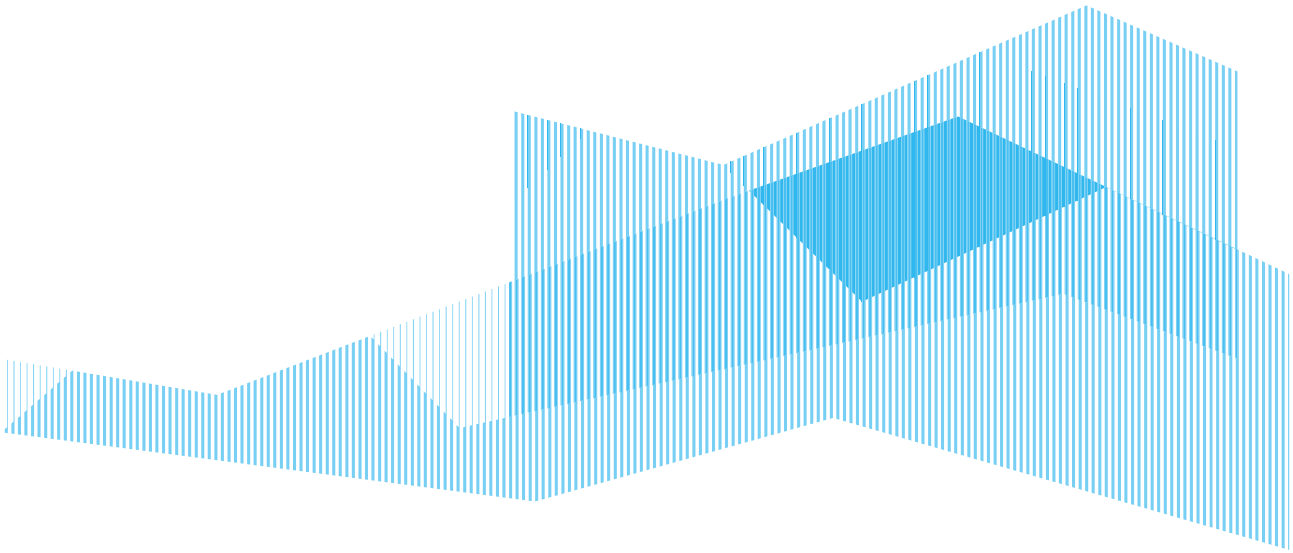
Working Paper Series
Nº 05 | August 2021

Universität Konstanz



Global norms, regional practices: Taste-based and statistical discrimination in German asylum decision-making

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Working Paper Series of the Cluster of Excellence "The Politics of Inequality":

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Abstract

Asylum policy-making in advanced democracies frequently faces the accusation that prejudice and stereotyping lead to erroneous decisions. The model of taste-based discrimination suggests that the biases of decision-makers or their peers against certain groups of applicants influence the evaluation of an asylum claim. Conversely, the concept of statistical discrimination implies that a dearth of information forces impartial decision-makers to resort to stereotypes. We examine both forms of discrimination, evaluating whether they shape asylum-seekers' chances to receive protection in Germany, currently a key recipient country. Our empirical examination of a representative refugee survey in Germany confirms that asylum decisions are subject to taste-based discrimination: males, Muslims, and applicants assigned to regions with a conservative population or government are less likely to obtain asylum or other forms of protection. Conforming to the theory of statistical discrimination, stereotyping against male or Muslim applicants' manifests most pronouncedly if decision-makers suffer under high workload or possess little information. However, high information costs do not alter stereotyping in more conservative regions. Altogether, our study reveals that extra-legal reasons in the form of prejudice and stereotypes considerably undermine what should be the key criterion in assessing an asylum claim: the credibility of an individual's need for protection.

JEL-Codes: F22, H83, J16, K37, K38

Keywords: Asylum recognition, principal-agent models, federalism, immigration attitudes, Germany, discrimination

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Please cite as: Gundacker, Lidwina, Yuliya Kosyakova, and Gerald Schneider, 2021, Global norms, regional practices: Taste-based and statistical discrimination in German asylum decision-making, Working Paper No. 5, Cluster of Excellence "The Politics of Inequality", University of Konstanz.

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Lidwina Gundacker, Yuliya Kosyakova, Gerald Schneider

Abstract

Asylum policy-making in advanced democracies frequently faces the accusation that prejudice and stereotyping lead to erroneous decisions. The model of taste-based discrimination suggests that the biases of decision-makers or their peers against certain groups of applicants influence the evaluation of an asylum claim. Conversely, the concept of statistical discrimination implies that a dearth of information forces impartial decision-makers to resort to stereotypes. We examine both forms of discrimination, evaluating whether they shape asylum-seekers' chances to receive protection in Germany, currently a key recipient country. Our empirical examination of a representative refugee survey in Germany confirms that asylum decisions are subject to taste-based discrimination: males, Muslims, and applicants assigned to regions with a conservative population or government are less likely to obtain asylum or other forms of protection. Conforming to the theory of statistical discrimination, stereotyping against male or Muslim applicants manifests most pronouncedly if decision-makers suffer under high workload or possess little information. However, high information costs do not alter stereotyping in more conservative regions. Altogether, our study reveals that extra-legal reasons in the form of prejudice and stereotypes considerably undermine what should be the key criterion in assessing an asylum claim: the credibility of an individual's need for protection.

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We thank Herbert Brücker, Lucas Guichard, Alexander Kubis, Adam Scharpf, Judith Spirig, Daniel Thym, and Natascha Zaun for providing helpful advice and useful comments on the earlier versions of this paper, and all those who commented on the earlier presentations of this work at the following events: the ECSR Thematic Workshop in Milan (March 2019), the DeZIM-FG Wednesday (September 2020), the IAB-ECSR Interdisciplinary Conference "Refugee Migration and Integration Revisited: Lessons from the Recent Past" conference in Nuremberg (May 2021), the European Political Science Association (EPSA) 2021 conference in Cologne (June 2021), and the American Sociological Association (ASA) 2021 Virtual Annual Meeting (August 2021). We thank Laura Goßner and Lukas Hain for great research assistance. Gundacker acknowledges funding from the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ, FKZ: 3920405WZB). Kosyakova acknowledges general funding from the Institute for Employment Research (IAB). Schneider acknowledges funding from the Deutsche Forschungsgemeinschaft (DFG - German Research Foundation) under the Excellence Strategy of the German federal and state governments – EXC-2035/1 – 390681379.

Introduction

Persecution, armed conflict, and human rights violations force people to leave their homes every day. The past decade saw the number of forcibly displaced persons grow to over 80 million in 2020, strongly driven by the conflicts in Syria, Afghanistan, Venezuela, South Sudan, and Myanmar (UNHCR 2021). While only one-third of the displaced population actually seeks refuge abroad, these global dynamics of forced migration nevertheless have triggered a worldwide increase in the number of asylum claims (UNHCR 2019). As a consequence, the accelerating numbers of asylum applications in the industrialized world have sparked heated debates on the costs and benefits of migration, access to social security, and the foundations of national identity, raising "public alarm to an unprecedented level" (Hatton 2017:486).

The resulting pressure on national migration regimes (Hansen and Olsen 2019; Inglehart and Norris 2017; Zunes 2017) has led to calls to curtail or, in the case of Hungary and the United States, suspend the right endorsed by almost every nation to grant asylum to those who have "a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion," as Art. 1 of the 1951 UN Convention Relating to the Status of Refugees states. In 2020, almost 150 states still remained parties to the two key multilateral treaties that create a binding framework for national asylum legislation: the Geneva Convention and the 1967 Protocol Relating to the Status of Refugees.

However, public officials have interpreted the obligation to protect asylum-seekers differently across time and locale. The people who evaluate a request are, to use Lipsky's (1980) catchphrase, "street-level bureaucrats" who operate in a context of constrained resources, high workloads, and ambiguous rules. The empowerment of these agents has arguably contributed to the vast divergences in recognition rates that characterize the asylum regime and translate, at the level of the individual applicant, into a highly fluctuating chance to obtain refugee status

or another form of protection. Past research indicates that the extra-legal considerations to which such street-level bureaucrats might pay attention are partly responsible for these differences. For example, studies focusing on key destination countries such as Switzerland (Holzer, Schneider, and Widmer 2000), Germany (Kosyakova and Brücker 2020), and the United States (Keith and Holmes 2009) suggest that age, gender, and the human or social capital of the applicants affect the probability of successful requests.

Additionally, domestic policy debates unrelated to the asylum claim have been shown to shape the decision on individual asylum claims. In this context, Salehyan and Rosenblum (2008) have established that media and congressional attention toward immigration as well as economic interests exert greater influence over U.S. asylum enforcement than the normative obligations of the multilateral asylum regime. Spirig (2021) similarly shows that Swiss judges consider the public salience of the asylum issue in their decision on appeals. Further, several macro-political studies have identified the political preferences of the governing party as a driving force behind asylum recognition rates (e.g., Alveng 2013; Avdan 2014; Gudbrandsen 2010; Neumayer 2005; Toshkov and de Haan 2013). Likewise, the attitude of the receiving society toward foreigners explains some of the variations in asylum decision outcomes across countries and regions (Holzer et al. 2000; Riedel and Schneider 2017). The aggregate protection numbers on which these examinations typically rely, however, neither allow the researchers to assess whether asylum decision-making discriminates against specific applicant groups nor to assess the importance of the individual motives for filing an asylum claim.[1]

To address this limitation, this article examines the extent to which administrative prejudice and stereotyping crowd out the individual reasons for protection, as defined by global norms and national laws, in the evaluation of individual asylum applications. As a theoretical frame, we rely on two canonical models of discrimination to explore the possible limits of legal reasoning in asylum decision-making. First, the taste-based model of discrimination, pioneered

by Becker (1957), suggests in the asylum context that administrators and judges are prejudiced against applicants who share a particular marker such as ethnicity, age, or religious denomination. This form of discrimination possibly reflects their own bias or that of their peers. Second, group attributes also play a role in the statistical model of discrimination (Arrow 1973; Phelps 1972). In this view, exceedingly high information costs can force unbiased decision-makers who evaluate a claim to rely on stereotypes about particular groups.

To juxtapose the influence of the asylum claim against the effects of such extra-legal reasons, we rely on the IAB-BAMF-SOEP Survey of Refugees (Brücker, Rother, and Schupp 2017; Kroh et al. 2017). This data source covers a representative sample of asylum-seekers and refugees who have arrived in Germany, currently one of the key European destination countries for those seeking asylum (Eurostat 2021), between 2013 and 2016. Using linear probability models, we find strong support for the hypotheses derived from the model of taste-based discrimination. The evidence gathered in favor of the theory of statistical discrimination is weaker but also implies that extra-legal factors affect the initial decision to grant protection. In particular, males and Muslim asylum-seekers, as well as those applying in more immigration-averse regions, have a lower chance of receiving protection. The bias against these groups is especially high if the external evidence supporting their asylum claims is weak. Our findings also reveal that decision-makers discriminate against applicants with a difficult motive to examine (e.g., the individual risk of persecution). Most interestingly, improved information about the endangerment risk posed to certain groups of applicants in their home country only marginally reduces the prejudice of the decision-makers and their immigration-adverse peers.

