0.40] 0.00 [0.80]	(0.07) 0.00 (0.05)	(0.09) 0.01	[0.31] -0.00	(0.11) 0.00 (0.04)	(0.04) 0.01	[0.03] -0.01 [0.08]
Don't know	$(0.08) \\ 0.15 \\ (0.35)$	(0.05) 0.12 (0.33)	$\begin{bmatrix} 0.34 \\ 0.02 \\ [0.19] \end{bmatrix}$	$(0.04) \\ 0.14 \\ (0.34)$	$(0.09) \\ 0.13 \\ (0.34)$	$\begin{bmatrix} 0.11 \\ 0.01 \\ [0.73] \end{bmatrix}$	(0.07) 0.16 (0.37)	(0.06) 0.11 (0.31)	$\begin{bmatrix} 0.89 \\ 0.05 \\ [0.00] \end{bmatrix}$	$(0.05) \\ 0.14 \\ (0.34)$	$(0.08) \\ 0.13 \\ (0.34)$	$\begin{bmatrix} 0.41 \\ 0.00 \\ [0.79] \end{bmatrix}$	$(0.04) \\ 0.13 \\ (0.34)$	$(0.09) \\ 0.14 \\ (0.34)$	[0.08] -0.00 [0.80]
Prob. random assign. produces $>=$ sig. t-tests			0.881			0.707			0.707			1.000			0.030

Notes: Table presents means and standard deviations (in parentheses) of background characteristics measured prior to the treatment for each treatment group (i.e., each of two variations of 5 policy types) as well as mean differences between treatment groups (i.e., between two variations of one policy type) and the p-values of t-tests of the differences in means (in brackets). The last row shows the probability that the number of significant t-tests under random assignment is equal to or larger than the number of significant t-tests observed in the data. Each participant is presented as three observations for each of the 5 policy types because each participant was randomly assigned to three policy profiles with 5 policy types.

3.4 Estimation strategy

Each task is a separate observation, with each participant as a cluster of three rating decisions, which means that our maximum estimation sample size is 2967 observations in 989 clusters. Subjects could discontinue their participation at any time (e.g., after the first experimental task) or refuse to provide a migration intent rating upon seeing a policy profile, but we observe essentially no such attrition in our data.

In order to estimate the effect of each potential policy measure, we regress migration intent on five indicator variables, one for each policy attribute. For ease of interpretation, we standardize the outcome variable to be mean-centered and have unit standard deviation. The reference category for each policy attribute indicator of interest is the status quo policy, and the coefficient on each indicator captures the difference in intent effected by the proposed change in policy. As described in our pre-analysis plan, we include randomization strata fixed effects, prior international migration intent, and any covariates that are double-lasso selected from among a large set of additional attributes measured prior to the experiment. Standard errors are clustered at the participant level.

Our estimation equation then is

$$Y_{i,k} = \alpha + \sum_{p=1}^{5} \beta_p Policy_{p,i,k} + X_i\beta + \varepsilon_i, \qquad (1)$$

where $Y_{i,k}$ is the expressed irregular migration intent of individual *i* in task *k*, $Policy_{p,i,k}$ are the policy indicators, β_p coefficients are our estimands, and X_i refers to a set of covariates that include a pre-treatment measure of the outcome variable, strata indicators and any other double-lasso selected variables.

We report the results of two-sided t-tests for all hypotheses. In the case of missingness in covariates, we impute mean or zero values and use the missingness-indicator method, as described in Zhao and Ding (2022).⁵

 $^{^{5}}$ For our main analyses, we include all completed tasks. We anticipated in our pre-analysis plan that some participants may not engage with each policy profile as thoroughly as intended, and we recorded the time participants took to consider each profile and select an intent rating. We report results from estimations where we split the sample into tasks where individuals spent above and below certain duration thresholds in Table S.4 in the Supplementary Materials. Key results concerning our policy attributes of interest are in some cases attenuated but largely persist even with low-intensity engagement.

4 Results

4.1 Knowledge concerning asylum

We first show several descriptive results in Table 3 concerning respondents' knowledge and beliefs about asylum procedures in Europe. First, there is substantial variation in respondents' estimates of the likelihood of being allowed to stay in Europe when traveling there without prior approval from their country of destination. For the EU, we know that in 2022, the last year for which data is available, 27% of all decisions issued were positive.⁶ In our data, the median respondent places this probability between 30–40%, and about a third of the sample believes that more than half of those arriving irregularly from Senegal in Europe are permitted to stay. At the same time, about a third place this figure at or below 20%.

