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# What Makes Policy Fair? Evidence from U.S. Immigrant Integration Policy and Public Opinion

A dissertation submitted in partial satisfaction
of the requirements for the degree

Doctor of Philosophy
in
Political Science

by

Taylor Noel Trummel

Committee in charge:

Professor Kathleen Bruhn, Chair
Professor Clayton Nall, Chair
Professor Daniel Masterson

June 2026

The Dissertation of Taylor Noel Trummel is approved.

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May 2026

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by

Taylor Noel Trummel

To Mom

## Acknowledgements

Completing a dissertation not only deserves the acknowledgment of the many people who helped develop the research, but warrants a reflection on those who contributed to the culmination of this milestone. This dissertation would not have been possible without the support from many loved ones over my lifetime, and I am deeply grateful to each person who has been a part of this journey.

First, I want to acknowledge my indispensable friends in Santa Barbara, with whom I shared countless days, nights, coffee breaks, and laughs. From our weekly themed supper club to the weekend getaways to the inevitable, "We lunching?" text around noon everyday, I was rarely alone in what can otherwise be an isolating endeavor. I was blessed these years to have so many good friends nearby that would drop everything at a moment's notice to help when needed. While I am thankful for the camaraderie of many, the friendships of Taft Crowley, Kylie Gaines, Denis Lomov, Medha Monjaury, Olivia Quinn, Noosha Uddin, and Annjulie Vester stand out.

This sitcom came with a perfect cast of characters. Taft Crowley: Our adventure buddy who always has a story to tell. My office mate, to his dismay. Always with fruit in his pockets and a proud alum of Wavy Gravy's Counterculture Clown Camp. Kylie Gaines: Our chief party planner and prankster. A leader in the community and whose kindness is felt by everyone she meets. Denis Lomov: Our cosmically hapless comrade who may or may not be allergic to dogs. The one who keeps champagne chilling in the mini fridge, just in case a friend has something to celebrate. Medha Monjaury: Our mixologist and annual Thanksgiving host. Independent, passionate, and always tells it like it is. Olivia Quinn: Our Florida woman. The thrifter and lover of all things vintage. A springboard for ideas. Most likely to tell you she can, "do a really good moo" and then proceed to demonstrate. Noosha Uddin: Our East Coast friend rarely seen without

a Baggu on her shoulder. The chef who never failed to keep everyone fed and always sent us home with leftovers. Under a roof on Bath Street, her sectional sofa was witness to many unhinged conversations and bouts of laughter. Annjulie Vester: Our resident baker. Always turning strangers into friends. Always on time and with a farmer's market salad and homemade dressing in tow. After many seasons, the series finale is bittersweet.

I also want to recognize my best friends from college, Janella Samson and Patty Fernandez, who rooted me on from afar. Their friendship will always remind me that we were in fact once 21 years old at Backyard in PB on Throwback Thursday. Before that, we were crossing from San Diego to Tijuana on foot just to go to Coco Bongo and come back reeking of cigarettes. Over the last decade of friendship, we have shared many trips that have forced us to make time for life outside of work. From breaking my arm snowboarding in the Alps to island hopping in Colombia and trail running in Big Sur, I would be remiss not to acknowledge the experiences, joy, and friendships outside of academia that have meant the world to me.

Next, I am thankful to many faculty members in the Department of Political Science. However, I have immense gratitude for my dissertation committee, Professor Kathleen Bruhn, Professor Clayton Nall, and Professor Daniel Masterson, who invested considerable time into advising me. Over the years, they have demonstrated excellence by providing extensive input toward my research and writing. Their mentorship extended far beyond the pages of this dissertation by fundamentally shaping the way I think, conduct research, and approach my career. It is one thing to help a student write a dissertation, but it is quite another to be invested in their professional success. Their rigor, high standards, and dedication were instrumental in helping me secure multiple dream job offers, an outcome that I am certain wouldn't have been achieved without their commitment. They exemplify the kind of scholar I aspire to be through their thoughtful teaching, diligent research, and collegial service to the profession.

My family sent me down this path from the beginning by encouraging education, ambition, and discipline. I thank my dad, Don, whose support has been unwavering and who doesn't miss an opportunity to express how proud he is. I thank my brother and childhood best friend, Austin, who gave me confidence. I thank my sister-in-law, Alyssa, for always lending an ear, making me laugh, and often opening conversations with, "Hey girly pop, so what's the tea?" To my uncles, aunts, and cousins in the Midwest, your love and support has been felt from thousands of miles away and I can't wait to be living closer to you. This dissertation is dedicated to my mom, Tammy, whose sacrifices made any of it possible.

Several loved ones saw me start this journey, but are no longer here to see the end. My grandma, Marlene Trummel. My grandpa, Donald Trummel. My uncle, Tom Latuff. My friend, James Adam Rivera. Whether it was enthusiastic Christmas cards or lending a sofa to crash on, they contributed to the building blocks of family and friendship that helped get me here. Each have left contours on my life and I wish they were here to share in the celebration.

Finally, I want to thank base camp. My partner, Manuel Valdes, has been steadfast in his support. The many years grounded in Santa Barbara has shaped both of our lives and he has built his own career around the constraints of mine. He provided exceptional security and devotion throughout what is often a fraught and stressful time. Those nights and weekends spent working were sustained not only by my own efforts at the desk, but also by the meals, treats, and cups of coffee that Manuel would bring me unprompted. Last but not least, I thank Oliver, our endearing cocker spaniel who kept faithful watch at my feet for every word written here.

# Curriculum Vitæ

Taylor Noel Trummel

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## Peer-Reviewed Articles

1. "Inclusive State Policies, Stronger Identities: The Impact of Policy on Latino Immigrant Linked Fate." 2025. ***Politics, Groups, and Identities***.

## Submitted Manuscripts

1. "What Makes Policy Fair? Evidence from U.S. Immigrant Integration Policy and Public Opinion." **Pre-print Available.**
   - ⋆ UC Santa Barbara Manzer-Wesson Award for Best Conference Paper (2026)
2. "When Threat Doesn't Mobilize: Linking Policy Perceptions with Behavior Among Non-Citizen Immigrants." **Working Paper.**

## Research in Progress

1. "Measuring Fairness in Empirical Research." **Working Paper.**
2. "Restrictions Increase Willingness to Pay for Immigrant Integration Policy." with Clayton Nall. **Working Paper.**
3. "State Policy and Immigrant Political Participation: Is Participation Decreased by More Inclusive Policy?" **Working Paper.**
4. "State Integration Policy, Perceptions of Fairness, and Attitudes toward Asylum Seekers in the United States." **Data Collected.**
5. "Immigrant Integration Policy and Perceptions of Fairness by Race." **Data Collected.**
6. "Zero-Sum Thinking and Policy Attitudes." with Clayton Nall. **Data Collected.**

7. "Fair Policy, Favorable Opinion? Increasing the Salience of Immigrant Integration Policy."
8. "Extending from the European Union: What Type of Asylum Regime Would Americans Prefer?"

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1. "Inclusive—Not Hostile—State Policies Promote Linked Fate Among Latino Immigrants." November 24, 2025. *London School of Economics United States Politics and Policy Blog.*

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2. Southern Political Science Association Prestage-Cook Travel Grant (2026) — $500
3. American Political Science Association Centennial Center Grant (2025) — $2,400
4. University of California Academic Senate Doctoral Grant (2025) — $1,500
5. UCSB Central Fellowship: Humanities and Social Science Grant (2025) — $3,000
6. UCSB Dept. of Political Science Graduate Research Grant (2025) — $2,220
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15. UCSD Graduate Student Association Grant (2019) — $500
16. UCSD School of Global Policy and Strategy Internship Grant (2018) — $5,000
17. UCSD School of Global Policy and Strategy Merit Fellowship (2017-19) — $35,000
18. Cal Coast Credit Union Academic Scholarship (2017) — $2,000
19. Phi Eta Sigma Continuing Student Scholarship (2017) — $500
20. Scholars Without Borders Study Abroad Scholarship (2015 and 2014) — $2,500
21. Vietnam Veterans of San Quentin State Prison Scholarship (2013) — $1,250

## Select Awards

⋆ UC Santa Barbara Manzer-Wesson Award for Best Conference Paper (2026)
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UC San Diego

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  - **Introduction to International Relations**: Spring 2019
  - **The Cuban Revolution**: Winter 2019
  - **Comparative LGBT Politics**: Fall 2018

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| | Midwest Political Science Association Annual Meeting |
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| | Southern Political Science Association Annual Meeting |
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| | Comparative Politics Workshop - Fall (UC Santa Barbara) |
| | Politics of Race and Immigration Consortium (UC Riverside) |
| | American Political Science Association Annual Meeting |
| | APSA Migration & Citizenship Dissertation Workshop |
| | Conference of Migration Studies (University of Neuchâtel) |
| | SPSA Borders & Migration Summer Session |
| | Research Transparency and Reproducibility Training (UC Berkeley) |
| | Politics of Race and Immigration Consortium (Cal Poly Pomona) |
| | Comparative Politics Workshop - Winter (UC Santa Barbara) |
| | Political Science Graduate Colloquium (UC Santa Barbara) |
| | Southern Political Science Association Annual Meeting |
| 2024 | American Political Science Association Annual Meeting |
| | Comparative Politics Workshop (UC Santa Barbara) |
| | APSA Race, Ethnicity, and Politics Workshop |
| | Political Science Graduate Colloquium (UC Santa Barbara) |
| 2023 | International Political Science Association Annual Meeting |
| | Political Science Graduate Colloquium (UC Santa Barbara) |
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2. Discussant, Migration Governance and Policy Implementation, SPSA, 2026
3. First-Year Graduate Student Mentor, UCSB, 2020-26
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## Abstract

What Makes Policy Fair? Evidence from U.S. Immigrant Integration Policy and Public Opinion

by

Taylor Noel Trummel

This dissertation asks how policy components influence perceptions of fairness and identifies the policy bundles that Americans are more likely to support. The research develops and validates a unique multidimensional measurement of fairness, advancing the study of public opinion methodologically and pushes the understanding of immigration attitudes beyond conventional debates. Chapter 1 outlines the theory and measurement approach and Chapter 2 uses an experimental design to identify the policy bundles Americans consider fair and support. Using an additional conjoint experiment, Chapter 3 tests whether the findings hold when explicit economic costs are included in the design.

Using two original and nationally representative samples of more than 5,500 U.S. respondents from April 2025 and April 2026, I utilize pre-registered experiments to test how state-level immigrant integration policy features affect perceptions of fairness and policy support. I find that state policies that offer social services to immigrants and include eligibility criteria increase perceptions of fairness and policy support. Although Americans are found to be supportive of providing social services to immigrants, the results also emphasize the importance of eligibility criteria. Regardless of the region of origin among the immigrant group most likely to benefit from a hypothetical policy, immigrant utilization of services is considered fair, broadly defined, when these policies require a background check and legal immigration status.

I also show that support for immigrant integration policy declines sharply as taxpayer

costs increase. However, including eligibility requirements such as a criminal background check and proof of legal status substantially offset this opposition, commanding the highest willingness to pay among respondents. The results also show similar effects between partisans, suggesting an area of policy consensus among Americans for one of the most contentious issues of our time. Subnational governments seeking to build public support for integration services should therefore consider pairing such programs with clear eligibility criteria, particularly when funding depends on increasing taxes.

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# Chapter 1

# Measuring Fairness in Empirical Research

## 1.1 Why Fairness?

Despite its significance in influencing judgments in our daily lives, perceptions of fairness constitute an inconsistently and imprecisely measured moral perspective in explaining policy attitudes. Fairness is defined as a thought process through which individuals assess proportionality and reciprocity norms, meaning benefits are proportional to effort and uncooperative behavior is penalized [1]. When confronted with a scenario to assess a fair division of goods, whether it be a limited number of seats for college admissions or the distribution of household chores, many people apply different standards that ultimately aim to arrive at a "fair" outcome. Does correcting for historical injustices make affirmative action fair? Are the allocation of household chores to children based on age and ability more fair than an equal division? This debate plays out in politics and the innate goal to achieve a "fair" outcome is socially constructed, yet evolutionarily ingrained [2, 3].

Moral reasoning like deservingness has been used by lawmakers, activists, and organizations to motivate public support for immigration [4, 5] and welfare policy [6], as well as influence ideas about nationalism and political membership [7]. However, fairness as a concept is distinct. Fairness dictates procedural expectations of reciprocity and values. The interpretation of fairness varies by person and context, meaning what is considered fair in the abstract may not be considered fair in an applied scenario. Moreover, the reasoning as to why something is fair or unfair can be influenced by dramatically different reasoning. This makes fairness conceptually challenging to measure. In the case of welfare allocation, some could believe that welfare policy is unfair because it is too generous, while others could believe it is unfair because it is not generous enough. Yet, if these individuals were to rate the fairness of a given welfare policy, they could arrive at the same conclusion that the policy is unfair. The goal then is to overcome this challenge by developing standardized measurements of distinct conceptual dimensions of fairness and assess whether they are predictive of political attitudes. These dimensions should elicit a consistent, clear measurement target and separate specific evaluations of fair outcomes from general affect. This effort improves upon an imprecise measurement target of "fairness."

A variety of research has examined how perceptions of fairness affect attitudes, but few account for the variation in how people conceptualize fairness. Lobo and Brutger (2025) look at how fairness beliefs vary by race in the context of international trade, but their primary outcome variable asks "how fair" a given trade agreement is [8]. While they recognize and affirm that groups vary in their understanding of a fair outcome, they use a blunt measurement of fairness. Employing fairness as an outcome, Rodon and Sanjaume-Calvet (2020) use a conjoint experiment that asks respondents "how fair" a policy is in the context of economic inequality and redistribution [9]. However, their dependent variable does not account for different dimensions of fairness. Similarly, Visschers and

Siegrist (2012) use the word fair repeatedly in their outcome questions in the context of energy policy preferences [10]. While they distinguish between procedural and outcome fairness, meaning the fairness of the process used to make a decision and the end result, the utilization of the word fair in their dependent variables muddies the interpretation of the results because people interpret fairness differently.

Powers et al. (2022) identifies that fairness consists of two dimensions, equity and equality, and that these dimensions explain American attitudes toward international relations and burden sharing [11].[1] Importantly, they do not use the word fair in their independent or dependent variables, but rather ask respondents to rate the moral wrongness of a given vignette following the methods of Clifford et al. (2015) [13]. This avoids the ambiguity and bluntness of asking "how fair," but also only determines a respondent's general orientation toward fairness in abstract terms rather than specific scenarios. In other words, this orientation is collected only as an independent variable. Applied as dependent variables, Bansak et al. (2017) also test two dimensions of fairness against the status quo: proportionality and equality [14]. Using the context of refugee allocation in the European Union, they use an experimental design to assess what refugee admission policy arrangement is preferred. In doing so, they assess fairness as a dependent variable without explicitly using the word fair. However, this bundles policy support and fairness perceptions as one when the two are not perfectly congruent. As observed by Visschers and Siegris (2012) and Trummel (2026), respondents may rate a policy as fair

[1]Powers et al. (2022) label one of the dimensions as "equity" oriented. They state, "Like President George W. Bush, who avowed that he would not 'let the United States carry the burden for cleaning up the world's air,' equity-minded citizens think that other states should contribute if they expect to reap the rewards from a clean environment" (p. 232). However, this description of a fair outcome is better aligned with a concept of *investment*, which rewards contribution. Equity on the other hand emphasizes a fair outcome as one that addresses existing inequalities to achieve equal outcomes. In the scenario described, countries that play a larger role in polluting the planet should pay more to clean it up. An equity-oriented solution would offer reparations to countries adversely affected by pollution. There is a mismatch between how Hochschild (1981)and Powers et al. (2022) [11, 12] label their dimensions of fairness.

but may not support its adoption [10, 15]. Brutger and Rathbun (2021) make similar observations and even note egotisical effects in which international trade policy may not be particularly "fair" according to respondents, yet the policy is supported when it offers advantageous conditions for the United States [16].