Our study of the role of discriminatory behavior in the handling of asylum requests, therefore, confirms the important role of extra-legal reasoning in the asylum process. The results challenge Germany's self-conception as a state under the rule of law as the motives of

individuals to file an asylum request and the humanitarian situation in the country of origin do not exclusively determine the decision to grant or refuse protection.

The discriminatory potential of asylum decision-making

Asylum decision-making as a principal-agent problem

The concept of asylum has existed for millennia, but it only became a global norm in the aftermath of WWI and WWII, when millions of people fled persecution and violence. The Geneva Refugee Convention and the Protocol Relating to the Status of Refugees have since been translated into national legal frameworks that grant asylum to those applicants who have a well-founded fear of persecution (Joppke 1997). If this relatively strict requirement is not fulfilled, the principle of *non-refoulement* enshrined in the multilateral treaties forbids states from returning applicants who are likely to face harm to their country of origin.

Evaluating the claims through which asylum-seekers seek to obtain protection is challenging for at least three reasons. First, any assessment of asylum claims ultimately boils down to a life-changing "binary yes-or-no decision" (Taylor 2007:176), while other administrative and judicial decisions frequently entail a range of options (e.g., the length and conditions of prison sentences).

A second difficulty for decision-makers arises from the often conflicting political prerogatives that they receive. The Geneva Refugee Convention and national asylum laws leave the definition of "political persecution" or "well-founded fear" to decision-makers (Law 2005), generating considerable discretionary power to interpret asylum legislation.[2] Consequently, while national asylum laws and the multilateral treaties behind them force the evaluators of asylum requests to consider the merit of each individual application, they may live in a region where the attitudes toward foreigners and the granting of asylum might markedly differ from the spirit of the asylum regime in place. The local implementation of nationally or globally

designed standards might exacerbate the principal-agent problem that characterizes policy implementation in states with a highly decentralized decision-making apparatus (Holzer et al. 2000; Niskanen 1971; Pressman and Wildavsky 1973; Riedel and Schneider 2017). Specifically, the empowerment of regional agents to implement asylum law becomes problematic when street-level bureaucrats include their own prejudices and stereotypes or the biases of their peers into the decisions on an asylum application. Paying attention to such extra-legal considerations distorts the asylum procedure, favoring some groups at the expense of others.

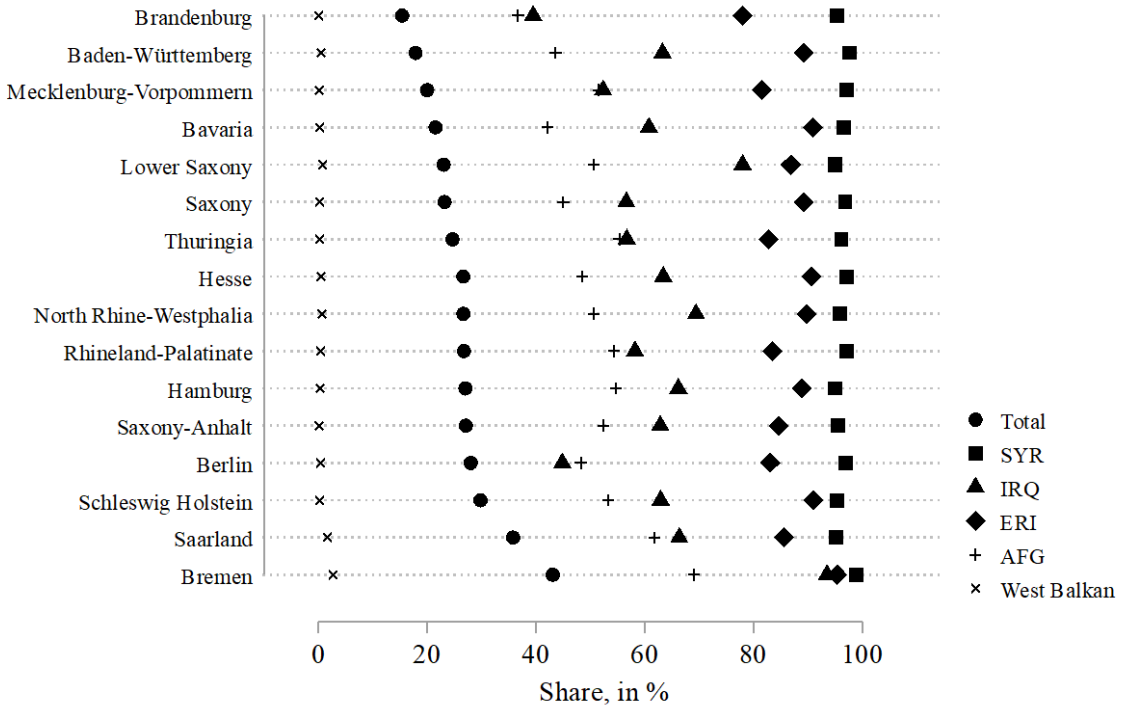
Third, even the most sophisticated control mechanisms do not allow responsible administrators to completely overcome the informational asymmetry that they face in comparison to the applicant. Such informational barriers manifest in a lack of language skills, minimal political and cultural knowledge of the asylum-seeker's country or region of origin, and a rudimentary understanding of the applicant's individual life circumstances. Hence, "a case may be difficult because legal standards are imprecise, the facts are uncertain, or both" (Baum 2010:1509).

The delegation of decision-making power to regional authorities and the difficulties in making objective decisions contribute to the implementation problem that finds its expression in the considerable differences in recognition rates for asylum-seekers across time. Location is also a factor, as differences in asylum outcomes are not only strongly pronounced across states in Western Europe (Vink and Meijerink 2003) but also vary also within them. For instance, Holzer, Schneider, and Widmer (2000) identify marked variation in first instance recognition rates across Swiss cantons (between 5 and 12 percent), which they partly attribute to residents' attitudes toward foreigners and the share of foreigners within each state. The way in which mass media have framed the refugee discussion has similarly affected decision-making among Swiss asylum judges (Spirig 2021).

In the U.S. context, Ramji-Nogales et al. (2007:302) point to a "remarkable variation in [asylum] decision making from one official to the next, from one office to the next, from one region to the next, from one Court of Appeals to the next, and from one year to the next." This holds true even in the absence of legal changes and when asylum outcomes are examined separately by country of origin. The authors attribute these variations in part to the political mood prevailing in the country and the characteristics of judges, including their political ideologies. A judge's political predisposition is also highlighted by Keith et al. (2013), who find that extra-legal considerations concerning national security and economic matters shape the outcomes of asylum claims (for Canada, see also Gould, Sheppard, and Wheeldon 2010).

Similar sub-national variations in asylum outcomes can also be observed for Germany – the country examined in this study. Figure 1 displays the varying protection rates across federal states and countries of origin between 2015 and 2017. For Afghans, the average protection rates range between 37 and 69 percent, for Eritreans between 78 and 95 percent, and for Iraqis between 40 and 93 percent. For Syrians and applicants from the West Balkans, the divergences are more moderate, with an average protection rate of 96 percent and 1 percent, respectively.

Figure 1 Protection rates by federal state overall and by selected countries of origin, 2015-2017



Notes: Protection rate reflects the share of recognitions relative to all decisions. Recognitions include refugee protection, subsidiary protection, and humanitarian protection. Decisions are first-instance decisions including decisions based on the Dublin convention. West Balkan includes Albania, Bosnia-Hercegovina, Kosovo, Macedonia, Montenegro, and Serbia. For further information, refer to Table S1 in the Supplementary Appendix, which can be found here: http://nbn-resolving.de/urn:nbn:de:bsz:352-2-1dgi3xkya4eq70

Source: Special provision of the BAMF 2010-2017, own calculations

Federalism in Germany and the evaluation of asylum claims

The federal states possess considerable discretion in a number of domains but only limitedly in asylum policy-making. Specifically, the handling of asylum requests is in the hands of the German Office for Migration and Refugees (BAMF), an agency subordinate to the Federal Ministry of the Interior. Regional BAMF offices, spread throughout the country, render verdicts on individual asylum applications.[3] Asylum-seekers can appeal a decision by the BAMF at one of the several dozen administrative courts that are distributed across the country. Further, the principle of *non-refoulement* implies that negative judicial decisions do not necessarily force failed applicants to leave Germany.[4]

When reviewing a case, decision-makers have to evaluate whether applicants have been persecuted in the home country or have a legitimate fear of harm upon their return. The decision-making process suggests that the outcome crucially depends on the arguments put forward by asylum-seekers. BAMF collaborators are presumably also more likely to grant protection if the humanitarian conditions in the country of origin are unstable to the extent that a negative decision would contradict the *non-refoulement* rule. The spirit of the liberal asylum regime thus suggests that the real or perceived threat to asylum-seekers in their country of origin should determine whether applicants receive protection. Thus, we contend that claims made by asylum-seekers to have fled war or persecution, as well as the information available about conflict and oppression in the applicant's home country, should increase their chance to obtain protection. The first hypothesis, therefore, distinguishes between the subjective (*H1a*) and objective (*H1b*) endangerment of asylum-seekers as benchmarks to determine asylum outcomes.

> *H1a*: Applicants expressing a fear of persecution, discrimination, forced recruitment into armed service, or of being victimized in a (civil) war in their country of origin have a higher chance of receiving a positive decision from the asylum office.
>
> *H1b*: Greater political oppression and a growing number of (civil) war casualties in an applicant's country of origin increase the chance of receiving a positive decision from the asylum office.

Taste-based discrimination: The power of political attitudes

The delegation of decision-making power to regional BAMF branches grants its agents considerable discretion. This administrative leeway in handling applications is the main reason why the biases and stereotypes held by these street-level bureaucrats or the prejudices expressed by their regional peers may shape their decisions, at least partly (Dahlvik 2017).[5]

A rich literature in labor economics (Neumark 2018), political science (Block 2019; Einstein and Glick 2017), and sociology (Pager and Shepherd 2008) has identified prejudice and exceedingly high information costs as the key mechanisms triggering the differential treatment of individuals who can only be distinguished through ascriptive group markers such as sex, age, or race. Differentiated treatment due to prejudices of decision-makers, their peer groups or political authorities typically results in taste-based discrimination (Becker 1957). In related studies, a significant number of experiments have demonstrated that applicants' ethnic origin and gender influence the behavior of public administrators. For instance, local governments were found to respond later (Grohs, Adam, and Knill 2016) or with less details (Hemker and Rink 2017) to email requests by individuals with Turkish names in Germany.

Some aggregate level evidence suggests that taste-based discrimination also influences German asylum decision-making. For example, Riedel and Schneider (2017) establish considerable differences in the treatment of asylum-seekers across German regions, and Plümper and Neumayer (2020) show that the recognition rate for female asylum-seekers is greater than for their male counterparts. Furthermore, Kosyakova and Brücker (2020) reveal a reduced level of recognition for individuals from an under-privileged socio-economic background. These results point to taste-based discrimination at the level of the individual asylum-seeker and reflect decision-makers' prejudices.