Second, fewer than half of our respondents correctly think that they would be eligible for state benefits as asylum seekers in Europe, and fewer than half believe that these benefits differ across countries. More than a quarter of subjects say that they don't know. This suggests that the European landscape of state support available to asylum-seekers is not as ubiquitously known in origin countries as is sometimes assumed.

Third, those that are aware that benefits differ across countries are to a large extent on the mark with their guesses as to which country offers the highest benefits. Spain is by far the most common response, and Spain has indeed had one of the most, if not the most generous support scheme for asylum seekers (Hodali and Prange de Oliveira, 2018). Some awareness of a history of relative Spanish generosity is not surprising, given that Senegalese irregular migrants on the Western African route enter Europe through Spain. At the same time, when asked in an open-ended question which country they would like to reach if they migrated to Europe, Spain is also the top destination. Regarding the reason for this choice, only 14 per cent name government benefits as the main reason. The most important reasons are migrant networks and general income generation opportunities. In any case this suggests that a subset of individuals parses intra-European differences, even as many others remain unaware that asylum-seekers receive any benefits at all.

⁶This includes 17% of first decisions and 45% of final decisions (Eurostat, 2024b,c).

	Mean	SD	Min	Max	Ν
How many in 100 are allowed to stay?					
0-5	0.06	0.24	0	1	989
5-10	0.11	0.31	0	1	989
10-20	0.13	0.33	0	1	989
20-30	0.10	0.30	0	1	989
30-40	0.06	0.25	0	1	989
40-50	0.10	0.30	0	1	989
50-60	0.08	0.28	0	1	989
60-70	0.03	0.16	0	1	989
70-80	0.05	0.21	0	1	989
80-90	0.04	0.19	0	1	989
90-100	0.10	0.30	0	1	989
Don't know	0.15	0.36	0	1	989
Eligible for state-benefits as asylum seeker?					
Yes	0.43	0.50	0	1	989
No	0.43	0.50	0	1	989
Don't know	0.14	0.34	0	1	989
Differences in benefits across countries?					
Yes	0.46	0.50	0	1	989
No	0.27	0.44	0	1	989
Don't know	0.28	0.45	0	1	989
In which country are benefits highest?					
Spain	0.40	0.49	0	1	451
France	0.16	0.36	0	1	451
Germany	0.10	0.30	0	1	451
Italy	0.10	0.29	0	1	451
Sweden	0.01	0.08	0	1	451
United Kingdom	0.04	0.20	0	1	451
Switzerland	0.02	0.14	0	1	451
Portugal	0.02	0.15	0	1	451
Belgium	0.02	0.12	0	1	451
Austria	0.00	0.05	0	1	451
Denmark	0.00	0.05	0	1	451
Poland	0.00	0.05	0	1	451
Other	0.00	0.07	0	1	451
	0.19	0.94	0	-1	1

Table 3: Beliefs about asylum

Notes: Table shows descriptive statistics of participants' beliefs about asylum acception rates and government transfers to asylum seekers in Europe prior to the treatment. Specifically, it presents the mean, standard deviation, minimum and maximum value, and number of observations. The number of observations is lower in the bottom part of the panel because it includes only participants who affirmed the question "Do you think there are differences in the level of these state benefits across European countries?"

4.2 Main effects

We now turn to the results of the conjoint experiment displayed in Table 4. We show three specifications: First, a model without any covariates beyond the treatment group indicators, then one that includes a pre-conjoint outcome measure and indicators for strata used during randomization, and finally our preferred specification that additionally incorporates a set of double-lasso selected variables. Given our randomized design, the main advantage of including covariates are potential efficiency gains, and indeed we see small decreases in standard errors as we move across columns. Coefficients also vary slightly but are consistent across columns, again as we would expect given the study design.