In an effort to resolve the inconsistent applications of the measurement of fairness perceptions, I develop multidimensional measurements of fairness to be applied as independent and dependent variables. I use immigration as a case to test my framework. Immigration is particularly well suited to test multidimensional perceptions of fairness as it raises procedural questions about who qualifies for benefits and protections, distributive questions about costs and benefits, and reciprocity questions about what immigrants owe and are owed. Using two original, nationally representative samples of 3,064 U.S. respondents from April 2025 and 2,584 from April 2026, I examine how respondents evaluate fairness in general and in specific circumstances. Drawing on existing work on fairness [1, 12, 17], I develop unique outcome measurements of fairness that unpack different dimensions of the concept. This research contributes conceptually and methodologically to the understanding of how people assess policy fairness. The validity of the approach is tested with immigration-related policy and can be extended to other domains.

Many related concepts have been used to explain attitudes, particularly in the case of immigration and redistribution. I examine the construct validity of my unique measurements against seven existing related and validated scales. These other measurements include egalitarianism, Moral Foundations Theory, the Migrant Deservingness Scale, ideology, symbolic racism, zero-sum thinking, and humanitarianism. Results find my fairness measurements to be distinct from prior measures, with the greatest convergence with egalitarianism. As such, the measurements constitute a methodological contribution that can be applied in future survey work. I also establish that fairness is multidimensional and show that these different perspectives are meaningfully associated with immigra-

tion attitudes. I proceed by briefly outlining the related measurements, developing the concept and operationalization of my fairness measures, testing the empirical validity of the multidimensional approach, assessing its relationship with immigration attitudes, and evaluating the construct validity of the fairness dimension items against these seven related scales.

## 1.2 Related Existing Measurements of Fairness

A number of related, existing measures capture independent orientations that may shape responses to public policy. In assessing the construct validity of fairness as a multidimensional, independent measurement, I review and compare it to other validated measurements in the literature.

### 1.2.1 Egalitarianism

Psychological studies have underlined the importance of values in shaping public opinion [18, 19]. Beliefs about equality are a core value to many people. According to Feldman (1988), public opinion is structured by beliefs about equal opportunity and individualism [20]. In contrast to Converse (1964), Feldman (1988) asserts that public opinion is in fact consistent when judged by its moral underpinnings [21, 20]. These values play a prominent role in American political culture and have been identified as the liberal basis for public opinion [22, 23, 24]. Those who hold equality of opportunity in high regard are considered egalitarian. Feldman (1988) measures this value through a set of Likert scale questions that assess whether someone believes equality of opportunity is desirable and should be pursued. Through surveys, Feldman (1988) shows that support for equality of opportunity is particularly strong in explaining attitudes toward a wide range of domestic issues in the United States.

### 1.2.2 Moral Foundations Theory

Haidt and Joseph (2004) make the observation that nearly all cultures have common elements such as reciprocity, loyalty, and some degree of respect for authority [3]. They propose that all people have intuitive ethics, an innate preparedness to judge human interaction. Virtues influence perceptions, emotions, and actions [25]. Haidt and Joseph (2004) link socially constructed virtues to innate moral assessments, leading to a psychological understanding of how attitudes and judgments are made. Moral Foundations Theory measures these different aspects of morality across populations [3]. The theory identifies six foundations for moral intuition: Care/Harm, Fairness/Reciprocity, Loyalty/Betrayal, Authority/Subversion, Purity/Degradation, and Liberty/Oppression [26]. Notably, political ideology maps onto these moral values in consistent ways. Liberals tend to prioritize Care and Fairness, while conservatives draw upon all moral lenses [27].

### 1.2.3 Out-Group Deservingness

Perceptions of deservingness can influence support for the provision of public goods [28], especially for members of social out-groups [29]. Migrant integration policy grapples with the distribution of public goods between groups. In high migrant receiving countries, group boundaries are particularly salient between the native population and "outsiders" [30]. Therefore, the perception of the legitimacy of some groups' claims to public goods has provoked judgments of deservingness [31]. In policy studies and sociology, many have applied the CARIN (control, attitude, reciprocity, identity, and need) criteria to explain differential support for access to public goods [32, 33, 34]. These principles are used to measure the perceived deservingness of individuals and groups in accessing social services [35]. De Coninck et al. (2024) adapts and extends this measurement to the perceived deservingness of migrants' settlement into host countries [36]. This framework has ex-

plained public support for migrant settlement in Belgium, the Netherlands, Sweden, and France [37]. Building on this, De Coninck et al. (2024) validates the Migrant Deservingness Scale (MDS) using confirmatory factor analysis on data spanning seven European countries. They conclude that the CARIN criteria for general welfare deservingness also apply to migrant deservingess perceptions and assert that the MDS can provide insights as to which types of integration policies would likely elicit support from the public. Unlike other existing concepts examined here, MDS is an applied measure for a specific circumstance while the others are foundational beliefs.

### 1.2.4 Ideology

Ideology refers to one's orientation on the liberal-conservative spectrum, which is a general position that can shape how people evaluate politics. In the United States, many consider themselves symbolically conservative, but operationally liberal [38, 39]. This means that on average Americans have a strong affect toward conservatism, but in practice endorse many of the policy solutions proposed by liberals, even if they don't support the mechanisms to fund programs [38]. Because of this, political ideology has proven to be limited in its ability to explain public opinion despite its salience in political behavior. According to Kinder (1983), the focus on ideology in early public opinion work does a better job explaining how people do *not* think about politics rather than how they actually do [40]. Converse (1964) argues that ideology involves knowing "what goes with what" among issue positions [21]. However, most people do not think consistently ideological and only a small minority hold coherent belief systems, leading political scientists to question the usefulness of ideology in explaining attitudes [41]. Building upon this issue, Zaller (1992) shows that elite messaging shapes political attitudes, mediated by political awareness, which determines the consistency of ideological reasoning [42]. Nonetheless, I

exam whether fairness dimensions have a strong relationship with ideology.

### 1.2.5 Symbolic Racism and Prejudice

Attitudes and beliefs about out-groups can affect policy preferences [43, 44, 40]. Historically, explicit racism and xenophobia have not only been endorsed openly by the public, but having played a significant role in shaping government policies.[2] Symbolic racism, introduced by Kinder and Sears (1981), hold that negative affect toward Black Americans is fused with traditional American values of a strong work ethic and individual liberty [45]. They argue this produces negative attitudes that Blacks are violating foundational values by not working hard enough and demanding undeserved special treatment. This symbolic racism, as they term it, has overtaken explicit racism in the decades following the Civil Rights Movement. Racial resentment, operationalized by Kinder and Sanders (1996), refines this concept by measuring the belief that racial inequality persists because Black Americans lack sufficient effort and discipline rather than because of structural disadvantage [46]. Both concepts attempt to explain persistent White opposition to race-conscious policies like affirmative action. Critics, such as Sniderman and Tetlock (1986) and Carmines et al. (2011), analyze whether these measures capture genuine racial prejudice or simply principled conservatism and individualism [47, 48]. Racial resentment and symbolic racism have also been extended to other groups beyond Black Americans [49, 50, 51]. Beliefs about a fair distribution of resources between groups may therefore mask underlying prejudice and resentment.

[2] As explicit racial prejudice declined in American public life, many recognized that racial attitudes had not disappeared but had instead taken on more subtle forms, leading Kinder and Sears (1981) to develop the concept of symbolic racism [45]. Examples of historical, explicitly racist policies include: The Chinese Exclusion Act of 1882, Japanese American internment, and Jim Crow laws.

### 1.2.6 Zero-sum Thinking

The concept of zero-sum thinking helps explain why we often encounter suboptimal outcomes in large societies. In short, a zero-sum mindset is the belief that someone's win is your loss and vice versa. This logic can be extended to group interests in that an out-group's benefit comes at the cost of the in-group. Andrews Fearon and Götz (2024) argue that a zero-sum mindset predicts lower cooperative behaviors, resulting in serious implications for attitudes and influence social behavior [52]. Zero-sum beliefs are particularly important for intergroup relationships because they can effectively undermine equity and equality. Perceived gains among one group can be viewed as loses to another. This orientation can apply to material resources such as wealth, but can also be symbolic threats to status or identity [53]. Zero-sum can be conceptualized in a general sense, but its testing and application vary by domain. In the context of immigration, Chinoy et al. (2026) show that zero-sum mindset is strongly associated with support for more restrictive immigration policies in the United States [54]. Furthermore, they demonstrate that it is positively associated with attitudes toward government redistribution and affirmative action policy preferences. Rozycka-Tran et al. (2015) gauge cultural variations across dozens of countries and show the "belief in life as a zero-sum game" is invariant and isomorphic at the state and individual level [55]. Furthermore, their measure shows that zero-sum thinking is negatively associated with a variety of metrics of well-being such as life satisfaction, civil liberties, and economic performance.

### 1.2.7 Humanitarianism

In examining value-attitude linkages, Katz and Hass (1988) develop the Humanitarianism-Egalitarianism (H-E) Scale to test individuals' adherence to democratic ideals of equality, racial justice, and concern for the others' well-being [56]. In particular, they

use it to examine the racial attitudes of Whites toward Blacks among college students across several university campuses. They argue that people simultaneously hold contradictory values that align with humanitarian ideals of racial justice and Protestant work ethic values that generate negative perceptions of Blacks. Subsequent studies have applied the H-E Scale to other domains and contexts. Fraser and Murakami (2022) apply the framework in Japan and find that those with stronger humanitarian orientations are most likely to favor refugee admission [57]. A number of other studies have examined how humanitarian values influence attitudes and state policy toward refugee admissions in Europe and the United States [58, 59]. Beyond race and migration, scholars have applied the H-E Scale to attitudes toward sexual minorities [60] and welfare policy [61].

## 1.3 Conceptualization and the Challenges of Measuring Fairness

While numerous general worldviews and moral perspectives have been used to assess political attitudes, very few have meaningfully dealt with the multidimensional nature of fairness. I aim to fill this gap by developing clear measurements of fairness in the context of immigration and at baseline. The goal is to develop standardized measurements of distinct conceptual dimensions of fairness that can be measured in a general sense and then adapted to specific contexts across policy domains. From here, I draw upon theoretical literature, as well empirical studies that further develop the concept [14, 1].

Research on the distribution of goods in society, referred to at times as distributive justice, has shown that a consensual normative framework for assessing fairness exists [62, 63, 64]. Universal standards of measurement are absent, despite recognition of the concept. Fairness beliefs provide individuals with a worldview through which to interpret

and choose policies that maximize a fair outcome as they see it [1], but this means people could believe a policy is unfair for different reasons. Some could believe that current immigration policy is unfair because it is too restrictive, while others could believe it is unfair because it is not restrictive enough. Simply asking a respondent whether they think a policy is fair or unfair imprecisely identifies the outcome through an ambiguous measure. This lack of precision can lead to measurement error in survey research and a lack of understanding in the reasoning behind perceptions of fairness. Prior studies that ask "how fair" something is identify how broad and often singular conceptions of fairness can be influenced by policy but fail to identify the underlying reasoning.

To navigate this challenge, I utilize Hochschild's (1981) conceptualization and definition of fairness. She identifies several perspectives of fairness in the context of economic redistribution, which I adapt and apply to immigration. Fairness is outlined by principles of equality and differentiation [12]. While Hochschild (1981) defines these principles along a spectrum moving from absolute equality to pure differentiation, they can also be conceptualized as categorical concepts [12]. There are also two other dimensions through which people conceptualize what's fair: evaluations of need and investment [12]. Strict equality asserts that all community members deserve equal shares of a good being divided. In this view, people are equal in virtue to be fully cooperating members of society, entitling them to the same basic rights, liberties, opportunities, and protections. Those that meet this definition are symmetrically situated, which establishes fair terms for social cooperation [65]. The need perspective asserts that all members of a community deserve equal satisfaction. This perspective is similar to equity in that it sees that it is fair to give a bit more of a good to some groups based on need to achieve equality. Investment perspectives see that community members deserve rewards in proportion to what they contribute. Under this view, people think it is fair that some people get more than others based on what they have contributed to the community. Ascription perspectives

assert that community members deserve rewards based on natural traits. Ascription is pure differentiation. Believers of this perspective would agree that some groups or people deserve more than others based on fixed, ascribed traits and that this is inherently fair.

Evolutionarily rooted, the human mind contains content-dependent cognitive adaptions for social exchange [66]. Individuals apply different perspectives of fairness throughout their life and in varying social domains. In other words, the same person could express all four viewpoints to four different issues within minutes. This person could believe it is "fair" to offer legal rights to all (equality) and provide food aid to low-income individuals (need). They could also believe it is "fair" that a university pays the tenured professor more than the graduate student (investment) and that male athletes be paid more than female athletes because they're thought to have greater athleticism than women (ascription). Overall, most people generally use principles of equality in the social and political domain, while they use differentiation when it comes to economics [12]. These four dimensions provide leverage to analyzing how policy attributes affect perceptions of fairness.

Perceptions of deservingness can influence whether something is considered fair and many studies have documented the significance of the reciprocity norm when community members are engaged in cooperative goals [67, 68]. People contribute to a collective goal if they feel others are not free-riding. They can punish free-riders by excluding them from accessing the goods generated by cooperation [69]. People are more likely to allocate resources to others if they perceive a good reason for the need, or if the aid satisfies the reciprocity norm [70]. The reciprocity norm is an important expectation under parochial altruism, which asserts a fair outcome is one that offers benefits only to group members and excludes nonmembers [71]. Not only are reciprocity beliefs difficult to change, as they are rooted in "proto-ideological" moral mindsets, but they can also spell success

or failure for welfare reform when it comes to public opinion [1].[3] Furthermore, people who dislike seeing outsiders treated as insiders will perceive a policy as unfair because it benefits "free-riders" [1]. In the context of immigration, factors related to cultural identity, be it law-based, racial, or otherwise, can influence whether new arrivals to a community are perceived as free-riding.

Following the conceptualization of fairness, I developed measurement items intended to capture perceptions of fairness along each dimension, both as outcome variables and at baseline. Next, I detail this measurement and then outline the measurements of related existing items included the data.

### 1.3.1 Measuring Fairness at Baseline and as Outcomes

Table 1.2 details the fairness measurement target, item wording, and response option for baseline and outcome measurements of fairness. These items aim to improve precision by capturing distinct conceptions of fairness. In operation, respondents were asked to select their level of agreement with statements about redistribution first at baseline and then in the specific context of immigration. The immigration context items were dependent variables following an experiment outlined in Trummel (2026) [15]. The ordering of the fairness baseline questions were randomized within their block in the survey flow.[4] Each item's wording is intended to capture the measurement target without using the word fair.