> *H2:* Men (*H2a*), applicants with a Muslim background (*H2b*), and those with a lower level of education (*H2c*) have a lower chance of receiving a positive decision from the asylum office.

When evaluating an asylum claim, decision-makers might also consider the biases and demands of their personal networks. Consequently, individual characteristics of asylum-seekers that are unrelated to the motive to file a request could be more or less decisive in various regional

contexts. For instance, young men may have a harder time gaining asylum recognition in more xenophobic regions where they are more easily classified as immigrants (Ward 2019). The same holds true for Muslim applicants in regions with a particular anti-Muslim bias (Bansak, Hainmueller, and Hangartner 2016).

Additionally, regional decision-makers operate in tandem with other regional administrative units during the asylum procedure – in particular, with immigration offices – to coordinate the logistics of the asylum process and to gather information on the individual asylum applicant (Wittmann 2018). These immigration offices coordinate accommodations and the supply of social services to asylum-seekers, and they are ultimately in charge of immigration enforcement (that is, deportation or issuance of residence titles, Wittmann 2018:53). Immigration offices are bound by the directives of their respective regional government. As a result, the decision-makers in regional BAMF offices are regularly confronted with local administrative conditions and the immigration preferences of regional executives and their voters. This renders it likely that – consciously or subconsciously – they are sensitive to regional political concerns and the political agenda of the regional government when they make a decision about an asylum claim. Various studies have revealed that agents' personal political predispositions (e.g., Keith et al. 2013; Ramji-Nogales et al. 2007), as well as regional political preferences, translate into varying chances of positive asylum outcomes (Ellermann 2006; Holzer et al. 2000; Riedel and Schneider 2017; Salehyan and Rosenblum 2008; Schneider, Segadlo, and Leue 2020; Spörndli, Holzer, and Schneider 1998). As a result, we expect that asylum decision-making is affected by regional preferences expressed by citizens and the public administration, both in terms of the government's overall ideology and their particular policy preferences toward refugees.[6]

> *H3:* Individuals placing an asylum claim in a region with a higher share of immigration-averse citizens (*H3a*), a more conservative public administration (*H3b*), or a more

restrictive attitude toward refugees, as expressed by the current regional government (*H3c*), have a lower chance of a positive decision from the asylum office.

Statistical discrimination: The role of information costs

Discrimination might also persist when decision-makers are not prejudiced against particular groups of applicants. For example, insufficient knowledge about the merits of an individual application can prompt administrators to resort to readily available information about the group to which a refugee belongs. Such stereotyping is akin to the model of statistical discrimination in labor markets developed by Arrow (1973) and Phelps (1972). Similarly, a field experiment on hiring decisions on German labor markets by Kaas and Manger (2012) has provided support for the thesis that pertinent information reduces the chasm between majority and minority job applicants. Distinguishing between candidates with German and Turkish names, the authors demonstrate that employers' discriminatory behavior contracts considerably when letters of reference with favorable information from previous employers are added to the application.

Considerable knowledge gaps plague asylum decision-making as well. The ambiguity of both facts and law has two important consequences for asylum decision-makers. While it generates an "enormous leeway for choice" (Baum 2010:1511), it also encourages "motivated reasoning" (Baum 2010:1512). As uncertainty increases, personal preferences for one conclusion over another gain importance in the decision-making process (Legomsky 2007), which may result in considerable inconsistency in decisions on asylum claims (Baum 2010). In sum, if the complexity of a case increases, decision-makers might be more sensitive to extra-legal considerations in the asylum process.

Even if decision-makers are not prejudiced, they are imperfectly informed about the credibility of the claim. Interviewing the applicant during the asylum process aims to reduce this information deficiency. Yet, the remaining information gap might be a reason to resort to group

attributes as a proxy for the credibility of a request. Along these lines, the statistical theory of discrimination implies that asylum claims will particularly suffer from discriminatory practices based on specific group attributes such as gender or religious denomination when no externally accessible information is available to validate their credibility.[7] The theory of statistical discrimination further suggests that decision-makers consider information on the asylum-seekers' social and educational backgrounds as proxies for the credibility of their claims. This implies that higher (real or perceived) human capital endowments might improve the chances of potentially disadvantaged applicants since skilled applicants can make a stronger case for their requests to obtain protection (Kosyakova and Brücker 2020).

Moreover, while citizens of war-torn countries have an easily verifiable reason at hand to back their asylum claims, individuals who fear persecution or discrimination for individual reasons such as gender, ethnicity, or sexual orientation may face difficulties in their attempt to credibly prove their claims. Such asylum cases are presumably characterized by (1) higher complexity and (2) the absence of readily available objective evidence to support the claim. As a consequence, decision-makers might more strongly rely on prejudices related to group attributes, resulting in statistical discrimination and a deviation from global norms and national asylum law. Such consciously or unconsciously applied stereotypes may represent personal biases as well as prevailing political preferences in a given region.

> *H4:* The absence of external sources confirming the endangerment an applicant would face in their home country reduces the chances of receiving a positive decision for applicant groups that can be more easily stereotyped: men (*H4a*), applicants with a Muslim background (*H4b*) or with a lower level of education (*H4c*), those with a reported fear of persecution or discrimination in their country of origin (*H4d*), applicants whose claims are decided in a region with a more conservative administrative tradition (*H4e*), in

a region where the state government expresses a more restrictive attitude toward refugees (*H4f*), or with a higher share of immigration-averse residents (*H4g*).

Given that the search for externally accessible information requires time, decision-makers facing a heavy workload might be more prone to stereotyping and are at greater risk of responding "in terms of their general attitudes towards asylum and asylum claimants" (Baum 2010:1519). For instance, it has been shown that judges might be less negative in their decision-making following breaks for meals (Danziger, Levav, and Avnaim-Pesso 2011). Judges also tend to make decisions requiring low effort in times of high stress (Holzer and Schneider 2002:153) and are less likely to accept appeals in times of an increased workload (Spirig 2021). From an administrative perspective, a large case backlog can shift the focus of officials from the goal to deliver coherent decisions to the goal to simply process cases and deliver timely decisions (Baum 2010; Lipsky 1980). We expect accordingly that decision-makers' consideration of extra-legal factors in the asylum process increase in tight situations where administrations possess few resources for case-specific research.

Time pressure could be particularly relevant in the German context, as the country faced 422,000 first-time asylum applications in 2015 and another 722,000 in 2016; almost 50 percent of the cases submitted in Europe in this period had to be managed by Germany, the largest Member State in the European Union (BAMF 2017; Eurostat 2020). Compared to 2014, the number of first-time asylum applications has grown by a factor of 2.6 in 2015 and by a factor of 4.2 in 2016 (Kosyakova and Brücker 2020). This dramatic increase and the corresponding lack of qualified interviewers and decision-makers have put considerable pressure on Germany's asylum system. As a result, many asylum-seekers experienced lengthy waiting periods before the authorities were able to clarify their asylum status (Kosyakova and Brenzel 2020). This, in return, increases the demand to curtail the duration of and access to asylum procedures (Grote 2018).

H5: Growing asylum workloads reduce the chances of receiving positive decisions for applicant groups that can be more easily stereotyped: men (*H5a*), applicants with a Muslim background (*H5b*) or with a lower level of education (*H5c*), those with a reported fear of persecution or discrimination in their country of origin (*H5d*), applicants whose claims are decided in a region with a more conservative administrative tradition (*H5e*), in a region where the state government expresses a more restrictive attitude toward refugees (*H5f*), or with a higher share of immigration-averse residents (*H5g*).

Data and methodology

Data

To examine the role played by taste-based and statistical discrimination in asylum decision-making, we rely on the longitudinal IAB-BAMF-SOEP Survey of Refugees in Germany (2016–2017)[8] and augment it with data on the municipality and the federal state of the applicant's initial residence. The data were sampled from the Central Register of Foreign Nationals (*Ausländerzentralregister*, AZR), the national registry of all foreign citizens in Germany. The survey covers all individuals seeking asylum or any other form of protection, irrespective of their current legal status, who arrived in Germany for humanitarian reasons between 2013 and 2016 and were registered in the AZR by January 2017. The survey was carried out in 169 representatively selected sampling points across Germany.

The survey's first wave was conducted between June and December 2016, covering 4,465 adult refugees. The gross participation rate was approximately 50 percent of the addresses originally drawn, which is substantially higher than in comparable surveys of the German population (Kroh et al. 2017). Interviews were conducted face-to-face with computer assistance (CAPI) and were supported by translators if needed. Questionnaires were available in seven languages (Arabic, English, Farsi/Dari, German, Kurmanji, Pashtu, and Urdu) and with auditory

instruments for illiterate survey participants. The second wave covered 67 percent of participants of the first wave and included an additional sample that resulted in data for 2,559 panel respondents and 2,897 first-time respondents (Brücker, Kosyakova, and Vallizadeh 2020). As a result, the data from the IAB-BAMF-SOEP Survey of Refugees in Germany include 7,430 adult persons (18 years and older) who were surveyed at least once over two survey waves.

Analytical sample

The unit of our analyses are adult refugees with a first instance decision on their asylum application, processed between January 2015 and December 2017. Correspondingly, we drop respondents (i) with a non-refugee questionnaire, (ii) who did not receive a decision or with missing information on the decision during the observation period, (iii) whose asylum application during the observation period was a follow-up application rather than their first application, (iv) with missing decision dates, (v) whose asylum application was processed before January 2015 or after December 2017, and (vi) with missing information on the country of origin. Moreover, we exclude minor asylum applicants (age at application is below 18) and those with extreme values on education years (more than 22 years). As a result, our sample contains 4,233 individuals.

Dependent outcomes and statistical method

As a dependent variable, we employ an indicator measuring whether the *asylum application* has been *approved* (yes=1, 0 otherwise). We do not distinguish between different forms of protection, however, as such a distinction is less relevant for a general test of our hypotheses (see also Kosyakova and Brücker 2020). To ease the interpretation of the findings, we rely on linear probability models with robust standard errors.

Explanatory variables and hypotheses tests

As a subjective indicator of the eligibility of an asylum claim (*H1a*), we consider whether the respondents report that they *fled* their countries of origin *because of violent conflict or war*, *discrimination*, *persecution*, or *forced recruitment*. As objective indicators of the eligibility of an asylum claim (*H2a, H4*), we rely on two measures: (1) the violation of political and civil rights in the origin countries as assessed by the combined Freedom House Political Rights and Civil Liberties Index (*FIW score*) (Freedom House 2018) and (2) the log-transformed number of monthly *conflict-related deaths* in the country of origin at the time of the asylum decision (Pettersson and Öberg 2020; Sundberg and Melander 2013). We disaggregate the monthly number of casualties to the regional level.

To test for group-specific taste-based discrimination, we consider survey information and account for being *male* (*H2a*), of *Muslim* religion (*H2b*), and for pre-migration *years of education* (*H2c*).