	(1) Irregular migration intent	(2) Irregular migration intent	(3) Irregular migration intent
Chance of asylum	0.117***	0.102^{***}	0.088***
	(0.035)	(0.033)	(0.032)
Time to asylum decision	0.036	0.028	0.028
	(0.038)	(0.035)	(0.035)
Location of asylum application	-0.269***	-0.271***	-0.276***
	(0.045)	(0.042)	(0.041)
Benefit payment mode	-0.007	-0.005	0.003
	(0.032)	(0.030)	(0.029)
Benefit waiting time	-0.067*	-0.058*	-0.064*
	(0.037)	(0.034)	(0.034)
Baseline outcome		\checkmark	\checkmark
Strata indicators		\checkmark	\checkmark
Double lasso covariates			\checkmark
Observations	2965	2965	2965
Adj. \mathbb{R}^2	0.02	0.14	0.18

Table 4: RESULTS OF THE CONJOINT EXPERIMENT

Notes: Table shows estimation results of a linear probability model of the intent to migrate irregularly on five treatment indicators (one for each policy type variation). Control variables are included as indicated in the table; they include intent to migrate irregularly prior to the treatment as the baseline outcome, indicators for the city of data collected as strata indicators, and double lasso selected covariates. The outcome is mean-centered and in units of standard deviations. The unstandardized mean reported intent is 3.8 on a scale from 0 to 10. Standard errors are clustered at the participant-level. * p < 0.1, ** p < 0.05, *** p < 0.01.

Changes in the location of the asylum application process have the strongest effect on reported irregular migration intentions. On average subjects' intent rating decreases by .28 standard deviations if the destination country processes their asylum claim in a third country outside of Europe, such as Tunisia or Rwanda. A similarly negative, but much smaller and only marginally significant effect can be observed with respect to an increase in the time asylum-seekers must wait to be entitled to state benefits at the same level as natives. Moving from 18 to 36 months decreases migration intent by .06 standard deviations, so a magnitude of less than a quarter of the effect of offshoring the processing of asylum claims.

We can benchmark these potential effects of recent German policy adjustments against the effect of a change in the asylum acceptance rate, for which we see an increase of .09 standard deviations in the intent rating when the acceptance rate goes from 5% to 30%. This puts into perspective in particular the effect size associated

with displacing the processing of asylum claims, which is three times larger than the effect of moving from the typical acceptance rate for a safe origin country to that of countries such as Iran.

Finally, we see that neither a three-month reduction in asylum processing times, nor a move toward disbursing benefits by way of a payment card instead of cash has any significant effect on irregular migration intent. Particularly notable is the fact that introducing a payment card—intensely and controversially discussed in Germany—has an entirely negligible effect on expressed intent.

4.3 Heterogeneous effects

In Table 5 we report a set of registered heterogeneous effects. We examine whether effects vary across levels of prior international migration intent (has the subject expressed a lot or a fair amount of interest in living in another country?), international migration histories (has the subject lived outside of Senegal in the past year), security perceptions (does the subject feel safe where he lives?), economic conditions (has the subject's household been without enough food within the past year?), educational background (has the subject completed secondary school?), trade-specific training (has the subject completed an apprenticeship?), and family status (is the subject married or does he have children?).⁷ Each of these variables is binary, measured prior to the conjoint experiment, and interacted with each of the treatment group indicators. We run a separate regression for each variable with respect to which we estimate heterogeneous effects. Each column in Table 5 provides the results from a regression with the heterogeneity-relevant variable identified by the column header.⁸

We take away three main results from this analysis concerning the policy adjustments of interest. First, the effect of processing asylum claims outside of Europe stays significant across almost all subgroups and varies comparatively little. One exception to this pattern is the absence of an effect for subjects that have already migrated internationally in the recent past. In fact, recent international migrants are not responsive to any aspects of the policy prompts, with their relatively steadfast intent presumably

 $^{^{7}}$ We report separate heterogeneous effects by marital status and parenthood in Table S.3, with very similar results.

⁸We do not include the pre-experiment measure of interest in irregular migration when we estimate treatment effects across levels of international migration intent, because the former generally presupposes the latter.

colored primarily by personal experience.⁹

Second, we see substantial variation across subgroups in the effects of changes in the wait time until asylum-seekers can receive benefits equivalent to those received by natives. The most prominent differences occur with respect to prior international migration intent and food insecurity. Subjects that have expressed interest in living abroad and those that have lacked food for their household are not moved by changes in how long they would have to wait to receive a relatively more generous package of benefits.¹⁰

Third, introducing a payment card to disburse benefits or shortening the time it typically takes to complete processing an asylum claim did not significantly affect irregular migration intent in the sample as whole, nor do these measures have any effects in any of the subgroups examined as part of the heterogeneous effects analysis.