[3] Cavaille (2023) describes how welfare reform in the 1990s in the United States was designed to target the "deserving" by incentivizing work, but failed to change public perceptions [1].

[4] The baseline fairness items were measured in two different surveys and there were slight modifications between the items. See Appendix A.5.

| **Measurement Target** | **Item Wording** | **Response Options** |
|---|---|---|
| *Baseline Fairness Principles* | | |
| Equality Principle | Resources should be allocated equally to people. | 5-point Likert |
| Need Principle | Some people need more resources than others to achieve equality. | 5-point Likert |
| Investment Principle | Allocation of resources to people should be based on their contributions to the country. | 5-point Likert |
| Ascription Principle | People naturally belong to different groups, so some groups deserve more resources. | 5-point Likert |
| *Dependent Variables* | | |
| Equality Principle | This policy treats immigrants the way everyone deserves to be treated. | 5-point Likert |
| Need Principle | This policy helps immigrants in greatest need. | 5-point Likert |
| Investment Principle | This policy helps immigrants who are going to contribute to the country. | 5-point Likert |
| Ascription Principle | This policy helps immigrants who are going to fit into the country. | 5-point Likert |

Table 1.2: Measurement items of fairness. Respondents did not see the measurement target.

### 1.3.2 Measuring Related Items for Comparison and Validation

To compare the novelty of these fairness measurements, I test them against existing validated measures such as egalitarianism, Moral Foundations Theory, the Migrant Deservingness Scale, ideology, symbolic racism, zero-sum thinking, and humanitarianism. These items are drawn directly from their respective literatures and are copied verbatim unless otherwise noted.

### Egalitarianism

I measure egalitarianism following the measurement approach of Feldman (1988), who disaggregated his index by items that align with equal opportunity and those that emphasize economic individualism [20]. I draw upon those related to equal opportunity.[5] The following items are rated on a scale from strongly agree to strongly disagree, with one item reverse coded. The items are then summed into an index where a higher score indicates stronger agreement with equality beliefs. Analysis should find a relatively high correlation between this scale and the baseline equality fairness item, as they both aim to measure the importance of equality to someone. However, the equality fairness dimension notably emphasizes the division of goods, rather than general principles of treatment of others. While they both address equality, they do so from slightly different angles and therefor should not have a one to one correlation.

| **Item Wording** | **Response Options** |
|---|---|
| If people were treated more equally in this country, we would have many fewer problems. | 5-point Likert |
| Some people are just better cut out than others for important positions in society. | 5-point Likert *(reverse coded)* |
| One of the big problems in this country is that we don't give everyone an equal chance. | 5-point Likert |

Table 1.3: Feldman's (1988) measurement of egalitarianism.

[5]To accommodate numerous competing scales to validate against, the survey in Study 2 contains branch logic randomizers so that half the sample (n=1,250) responded to the Feldman equal opportunity questions.

### Moral Foundations Theory

I also examine four items related to fairness from the Moral Foundations Theory (MFT) questionnaire [3]. They measure the importance and relevance of fairness and reciprocity to respondents through their four variables. These questions capture how important fairness, unidimensionally defined, is to a given person. Given the single construction of fairness, I do not expect a strong correlation between MFT and my multidimensional fairness items. These questions are detailed in Table 1.4.

| **Item Wording** | **Response Options** |
|---|---|
| When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Whether or not some people were treated differently than others. | 0–5 (Not at all relevant – Extremely relevant) |
| When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Whether or not someone was denied his or her rights. | 0–5 (Not at all relevant – Extremely relevant) |
| When the government makes laws, the number one principle should be ensuring that everyone is treated fairly. | 5-point Likert |
| Justice is the most important requirement for a society. | 5-point Likert |

Table 1.4: Fairness-related Moral Foundation Theory measurement items from Haidt and Joseph (2004).

### Migrant Deservingness Scale

De Coninck (2024) adapted the measurement of welfare deservingness to the context of migration and assessed their scale using confirmatory factor analysis (CFA) [36]. Based on the results of their analysis, I selected one item from each of the five CARIN criteria with the highest CFA indicator. The items are equally weighted and summed into an index where higher scores indicate stronger agreement with judging migrants based on

perceived deservingness for settlement in one's country. The item wording in Table 1.6 follows De Coninck (2024) exactly [36].[6] Items are given a binary score of one if either form of agreement is selected and zero if any other case is selected.[7] They are then summarized into a scale where higher values reflect respondents who view settlement in the United States based on the potential deservingness of a migrant. Those who score highly on this scale are generally not humanitarian nor particularly inclusive.

| **CARIN Criteria** | **Item Wording** | **Response Options** |
|---|---|---|
| Control | Unaccompanied minors who decide to come to the United States should be allowed to stay in the United States. | 5-point Likert |
| Attitude | Migrants who are allowed to remain in the country should be grateful for that. | 5-point Likert |
| Reciprocity | Only migrants with work skills from which the economy of the United States can profit should be allowed to stay in the United States. | 5-point Likert |
| Identity | Only migrants with similar cultural backgrounds as the United States population should be allowed to stay. | 5-point Likert |
| Need | Only poor migrants with dependent young children should be allowed to stay in the United States. | 5-point Likert |

Table 1.6: Migrant Deservingness Scale (MDS) items from De Coninck (2024).

[6]Following branch logic in the survey of Study 2, half the sample responded to the MDS items and the other half responded to the humanitarianism scale, resulting in a sample of roughly 1,250 for each correlation test.

[7]This coding approach was pre-registered. The majority of the pre-analysis plan relates to an experiment in a related paper, however coding decisions reflected in this paper are outlined **here**.

### Ideology

Ideology is measured using the conventional political ideology scale where respondents are asked to indicate whether they are a strong liberal, somewhat liberal, moderate, somewhat conservative, or strong conservative. This is a typical approach to measuring respondent ideology.

### Symbolic Racism and Racial Resentment

Next, I examined six survey questions stemming from racial resentment, racial stereotypes, and racial policy research. Taken directly from Carmines et al. (2011), I included questions in the survey that asked respondents attitudinal questions about racial groups and racial policy [48]. From their instrument, I changed each reference from Black or African American to Latino.[8] I chose to use Latino in this context because Latinos make up the largest share of immigrants in the United States and they are often racialized as immigrants whether or not they are foreign-born [74]. The six items, almost verbatim from Carmines et al. (2011) with the exception of the word Latino(s), are described in Table 1.7 [48].[9]

In my analysis, I use two measures of prejudice. Both approaches include perceptions of Latinos' trustworthiness and work ethic (the stereotype questions), but the Kinder and Sanders (1996) approach also includes what Carmines et al. (2011) refer to as racial resentment [46, 48]. These two items include agreement with statements that assert

[8]Many agree that Latino/a/x is not a racial group, but rather better describes an ethnicity [72]. The Hispanic and Latino identities, also not perfectly interchangeable, are socially and politically constructed in American politics, each in their own way. High racial diversity exists within the Latino ethnic group, but in a general sense to the majority of Americans and many Latinos themselves it can be considered a racial group at times [73].

[9]A drawback of this approach is that the stereotypes applied to Blacks in the United States may not extend to Latinos. Nonetheless, it is a fair method for collecting data on racial animus. Because the stereotypes, are not perfectly congruent, those who agree with these statements can generally be considered particularly prejudiced against Latinos.

that Latinos need to try harder to be as well off as Whites and that generations of discrimination make it difficult for Latinos to achieve upward mobility. These two items are a measurement of symbolic racism according to Kinder and Sanders (1996), while they are more accurately a measurement of political ideology according to Carmines et al. (2011). In any case, I compare my measurement of fairness against both scales.

| **Category** | **Question** | **Response Scale** |
|---|---|---|
| Racial Stereotypes | In thinking about how hard some groups work, where would you rate Latinos on a scale of 1 to 7? | 1 (Lazy) – 7 (Hardworking), 4 = Neutral |
| | In thinking about how trustworthy some groups are, where would you rate Latinos on a scale of 1 to 7? | 1 (Untrustworthy) – 7 (Trustworthy), 4 = Neutral |
| Racial Resentment | It's really a matter of some people not trying hard enough; if Latinos would only try harder they could be just as well off as Whites. | 5-point level of agreement |
| | Generations of discrimination have created conditions that make it difficult for Latinos to work their way out of the lower class. | 5-point level of agreement |

Table 1.7: The survey questions on racial attitudes toward Latinos. Respondents did not see the category label.

### Zero-sum Thinking

I measure zero-sum thinking in two ways.[10] One follows the exact items of Chinoy et al. (2026) [54], while the second approach makes minor modifications to the wording of the measurement items [75]. The modified items are important robustness checks, as the original items are at times too ambiguous. For example, the statement "if an

[10]Branch logic in the survey flow randomly presented respondents with one block or the other.

ethnic group becomes richer, this comes at the expense of other groups," does not make clear whether they are becoming richer than they were before or if they are becoming richer than other groups. Other minor changes, albeit important ones for measurement precision, are detailed below.

| **Item Wording** | **Response Options** |
|---|---|
| *Original Item Wording* | |
| If an ethnic group becomes richer, this comes at the expense of other groups. | 5-point Likert |
| If non-US citizens do better economically, this is at the expense of citizens. | 5-point Likert |
| In international trade, if one country makes more money, then the other makes less. | 5-point Likert |
| If one income class becomes wealthier, it is at the expense of others. | 5-point Likert |
| *Modified Item Wording* | |
| If an ethnic group grows in wealth, this comes at the expense of other groups. | 5-point Likert |
| If non-US citizens improve economically, this is at the expense of US citizens. | 5-point Likert |
| In international trade, if one country gains economically, then the other loses economically. | 5-point Likert |
| If one income class gains wealth, it is at the expense of others. | 5-point Likert |

Table 1.9: Zero-Sum Thinking items. Both approaches are used for comparison.

### Humanitarianism

Finally, I measure humanitarianism using the Humanitarianism-Egalitarianism Index constructed by Katz and Hass (1988) [56]. Their full index uses 10 items scored on Likert scales of agreement. Due to time constraints in the survey duration, I selected five of the

10 to assess construct validity against the fairness dimension items. Some of the question items in Katz and Hass' (1988) instrument focus more on the equality dimension of their two-dimension scale. Because I measure egalitarianism following Feldman (1988)'s approach, I selected five of the items from Katz and Hass (1988) that align more clearly with conceptions of humanitarian values [20, 56]. Humanitarian values overlap with egalitarianism insofar as both concern the equal treatment of people, yet some items in the Katz and Hass (1988) scale are more explicitly focused on equality than others. For example, one item that I did not include states, "Everyone should have an equal chance and an equal say in most things." The table below outlines the five chosen items. Like the other indices included in this research, each item is given equal weight. Items are given a binary score of one if either form of agreement is selected and zero if any other case is selected. They are then summed into a scale where a higher score indicates a person with stronger humanitarian values. Katz and Hass (1988) and other work often refers to this as the H-E scale, although because the emphasis in the truncated version contains no items that explicitly address equality, interpretation of the measurement should focus on humanitarianism values.

| **Item Wording** | **Response Options** |
|---|---|
| One should find ways to help others less fortunate than oneself. | 5-point Likert |
| One should be kind to all people. | 5-point Likert |
| A good society is one in which people feel responsible for one another. | 5-point Likert |
| Prosperous nations have a moral obligation to share some of their wealth with poor nations. | 5-point Likert |
| A person should be concerned about the well-being of others. | 5-point Likert |

Table 1.10: Katz and Hass' (1988) measurement of humanitarianism-egalitarianism.

### 1.3.3 Data

Data to support this analysis was collected in two separate surveys. For Study 1, the sample was drawn from the U.S. general population and was collected by Forthright, a web-based platform utilizing a survey constructed in Qualtrics by the author. The survey contained two attention checks. One came at the very beginning of the survey and the other occurred right before an experiment for a related project.[11] Failure on either attention check resulted in immediate closure of the survey. To qualify, respondents needed to live in the United States and be at least 18 years old.[12] The median duration of the survey was 9.5 minutes and 3,064 respondents completed the survey. The survey was first piloted in mid-April 2025 and fully launched between April 23 and April 30, 2025. It is nationally representative of racial and ethnic quotas as determined by the U.S. Census Bureau's 2023 American Community Survey (ACS).[13] While fairness and ideology appear in both surveys, Study 1 collected responses to symbolic racism and Moral Foundations Theory.

Study 2 was fielded one year later from April 10 to May 9, 2026 and was collected by Prolific, a web-based platform utilizing a survey constructed in Qualtrics.[14] The sample (n=2,584) is nationally representative of the United States along the lines of gender, race, and ethnicity.[15] Like Study 1, respondents needed to be at least 18 years old and live in the United States to qualify. The median duration was 16 minutes and it contained one attention check and two bot detection points to verify the quality of the data. Fur-

[11]For the full research design of this experiment, see Trummel (2026) [15].

[12]The study was exempted by UC Santa Barbara IRB on April 10, 2025. Participants gave informed consent to qualify.

[13]See Appendix A.1 for more details on sample demographics.

[14]Prolific is widely considered a high-quality survey platform because of its human-validated samples, a feature that has become increasingly important as AI systems have demonstrated the ability to pass even complex attention checks [76].

[15]The study was exempted by UC Santa Barbara IRB on January 16, 2026. Participants gave informed consent to qualify. See Appendix A.2 for more details on sample demographics.

thermore, Prolific as a survey platform has been found to present the least evidence of sample corruption by AI bots [76]. Study 2 contained the items for humanitarianism, zero-sum thinking, egalitarianism, and the Migrant Deservingness Scale. In both surveys, the baseline fairness items were among the first questions in the survey.

## 1.4 Analysis

First, I use confirmatory factor analysis (CFA) to test whether the four fairness dimensions load onto a single factor. I apply CFA using a diagonally weighted least squares (DWLS) estimator. If the variables do not load onto a single factor, this demonstrates that the four dimensions are not capturing a single latent construct. Next, I test whether these dimensions have a meaningful relationship with a general immigration attitudinal question. This standard question asks, "Do you think the number of immigrants coming to the United States to live should be increased, decreased, or kept about the same?" It is an ordinal variable and as such I use an ordinal logistic regression model to estimate how baseline fairness views are associated with immigration attitudes.

Finally, to test the construct validity of the fairness items, I use Pearson correlations to evaluate the strength and direction of associations among the measures. The analysis tests whether the fairness items move with the comparison items. High positive correlations suggest that the items are not empirically distinct, while strong negative correlations indicate that the measures are closely related but capture opposing relationships. Standard benchmarks for assessing the strength of relationships consider 0.10-0.29 to be weak, 0.30-0.49 to be moderate, and 0.50 and above to be strong.