The regional residents' and governments' political preferences enter the analysis to test for taste-based discrimination. For this purpose, we consider the municipality of the respondent's initial residence and decision date. Recall that the national dispersal policies determine asylum-seekers' residential allocation across German federal states (*Länder*) according to a key based on population size and tax revenues (*Königssteiner Schlüssel*). The allocation is thus exogenous to the individual characteristics of the asylum-seeker. Within the federal states, asylum-seekers are subsequently distributed by local authorities based on a similar logic. After their initial allocation, asylum-seekers must place the asylum request personally at the BAMF branch office to which the initial reception facility belongs. Correspondingly, this state-based allocation rules out potential biases that could result from the self-selection of asylum-seekers into regions with better approval chances (Kosyakova and Brücker 2020).

To approximate for immigration-averse citizens (*H3a*), we consider the *share of residents* who indicate that they are *very concerned about immigration to Germany* in the municipality of residence and year of decision. The data on attitudes stems from the German Socio-Economic Panel (SOEP 2019). The conservative ideology of the public administration (*H3b*) is measured via two proxies for political tradition among the federal states. First, the dummy *center-right minister* indicates whether the minister of a federal state came from a conservative party (CDU/CSU) in the decision year. Second, we consider the number of *years of center-right dominance* in the federal state since 1991 through a variable assembled by Schneider et al. (2020) and the authors.

To measure the more restrictive attitudes of the current regional government toward refugees in particular (*H3c*), we consider a municipality's *application of the restrictive residence obligation* and *share of the non-monetary benefits to asylum-seekers*. Introduced in August 2016, the residential obligation policy requires refugees to reside in the federal state in which their asylum application was processed for three years after approval (*Wohnsitzauflage*, §12a, Residence Act). Several federal states additionally restricted refugees to residing not only within the federal state but also within a particular district (and sometimes even a municipality). Hence, we coded the corresponding indicator depending on the respondents' decision date and the municipality of residence. German federal states furthermore decide whether or to what extent to provide benefits to asylum-seekers in kind or in vouchers instead of monetary payments (DIP 2020, Drucksache 19/16747), with a maximum amount of 143 and 216 Euros for individuals in shared accommodations and private accommodations, respectively (BGBl 2015, 2016). As vouchers for specific shops or products as well as in-kind deliveries of food, clothes, or hygienic products restricts asylum-seekers in their free choice of goods, this reflects a restrictive policy as opposed to a cash payout. We use the yearly share of benefits every federal state paid in cash to asylum-seekers in the year of the asylum decision to proxy each

administration's attitude toward refugees, with a lower share reflecting a more restrictive attitude.

The *workload of asylum decision-makers* (*H5*) is reflected in the monthly ratio of the number of pending asylum requests to the number of decided asylum requests in the federal state of residence. The data on asylum applications and decisions are published monthly by the BAMF (BAMF 2018). Note that all regional variables are assembled either on the federal or municipal level, depending on context and data availability.

To test the hypotheses of statistical discrimination (*H4*, *H5*), we interact in separate models both the asylum-seeker's individual characteristics and the regional characteristics with the objective indicators of the eligibility of an asylum claim on the one hand and with the workload of asylum decision-makers on the other. Statistical discrimination is confirmed if the effects of individual and regional characteristics increase with lower levels of political and civil rights violations (*FIW score*), with lower numbers of *conflict-related deaths* in the country of origin, or with the rising *workload of asylum decision-makers*.

Several individual-level and contextual variables enter our analyses as potential confounders. On the side of the individual asylum-seeker, *age* is controlled for since it correlates with education years and the probability of migration. We control for *traumatization experience* because having experienced traumatizing events on the way to Germany may result in contradictory statements and misunderstandings in the interviews with an applicant, reducing the credibility of the asylum-seeker's testimony (Rousseau and Foxen 2010). To facilitate decision-making and lessen public criticism, the federal authority maintains lists of so-called "*safe countries of origin*" and countries with "*good prospects to remain*" (Grote 2018). As the countries listed under these categories receive priority status in the processing of asylum applications, we include two respective dummy variables. A further control is whether an

asylum-seeker *arrived via* a "*safe third country*." If the authorities possess this information, they are likely to deny protection, partly based on the controversial Dublin regulation that renders the state responsible for the procedure in which the applicant first arrived. We also control at the municipality-level for *population density*, the *share of the foreign population*, and the *unemployment rate* in the decision year (INKAR 2020). To account for systematic differences in the survey design data, the estimations include the *sample of the survey*.[9] We further control for cases where *information on the application/decision dates* and *type* was *replaced* with the registration date in Germany or with information provided in later survey periods. Table 1 presents the descriptive statistics for the explanatory and control variables.

Table 1 Descriptive statistics on explanatory and control variables

Variables	Mean/ Share	(SD)	Range	Share of missings (% of sample)
Fled because of violent conflict or war	0.81		0/1	0.73
Fled because of forced recruitment	0.42		0/1	0.73
Fled because of persecution	0.49		0/1	0.73
Fled because of discrimination	0.44		0/1	0.73
FIW score	9.88	(15.73)	-1–84	0.00
Conflict-related deaths	509.91	(882.37)	0–3805	5.27
Male	0.61		0/1	0
Muslim	0.74		0/1	1.28
Years of education	9.68	(5.08)	0–22	5.95
Share of residents very concerned about immigration to Germany	41.33	(16.24)	0-100	6.17
Center-right minister	0.39		0/1	3.02
Years of center-right dominance	12.17	(7.85)	0–27	3.02
Application of the restrictive residence obligation	0.22		0/1	3.02
Share of the non-monetary benefits to asylum-seekers	51.87	(17.29)	0–88	3.02
Workload of asylum decision-makers	66.04	(45.39)	-0.2–465.3	3.02
Workload of judges	0.61	(0.25)	0.07–1.34	3.02
BAMF: safe country of origin	0.01		0/1	0
BAMF: Good perspective to stay	0.41		0/1	0
Arrived via secure country of transit	0.09		0/1	0.76
Age when filing asylum application	32.14	(10.53)	18–87	0.92
Traumatic experiences on route	0.51		0/1	39.81
Population density	183.77	(219.88)	1–998	6.17
Share of foreign population	11.36	(5.38)	1.9–29.0	6.17
Unemployment rate	6.23	(2.61)	1.3–15.1	6.17
Information on application/decision dates was replaced	0.05		0/1	0
Sample: M3	0.29		0/1	0
Sample: M4	0.33		0/1	0
Sample: M5	0.37		0/1	0

Notes: In the multivariate model, we control for missing values in the variables of interest. SD = standard deviation.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Results

Asylum application outcomes

Our study examines whether the objective or subjective arguments made by asylum applicants or stereotyping and prejudice more greatly influenced asylum decision-making in Germany from 2015 to 2017. This period was marked by high numbers of individuals seeking refuge in Germany. Table 2 illustrates the baseline statistics on the first instance decisions of asylum applications over the observation period. In 2016, more than 90 percent of asylum-seekers reported that they had received initial protection through the BAMF. However, the share of approved applications declined in 2017. This drop might be a consequence of the longer processing time required for decisions with a negative prospect and their possible postponement to later periods (Kosyakova and Brücker 2020).

Table 2 Status of the asylum application, by survey year (in percent)

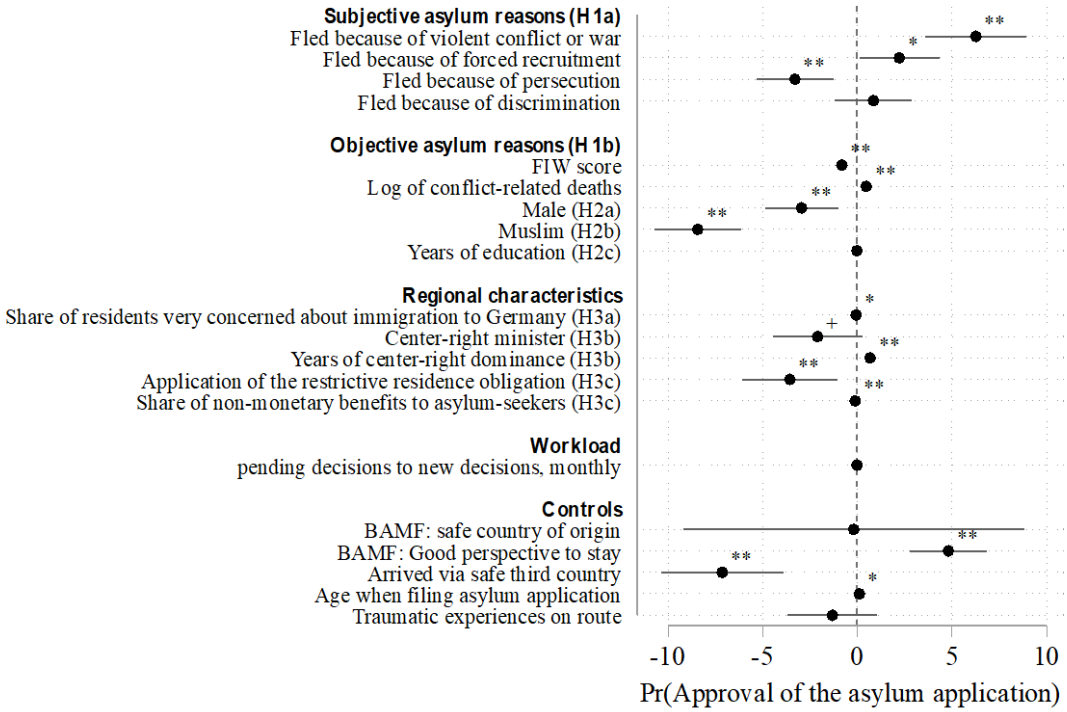
	2016	2017
Results of asylum application		
Approval	90.89	77.94
Rejection	9.11	22.06
Observations	1887	3567

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Subjective and objective indicators for the eligibility of an asylum claim

In the following, we examine first whether the vast baseline differences in the probability of receiving protection can be attributed to subjective or objective indicators of protection eligibility. Figure 2 visualizes the estimated probabilities of receiving a positive asylum decision.

Figure 2 Probability of approval of the asylum application (linear probability models, average marginal effects in percentage points)



Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). For full models, refer to Appendix Table A1.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

According to global asylum norms and national legislation, asylum decisions should exclusively be determined by the (real or perceived) threat asylum-seekers are exposed to in their country of origin. The results indicate a six percentage points higher recognition probability for individuals who fled because of violent conflict or war, and a two-percentage points probability increase if they fled because of forced recruitment, compared to those who did not state these reasons. Both findings support the first theoretical conjecture (*H1a*). However, and contrary to *H1a*, having fled because of persecution negatively affects the chance of recognition. Likewise, having fled for discrimination has a positive but not statistically significant impact. This relationship may arise due to information asymmetries between the decision-maker and asylum-seeker: for example, little external information is available to verify the persecution of an individual because of their gender, sexual orientation, or ethnic

background. This tendency challenges the spirit of the Geneva Convention, according to which a "well-founded fear of persecution" is the key to obtaining protection.