⁹Recent international migrants are not disproportionately likely or unlikely to be interested in irregular migration, so the lack of responsiveness to treatment is not due to floor or ceiling effects. We also show in Table S.1 in the Supplementary Materials that only international migration by the subject has this effect, as we do not see this pattern when we consider domestic migration, being born somewhere other than the current place of residence, or migration by other household members.

¹⁰We do not observe this pattern when we replace food insecurity with an indicator for the subject's income being below the median, as shown in Table S.2 in the Supplementary Materials, so this differential treatment response concerns the most critically poor subjects.

				Interacted binary	covariate:		
Outcome: Intent to migrate irregularly	Intent	Migrated	Feels safe	Insufficient food	\geq Secondary	Apprenticeship	Family
Higher chance of asylum	0.204	0.373***	0.469***	0.442**	0.142	0.275	0.263*
	(0.241)	(0.131)	(0.175)	(0.195)	(0.163)	(0.176)	(0.155)
Chance x [Covariate]	0.222	-0.280	-0.274	-0.175	0.509**	0.129	0.250
	(0.284)	(0.425)	(0.252)	(0.253)	(0.253)	(0.249)	(0.260)
Shorter time to asylum decision	0.010	0.088	-0.043	0.183	0.066	0.200	0.078
	(0.277)	(0.139)	(0.174)	(0.204)	(0.187)	(0.192)	(0.166)
Time x [Covariate]	0.132	0.194	0.338	-0.141	0.111	-0.163	0.127
	(0.322)	(0.548)	(0.273)	(0.270)	(0.268)	(0.270)	(0.279)
Asylum location outside EU	-0.602*	-1.133***	-1.120***	-1.239***	-1.032***	-1.130***	-1.251***
	(0.309)	(0.166)	(0.227)	(0.253)	(0.216)	(0.231)	(0.199)
Location x [Covariate]	-0.535	0.826	0.062	0.261	-0.110	0.105	0.551^{*}
	(0.365)	(0.646)	(0.322)	(0.327)	(0.321)	(0.320)	(0.331)
Payment card	-0.375	0.033	0.158	-0.098	0.122	-0.201	0.115
	(0.231)	(0.120)	(0.160)	(0.180)	(0.154)	(0.155)	(0.143)
Payment x [Covariate]	0.430	-0.312	-0.300	0.194	-0.215	0.402^{*}	-0.336
	(0.268)	(0.440)	(0.230)	(0.233)	(0.227)	(0.228)	(0.238)
Benefits after 36 months	-1.054***	-0.242*	-0.295	-0.593***	-0.301*	-0.128	-0.195
	(0.276)	(0.136)	(0.180)	(0.199)	(0.174)	(0.202)	(0.164)
Benefit x [Covariate]	0.920***	-0.066	0.115	0.585**	0.164	-0.185	-0.155
	(0.319)	(0.558)	(0.267)	(0.264)	(0.266)	(0.265)	(0.277)
[Covariate]	0.956**	-0.809	-0.305	0.287	-0.869**	0.405	0.078
	(0.462)	(0.791)	(0.367)	(0.380)	(0.372)	(0.368)	(0.550)
Baseline outcome		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	1
Strata indicators	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Double lasso covariates	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Observations	2965	2965	2965	2962	2965	2965	2965
Adj. \mathbb{R}^2	0.09	0.18	0.18	0.18	0.18	0.18	0.18
p-value (main + interaction): Asylum chance	0.01	0.82	0.28	0.10	0.00	0.02	0.01
p-value (main $+$ interaction): Decision time	0.39	0.59	0.16	0.81	0.35	0.85	0.36
p-value (main + interaction): Asylum location	0.00	0.62	0.00	0.00	0.00	0.00	0.01
p-value (main $+$ interaction): Payment card	0.68	0.51	0.39	0.52	0.58	0.23	0.25
p-value (main + interaction): Benefit waiting time	0.40	0.57	0.36	0.96	0.50	0.07	0.12