## 1.5 Results

Descriptively, across the four fairness dimensions, equality and need show the highest levels of agreement. Measured on a scale from zero to four where four corresponds to strongly agree, equality and need have a median of three and means of 2.65 and 2.86, respectively, indicating that respondents on average lean toward agreement with equality- and need-based fairness principles. Investment and ascription show notably lower levels of agreement. Investment has a median of two and a mean of 1.69, while ascription has the lowest median (one) and mean (1.52) of all four dimensions, suggesting that group membership as a basis for fairness is the least endorsed principle in the sample.[16]

### 1.5.1 Is Fairness Unidimensional?

Next, I examine the results of an empirical test to assess whether different dimensions of fairness exist and are captured through these measures. Confirmatory factor analysis (CFA) failed to converge and produced inadmissible parameter estimates. In other words, the analysis finds that the four baseline fairness items do not behave like indicators of a single latent construct. This suggests that the measures capture distinct reasoning. Because of this, each fairness perspective may have independent effects on attitudes.

### 1.5.2 Do Views about Fairness Predict Immigration Attitudes?

With multiple concepts of fairness established, I now examine whether these views predict immigration attitudes. Following the ordinal regression analysis, results indicate that fairness considerations are differentially associated with respondents' likelihood of reporting open immigration attitudes (Table 1.11 and Figure 1.1). Table 1.11 demonstrates

[16]These correspond to the results of Study 2. Descriptive statistics from Study 2 are very similar to those in Study 1 with the exception that equality had the highest average level of agreement. See Appendix A.3.2 and A.3.3.

that three of the four predictors are statistically significant and Figure 1.1 visualizes the relationship between baseline views of each fairness principle and the predicted probability of respondents' immigration attitudes. Each row of Table 1.11 identifies the log-odds and odds ratio results for each baseline perception of fairness, as well as the standard errors and significance level. Log-odds indicate the direction and significance of the effect, while odds ratios, which are obtained by exponentiating the log-odds, indicate its magnitude, where values above one indicate higher odds of favoring increased immigration levels and values below one indicate lower odds.

| | Log-Odds | Odds Ratio |
|---|---|---|
| Equality | $0.261^{***}$ | 1.299 |
| | (0.031) | |
| Need | $0.521^{***}$ | 1.684 |
| | (0.037) | |
| Investment | $-0.502^{***}$ | 0.606 |
| | (0.033) | |
| Ascription | $-0.012$ | 0.988 |
| | (0.030) | |
| N | 2,514 | |

$^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$

Table 1.11: Ordinal regression predicting general immigration level preference. Each row is a bivariate ordered logit model. Standard errors in parentheses. Fairness items scaled 0–4.

Specifically, need- and equality-based fairness views have the strongest positive associations with pro-immigration attitudes. A one-unit increase in need-based fairness perceptions are associated with 1.68 times higher odds of being in a higher category of immigration level preference, while a one-unit increase in equality-based fairness perceptions are associated with 1.30 times higher odds. Investment-based fairness evaluations show the opposite pattern, where a one-unit increase is associated with 0.61 times the

odds of favoring higher or status quo immigration levels. Ascriptive considerations are statistically indistinguishable from zero. These results suggest that different dimensions of fairness matter in distinct ways for immigration attitudes. While concerns for need and equality promote more supportive attitudes, those who prioritize contribution-based fairness appear less open to increased immigration levels.

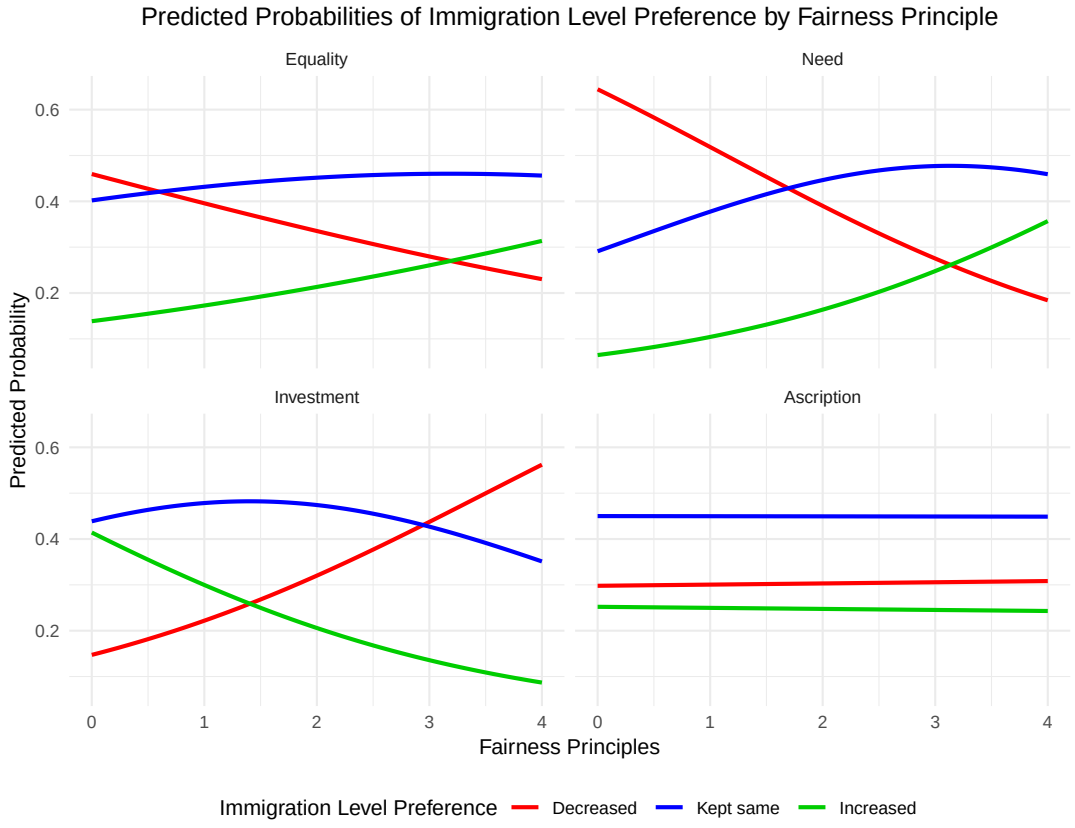



Figure 1.1: Relationship between each baseline fairness view and the predicted probability of the respondent's position on immigration levels.

### 1.5.3 Divergence and Convergence with Egalitarianism

The analysis up to this point shows that fairness is multidimensional and that these dimensions, with the exception of ascription, are influential to views about immigration.

Next, I begin comparing how the fairness dimensions differ from the related validated scales using Pearson correlations of each baseline fairness view and egalitarianism. Figure 1.2 demonstrates the results where each row indicates how the variable correlates with the other variables tested. Larger circles in either color denote a stronger relationship. Large red dots correlating at one indicate a perfectly congruent relationship.

First, most respondents score highly on the egalitarianism index, meaning most endorse principles of equality.[17] The correlation between each fairness dimension and Feldman's (1988) measurement of egalitarianism finds moderate correlation [20]. However, half of the four fairness dimensions are directionally opposed with each other. Among those that move against egalitarian values, the investment dimension of fairness has the strongest negative relationship. Ascription in particular has a weak relationship with egalitarianism. As expected, the strongest correlations are between the equality and need dimensions of fairness and the equal opportunity measurement of egalitarianism. This correlation is found at 0.36, making it moderately correlated (Figure 1.2). The relationship is likely not stronger due to the items measuring slightly different concepts related to equality. Egalitarianism in this context is drawn from equal opportunity, which is focused on life chances and treatment of others. Meanwhile, the equality dimension of fairness is focused more explicitly on the allocation of resources across people. In sum, I observe both convergence and divergence across the fairness dimensions, suggesting a valid construct.

[17] See Appedix A.3.4.

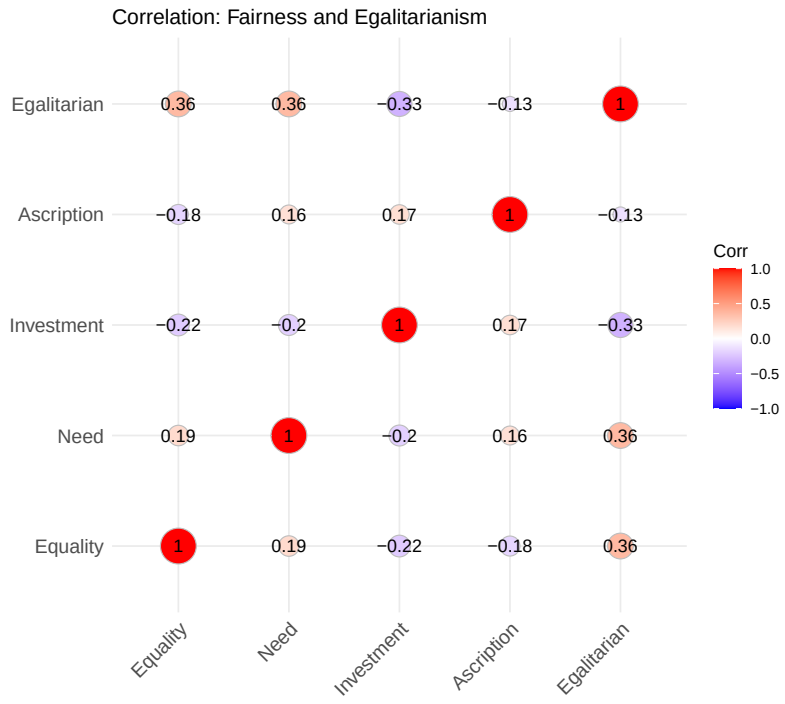
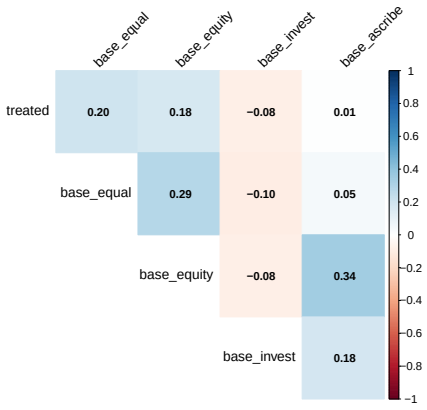



Figure 1.2: Correlation between fairness items and egalitarianism.

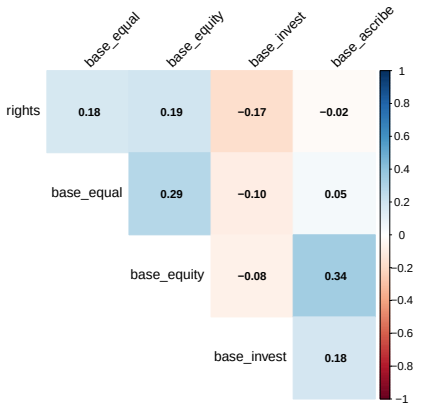
### 1.5.4 Moral Foundations Theory Doesn't Capture Multidimensionality

To continue testing overlap with existing approaches, I test whether my fairness measures are empirically distinct from Moral Foundations Theory (MFT) survey items. Using Pearson correlation tests, I examine the relationships between the variables. As seen in Figure 1.3, the results show that each of the baseline measures of fairness in this study have a weak correlation with the MFT fairness items, suggesting divergence in measurement. The variables "treated," "rights," "fairly," and "justice" are each single items drawn from MFT. The top row of each correlation matrix shows the strength of the relationship. The strongest relationship is between the equality perception of fairness and the MFT item "fairly," which asks respondents to rate their level of agreement with

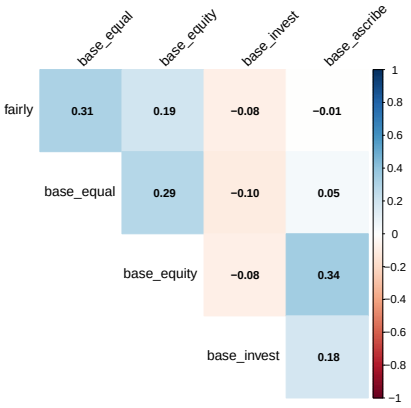
the statement, "When the government makes laws, the number one principle should be ensuring that everyone is treated fairly." The overall weak correlation across the variables though means that the items do not meaningfully overlap. Despite addressing fairness explicitly, the MFT items do not address different dimensions of fairness. As described, the MFT items measure the importance of fairness concerns, unidimensionally defined. This underspecifies the concept. The results across all four correlations suggest discriminate validity.



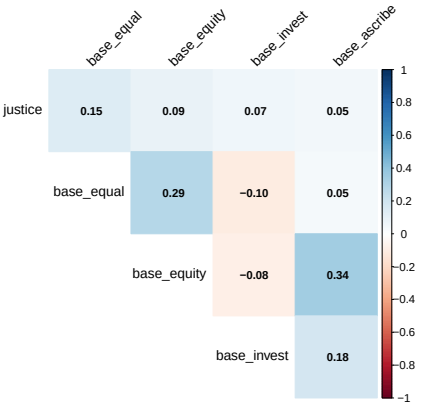

(a) Treated




(b) Rights




(c) Fairly




(d) Justice

Figure 1.3: Pearson correlations between MFT items and baseline fairness measures. Weak relationship found between each individual fairness dimension and four of the variables from MFT: treated, rights, fairly, and justice. The strongest correlation is between baseline percpetions of equality and the "fairly" item from MFT, but all other correlations fail to reach moderate strength. See Table 1.4 for the wording of the MFT items.

### 1.5.5 The Migrant Deservingness Scale Demonstrates the Importance of Context

Overall, most respondents do not score highly on the Migrant Deservingness Scale (MDS), meaning most people do no assess the deservingness of migrants when determining settlement entitlement.[18] As seen in Figure 1.4, the MDS and each fairness item are found to have a weak relationship, despite the similarity of the concepts. The correlation plot shows the strength of the relationship between each of the fairness variables and the MDS, with all of the relationships falling under 0.30 and resulting in a weak correlation. While both equality and need are negatively correlated, the relationship between equality the MDS is nearly zero. This is also true of ascription, although it moves in a positive direction. The strongest relationship between the MDS and the fairness items is on the investment dimension. The weak relationship is likely due to the MDS being measured in a specific migration context and the fairness baselines being measured in a general context. This is an important finding as it highlights the disconnect between measuring fairness attitudes abstractly and applying them in specific contexts. The findings here suggest the fairness dimensions are distinct from deservingness. Like many other correlations examined, equality and need are directionally opposite to investment and ascription, which is consistent with theorization by Hochschild (1981) [12]. This pattern is noticeable throughout the results.

[18] See distribution in Appendix A.3.4.




Figure 1.4: Correlation between fairness items and the Migrant Deservingness Scale.

### 1.5.6 Fairness Perspectives are Distinct from Ideology

The results of this analysis find that ideology is distinct from fairness perceptions. Liberals were more likely to agree with the equality, need, and ascription perceptions of fairness, while conservatives were more likely to agree with the investment perception. In other words, the fairness dimensions does not align with the political ideology spectrum, underscoring it as a distinctive and important perspective for explaining attitudes. Furthermore, there is a generally weak to moderate correlation between ideology and baseline fairness perspectives. The baseline need perspective correlates most strongly with liberal ideology, while the baseline investment perspective correlates most strongly with conservatives. Table 1.12 details the descriptive distribution of the share of liberals minus the share of conservatives that selected each point on the scale. A larger number,

whether it is positive or negative means there is a larger difference between liberals and conservatives at a particular point. For example, -73.6% at disagreement with baseline equality is the largest point of difference between ideologues. Many of the smallest differences are on baseline ascription, meaning the scale of difference between liberals and conservatives when it comes to agreement with baseline views of ascriptive fairness are generally minimal.

| **Measure** | **Disagree** | **Somewhat Disagree** | **Neither** | **Somewhat Agree** | **Agree** |
|---|---|---|---|---|---|
| Baseline Equality | -73.6% | -47.2% | -37.4% | 11.6% | 23.6% |
| Baseline Need | -58.0% | -52.2% | -31.8% | -1.4% | 42.2% |
| Baseline Investment | 59.0% | 34.0% | 8.6% | -18.6% | -44.6% |
| Baseline Ascription | -0.8% | -11.0% | -7.4% | 7.4% | 23.6% |

Table 1.12: Difference in level of agreement with baseline fairness views by ideology (% Liberal - % Conservative). Numbers closer to zero indicate less difference between the ideologies.