The results further demonstrate that asylum-seekers from countries for which external sources confirm the presence of armed conflict or political oppression (i.e., higher numbers of terror-related fatalities or lower levels of freedom) have significantly higher chances of having their asylum claim approved. This result confirms hypothesis *H1b*. In quantitative terms, a ten-point increase in the FIW score results in an eight percentage points lower probability of approval, while a ten percent increase in conflict-related deaths raises the approval probability by five percentage points.

Test of group-specific and general taste-based discrimination

We expected that, in addition to the asylum-seeker's endangerment, extra-legal factors enter the asylum decision-making process. The presence of such effects would mean that recognition is unequal among applicants with similarly credible claims. In order to test whether asylum decisions are affected by taste-based discrimination, we first estimated the impact of individual characteristics that should be unrelated to the asylum claim and the effect of political preferences in the region where an asylum claim was made (see Figure 2). The results show that, net of other model controls, the chances of recognition are three percentage points lower for men and eight percentage points lower for Muslim applicants. The number of years during which an individual received formal education does not significantly affect the probability of a positive decision. We thus find ample, but not complete, support for *H2*: everything else being equal, some groups have lower recognition chances than others, suggesting the existence of taste-based discrimination against men (*H2a*) and Muslims (*H2b*), but not against less-educated asylum-seekers (*H2c*).

Taste-based discrimination was also expected to manifest indirectly through the regional biases to which the decision-makers of the Federal Office for Migration and Refugees (BAMF) are exposed. We tested three potential sources of bias: the attitude of residents toward immigration, the general ideology of the public administration, and the administration's refugee-specific attitudes.

In line with *H3a*, a ten percentage points higher share of residents who express concerns about immigration to Germany decreases the odds of a positive asylum decision by 0.6 percentage points. The results also reveal that the presence of a center-right prime minister in a federal state reduces the approval probability by two percentage points (significant at $p < 0.10$), while longer center-right governmental dominance has a positive impact. Hence, empirical evidence for hypothesis *H3b* is mixed. We further observe that in regions with a more restrictive administrative approach toward refugees, the chances to obtain a protection status lessen (*H3c*). For instance, in regions applying a restrictive residence obligation on refugees, the recognition chances are reduced by four percentage points. Likewise, an increase in the share of non-monetary benefits to asylum-seekers by ten percentage points is associated with a decrease in recognition probability by one percentage point.

Test of statistical discrimination: Knowledge gap

For the test of statistical discrimination, we interacted individual characteristics, subjective asylum reasons, and regional political preferences with the two measures of objective asylum reasons, reflecting the severity of knowledge gaps (*H4a–H4g*) on the one hand, and the administrative workload (*H5a–H5g*) on the other. Note that each set of hypotheses was tested in separate models (for full models, see Appendix Tables A2–A4).

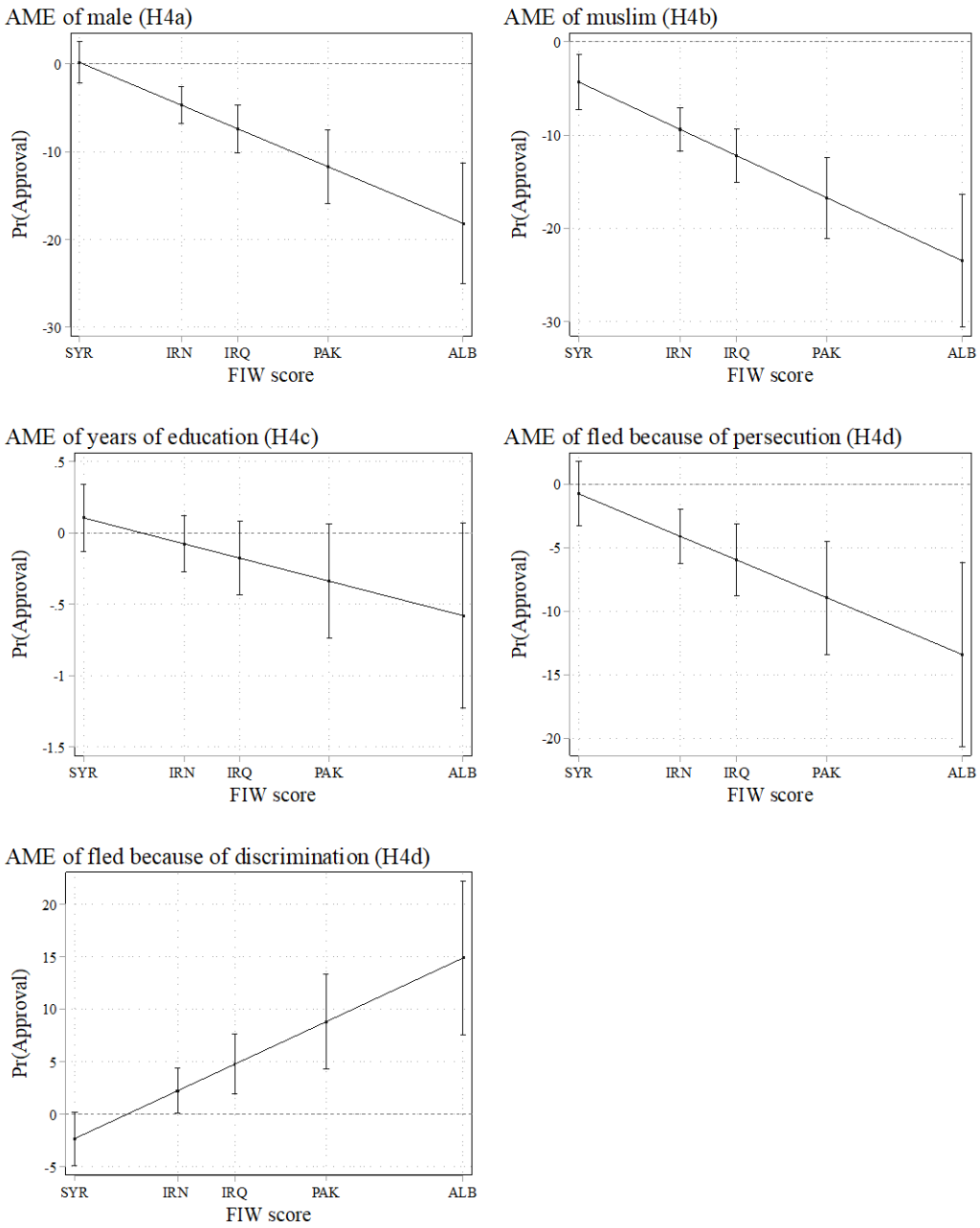
First, we expected that statistical discrimination would be particularly pronounced if the objective reasons for asylum are absent, resulting in lower approval probabilities for applicant

groups that can be more easily stereotyped, either because of group attributes (*H4a–H4c*), a complex asylum claim (*H4d*), or when the decision is made in a region with more conservative local or governmental attitudes (*H4e–H4g*). Figures 3 and 4 depict the results obtained for these theoretical expectations through the average marginal effects for the characteristics of interest at different levels of the FIW score and conflict-related deaths, respectively. These two proxies represent the degree to which decision-makers could obtain general information about the human rights situation in the asylum-seeker's country of origin. Overall, we find that the results are partly sensitive to the indicator that is expected to close the decision-makers' knowledge gap. Note that we visualize only interaction effects that are significant at least at $p<0.10$. Appendix Table A5 presents the average marginal effects and statistical tests for all interaction effects.

As for male asylum-seekers, hypothesis *H4a* is confirmed using the FIW score: men from countries with comparatively low levels of political oppression (such as Albania) have their recognition chances lowered by 18 percentage points. The negative relationship decreases with higher levels of oppression and disappears for countries with very low levels of freedom (such as Syria). These findings suggest that decision-makers are likely to doubt the validity of a male's asylum claim if a country's humanitarian situation has not been highlighted by international observers. We find, less clear patterns for the fatality indicator: being male reduces the approval probability for asylum-seekers with increased terror-related fatalities. However, the interaction effect is not statistically significant. The discrimination against Muslims (*H4b*) is supported for both indicators. The chance for protection is particularly low for Muslims from freer countries or from war-torn states with fewer fatalities. Note that the interaction effects are only significant for the FIW score. Regarding the applicant's education, we find some disadvantages for asylum-seekers with more years of education if they come from "free"

countries, though statistical certainty is low. Hence, hypothesis *H4c* finds very limited empirical support overall.

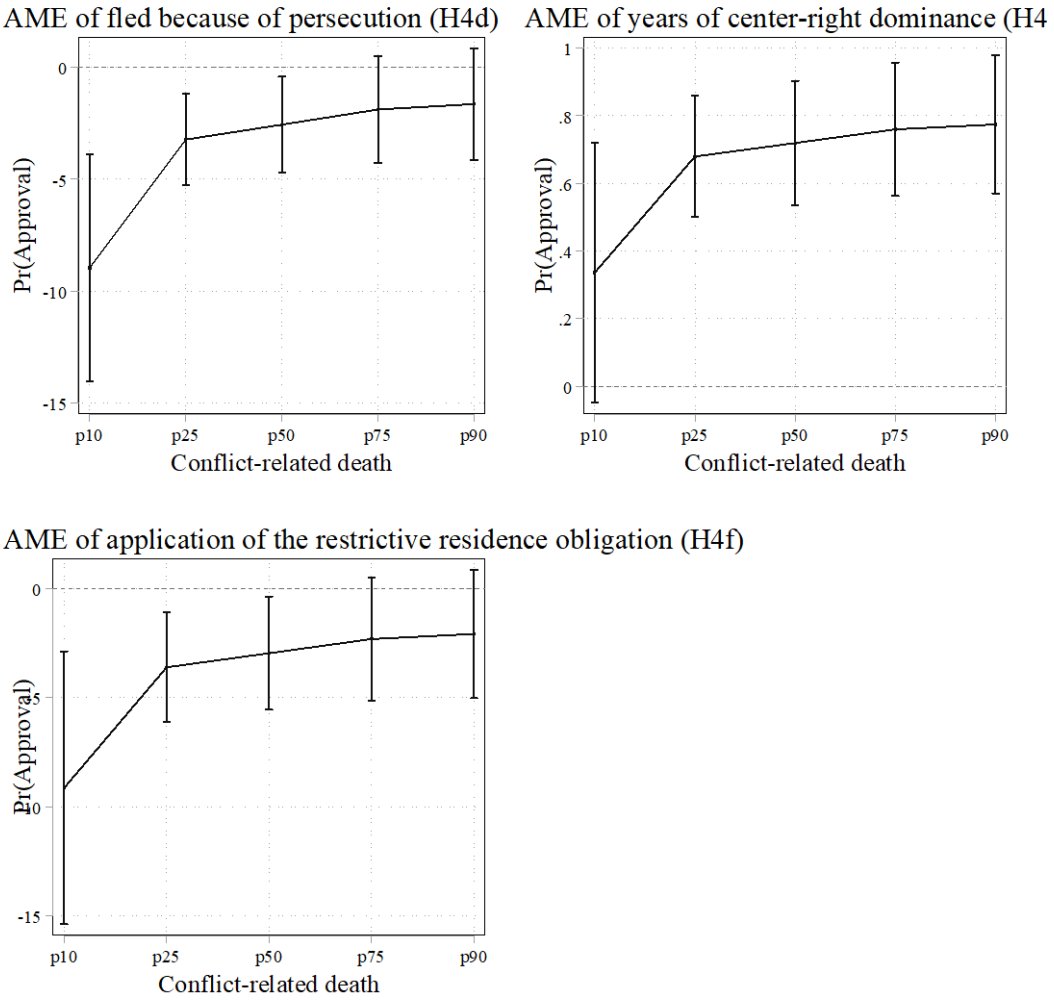
Figure 3 Average marginal effects (AME) of individual and regional characteristics at different levels of FIW score, in percentage points, with 95% CI



Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). For full models, refer to Appendix Table A1. For statistical test, refer to Appendix Table A5.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Figure 4 Average marginal effects (AME) of individual and regional characteristics at different levels of conflict-related deaths in percentage points, with 95% CI



Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). For full models, refer to Appendix Table A2. For statistical test, refer to Appendix Table A5.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Hypothesis *H4d* predicted a reduced approval chance for asylum-seekers with more complex asylum claims if they arrive from countries with limited macro-evidence to support their claim. Accordingly, we find a negative interaction effect of fleeing because of persecution for both objective indicators (FIW score and conflict-related deaths). Quantitatively, fleeing due to fear of persecution from a politically relatively free country such as Albania reduces approval probability by 13 percentage points, and fleeing from persecution in a country with zero conflict-related fatalities reduces approval probability by nine percentage points. At the same

time, fleeing from discrimination from a relatively free country increases the approval probability, while approval chances for asylum claims motivated by discrimination do not vary by the number of fatalities in the home country. This contrasts with our expectations, and *H4d* finds partial support.