Table 5: Heterogeneous treatment effects

Notes: Table shows estimation results of a linear probability model of the intent to migrate irregularly on five treatment indicators (one for each policy type variation) interacted with binary covariates measured prior to treatment. Pre-treatment control variables included are intent to migrate irregularly as the baseline outcome (omitted for heterogeneity by intent to migrate internationally), indicators for the city of data collected as strata indicators, and double lasso selected covariates. The outcome is mean-centered and in units of standard deviations. The unstandardized mean reported intent is 3.8 on a scale from 0 to 10. Covariates used for interactions are whether the participant would like to live in another country, either seasonally or for a longer time, "lots" or "a fair amount" (INTENT); lived for at least 4 weeks outside of Senegal in the past 12 months (MIGRATED); feels safe where they live and without fear of harmful consequences when stating opinion in public or standing in for rights (FEELS SAFE), has been without enough food to feed household in past 12 months (INSUFFICIENT FOOD), has completed at least secondary school as highest level of formal education (\geq SECONDARY); has completed an apprenticeship, i.e. formal or informal training for a trade in a work setting under the guidance of an experienced practitioner (APPRENTICESHIP); or currently married and/or has children (FAMILY). Standard errors are clustered at the participant-level. * p < 0.1, ** p < 0.05, *** p < 0.01

5 DISCUSSION AND CONCLUSION

In this paper, we have documented knowledge on the European asylum system and have tested the impact of different policy measures in destination countries on the intent to migrate among potential migrants in urban Senegal. We have shown that overall knowledge of the European asylum system is low. Through a conjoint experiment, we have demonstrated that out of four proposed policy measures, only two significantly affect the intention to migrate. Reducing the time for asylum decision by three months or changing the payment mode of state benefits do not alter the intention to migrate. We measure by far the biggest reduction in intent to migrate for a relocation of the asylum process to an African country. Also the waiting time for receiving state benefits at the same level as natives reduces migration intent.

While these results of a (hypothetical) conjoint experiment among potential migrants should not be taken at face value to predict real migration flows following such policy changes, they give some indication of the potential impacts and the relative importance of different motives for migration. For example, the hotly debated introduction of a payment card for asylum seekers in Germany, which replaces cash hand-outs to migrants, is unlikely to reduce the number of migrants. Politicians had formulated the hope that apart from reducing the administrative burden on local authorities, a payment card would make it more difficult to sent money home or use the state benefits for paying for trafficking services. This could make migration less attractive for people who migrate mainly for economic reasons. Apparently, potential migrants do not care about the payment mode of state benefits. This is also in line with answers to descriptive questions on the preferred migration destination in Europe and the reason for the choice. Only 10 percent of respondents refer to government benefits as the reason for selecting a destination, way below popular reasons like the number of Senegalese or other migrants in the destination country or generally good income generation possibilities.

For interpreting the large effect of relocating the asylum process to an African country, it is important to note two caveats: Firstly, as the discussions around changing migration rules in the UK to outsource the migration process to Rwanda or Italy's attempts to outsource the decision process to Albania, show, there are big question marks over the feasibility of such a policy. It is unclear in how far a European country can make sure, human rights obligations arising from the Geneva Refugee Convention and the European Convention on Human Rights are met in a third country. Secondly, it is unclear whether the deterrent effect would persist over time. Once such policy changes are implemented, new migration routes and processes may emerge, reducing some of the uncertainty around the logistics of organizing the migration journey. This could potentially reduce some of the deterrent effect of being processing in a third country.

REFERENCES

- Africanews. 2023. "Senegal: President orders emergency measures to combat illegal emigration." *Africanews*.
- Alrababah, Ala, Daniel Masterson, Marine Casalis, Dominik Hangartner, and Jeremy Weinstein. 2023. "The Dynamics of Refugee Return: Syrian Refugees and Their Migration Intentions." *British Journal of Political Science*, 53(4): 1108– 1131.
- Bah, Tijan L., Catia Batista, Flore Gubert, and David McKenzie. 2023. "Can information and alternatives to irregular migration reduce "backway" migration from The Gambia?" *Journal of Development Economics*, 165: 103153.
- Beber, Bernd, and Alexandra Scacco. 2022. The Myth of the Misinformed Migrant? Survey Insights from Nigeria's Irregular Migration Epicenter. DE:RWI.
- Becker, Malte, Finja Krüger, and Tobias Stoehr. 2024. "What Drives Attitudes Toward Immigrants in Sub-Saharan Africa? Evidence from Uganda and Senegal." SSRN Electronic Journal.
- Beine, Michel, Simone Bertoli, and Jesús Fernández-Huertas Moraga. 2016.
 "A Practitioners' Guide to Gravity Models of International Migration." The World Economy, 39(4): 496–512.
- Bundesamt für Migration und Flüchtlinge. 2023. "Asylgeschäftsstatistik (1-12/23)."
- Bundesamt für Migration und Flüchtlinge. 2024a. "Asylgeschäftsstatistik (01-12/23)."
- Bundesamt für Migration und Flüchtlinge. 2024b. "Sichere Herkunftsstaaten."
- Bund und Länder. 2023. "Flüchtlingspolitik Humanität und Ordnung. Besprechung des Bundeskanzlers mit den Regierungschefinnen und Regierungschefs der Länder am 6. November 2023."
- **Di Iasio, Valentina, and Jackline Wahba.** 2023. "The Determinants of Refugees' Destinations: Where Do Refugees Locate within the EU?" SSRN Electronic Journal.
- **EU Agency for Asylum.** 2024*a*. "Key figures on international protection in EU+ countries."
- EU Agency for Asylum. 2024b. "Latest Asylum Trends."
- EU Agency for Asylum. 2024c. "Ukraine Crisis: Data and Analysis."