Figures 1.5 and 1.6 show the correlations between political ideology and the baseline fairness measures and the immigration-specific outcome measures from Study 1. There is moderate to weak correlation with ideology. There is more moderate correlation in Figure 1.5 between baseline fairness views and ideology. However, in Figure 1.6 we see the relationship with ideology weaken when respondents rate agreement with immigration policy specific scenarios along each fairness dimension. While the relationship with ideology generally weakens further, the correlation with other outcome fairness items strengthens. In some cases, the relationship is relatively strong as seen between investment and ascription. However, there is variation between them and in no case is it

perfectly one. The differences between these two figures highlight that fairness evaluations do in fact vary from general principles to specific contexts, as argued by theory and prior work [12]. Focusing back on ideology, agreement with fairness perspectives clearly does not follow the political ideological spectrum. Although three of the four relationships between ideology and the baseline views of fairness have moderate correlations, the strength of the relationship is still suggestive that the four fairness dimensions are not merely masking ideological reasoning.

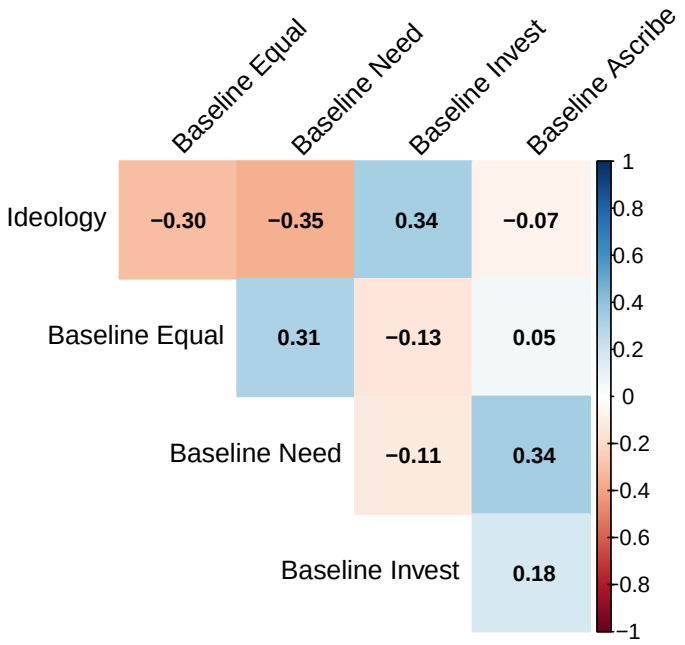



Figure 1.5: Correlation between baseline fairness perspectives and political ideology. Moderate relationship is shown.

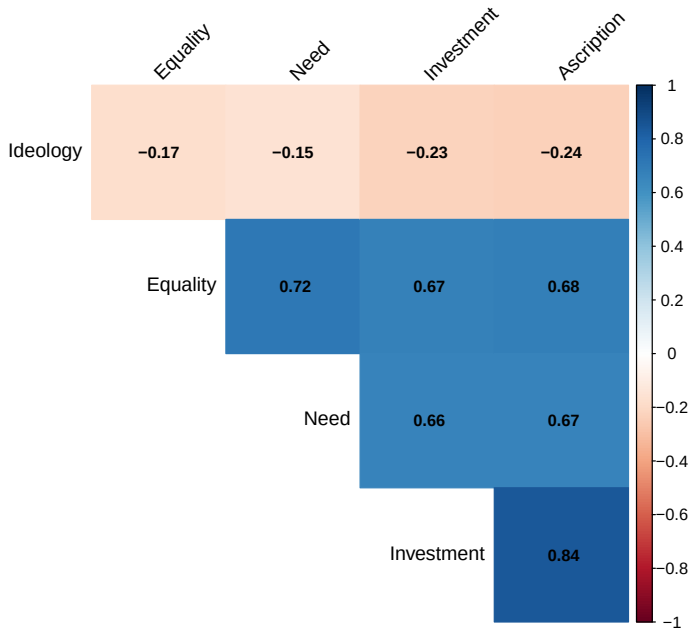
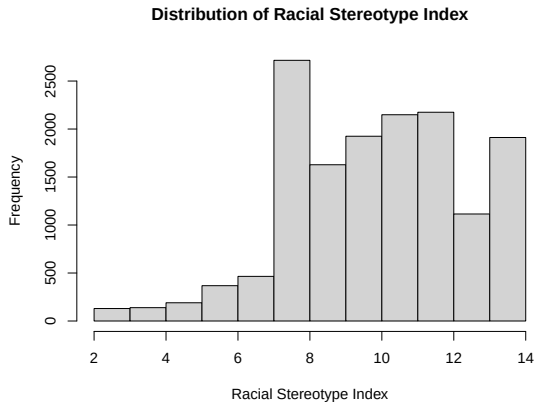



Figure 1.6: Correlation between outcome fairness perspectives and political ideology. Generally, a weak relationship is shown with ideology.

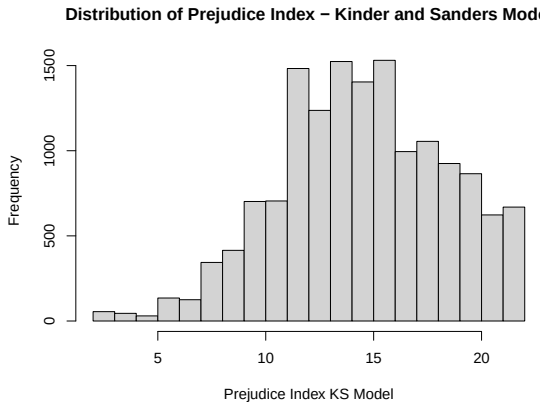
### 1.5.7 Views about Fairness are not Masking Symbolic Racism

Next, I examine symbolic racism and racial resentment [48, 45, 46, 77]. The histogram in the left panel below depicts the distribution of scores on the prejudice index following the methods of Carmines et al. (2011) [48]. The index is composed of the two racial stereotype questions included in the survey. The right panel uses the coding method of Kinder and Sanders (1996) [46]. Lower scores corresponded with more negative feelings towards Latinos. Descriptively, very few respondents can be described as holding high prejudice toward Latinos.[19]

[19]Measuring prejudice in survey research can be susceptible to social desirablity bias. It is possible that Americans attitudes about redistribution are plagued by civic and moral assumptions made about non-White groups, as argued by Kinder and Sears (1981) [45]. Views about the fairness of redistributing resources may help identify this without explicitly mentioning race. This is particularly true of experimental designs testing fairness views in the context of immigration [15].




(a) Carmines et al. Method



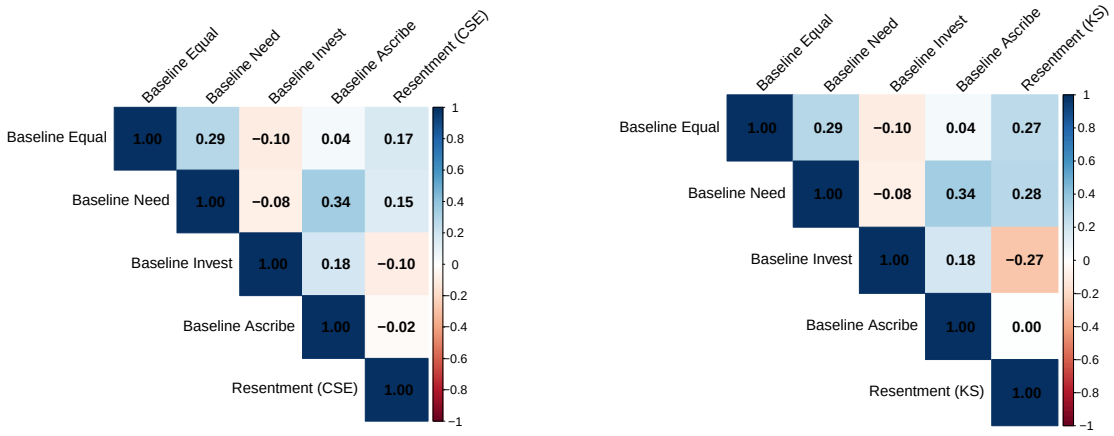

(b) Kinder and Sanders Method

Figure 1.7: Distribution of Racial Prejudice Index Scores - Comparison of Two Measurement Approaches

As perceptions of fairness could be influenced by general orientations about in-group and out-group benefit access, I also examine the Pearson correlations between the two racial prejudice indices and the four baseline perceptions of fairness. Results reveal a weak relationship, indicating that general perceptions of fairness have little relationship with negative racial attitudes toward Latinos. It provides further evidence that these are distinct concepts. However, comparing the two figures, there is a stronger relationship between the fairness dimensions and racial resentment as measured by Kinder and Sanders (1996). Recall the Carmines et al. (2011) approach only uses the stereotype questions, while Kinder and Sanders (1996) include the racial resentment items that Carmines et al. (2011) contend better align with conservative ideology [48]. Because the results have shown that the fairness items have a moderate correlation with ideology, this provides additional suggestive evidence that Kinder and Sanders' (1996) method is capturing elements of ideology in addition to racial stereotypes [46]. While there is little relationship between the fairness views and racial stereotypes, the relationship is stronger

when the index includes resentment. Notably, the ascriptive view of the fair allocation of resources has essentially no relationship at all with either racial prejudice scale. In sum, the lack of even a moderate relationship between racial prejudice, measured two different ways, and the fairness dimensions provides further evidence of its distinction as a separate construct.

**Correlation between Racial Prejudice and Baseline Fairness Items**




(a) Racial Prejudice (CSE) (b) Racial Prejudice (KS)

Figure 1.8: Pearson correlations between racial prejudice measures and baseline fairness items. The left panel uses the Carmines et al. (2011) measure (CSE), while the right panel uses the Kinder and Sanders (1981) measure (KS). In both cases, correlations are weak, suggesting that baseline fairness perceptions capture a concept distinct from racial prejudice.

### 1.5.8 Near Zero Relationship with Zero-sum Thinking

Next, the majority of respondents do not view the world through a zero-sum lens. Just over 5% of respondents strongly agree with zero-sum statements using the Chinoy et

al. (2026) measurement approach [54]. The results of the correlation between zero-sum thinking and the fairness dimensions finds nearly zero relationship across the board. The investment dimension has the strongest relationship, however this is practically negligible. Overall, this suggests that agreement with the zero-sum thinking index has little to no relationship with agreement with dimensions of fairness and further provides evidence of the dimensions as unique constructs. The relationships between the fairness dimensions and the modified zero-sum thinking scale are even weaker.[20]

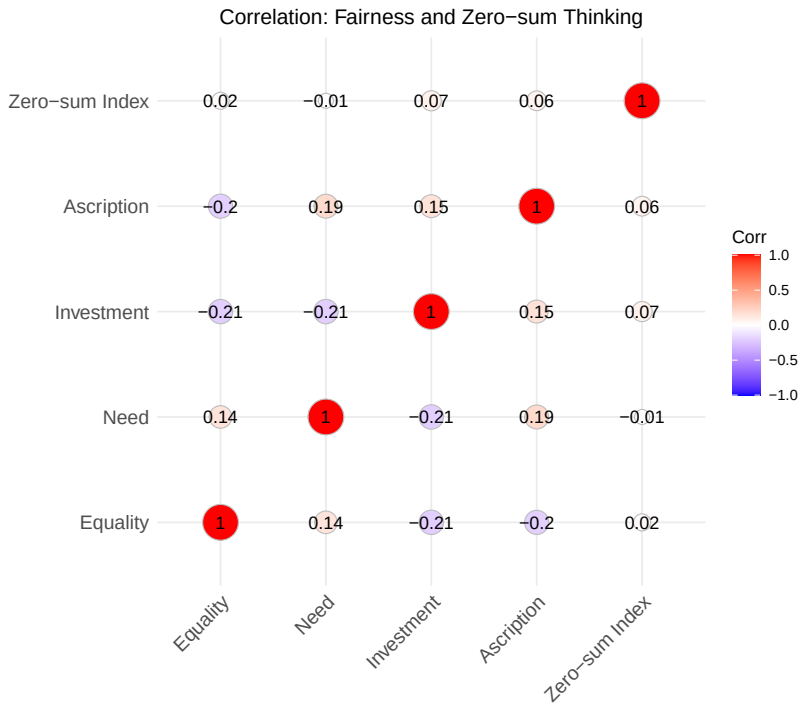



Figure 1.9: Correlation between fairness items and zero-sum thinking.

### 1.5.9 Weak Relationship with Humanitarianism

Finally, just over half the sample strongly agreed with all five humanitarian statements, indicating that many hold humanitarian values.[21] Humanitarianism is shown to

[20] See Appendix A.4.
[21] See Appendix A.3.4 for distribution.

have a weak relationship with dimensions of fairness. Found at 0.27, the strongest relationship is between need and the H-E Index. This is as expected because the need perspective values equity. There is also a weak, negative relationship between investment and the H-E Index. As investment values the contributions of people, I would not expect there to be a positive correlation between the items, suggesting the relationship moves in the correct theoretical direction. Additionally, unlike the MDS, the items are measured at a general level like the fairness items. Because of this, the relationship is stronger than what is observed between fairness and the MDS. Although the correlations nearly rise to a moderate level, they are ultimately within range to be considered weak. I can conclude the fairness dimensions are distinct from an attitudinal orientation towards humanitarianism.

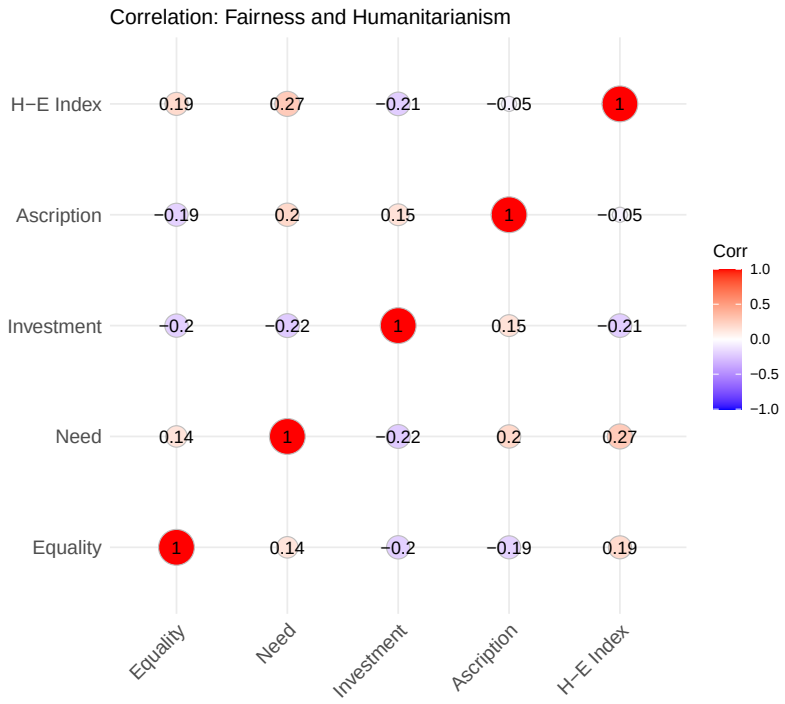



Figure 1.10: Correlation between fairness items and humanitarianism.