Next, asylum applications filed in regions with a more conservative administrative tradition were expected to be more highly discriminated against when knowledge gaps increase. Given that interaction effects neither point in the expected direction nor are statistically significant, hypothesis *H4e* is deemed empirically unsupported. On the contrary, we find some support for *H4f*, which predicted that the combination of knowledge gaps and the restrictive attitude of the current regional government toward refugees would be disadvantageous for approval chances. In particular, asylum-seekers residing in municipalities with a restrictive residence obligation have their recognition chances decreased by nine percentage points in the absence of fatalities in their home country or region, while there is no significant variation for the interaction with the human rights indicator (FIW).

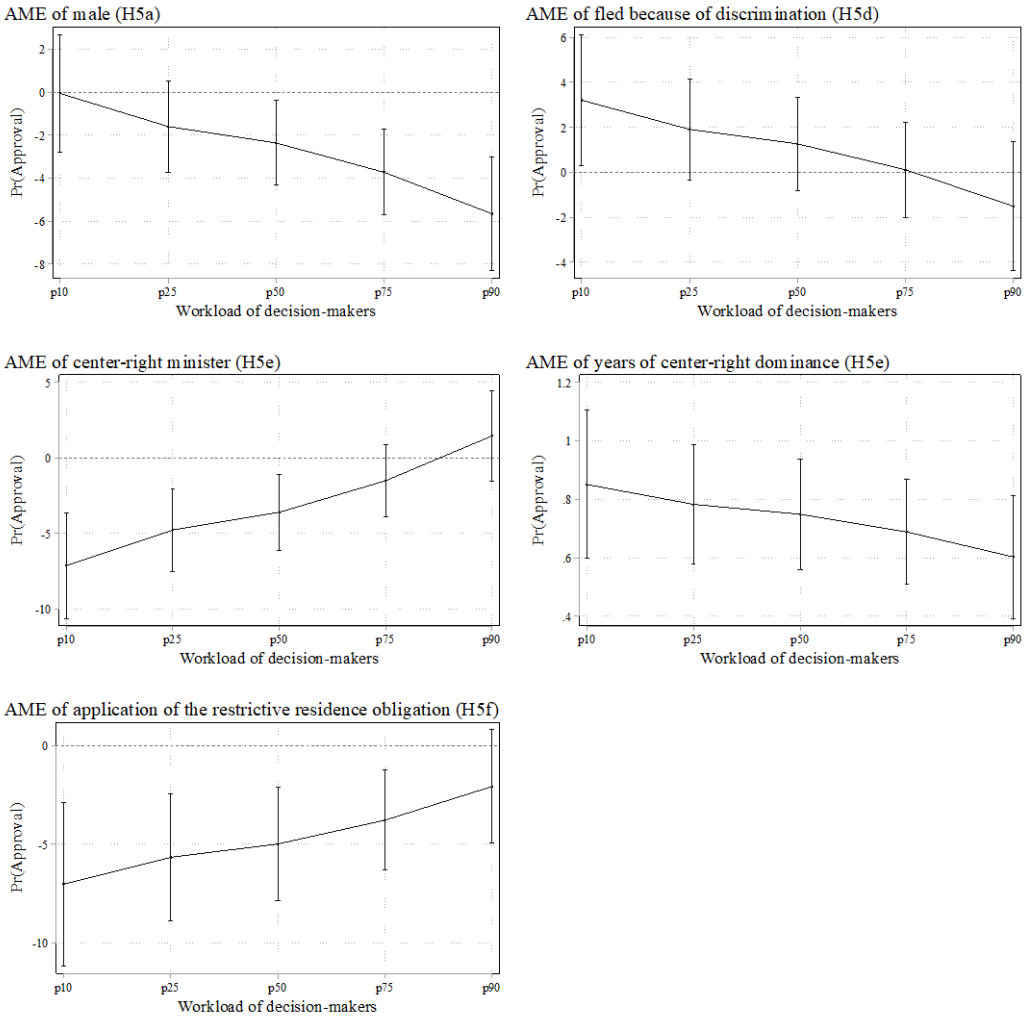
The interaction effects between both indicators of the situation in the country of origin and the share of non-monetary benefits are not statistically significant. Since the effect of immigration-averse residents neither varies by FIW score nor by conflict-related deaths, the theoretical expectation *H4g* is not empirically supported. In sum, the results suggest that stereotyping based on group attributes is sensitive to information costs. If the decision on an asylum request is made in a more biased region, access to better information, conversely, does not increase the chance of a more favorable outcome for asylum-seekers.

Test of statistical discrimination: Time pressure

We expected that time pressure is a second source of statistical discrimination (*H5*), although a growing workload has, as indicated, no direct effect on approval probability (Figure 2). Figure

5 shows whether stereotyping is more pronounced in situations of decision-making stress. Again, only interaction effects significant at least at $p<0.10$ are visualized, whereas Appendix Table A6 illustrates the average marginal effects and statistical test for all interaction effects.

Figure 5 Average marginal effects (AME) of individual and regional characteristics at different levels of workload in percentage points, with 95% CI



Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). For full models, refer to Appendix Table A3. For statistical test, refer to Appendix Table A6.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

In line with our expectations, male asylum-seekers have significantly lower approval chances as the workload rises for BAMF decision-makers (*H5a*). Growing time pressure, conversely, reduces the disadvantage of being a Muslim applicant, which contradicts *H5b*. The interaction

of the workload variable with the applicants' educational level does not significantly vary, such that *H5c* is not empirically supported.

The effects of individual reasons for fleeing from their home country do not vary with increased time pressure, except for those fleeing from discrimination. We find that discrimination as an asylum motive increases the approval probability during times of low time pressure, while this effect becomes negative – albeit non-significant – when a case is handled at high workload levels (when the monthly ratio of pending-to-decided decisions is 111 to 1). Hypothesis *H5d*, predicting lower approval chances of applicants with more complex asylum claims, thus finds only partial support.

Concerning regional political preferences, we find some evidence that contradicts our expectations. For instance, the approval chance is reduced by seven percentage points with a current center-right party minister if the asylum decision-makers do not operate under time pressure, while this negative effect lessens with growing time pressure (*H5e*). Likewise, the negative effect of the restrictive residence obligation is lower in situations of decision-making stress, contradicting *H5f*. The interaction of anti-migration attitudes with the workload variable is not statistically significant (*H5g*). Overall, with the exception of more severe discrimination against male asylum-seekers when the workload is high, time constraints did not affect asylum decision-making in the way we had expected based on the theory of statistical discrimination.

Discussion

This article offers a comprehensive individual-level examination of the extent to which both taste-based and statistical discrimination filter into asylum decisions. Based on the theory of taste-based discrimination, we have advanced the conjecture that the prejudices of decision-makers, their political authorities or their regional peers against particular groups override the importance of the credibility of asylum-seekers' reported motives for flight. As an additional

explanation, our study has examined predictions based upon the theory of statistical discrimination, which prevails if high information costs due to case complexity or workload pressure allow extra-legal considerations to distort such decisions. We thus expected that administrators are more likely to follow negative stereotypes against a particular group of applicants and turn down a request if they do not have sufficient information or time to research and judge the credibility of the claim.

Relying on linear probability models applied to the IAB-BAMF-SOEP Survey of Refugees, which is representative of recent asylum-seekers in Germany, our analyses unambiguously show that some groups of asylum-seekers (in particular, Muslims and men) have a lower chance to obtain protection in Germany than others. Moreover, regional political preferences seem to affect the asylum decision-making regime: asylum applications are *per se* less successful in regions with a more restrictive administration or a more immigration-averse population. This indicates that the decisions made by administrators of the BAMF are subject to taste-based discrimination.

The analyses furthermore reveal that high information costs can aggravate stereotyping tendencies. In a world without statistical discrimination, the chance to protect all asylum-seekers and not only particular groups would suffer equally from high information costs. Yet, *ceteris paribus*, the protection chances of Muslims decrease further if external information is scarce, and a heavy BAMF workload additionally decreases the protection chances for men. Similarly, asylum applicants with more abstract asylum claims (such as individual persecution) are less successful in making a credible claim compared to asylum-seekers fleeing war or conflict. This finding is particularly pronounced if no external evidence is available to confirm the adverse situation in their home country. These results highlight the informational challenge that BAMF employees face when they evaluate an asylum request and interview an applicant.

In line with the theory of statistical discrimination, our results thus show that the chance for recognition is partly sensitive to knowledge gaps and the time constraints of decision-makers.

While our examination confirmed that extra-legal aspects and especially political biases enter the asylum decision-making process, the tests only partially supported the hypotheses derived from the theory of statistical discrimination, according to which stereotyping is amplified through high information costs. For instance, stereotyping did not markedly increase in regions with more conservative local or governmental attitudes when evidence was scarce or when the workload was high. This suggests that the main source of biased asylum decision-making in Germany is political predispositions consciously or unconsciously transferred into the decision-making process by the decision-makers – street-level bureaucrats with considerable discretion but with limited time on their hands to make informed decisions. Stereotyping based on group attributes further aggravates the situation when information costs are high, but this is not observed for regional political biases. Hence, we find ample evidence for taste-based discrimination in German asylum decision-making and some evidence for statistical discrimination. While high information costs augment the reliance on stereotypes against some groups, the impact of immigration-averse regional populations, which might translate into lower protection chances, is a matter of taste rather than the result of a lack of information or a high workload.