Eurostat. 2024a. "Annual asylum statistics."

- **Eurostat.** 2024*b*. "Final decisions in appeal or review on applications by type of decision, citizenship, age and sex annual data (migr_asydcfina)."
- **Eurostat.** 2024*c*. "First instance decisions on applications by type of decision, citizenship, age and sex - annual aggregated data (migr_asydcfsta)."
- Frohnweiler, Sarah, Bernd Beber, and Cara Ebert. 2022. "Information Frictions, Belief Updating and Internal Migration: Evidence from Ghana and Uganda." *SSRN Electronic Journal*.
- **Frohnweiler, Sarah, Bernd Beber, and Cara Ebert.** 2024. "Delayed effects on migration intentions in an information provision experiment in Ghana." *Revue d'économie du développement.*
- **Frontex.** 2024. "Significant rise in irregular border crossings in 2023, highest since 2016."
- Hainmueller, Jens, Daniel J. Hopkins, and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." *Political Analysis*, 22(1): 1–30.
- Hatton, Timothy J. 2016. "Refugees, Asylum Seekers, and Policy in OECD Countries." *American Economic Review*, 106(5): 441–445.
- Hodali, Diana, and Astrid Prange de Oliveira. 2018. "Asylum benefits in the EU: A comparison." *Deutsche Welle*.
- Jeannet, Anne-Marie, Tobias Heidland, and Martin Ruhs. 2021. "What asylum and refugee policies do Europeans want? Evidence from a cross-national conjoint experiment." *European Union Politics*, 22(3): 353–376.
- Morgenstern, Sandra. 2023. "(How) Do Information Campaigns Influence Migration Decisions?" Journal of Experimental Political Science, 1–13.
- **Statista.** 2024. "Gesamtzahl der offiziell gezählten Kriegsflüchtlinge aus der Ukraine in Deutschland von März 2022 bis Dezember 2023."
- **Tjaden, Jasper, and Felipe Alexander Dunsch.** 2021. "The effect of peer-to-peer risk information on potential migrants Evidence from a randomized controlled trial in Senegal." *World Development*, 145: 105488.
- Tjaden, Jasper, and Horace Gninafon. 2022. "Raising awareness about the risk of irregular migration: Quasi-experimental evidence from Guinea." *Population and Development Review*.
- Tjaden, Jasper, Daniel Auer, and Frank Laczko. 2019. "Linking migration intentions with flows: Evidence and potential use." *International Migration*, 57(1): 36–57.

- Turkoglu, Oguzhan, and Sigrid Weber. 2023. "When to Go? A Conjoint Experiment on Social Networks, Violence, and Forced Migration Decisions in Eastern and Southeastern Turkey." *International Studies Quarterly*, 67(2): sqad033.
- Zhao, Anqi, and Peng Ding. 2022. "To Adjust or not to Adjust? Estimating the Average Treatment Effect in Randomized Experiments with Missing Covariates." *Journal of the American Statistical Association*, 1–11.
- Zhirkov, Kirill, and Rachel Smilan-Goldstein. 2023. "U.S. Sanctuary Policies and Mexicans' Migration Preferences: A Conjoint-Experimental Study." International Migration Review, 01979183231185120.

Zimmermann, Diana. 2023. "Migrationskrise: Das sind die Stellschrauben."