## 1.6 Discussion

Related studies have examined broad moral values [78], humanitarianism [57, 79], empathy [80], and cognitive frames [54], however little work has explicitly unpacked the multidimensional nature of fairness. This analysis has provided numerous checks and has validated the multidimensional measurements of fairness. I show that each dimension of fairness is unique from the other dimensions, as well as that they are distinct from other existing related measurements. The strongest relationship is between egalitarianism and the equality and need dimensions of fairness which emphasize different perspectives of equal treatment and allocation of resources. Despite the moderate convergence on these items, they fail to reach a strong range of correlation and all other tested scales and items find little to no relationship. This suggests that views about fairness may have stronger ties to beliefs about equality above all else, but that a multidimensional development of fairness goes beyond this conceptualization. The ascription perspective consistently showed limited potential. It did not predict immigration policy attitudes and often had no relationship with any of the examined scales.[22] Because of this, future work may consider removing it as tested dimension of fairness, especially if space constraints in a survey are considered. At the same time, future work could further analyze ascription, as well as the other three dimensions, by building self-contained multi-item indices, which could then be subjected to confirmatory factor analysis to assess whether items within each fairness dimension load onto a single coherent factor.

The results have established a foundation for the utilization of different conceptualizations of fairness in other issue areas such as policing, criminal justice, housing, and climate policy. Each of these domains involve distributive questions, making the framework developed here a natural fit. Future work could also extend the measurement to

[22]Further dissection of ascription by subgrouping respondents by partisanship did not yield illuminating answers as to why it is insignificant. See Appendix A.6.

countries beyond the United States to assess their comparative nature, as fairness norms likely vary cross-culturally in ways that may produce meaningfully different relationships between fairness principles and policy attitudes.

## 1.7 Conclusion

This paper has done three things. First, it has provided evidence that these fairness measurement items are not tapping into a single latent construct. Beliefs about fairness are *not* unidimensional. Second, it has demonstrated a differential and significant relationship among three of the four fairness dimensions with general immigration attitudes. This establishes it as an important concept worth researcher attention in migration studies. Finally, it has shown that these dimensions are distinct from seven pre-existing, related concepts and measurement scales. Drawn from theory, the paper provides ready-to-use measurement items of fairness perceptions in a general context, as well as for specific immigration-related contexts. This conceptual framework can be extended to other policy domains and tested in comparative cases.

# Chapter 2

# What Makes Policy Fair? Evidence from U.S. Immigrant Integration Policy and Public Opinion

## 2.1 Introduction

In December 2022, *Newsweek* ran a headline asking, "Why are we spending millions housing illegal migrants while Americans go homeless?"[1] This post occurred amid the influx of asylum seekers bused from southern states to New York City and other sanctuary cities, drawing national attention and raising the issue's salience.[2] Headlines like this can generally be considered anti-immigrant for their suggestion of citizen prioritization and

[1]See Appendix B.10 for other examples of media coverage and a link to this article.

[2]Immigration was not only a top three issue according to Americans in Gallup polling, but even repeatedly outranked the economy, inflation, and government as the most important problem from 2022-2025.

dog-whistle terms like "illegal." However, categorizing opinions through a pro and anti-immigration binary obscures alternative interpretations of such sentiments. Already in the midst of a housing crisis, New Yorkers faced incredibly expensive housing costs while migrants were met with free hotel accommodations and shelters. At the same time, some migrants slept on the streets when there was nowhere left to go. Either way, many New Yorkers were angry.[3] Within a year of the crisis, the majority of New Yorkers expressed disapproval of how the city was handling the situation and most were in favor of reducing the flow of migrants.[4] This majority included many of those typically considered "pro-immigrant," such as liberals, Democrats, and racial and ethnic minorities. What explains immigration attitudes such as these? One explanation could be that when exposed to a greater quantity of migrants, New Yorkers became more xenophobic. Another possibility could be that migrants' use of city services posed an economic challenge by straining public resources and provoking animosities. However, I contend that these explanations are insufficient. Rather, I propose that immigrant integration policy design choices affect perceptions of fairness, a moral lens that goes beyond conventional debates.

Accounts for immigration attitudes abound. This large area of research is generally distilled into explanations of cultural and economic threat. The negative effects of aspects such as ethnocentrism, prejudice, and norms provide evidence for cultural threat explanations [81, 82, 83]. Meanwhile, material features like fears of labor market competition, fluctuations in wages, and fiscal burdens on public resources are examples of economic threat [84, 85, 86, 87, 88]. Experimental work has engaged this debate in the United States. Hainmueller and Hopkins (2015) show that norms-based and sociotropic reasoning explain American attitudes toward immigrants, meaning adherence to American societal norms like following the law and speaking English are important [89]. Adida

[3]See "As Crisis Grows, All of New York's Migrant Plans Are Met With Outrage" in *The New York Times*.

[4]See the results of polls from the Siena University Research Institute and Manhattan Institute.

et al. (2019) find that refugees perceived to have better odds of integrating into the United States are preferred and Brader et al. (2008) show that White opposition to immigration increases when the costs are associated with Latino immigrants [90, 91].

However, with existing immigration attitude debates largely framed as xenophobic cultural reactions or economic self-preservation, perceptions of fairness constitute an understudied and undermeasured moral dimension in explaining immigration attitudes. Moreover, a large body of work has explained attitudes toward migrants, while much less research has explained how immigration policy directly affects attitudes. Deservingness has been used by lawmakers, activists, and organizations to motivate public support for policies like Deferred Action Against Childhood Arrivals (DACA) and the Development, Relief, and Education for Alien Minors (DREAM) Act [5]. This moral lens has been shown to influence public preferences in immigration [4], political membership [7], and welfare policy [6]. However, fairness is distinct. Dictating procedural expectations of reciprocity and value, fairness has been neglected as a factor influencing immigration attitudes. Conceptually challenging, fairness varies by person and context. In general, fairness is defined as a thought process through which individuals assess proportionality and reciprocity norms, meaning benefits are proportional to effort and uncooperative behavior is penalized [1]. In the case of immigration, some could believe that immigration policy is unfair because it is too generous, while others could believe it is unfair because it is not generous enough. These expectations flow from perceptions of proportional investment and cooperative reciprocity, which together constitute a sense of fairness. Yet, a unidimensional measurement of fairness could identify two people as agreeing that something is unfair, despite their diametrically opposed reasons. Because of this, a multidimensional measurement of fairness is necessary to better understand attitudes.

Using an original nationally representative sample of 3,064 U.S. respondents from

April 2025, I utilize a pre-registered[5] conjoint experimental design to test how state immigrant integration policy[6] features affect perceptions of fairness and policy support. I ask respondents to not only consider the policy attributes like social services and eligibility requirements, but also to factor in considerations of who in particular stands to benefit from the policy. This prompts respondents to weigh both economic and cultural threats simultaneously while assessing moral judgments and policy support. This design can be used to identify the features of immigrant integration policy that provoke especially positive or negative attitudes. Drawing on the limited existing work on fairness [14, 1, 12, 17], I develop unique outcome measurements of fairness that unpack different dimensions of the concept. Because fairness can be conceptualized in many ways, this paper contributes theoretically and empirically to the understanding of how people assess fairness in immigration-related policy. As our individual beliefs about fairness can be shaped by a variety of factors, the measurements employed in this study assess fairness in the experiment and at baseline without explicitly using the word fair.

I find that state policies that offer social services to immigrants and include eligibility criteria increase perceptions of fairness and policy support. As social services are costly publicly funded programs, this undermines economic threat-based arguments about immigration attitudes. In the majority of scenarios tested, immigrants' region of origin does not negatively affect perceptions of fairness or support, providing only limited evidence for xenophobic cultural threat-based explanations. Furthermore, little evidence for racial prejudice in motivating policy support or influencing perceptions of fairness is found, even among respondents with higher levels of prejudice.[7] Although Americans are found

[5]Pre-analysis plan linked **here**. All analyses in this paper were pre-specified unless otherwise stated.

[6]Immigrant policy refers to state-level policies that affect immigrants. Following T. H. Marshall's conceptualization, many of these policies relate to providing basic social rights [92]. In other cases, it can empower law enforcement or limit social integration. In contrast, immigration policy refers to federal-level policy that affects the flow of immigrants.

[7]See Appendix E for thorough detail of these results. Prejudice was measured two ways [46, 48]. Findings hold for both approaches.

to be supportive of providing social services to immigrants, the results also emphasize the importance of eligibility criteria. Regardless of the region of origin, immigrant utilization of services is considered fair, broadly defined, when these policies require a background check and legal status, highlighting security concerns among Americans when weighing the terms of inclusion.

In the following sections, I detail common existing explanations of immigration attitudes, conceptualize fairness, and outline the experimental design. Then, I present the results and examine heterogeneous treatment effects by baseline perceptions of fairness and political ideology.

## 2.2 Common Explanations

### 2.2.1 Cultural Threat

Drawing from social identity theory, perceptions of cultural threat among the dominant group can be triggered by out-group differences such as race, religion, ethnicity, language, and beliefs [93]. In this view, restrictive immigration attitudes are driven by the perception that immigration poses a threat that would weaken the cohesiveness and distinctiveness of the dominant group [94, 95, 96]. Attributes such as race are ascribed, meaning they are assigned rather than chosen, while others, like norms and values, are learned through socialization. Because of this, cultural threat work can be sorted into studies that emphasize prejudice and those that focus on norms.

Prejudice-based explanations about attitudes toward immigrants and restrictive immigration policy is largely rooted in racial attitudes and xenophobia. In this perspective, immigration-related beliefs stem from ethnocentrism and symbolic racism [45, 97, 46, 98]. For example, individuals who hold negative stereotypes about immigrants [81] or more

biased implicit associations [99] express greater opposition to immigration. Ethnocentrism has a strong relationship with opposition to increasing immigration levels and support for requiring immigrants to wait for government benefits [97]. This perspective also emphasizes the importance of ascriptive features such as skin tone and ethnicity. Prior empirical work, however, has shown that ascriptive features like skin tone do not meaningfully influence immigration-related attitudes [100, 101]. Cultural distance and prejudice are of course not limited to skin tone though. Other work has shown that immigrants from the Middle East face negative stereotypes about religion and terrorism [102, 103, 104, 105].

Norms-based arguments emphasize that Americans judge immigrants and immigration policy based on its adherence to American identity norms [106]. Some Americans worry that immigration might alter the national identity [82, 81, 107]. As a result, attitudes toward immigrants might depend on whether they are seen as upholding American norms [108]. American norms are difficult to establish given the pluralist and racially hierarchical origins of the country, however central tenets most Americans agree upon is the need to assimilate by speaking the English language [109, 110] and embracing basic civic principles such as law-based order [111]. Violations of norms and law are shown to matter a great deal to Americans [89]. Furthermore, Americans have stronger negative attitudes toward unauthorized immigrants than authorized immigrants [112, 108]. Rooted in principles of equality, liberalism, rule of law, civic responsibility, and self-reliance, these studies speak to the importance of American civic nationalism in shaping attitudes [17].

### 2.2.2 Economic Threat

Economic and material threat asserts that groups are concerned about their individual and collective welfare [113]. The introduction of new groups incites competition over limited resources [114, 115, 116]. This can cause concern over macro-level economic conditions, such as the state of the economy, as well as micro-level worries like individual labor market competition [117].

Ethnic diversity and immigration have been found to be influential to attitudes toward economic redistribution [118, 119, 120, 121, 122]. The social construction of who primarily benefits from policy can affect political behavior and attitudes [123], as can welfare regimes' influence over perceptions of inclusion and group membership [124]. For example, comprehensive welfare regimes are associated with more positive views of immigration in Europe [125]. Welfare chauvinism in general is the belief that welfare services should be restricted to in-group members within a country [126]. In some cases, this perspective can increase support for far-right parties [127].

Attitudes about immigration can also be shaped by a perceived fiscal threat on public resources [128]. In particular, Americans are concerned about immigrants using welfare [129] and paying their fair share of taxes [130]. Experimental research has shown that fiscal threat increases assumptions that immigrants will benefit from welfare policy at the expense of native-born Americans [128]. Alesina et al. (2023) show that immigrants are perceived as being more dependent on welfare than native-born Americans, despite this being untrue [131]. In the United Kingdom, many citizens resent immigrants' access to welfare, applying both racial and immigration status discrimination [132].

While compelling in providing answers to what kinds of factors influence attitudes toward migrants, almost no work to date has examined the multidimensional nature of fairness in the context of immigration. Influencing our everyday judgments, fairness is a

critical topic with implications for satisfaction, institutional trust, legitimacy, and social cohesion [133, 134, 135]. I propose and test the theory that integration policy can shape perceptions of fairness. However, determining what is fair is difficult when different factors, from historical racial marginalization to political ideology, guide our morals and beliefs systems. Because of this, I draw heavily on theory to conceptualize fairness and a subsequent measurement approach.

## 2.3 Conceptualizing Fairness

Research on the distribution of goods in society, at times referred to as distributive justice, have shown that a consensual normative framework for assessing fairness exists [62, 63, 64]. Despite being a core aspect of social life, defining fairness is difficult because it varies by person and context [136]. Fairness beliefs provide individuals with a world-view through which to interpret and choose policies that maximize fairness as they see it [1], but this means people could believe a policy is unfair for different reasons. Some could believe that current immigration policy is unfair because it is too restrictive, while others could believe it is unfair because it is not restrictive enough. Simply asking a respondent whether they think a policy is fair or unfair not only misses this nuance, but actually results in systematic measurement error. A liberal and a conservative could agree that an immigration policy is unfair, but for drastically different reasons. Conceptual clarity is necessary to provide answers as to "what is fair" and add more precision to our understanding of policy attitudes. To navigate this challenge, I utilize Hochschild's definition of fairness (1981). She identifies at least four perspectives of fairness in the context of economic redistribution, which I adapt and apply to immigration. This adaptation results in four novel measurements of fairness assessments in the context of immigration.

First, fairness is broadly defined by principles of equality and differentiation [12].