Our results question Germany's self-conception as a state under the rule of law: global norms and national laws require that the decision on an asylum application be exclusively determined by the persecution and endangerment feared by the applicant. Our analyses provide evidence for extra-legal reasoning, whether conscious or unconscious, based on political taste in the German asylum system, contradicting the regulations of the legal asylum framework. In part, this is affected by time constraints and the knowledge gaps of the decision-making authority. In the period under research, the workload of BAMF collaborators was particularly high. To

ensure that every asylum decision can be prepared appropriately, reforms should ensure sufficient time and staff to evaluate an application properly. Regular training of the decision-makers and a systematic internal or external revision of asylum decisions may further limit the arbitrariness of asylum decision-making. Such reforms should particularly ensure that the decision-making is insulated from the political prerogatives of the day.

Notes

[1] Holzer et al. (2000) and Spirig (2021) rely on individual-level administrative data from Switzerland, for which only basic sociodemographic information on applicants was available. Kosyakova and Brücker (2020) focus on the relationship between asylum-seeker attributes and asylum decisions but address the question of discrimination only partly.

[2] Immigration is exclusively regulated by national legislation in Germany but, within this national framework, the federal states and the districts therein may design their own enforcement mechanisms (Bommes 2018; Spiro 2002).

[3] In 2016, there were 40 regional BAMF offices (Kosyakova and Brücker 2020:664). These administrative units also coordinate integration measures with regional actors such as educational institutions (BAMF 2020; Schneider and Wottrich 2017). However, the subsequent implementation of integration and asylum-related tasks – other than asylum decision-making – is the responsibility of local immigration offices (*Ausländerbehörden*) that fall under the jurisdiction of regional governments.

[4] While this article focuses on the decisions made by the BAMF, related analyses on a smaller number of court decisions are provided in the Supplementary Material (Tables SA1–SA7), which can be found here: http://nbn-resolving.de/urn:nbn:de:bsz:352-2-1dgi3xkya4eq70

[5] For instance, regional authorities have far-reaching competencies in choosing the accommodations for asylum-seekers and in granting them access to labor market services, educational services, and medical treatment (Aumüller and Bretl 2008; Schammann 2015).

[6] While previous studies have also stressed economic factors, the empirical evidence is rather ambiguous. For instance, Toshkov (2014) observes that European recognition rates correlate positively with national income and negatively with the level of unemployment. Conversely, Neumayer (2005) finds no such effects. In Germany, Riedel and Schneider (2017) observe a negative impact of local unemployment rates and economic growth on regional recognition rates, whereas Schneider, Segadlo, and Leue (Schneider et al. 2020) find that local GDP per capita reduces rejection rates. In light of these unclear effects, we do not consider regional economic factors in our study.

[7] Reports by government agents or non-governmental organizations on the situation in the applicant's country or region of origin represent such external sources of information.

[8] This article uses the factually anonymous data of the IAB-BAMF-SOEP Survey of Refugees, waves 1–2. Data access was provided via a Scientific Use File supplied by the Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the Institute for Employment Research (IAB). DOI: 10.5684/soep.iab-bamf-soep-mig.2017.

[9] Controlling for decision date fixed effects (aggregated into six-month periods) did not render improvement of goodness-of-model fit. Therefore, we opted for a parsimonious model without these controls.

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Appendix

Table A1 Multivariate results for the probability of approval of the asylum application (linear probability models, average marginal effects)

Variables	**Approval of the asylum application**	
	p.p.	(t)
Subjective asylum reasons (*H1a*)		
Fled because of violent conflict or war	6.27**	(4.61)
Fled because of forced recruitment	2.23*	(2.07)
Fled because of persecution	-3.30**	(-3.18)
Fled because of discrimination	0.85	(0.82)
Objective asylum reasons (*H1b*)		
FIW score	-0.81**	(-21.13)
Log of conflict-related deaths	0.47**	(4.41)
Individual characteristics		
Male (*H2a*)	-2.94**	(-2.99)
Muslim (*H2b*)	-8.44**	(-7.21)
Years of education (*H2c*)	-0.02	(-0.19)
Regional characteristics		
Share of residents very concerned about immigration to Germany (*H3a*)	-0.06*	(-2.05)
Center-right minister (*H3b*)	-2.10+	(-1.74)
Years of center-right dominance (*H3b*)	0.68**	(7.39)
Application of the restrictive residence obligation (*H3c*)	-3.56**	(-2.77)
Share of non-monetary benefits to asylum-seekers (*H3c*)	-0.11**	(-3.38)
Workload		
Workload of asylum decision-makers	-0.01	(-1.20)
Controls		
BAMF: safe country of origin	-0.19	(-0.04)
BAMF: Good perspective to stay	4.81**	(4.59)
Arrived via safe third country	-7.14**	(-4.32)
Age when filing asylum application	0.11*	(2.51)
Traumatic experiences on route	-1.31	(-1.09)
Population density	0.35	(1.27)
Share of foreign population	-0.31**	(-2.91)
Unemployment rate	1.71**	(6.48)
Information on application/decision dates was replaced	3.44	(1.60)
Sample (Ref. M3)		
Sample: M4	0.78	(0.66)
Sample: M5	-3.84**	(-3.12)
_cons	87.00**	(19.39)
Observations	4233	

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). t = t statistics; p.p. = percentage points. Models further control for missing values.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Table A2: Interaction effects between individual and regional characteristics and FIW score on the probability of approval of the asylum application (linear probability models, average marginal effects)

Variables	Model H4a	Model H4b	Model H4c	Model H4d	Model H4e	Model H4f	Model H4g
	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.
Subjective asylum reasons							
Fled because of violent conflict or war	6.43**	6.04**	6.22**	6.23**	6.30**	6.28**	6.26**
Fled because of forced recruitment	1.72	2.24*	2.20*	2.30*	2.22*	2.22*	2.24*
Fled because of persecution	-3.19**	-3.19**	-3.33**	-0.96	-3.31**	-3.31**	-3.30**
Fled because of discrimination	0.85	0.83	0.82	-2.10+	0.86	0.83	0.85
Individual characteristics							
Male	-0.11	-2.80**	-2.92**	-2.96**	-2.92**	-2.94**	-2.95**
Muslim	-8.30**	-4.60**	-8.38**	-8.14**	-8.49**	-8.45**	-8.44**
Years of education	-0.01	-0.02	0.09	-0.01	-0.02	-0.02	-0.02
Regional characteristics							
Center-right minister	-2.25+	-1.86	-2.04+	-2.03+	-2.80*	-2.07+	-2.09+
Years of center-right dominance	0.67**	0.67**	0.67**	0.67**	0.71**	0.68**	0.68**
Application of the restrictive residence obligation	-3.58**	-3.68**	-3.53**	-3.53**	-3.57**	-2.92+	-3.55**
Share of the non-monetary benefits to asylum-seekers	-0.11**	-0.11**	-0.11**	-0.11**	-0.11**	-0.11**	-0.11**
Share of residents very concerned about immigration to Germany	-0.06*	-0.06*	-0.06*	-0.06*	-0.06*	-0.06*	-0.07*
Workload							
Workload of asylum decision-makers	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Objective asylum reasons							
Log of conflict-related deaths	0.49**	0.44**	0.46**	0.46**	0.47**	0.48**	0.47**
FIW score	-0.66**	-0.63**	-0.72**	-0.83**	-0.80**	-0.79**	-0.83**
x Male	-0.27**						
x Muslim		-0.28**					
x Years of education			-0.01+				
x Fled because of persecution				-0.19**			
x Fled because of discrimination				0.25**			
x Center-right minister					0.06		
x Years of center-right dominance					-0.00		
x Application of the restrictive residence obligation						-0.05	
x Share of the non-monetary benefits to asylum-seekers						-0.00	
x Share of residents very concerned about immigration to Germany							0.00
cons	84.97**	83.77**	85.87**	87.26**	86.91**	86.71**	87.12**

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). p.p. = percentage points. For the full list of controls, refer to Table A1.
Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Table A3: Interaction effects between individual and regional characteristics and conflict-related deaths on the probability of approval of the asylum application (linear probability models, average marginal effects)

Variables	Model H4a	Model H4b	Model H4c	Model H4d	Model H4e	Model H4f	Model H4g
	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.
Subjective asylum reasons							
Fled because of violent conflict or war	6.23**	6.29**	6.22**	6.26**	6.28**	6.24**	6.29**
Fled because of forced recruitment	2.25*	2.22*	2.23*	1.93+	2.19*	2.19*	2.20*
Fled because of persecution	-3.29**	-3.30**	-3.30**	-4.77**	-3.27**	-3.29**	-3.32**
Fled because of discrimination	0.85	0.88	0.83	0.23	0.87	0.85	0.87
Individual characteristics							
Male	-2.39*	-2.93**	-2.94**	-2.93**	-2.93**	-2.97**	-2.95**
Muslim	-8.45**	-8.67**	-8.48**	-8.27**	-8.35**	-8.46**	-8.45**
Years of education	-0.02	-0.02	-0.07	-0.02	-0.02	-0.01	-0.02
Regional characteristics							
Center-right minister	-2.08+	-2.12+	-2.09+	-2.17+	-1.09	-2.07+	-2.11+
Years of center-right dominance	0.68**	0.68**	0.68**	0.68**	0.59**	0.68**	0.68**
Application of the restrictive residence obligation	-3.56**	-3.57**	-3.56**	-3.57**	-3.49**	-5.10**	-3.56**
Share of the non-monetary benefits to asylum-seekers	-0.11**	-0.11**	-0.11**	-0.11**	-0.11**	-0.12**	-0.11**
Share of residents very concerned about immigration to Germany	-0.06*	-0.06*	-0.06*	-0.07*	-0.06*	-0.06*	-0.07*
Workload							
Workload of asylum decision-makers	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Objective asylum reasons							
FIW score	-0.81**	-0.81**	-0.81**	-0.82**	-0.81**	-0.82**	-0.81**
Log of conflict-related deaths	0.58**	0.44**	0.35+	0.21	0.28	0.21	0.36+
x Male	-0.17						
x Muslim		0.09					
x Years of education			0.01				
x Fled because of persecution				0.46*			
x Fled because of discrimination				0.16			
x Center-right minister					-0.32		
x Years of center-right dominance					0.03*		
x Application of the restrictive residence obligation						0.44+	
x Share of the non-monetary benefits to asylum-seekers						0.00	
x Share of residents very concerned about immigration to Germany							0.00
cons	86.69**	86.93**	87.59**	88.03**	87.52**	87.69**	87.36**

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). p.p. = percentage points. For the full list of controls, refer to Table A1.
Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Table A4: Interaction effects between individual and regional characteristics and workload of asylum decision-makers on the probability of approval of the asylum application (linear probability models, average marginal effects)