SUPPLEMENTARY MATERIALS

S.1 Experimental script and visual aid

- 1. Introduction
 - "We want to talk to you about hypothetical policies in a destination country in Europe related to irregular migrants. We will now show you three sets of policies that this European country could have in place. Given each set of policies, please indicate how interested you would be in trying to migrate irregularly (traveling without prior approval) to this country? [0 = Not at all. 10 = Very.]"
- 2. Policy set 1
 - "Enumerator: Mark these attributes on the printed sheet to show the respondent! Take a photo of the printed sheet"
 - "Given this set of policies, how interested would you be in trying to migrate irregularly to this country? [0 = Not at all. 10 = Very.]"
- 3. Policy set 2
 - "Enumerator: Mark these attributes on the printed sheet to show the respondent! Take a photo of the printed sheet"
 - "Given this set of policies, how interested would you be in trying to migrate irregularly to this country? [0 = Not at all. 10 = Very.]"
- 4. Policy set 3
 - "Enumerator: Mark these attributes on the printed sheet to show the respondent! Take a photo of the printed sheet"
 - "Given this set of policies, how interested would you be in trying to migrate irregularly to this country? [0 = Not at all. 10 = Very.]"
- 5. Debrief
 - "[Enumerator: READ the following to the subject. You are required to stay on this screen and READ this text for at least thirty seconds:] The scenarios presented are hypothetical. Please inform yourself carefully about the actual numbers and processes if you consider migrating! Irregular migration across the desert or by boat across the sea is extremely dangerous! The journey can go on for weeks or months, and many people, including many men like you, die along the way. And among those that make it to Europe, most are not allowed to stay or work and are legally required to leave. Again, think carefully and inform yourself before attempting to migrate irregularly."





S.2 Additional heterogeneous effect results

	Domestic, 1y	International, 1y	Born elsewhere	HH irregular, 1y
Higher chance of asylum	0.408***	0.373***	0.259*	0.351***
	(0.146)	(0.131)	(0.143)	(0.130)
Chance x Migrated	-0.222	-0.280	0.404	0.045
	(0.285)	(0.425)	(0.298)	(0.505)
Shorter time to asylum decision	-0.043	0.088	0.043	0.073
	(0.154)	(0.139)	(0.153)	(0.139)
Time x Migrated	0.593^{*}	0.194	0.283	0.434
	(0.311)	(0.548)	(0.323)	(0.499)
Asylum location outside EU	-1.003***	-1.133***	-1.128***	-1.007***
	(0.191)	(0.166)	(0.185)	(0.167)
Location x Migrated	-0.309	0.826	0.165	-0.870
	(0.350)	(0.646)	(0.379)	(0.592)
Payment card	0.040	0.033	0.003	0.024
	(0.137)	(0.120)	(0.130)	(0.120)
Payment x Migrated	-0.108	-0.312	0.026	-0.208
	(0.249)	(0.440)	(0.278)	(0.426)
Benefits after 36 months	-0.335**	-0.242*	-0.317**	-0.226
	(0.158)	(0.136)	(0.151)	(0.137)
Benefit x Migrated	0.318	-0.066	0.279	-0.309
	(0.286)	(0.558)	(0.318)	(0.515)
Migrated	-0.486	-0.809	-0.928**	0.954
	(0.400)	(0.791)	(0.435)	(0.661)
Baseline outcome	\checkmark	\checkmark	\checkmark	\checkmark
Strata indicators	\checkmark	\checkmark	\checkmark	\checkmark
Double lasso covariates	\checkmark	\checkmark	\checkmark	\checkmark
Observations	2965	2965	2965	2965
Adj. \mathbb{R}^2	0.18	0.18	0.18	0.18
p-value (main $+$ interaction): Asylum chance	0.45	0.82	0.01	0.42
p-value (main $+$ interaction): Decision time	0.04	0.59	0.25	0.29
p-value (main + interaction): Asylum location	0.00	0.62	0.00	0.00
p-value (main + interaction): Payment card	0.75	0.51	0.91	0.65
p-value (main + interaction): Benefit waiting time	0.94	0.57	0.89	0.28