There are two additional categorical perspectives: need and investment. Strict equality asserts that all community members deserve equal shares of a good being divided. In this view, people are equal in virtue to be fully cooperating members of society, entitling them to the same basic rights, liberties, opportunities, and protections. Those that meet this definition are symmetrically situated, which establishes fair terms for social cooperation [65]. The need perspective asserts that all members of a community deserve equal satisfaction. This perspective is similar to equity in that it sees that it is fair to give a bit more of a good to some groups based on need in order to achieve equality. Investment perspectives see that community members deserve rewards in proportion to what they contribute. Under this view, people think it is fair that some people get more than others based on what they have contributed to the community. Ascription perspectives assert that community members deserve rewards based on natural traits. Ascription is pure differentiation. Believers of this perspective would agree that some groups or people deserve more than others based on fixed, ascribed traits and that this is inherently fair. I refer to these four dimensions as perceptions of fairness.

Research from evolutionary psychology tells us that the human mind contains content-dependent cognitive adaptions for social exchange [66]. Individuals apply different perspectives of fairness throughout their life and for varying social domains. In other words, the same person could express all four viewpoints to four different issues within minutes. This person could believe it is "fair" to offer legal rights to all (equality) and provide food aid to low-income individuals (need). They could also believe it is "fair" that a university pays a tenured professor more than an first-year graduate student (investment) and that male athletes be paid more than female athletes because they believe men have greater athleticism than women (ascription). Overall, most people generally use principles of equality in the social and political domain, while they use differentiation when it comes to economics [12]. These four dimensions provide leverage to analyzing how policy

attributes affect perceptions of fairness.

Because fairness can be viewed many ways, agreement that something is fair may not always equate to policy support. Someone may believe a policy is fair under one perspective, but may ultimately oppose a policy. For example, someone may agree it is fair under the need perspective of fairness to offer shelter accommodation to asylum seekers. However, this may not translate to policy support due to self-interest, as well as divergence between stated versus revealed preferences. We see this kind of tension play out frequently in support for affordable housing among "NIMBYs" [137].[8] This mismatch is at the root of the fairness balancing act and emboldens the need to compare fairness beliefs alongside policy support. Abraham (2010) similarly describes the liberal dilemma in the context of immigration as an interest to maintain equality for all on one hand, and the interest to preserve equity through redistribution on the other [138]. This describes common challenges in high-immigrant receiving liberal democracies and leads us to questions of what may influence differentiation perspectives and support.

Outside of absolute equality, perceptions of deservingness influence whether something is considered fair. Many studies have documented the significance of the reciprocity norm when community members are engaged in cooperative goals [67, 68]. People contribute to a collective goal if they feel others are not free-riding. They can punish free-riders by excluding them from accessing the goods generated by cooperation [69]. People are more likely to allocate resources if they perceive a good reason for the need, or if the aid satisfies the reciprocity norm [70]. The reciprocity norm is an important expectation for welfare chauvinism, or more broadly parochial altruism, which asserts a fair outcome is one that offers benefits only to group members and excludes nonmembers [71]. People who dislike seeing outsiders treated as insiders will perceive a policy as un-

[8]NIMBY is an acronym for "Not In My Back Yard." It describes people who oppose certain developments (such as affordable housing and shelters) when they're proposed near where they live, even if they might support them in principle.

fair because it benefits "free-riders" [1]. In the context of immigration, factors related to cultural identity, be it law-based, racial, or otherwise, can influence whether new arrivals to a community are perceived as free-riding. Furthermore, those who view immigrants as outsiders will be especially hostile toward state policies that offer public benefits to immigrants.

State policies increasingly offer forms of social services to immigrants and states stipulate different requirements for policy eligibility.[9] Different forms of social services, exclusion criteria, and the cultural distance of the group receiving the policy benefits can provoke different perceptions of fairness and policy support. Policies that offer hotel vouchers to provide short-term housing to immigrants and subsidized integration programs are both forms economic redistribution, but could trigger substantially different reactions. Likewise, employment verification and legal immigration status are two forms of eligibility criteria with potential disparate impacts on fairness perceptions.

### 2.3.1 Expectations

Based on the findings of prior work and the development of my theory, I expect that policies which *limit* social services and *require* eligibility criteria will be viewed as fair, broadly construed, and will receive greater support. Among the four outlined perceptions of fairness, I anticipate that policies that offer social services to immigrants will reduce agreement with equality, investment, and ascription perceptions of fairness, but will increase agreement with the need perspective.

Furthermore, different aspects of eligibility criteria may map onto different perceptions of fairness. For example, requiring proof of employment to access benefits will likely affect perceptions of fairness under the investment perspective, which values contribu-

[9]From 2008 to 2025, there were at least 4,731 bills that moved through state legislatures. Bills are tracked through the National Conference of State Legislatures (NCSL). See Appendix B.15 for more detail.

tion. As many U.S. welfare programs require some form of legal status to gain access, this policy component may appeal to the equality perception of fairness, which values treating everyone the same. At the same time, some policy components could influence multiple perceptions of fairness. Policies that do not require a legal status may be considered fair under the need perception, as it could help immigrants without a documented legal status, who may generally be assumed to be more vulnerable. Likewise, policies that are limited to asylum seekers may also appeal to need perceptions. When considering who the policy primarily benefits, immigrant groups from outside of Europe may generally be considered needier.[10] However, it could also influence perceptions of fairness based on ascription which asserts some naturally determined groups are entitled to more than others. Assuming the social hierarchy assigns European immigrants as higher status than all other immigrant groups, a greater sense of fairness under the ascription perspective should be observed when the policy benefits European immigrants. These considerations inform the experimental design.

## 2.4 Experimental Design

This paper uses a single-profile conjoint design to identify the effect of state-level immigrant policy attributes on perceptions of fairness and support. Single-profile designs present the respondent with one randomized profile at a time. In contrast to a forced-choice or pairwise design, a single-profile conjoint allows respondents to express evaluations in absolute terms without being held relative to another randomized profile. For this project, this maintains greater ecological validity as Americans in reality do not often evaluate policy options relative to another policy, but rather express views for or against policies that are created in the legislature without direct constituent input. In

[10]There are of course exceptions to this, such as Ukrainian refugees and other marginalized European groups across socioeconomic lines.

addition to ecological validity, there are also response quality reasons for the single-profile design choice. As the profile contains seven attributes and five outcome questions, it is a simpler cognitive task for the respondent. Conjoint designs allow analysis of the effects of multiple variables at the same time. Because the levels of the attributes are randomly assigned, I can identify the average marginal component effect (AMCE). This design can reduce the likelihood of bias in a socially desirable direction [139] and is well externally validated under similar experimental design conditions [140].

The policy combinations constructed in this study reflect real-world scenarios in subnational politics. In the conjoint design, I ask respondents to imagine that their state is adopting a new immigration-related law. A randomly combined policy with select eligibility criteria and policy features is presented to the respondent (Table 2.1).[11] Respondents repeat the conjoint five times with a new randomized policy generating each time. All levels have equal probability of random assignment per attribute and the attribute ordering is fixed to reduce respondent fatigue. Attributes contain two to four levels each. In total, there are 864 possible combinations of the policy features and levels. Conjoint experiments could theoretically contain dozens of attributes, however larger conjoints increase risks of satisificing [141], meaning respondents may rush through a survey more quickly to reduce the cognitive burden by straightlining or skipping. More complex conjoints also reduce statistical power. Each attribute could have many more levels, but the addition of each new level reduces the sample size presented with each treatment. Given these considerations, Table 2.1 details the carefully chosen features and levels of the conjoint, as well as the baseline comparison levels for each feature.

[11] See Appendix B.1 for example.

| Features | Levels |
|---|---|
| **Legal Eligibility** | • No legal status requirement *(baseline)*<br>• Must be an asylum seeker<br>• Must have proof of legal status |
| **Work Eligibility** | • No employment requirement *(baseline)*<br>• Must have proof of employment |
| **Security Eligibility** | • No background check required *(baseline)*<br>• Must pass a background check |
| **Primary Beneficiaries** | • European immigrants *(baseline)*<br>• Middle Eastern immigrants<br>• Latin American immigrants<br>• African immigrants |
| **Cash Assistance** | • None *(baseline)*<br>• Monthly food aid<br>• Monthly debit of $200 |
| **Housing Assistance** | • None *(baseline)*<br>• Shelter accommodation for one month<br>• Hotel vouchers for one month |
| **Program Creation** | • Low-cost U.S. history lessons *(baseline)*<br>• Low-cost English lessons |

Table 2.1: Features and levels of the conjoint design.

Legal, work, and security eligibility are all features of exclusion criteria, while cash, housing, and program creation are components of social services. In all cases except for the program creation feature, the baseline is "none." The program feature uses U.S. history lessons as the baseline to ensure the randomization creates at least a minimal

policy change in the proposal, as there is a chance that all other attributes could be "none." While housing and cash assistance are both forms of welfare benefits, they are distinct. Housing is a scarce and rivalrous good. It is finite and can only be used for shelter. Cash in the form of a debit payment is a highly flexible good that can be divided many different ways, while food aid is specifically tied to nutritional needs. Furthermore, cash aid is theoretically non-rivalrous, but many citizens perceive it as draining public resources. In any case, these hypothetical forms of aid are based on real policies that states and cities have adopted in assisting migrants. Likewise, the eligibility criteria reflect similar rules that already exist for both migrants and native-born citizens alike. Although asylum seeker status is a legal status, I include it as a separate level to examine if there are distinct reactions to asylum seekers given recent events and misperceptions about immigration are common [142, 143]. The primary beneficiary feature prompts the respondent to consider who benefits most from the proposed policy. Many U.S. immigration policies have historically benefited particular groups, sometimes intentionally and other times by happenstance based on settlement patterns. The choice to use region of origin instead of a specific country reduces idiosyncrasies that may be observed from any one particular country. While region is broader measurement, the unique conditions of Ukraine relative to Syria are not the estimated effects of interest in this study. Rather, I aim to assess general cultural distance through this attribute, with European immigrants assumed to be perceived as having less cultural distance than immigrants from other regions of the world.

### 2.4.1 Outcomes and Estimation

Immediately following the conjoint, respondents were asked to answer five questions. The first four were about perceptions of fairness, while the fifth was about support for the

proposed state policy. The fairness outcomes are operationalized through the previously defined four conceptions of fairness. Respondents were asked to select their level of agreement on a 5-point scale for each of the fairness statement measurements (Table 2.2). For policy support, respondents were presented with a binary yes or no question.

| **Measurement Target** | **Item Wording** | **Response Options** |
|---|---|---|
| Equality Principle | This policy treats immigrants the way everyone deserves to be treated. | 5-point Likert |
| Need Principle | This policy helps immigrants in greatest need. | 5-point Likert |
| Investment Principle | This policy helps immigrants who are going to contribute to the country. | 5-point Likert |
| Ascription Principle | This policy helps immigrants who are going to fit into the country. | 5-point Likert |
| Policy Support | Would you want your state to adopt this policy? | Yes / No |

Table 2.2: Dependent variables following conjoint iteration. Respondents did not see the measurement target.

I follow a standard approach for analyzing conjoint experiments, using least squares regression to estimate the average marginal component effect (AMCE) for each attribute level [144]. In the estimation, the AMCE represents the average difference in the probability of supporting the policy or agreeing with the fairness perspective statements when comparing different levels of a given attribute relative to a set baseline. The average is taken over all possible combinations of the other policy attributes.

### 2.4.2 Data

The sample was drawn from the U.S. general population and was collected by Forthright, a web-based platform utilizing a survey constructed in Qualtrics by the author. The survey contained two attention checks. One came at the very beginning of the survey and the other occurred right before the experiment. Failure on either attention check resulted in immediate closure of the survey. To qualify, respondents needed to live in the United States and be at least 18 years old.[12] The qualification and dropout rate were 87.4% and 4.9% respectively. The median duration of the survey was 9.5 minutes and 3,064 respondents completed the survey. The survey was first piloted in mid-April 2025 and fully launched between April 23 and April 30, 2025. Because the respondents repeated the conjoint experiment five times, there are over 15,000 observations which are clustered by respondent. Ex-ante power analysis indicates the sample size is sufficient for a very well powered experiment.[13] It is nationally representative of racial and ethnic quotas as determined by the U.S. Census Bureau's 2023 American Community Survey (ACS). Sample demographics are consistent with the ACS in almost all sociodemographic metrics. Foreign-born respondents are underrepresented, which is typical of selection bias found in online samples.[14]

[12]The study was exempted by UC Santa Barbara IRB on April 10, 2025. Participants gave informed consent to qualify.

[13]With an assumed effect size of 0.05, five repeated conjoint profile assessments, and attributes with at most four levels, a sample of 3,000 approaches 100% power.

[14]5.45% of the sample is foreign-born, well below the national rate of roughly 13.9%.

## 2.5 Results

### 2.5.1 Effects of Policy Attributes on Support and Fairness Views

The outcome fairness perception with the highest average level of agreement is the investment perception, followed by ascription, equality, and need respectively. On average, this means that policy scenarios in the conjoint elicited stronger agreement with the perception that the policy will "help immigrants who are going to contribute to the country." Respondents supported policy adoption in 38.2% of policy scenarios.[15]

Utilizing the full sample with 15,072 observations clustered by respondent, the dots in Figure 2.1 indicate point estimates and the lines illustrate 95% confidence intervals for the AMCE of each attribute value on the probability that respondents would want their state to adopt the policy. Positive coefficients indicate greater probability that a respondent preferred that their state adopt a given policy. For example, policies that offer food aid to immigrants are 6.2 percentage points more likely to be supported than policies that offer no aid. Figure 2.2 displays the effect of each attribute on the respondents' perceptions of fairness using the four different outcome measurements of fairness. Positive coefficients indicate a greater probability of agreement that a policy with that feature is fair under a particular dimension of fairness.

Beginning with policy support in Figure 2.1, respondents are more supportive of policies that offer social services and require more stringent eligibility checks. The largest effect is on the preference for policy that requires a background check. All else held equal, requiring an immigrant to be subject to a background check to utilize a given policy increases support by 12.5 percentage points. Respondents were also more supportive of policy that requires proof of a form of legal immigration status and employment verification compared to a policy that does not. Both asylum seeker status and general

[15]See Appendix B.16 for full coverage of descriptive outcomes.