Variables	Model H5a	Model H5b	Model H5c	Model H5d	Model H5e	Model H5f	Model H5g
	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.	p.p.
Subjective asylum reasons							
Fled because of violent conflict or war	6.26**	6.30**	6.25**	6.41**	6.14**	6.27**	6.30**
Fled because of forced recruitment	2.13*	2.20*	2.21*	2.09+	2.20*	2.17*	2.23*
Fled because of persecution	-3.25**	-3.30**	-3.29**	-3.12+	-3.26**	-3.30**	-3.31**
Fled because of discrimination	0.83	0.84	0.87	4.01*	0.94	0.92	0.85
Individual characteristics							
Male	0.89	-2.92**	-2.96**	-2.91**	-2.87**	-2.91**	-2.95**
Muslim	-8.50**	-10.86**	-8.43**	-8.44**	-8.33**	-8.43**	-8.44**
Years of education	-0.02	-0.02	0.08	-0.01	-0.02	-0.02	-0.02
Regional characteristics							
Center-right minister	-2.13+	-2.05+	-2.11+	-2.10+	-8.58**	-2.11+	-2.12+
Years of center-right dominance	0.67**	0.67**	0.68**	0.68**	0.89**	0.66**	0.68**
Application of the restrictive residence obligation	-3.60**	-3.59**	-3.54**	-3.50**	-3.61**	-7.87**	-3.59**
Share of the non-monetary benefits to asylum-seekers	-0.11**	-0.11**	-0.11**	-0.11**	-0.12**	-0.13**	-0.11**
Share of residents very concerned about immigration to Germany	-0.06*	-0.06*	-0.06*	-0.06*	-0.06+	-0.06+	-0.05
Objective asylum reasons							
Log of conflict-related deaths	0.48**	0.47**	0.47**	0.47**	0.48**	0.47**	0.47**
FIW score	-0.81**	-0.81**	-0.81**	-0.81**	-0.81**	-0.81**	-0.81**
Workload							
Workload of asylum decision-makers	0.02	-0.04*	-0.00	0.00	-0.02	-0.06+	-0.00
x Male	-0.06**						
x Muslim		0.04					
x Years of education			-0.00				
x Fled because of persecution				-0.00			
x Fled because of discrimination				-0.05*			
x Center-right minister					0.09**		
x Years of center-right dominance					-0.00+		
x Application of the restrictive residence obligation						0.05*	
x Share of the non-monetary benefits to asylum-seekers						0.00	
x Share of residents very concerned about immigration to Germany							-0.00
cons	85.00**	88.72**	86.17**	85.78**	86.85**	89.48**	86.24**

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). p.p. = percentage points. For the full list of controls, refer to Table A1.
Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Table A5 Average marginal effects (AME) of individual and regional characteristics at different levels of FIW score and conflict-related deaths

Interaction	Approval of the asylum application	
	p.p.	t-test
AME of male (*H4a*)		
at FIW score = 67 (e.g., Albania)	-18.17**	-5.21
at FIW score = 24 (e.g., Iraq)	-6.58**	-5.20
at FIW score = -1 (e.g., Syria)	0.16	0.12
Wald Test of the interaction effects	20.68**	
at conflict-related deaths = 10th percentile	-0.81	-0.32
at conflict-related deaths = 50th percentile	-3.22**	-3.13
at conflict-related deaths = 90th percentile	-3.56**	-2.98
Wald Test of the interaction effects	0.83	
AME of muslim (*H4b*)		
at FIW score = 67 (e.g., Albania)	-23.52**	-6.46
at FIW score = 24 (e.g., Iraq)	-11.37**	-8.44
at FIW score = -1 (e.g., Syria)	-4.31**	-2.87
Wald Test of the interaction effects	19.13**	
at conflict-related deaths = 10th percentile	-9.47**	-3.56
at conflict-related deaths = 50th percentile	-8.24**	-6.54
at conflict-related deaths = 90th percentile	-8.06**	-5.52
Wald Test of the interaction effects	0.19	
AME of years of education (*H4c*)		
at FIW score = 67 (e.g., Albania)	-0.58+	-1.75
at FIW score = 24 (e.g., Iraq)	-0.15	-1.22
at FIW score = -1 (e.g., Syria)	0.10	0.88
Wald Test of the interaction effects	3.14+	
at conflict-related deaths = 10th percentile	-0.20	-0.83
at conflict-related deaths = 50th percentile	0.00	.01
at conflict-related deaths = 90th percentile	0.03	0.27
Wald Test of the interaction effects	0.66	
AME of fled because of persecution (*H4d*)		
at FIW score = 67 (e.g., Albania)	-13.42**	-3.62
at FIW score = 24 (e.g., Iraq)	-5.83**	-4.36
at FIW score = -1 (e.g., Syria)	-0.63	-0.48
Wald Test of the interaction effects	10.13**	
at conflict-related deaths = 10th percentile	-8.99**	-3.44
at conflict-related deaths = 50th percentile	-2.54*	-2.32
at conflict-related deaths = 90th percentile	-1.62	-1.26
Wald Test of the interaction effects	5.47*	
AME of fled because of discrimination (*H4d*)		
at FIW score = 67 (e.g., Albania)	14.85**	3.98
at FIW score = 24 (e.g., Iraq)	3.54**	2.65
at FIW score = -1 (e.g., Syria)	-2.03	-1.57
Wald Test of the interaction effects	11.78**	
at conflict-related deaths = 10th percentile	-1.26	-0.48
at conflict-related deaths = 50th percentile	1.02	0.93
at conflict-related deaths = 90th percentile	1.34	1.05
Wald Test of the interaction effects	0.67	
AME of center-right minister (*H4e*)		
at FIW score = 67 (e.g., Albania)	1.53	0.37
at FIW score = 24 (e.g., Iraq)	-1.25	-0.81
at FIW score = -1 (e.g., Syria)	-2.86*	-1.98
Wald Test of the interaction effects	0.87	
at conflict-related deaths = 10th percentile	1.81	0.59
at conflict-related deaths = 50th percentile	-2.63*	-2.09
at conflict-related deaths = 90th percentile	-3.26*	-2.46
Wald Test of the interaction effects	1.96	
AME of years of center-right dominance (*H4e*)		
at FIW score = 67 (e.g., Albania)	0.51*	1.97
at FIW score = 24 (e.g., Iraq)	0.64**	5.89
at FIW score = -1 (e.g., Syria)	0.71**	6.86
Wald Test of the interaction effects	0.49	
at conflict-related deaths = 10th percentile	0.34+	1.71

at conflict-related deaths = 50th percentile	0.72**	7.65
at conflict-related deaths = 90th percentile	0.77**	7.44
Wald Test of the interaction effects	3.86+	
AME of application of the restrictive residence obligation (*H4f*)		
at FIW score = 67 (e.g., Albania)	-6.24	-1.60
at FIW score = 24 (e.g., Iraq)	-4.11*	-2.76
at FIW score = -1 (e.g., Syria)	-2.87+	-1.79
Wald Test of the interaction effects	0.53	
at conflict-related deaths = 10th percentile	-9.14**	-2.86
at conflict-related deaths = 50th percentile	-2.96*	-2.24
at conflict-related deaths = 90th percentile	-2.08	-1.38
Wald Test of the interaction effects	3.64+	
AME of non-monetary benefits to asylum-seekers (*H4f)*		
at FIW score = 67 (e.g., Albania)	-0.15*	-2.24
at FIW score = 24 (e.g., Iraq)	-0.11**	-2.96
at FIW score = -1 (e.g., Syria)	-0.11**	-2.83
Wald Test of the interaction effects	0.02	
at conflict-related deaths = 10th percentile	-0.15*	-2.24
at conflict-related deaths = 50th percentile	-0.10**	-3.13
at conflict-related deaths = 90th percentile	-0.10*	-2.64
Wald Test of the interaction effects	0.57	
AME of residents very concerned about immigration to Germany (*H4g*)		
at FIW score = 67 (e.g., Albania)	-0.04	-0.41
at FIW score = 24 (e.g., Iraq)	-0.06	-1.46
at FIW score = -1 (e.g., Syria)	-0.07+	-1.94
Wald Test of the interaction effects	0.06	
at conflict-related deaths = 10th percentile	-0.10	-1.46
at conflict-related deaths = 50th percentile	-0.06+	-1.82
at conflict-related deaths = 90th percentile	-0.05	-1.47
Wald Test of the interaction effects	0.35	

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). SE = standard errors. p.p. = percentage points. All models control for the same variables as listed in Table A1. For full models, refer to Appendix Tables A2-A3.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.

Table A6 Average marginal effects (AME) of individual and regional characteristics at different levels of workload

Interaction		Approval of the asylum application	
		p.p.	t-test
AME of male (*H5a*)			
at workload = 10th percentile		-0.06	-0.04
at workload = 50th percentile		-2.36*	-2.36
at workload = 90th percentile		-5.66**	-4.17
	Wald Test of the interaction effects	8.43***	
AME of muslim (*H5b*)			
at workload = 10th percentile		-10.25**	-6.37
at workload = 50th percentile		-8.77**	-7.38
at workload = 90th percentile		-6.64**	-4.14
	Wald Test of the interaction effects	2.68	
AME of years of education (*H5c*)			
at workload = 10th percentile		0.05	0.41
at workload = 50th percentile		0.00	-0.04
at workload = 90th percentile		-0.09	-0.68
	Wald Test of the interaction effects	0.65	
AME of fled because of persecution (*H5d*)			
at workload = 10th percentile		-3.25*	-2.18
at workload = 50th percentile		-3.30**	-3.11
at workload = 90th percentile		-3.37*	-2.34
	Wald Test of the interaction effects	0.00	
AME of fled because of discrimination (*H5d*)			
at workload = 10th percentile		3.52*	2.33
at workload = 50th percentile		1.31	1.24
at workload = 90th percentile		-1.87	-1.26
	Wald Test of the interaction effects	6.18*	
AME of center-right minister (*H5e*)			
at workload = 10th percentile		-7.12**	-3.99
at workload = 50th percentile		-3.60**	-2.81
at workload = 90th percentile		1.54	0.95
	Wald Test of the interaction effects	14.63**	
AME of years of center-right dominance (*H5e*)			
at workload = 10th percentile		0.85**	6.59
at workload = 50th percentile		0.75**	7.76
at workload = 90th percentile		0.60**	5.61
	Wald Test of the interaction effects	2.85+	
AME of application of the restrictive residence obligation (*H5f*)			
at workload = 10th percentile		-7.02**	-3.31
at workload = 50th percentile		-4.98**	-3.39
at workload = 90th percentile		-2.06	-1.41
	Wald Test of the interaction effects	4.32*	
AME of non-monetary benefits to asylum-seekers (*H5f*)			
at workload = 10th percentile		-0.12*	-2.80
at workload = 50th percentile		-0.11**	-3.06
at workload = 90th percentile		-0.08*	-2.24
	Wald Test of the interaction effects	0.94	
AME of residents very concerned about immigration to Germany (*H5g*)			
at workload = 10th percentile		-0.05	-1.22
at workload = 50th percentile		-0.06*	-2.01
at workload = 90th percentile		-0.08+	-1.72
	Wald Test of the interaction effects	0.21	

Notes: Significance level ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$ (two-tailed test). SE = standard errors. p.p. = percentage points. All models control for the same variables as listed in Table A1. For full models, refer to Appendix Tables A4.

Source: IAB-BAMF-SOEP Survey of Refugees in Germany, 2016-2017, own calculations.