Table S.1: Heterogeneous treatment effects by past migration experience

Notes: TBA

	Insufficient food	Below median income
Higher chance of asylum	0.442**	0.143
	(0.195)	(0.186)
Chance x Low SES	-0.175	0.250
	(0.253)	(0.255)
Shorter time to asylum decision	0.183	-0.072
	(0.204)	(0.203)
Time x Low SES	-0.141	0.229
	(0.270)	(0.276)
Asylum location outside EU	-1.239***	-0.788***
	(0.253)	(0.241)
Location x Low SES	0.261	-0.416
	(0.327)	(0.331)
Asylum location outside EU	-0.098	-0.139
	(0.180)	(0.163)
Payment x Low SES	0.194	0.180
	(0.233)	(0.230)
Benefits after 36 months	-0.593***	-0.280
	(0.199)	(0.191)
Benefit x Low SES	0.585^{**}	0.143
	(0.264)	(0.272)
Low SES	0.287	-0.566
	(0.380)	(0.393)
Baseline outcome	\checkmark	\checkmark
Strata indicators	\checkmark	\checkmark
Double lasso covariates	\checkmark	\checkmark
Observations	2962	2791
Adj. \mathbb{R}^2	0.18	0.17
p-value (main + interaction): Asylum chance	0.10	0.02
p-value (main + interaction): Decision time	0.81	0.40
p-value (main + interaction): Asylum location	0.00	0.00
p-value (main + interaction): Payment card	0.52	0.80
p-value (main + interaction): Benefit waiting time	0.96	0.48

Table S.2: Heterogeneous treatment effects by wealth

Notes: TBA

	Married	Has children
Higher chance of asylum	0.278*	0.274*
	(0.149)	(0.152)
Chance x Yes	0.246	0.252
	(0.273)	(0.267)
Shorter time to asylum decision	0.137	0.092
	(0.157)	(0.162)
Time x Yes	-0.087	0.112
	(0.300)	(0.290)
Asylum location outside EU	-1.223***	-1.229***
	(0.190)	(0.196)
Location x Yes	0.568	0.517
	(0.348)	(0.340)
Asylum location outside EU	0.081	0.116
	(0.136)	(0.140)
Payment x Yes	-0.287	-0.374
	(0.251)	(0.244)
Benefits after 36 months	-0.177	-0.215
	(0.157)	(0.161)
Benefit x Yes	-0.279	-0.101
	(0.288)	(0.284)
Yes	-0.311	0.326
	(0.484)	(0.518)
Baseline outcome	\checkmark	\checkmark
Strata indicators	\checkmark	\checkmark
Double lasso covariates	\checkmark	\checkmark
Observations	2965	2956
Adj. \mathbb{R}^2	0.18	0.17
p-value (main $+$ interaction): Asylum chance	0.02	0.02
p-value (main $+$ interaction): Decision time	0.85	0.40
p-value (main + interaction): Asylum location	0.02	0.01
p-value (main + interaction): Payment card	0.33	0.20
p-value (main + interaction): Benefit waiting time	0.06	0.18

Table S.3: Heterogeneous treatment effects by family status

Notes: TBA

	Timest	amps	Display dur	ation (audit)
	$\geq 1 \min$	<1 min	$\geq 5 \min$	$<5 \min$
Chance of asylum	0.099**	0.045	0.096***	-0.024
	(0.042)	(0.057)	(0.034)	(0.104)
Time to asylum decision	0.059	-0.020	0.044	-0.075
	(0.044)	(0.053)	(0.036)	(0.094)
Location of asylum application	-0.281***	-0.242***	-0.279***	-0.241**
	(0.048)	(0.060)	(0.043)	(0.105)
Benefit payment mode	0.023	-0.068	0.000	0.000
	(0.040)	(0.049)	(0.032)	(0.089)
Benefit waiting time	-0.064	-0.061	-0.067*	-0.118
	(0.042)	(0.055)	(0.036)	(0.102)
Baseline outcome	\checkmark	\checkmark	\checkmark	\checkmark
Strata indicators	\checkmark	\checkmark	\checkmark	\checkmark
Double lasso covariates	\checkmark	\checkmark	\checkmark	\checkmark
Observations	1836	1129	2665	300
Adj. \mathbb{R}^2	0.17	0.19	0.17	0.29
Outcome mean	0.00	0.00	0.00	0.00
Outcome mean, not standardized	3.80	3.80	3.80	3.80

Table S.4: Results of the conjoint experiment by engagement

Notes: Compliance is measured by duration. Columns (1) and (2) use timestamps for the first time a question was opened; coumns (3) and (4) use total display times including all times the questions's screen was active.