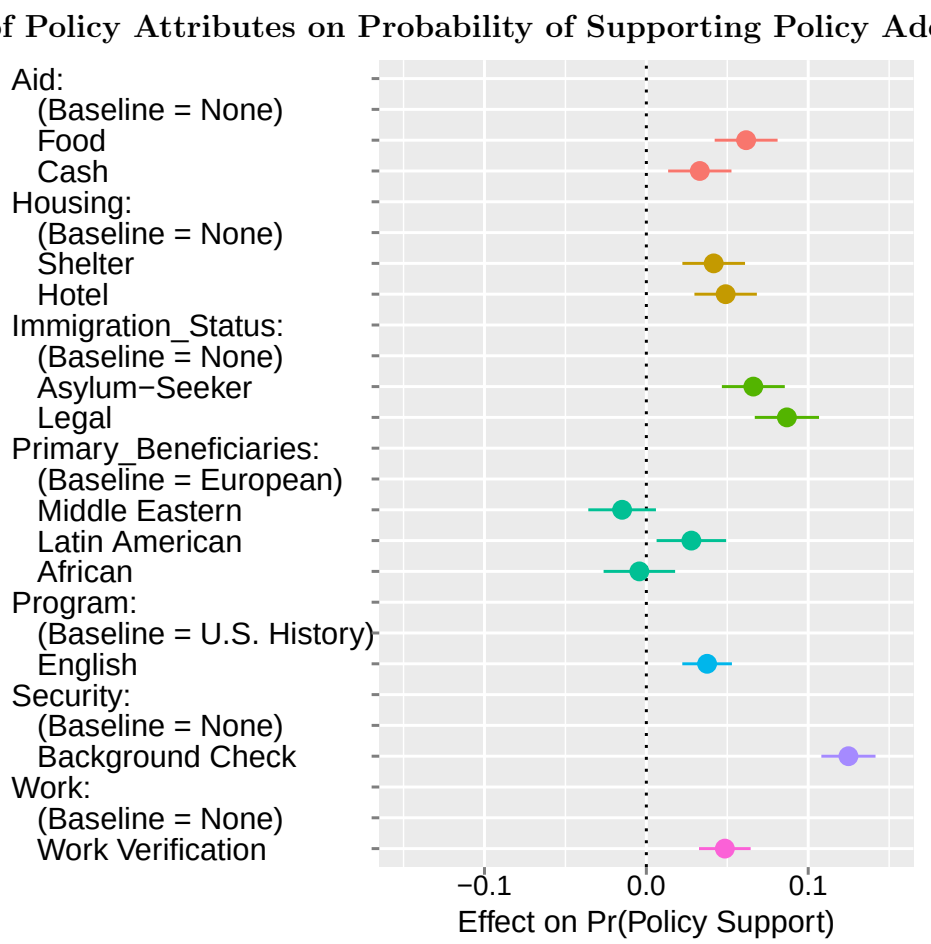
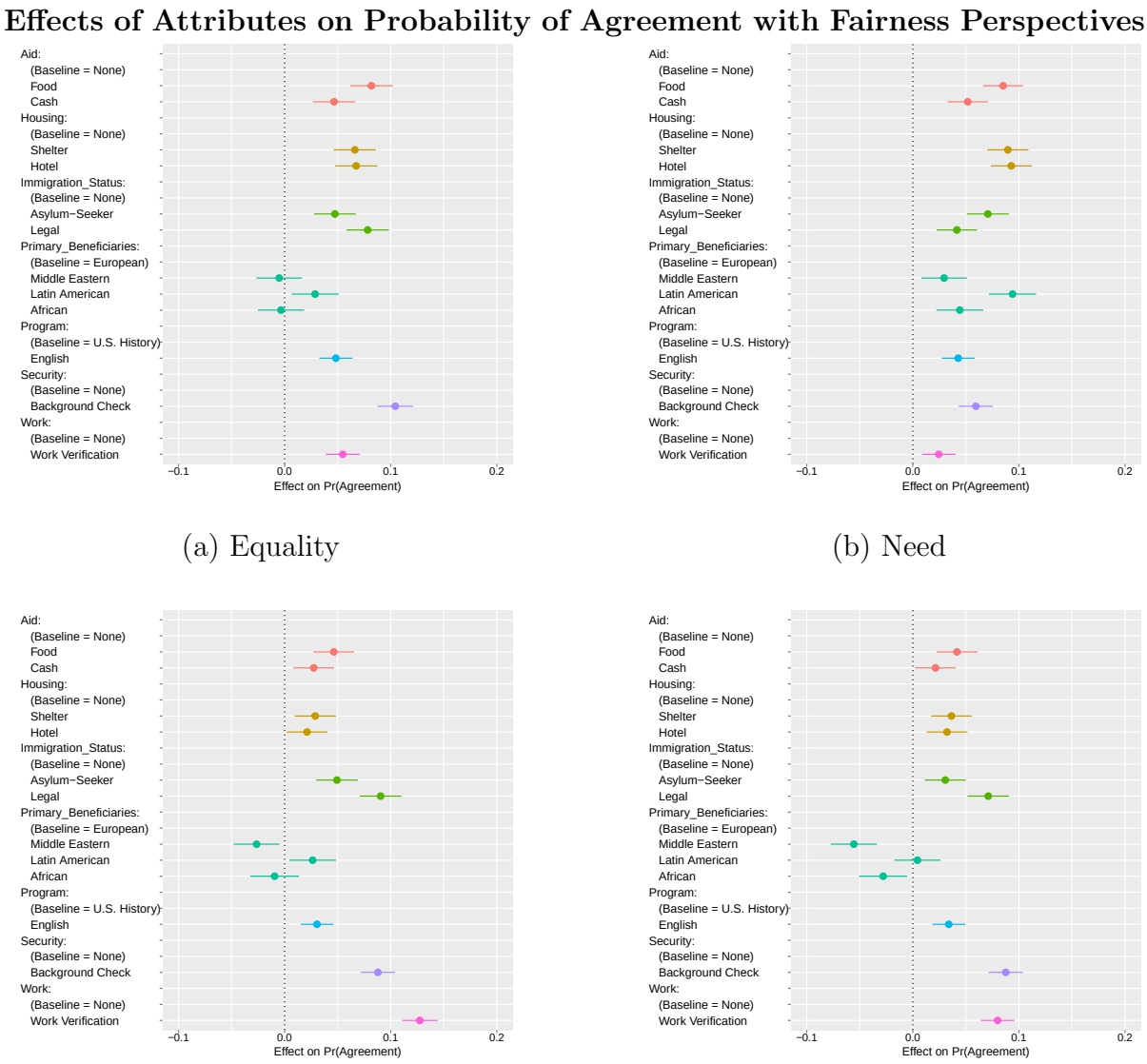



Figure 2.1: Effect of policy attributes on support for policy being adopted in respondents' state. The outcome variable is binary. A positive coefficient means that the attribute level increased the probability that the respondent supports policy adoption. The model includes respondent-level fixed effects and clusters standard errors by respondent.

legal status increase support relative to the baseline of having no immigration status as exclusion criteria. The housing and aid attributes increase support relative to the baseline as well (Figure 2.1). One month of shelter accommodation, hotel vouchers, food aid and a $200 cash debit all increase the probability of support. Respondents also reveal greater support for low-cost English lessons relative to U.S. history lessons. These results show that respondents are supportive of policies that offer social services to immigrants whether it be a scarce good like housing or modest integration program subsidies. The findings for the background check, work verification, and immigration status support my registered expectation that exclusion criteria increase policy support. However, findings in favor of social services are counter to my expectations.

Contrary to emphasis in prior work on the significance of cultural difference, the region of origin among the immigrant group primarily benefiting from the policy does not have a statistically significant effect on policy support on average. Relative to European immigrants, there is no evidence of an effect on support if the primary group receiving the benefits is of Middle Eastern or African origin. The point estimate for Middle Eastern immigrants is slightly negative, while the point estimate for African immigrants is nearly zero. In both cases though, significance is not found. On the other hand, policy that primarily aids Latin American immigrants receives greater support than policy that primarily benefits European immigrants. Overall, these findings are in many ways consistent with Hainmueller and Hopkins (2015) and Haselswerdt (2021) and are in tension with work that shows Americans prefer European, White immigrants [91, 99].




(a) Equality

(b) Need

(c) Investment

(d) Ascription

Figure 2.2: AMCE results by fairness perspective. Overall, social services and exclusion criteria are considered fair through all four dimensions.

Turning to fairness perspectives (Figure 2.2), the main observation across all four fairness dimensions is that social services and exclusion criteria increase the probability of agreement that a policy with that feature is fair.[16] Exclusion criteria on average show

[16]Collapsing the Likert agreement scale into a binary where 1 equals "agree" or "somewhat agree"

the weakest agreement with need-based considerations, suggesting that people are less likely to categorize exclusionary policies as satisfying need-based perceptions of fairness. Instead, exclusion criteria are found to matter roughly just as much as social services, if not more, along the dimensions of equality, investment, and ascription. The effects for social services are greater under the equality and need perspectives than under the investment and ascription views of fairness. Suggesting face validity, employment verification shows the largest effect on agreement that "this policy will help those who contribute to the country." Similar results are shown for those who have proof of legal immigration status. Legal status is important for agreement with the ascription perspective, meaning that not only does having proof of legal status increase the probability of agreement that a policy with that feature is fair, but also that the effect of asylum seeker status verification is weaker than for general legal status. The attribute with the largest effect on support, requirement of a background check, shows the strongest effect with the equality perception of fairness. In addition, the equality perspective results most closely mirror the policy support results. Overall, the imposition of limitations on who qualifies for the policy are viewed as fairer than policies without exclusion criteria under all four perspectives of fairness. This is consistent with my expectations.

The results for the primary beneficiary attribute reveal a distinct pattern. The point estimate for Latin American immigrants is always to the right of African and Middle Eastern immigrants, however statistical significance is not always found. The investment and ascription perspectives detect negative results for Middle Eastern immigrants. For Middle Eastern immigrants, this means that people were less likely to agree that "this policy helps immigrants that are going to contribute to the country" and "this policy helps immigrants who are going to fit into the country." The point estimate for African

was not pre-specified, however it makes interpretation more straightforward. The results using the full scales are qualitatively nearly identical to the binary analysis method.

immigrants are occasionally negative, but only reach statistical significance in the case of ascription. There is null effect for Latin American immigrants in the ascription perspective, but an increase in the probability of agreement in the other three perspectives. Finally, a noticeable feature of the need perspective is that all non-European beneficiary groups are viewed as needier than European immigrants, with the strongest agreement effect on Latin American immigrants. Because three out 12 point estimates across the fairness outcomes detect statistically significant negative effects for two regional groups relative to European immigrants, there is some evidence of xenophobic cultural threat in motivating some perceptions of fairness. However, when considering these outcomes alongside policy support, the primary beneficiaries attribute is generally null and the least important attribute as measured by effect size among the seven policy attributes. Furthermore, there are actually more instances of positive effects for non-European immigrants benefiting from a proposed policy than there are negative ones.[17] This does not dismiss immigrants' region of origin as an important factor affecting attitudes in all cases, but does cast doubt on its significance in the evaluation of fairness and policy support in this context.

### 2.5.2 Heterogeneity by Baseline Perceptions of Fairness

A variety of pre-specified moderators influence the effect of the policy attributes. Here I assess how the attributes interact with different baseline characteristics of the respondents. Unlike the results of the experiment, relationships found in heterogeneous treatment effect analysis are only correlational because they are no longer randomly assigned. Nonetheless, the results detail descriptive associations. The moderators assessed in this study include the respondents' baseline fairness beliefs and political ideology.[18] In

[17] Additional analysis examining respondents with higher racial prejudice also shows that the region of origin is a near negligible attribute for assessing fairness and policy support.

[18] See Appendix B.18 for interaction models.

the Appendix, I also assess racial prejudice, nativity, and partisanship.

Because our perceptions of fairness can vary depending on context, it is important to establish the average perspective a respondent most strongly agrees with. These baseline perceptions of fairness could influence how they approach fairness in immigration-related policy. In this section I compare four general statements about fairness and how respondents' support for policy adoption above and below the average fairness perspective are affected by the policy attributes in the conjoint. The first perspective is general equality. This baseline is collected via a 5-point Likert agreement scale with the following statement: *The human worth of all people is equal and resources should be allocated equally.* With a range of zero to four, I find an average agreement with this statement at 3.04 and a median of three, which corresponds to "somewhat agree." For the analysis, I sort respondents into two groups: those who fall above the average and those who fall below. One of the largest differences between the groups is found among policies that proposed to offer a form of cash aid. For respondents with an above average level of agreement with the equality perspective, providing cash aid increased the likelihood of policy support, while there is no evidence of an effect for the group with below average agreement with this perspective of fairness. People with below average agreement with this statement are relatively less influenced by social service allocation. Respondents with stronger agreement with the equality perspective of fairness are more supportive of allocating housing benefits.[19] In addition, the region of origin for the primary beneficiary group is null across all groups except Latin Americans among the above average agreement group. Exclusion criteria like proof of a legal status, a background check, and employment verification continue to be positively significant for all. Taken together, respondents that were more likely to agree with the equality principle were only somewhat more supportive of social services compared to those with below average levels of agreement.

[19]The finding supports exploratory hypothesis one in the pre-analysis plan.

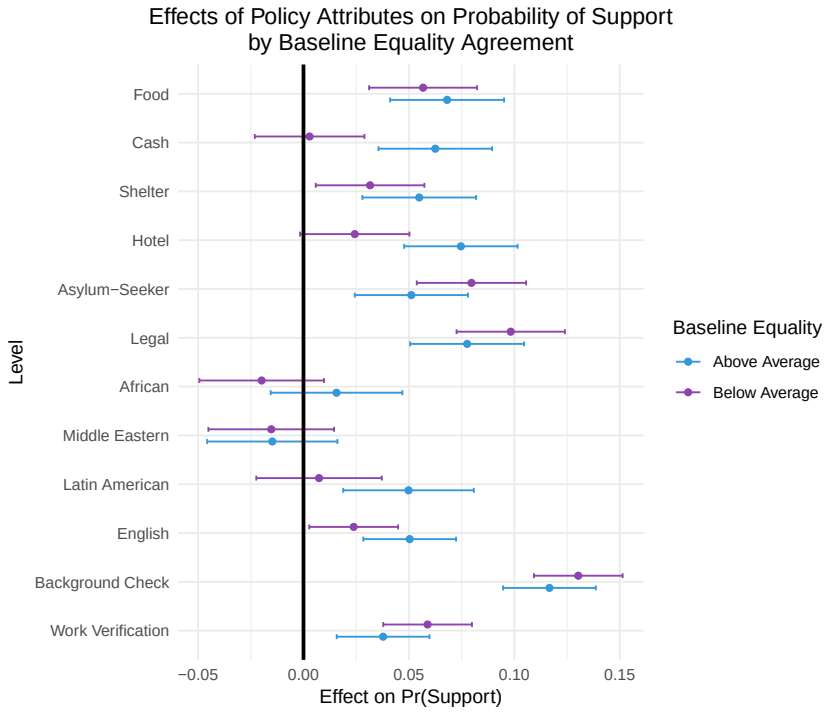



Figure 2.3: Policy support by equality baseline perception of fairness above and below average level of agreement. Those with above average agreement with this perspective revealed higher odds of supporting policy when it benefited Latin American immigrants. Social services had positive effects on support. Exclusion criteria increase support among both groups.

The next general fairness perspective is based on need. The respondents rated their agreement with the following statement: *The human worth of all people is equal, but some people need more resources than others to achieve equality.* The average is 2.80, indicating slightly lower average agreement compared to the equality principle. It has a median of three, which corresponds to "somewhat agree." Among those less likely to agree with the need-based principle of fairness, the allocation of benefits has no evidence of an effect on their policy support. Across all types of social assistance tested, those with stronger agreement with the need perspective, are more likely to support policy

that allocates aid.[20] Exclusion criteria continued to be positively influential on policy support. The primary beneficiary feature is null among the below average group, meaning the policy support of people less likely to agree with the need-based perspective was not influenced by the immigrants' region of origin. Policy that primarily benefited Latin American immigrants increased the probability of support among the above average agreement group. The other levels show little difference between the groups. Overall, the most significant differences when comparing between people more likely to agree with the general need-based perspective of fairness shows that food and cash aid increase the probability of policy support, while these aspects have null effect on those with below average agreement with this perspective of fairness.

[20]Finding supports exploratory hypothesis two in the pre-analysis plan.

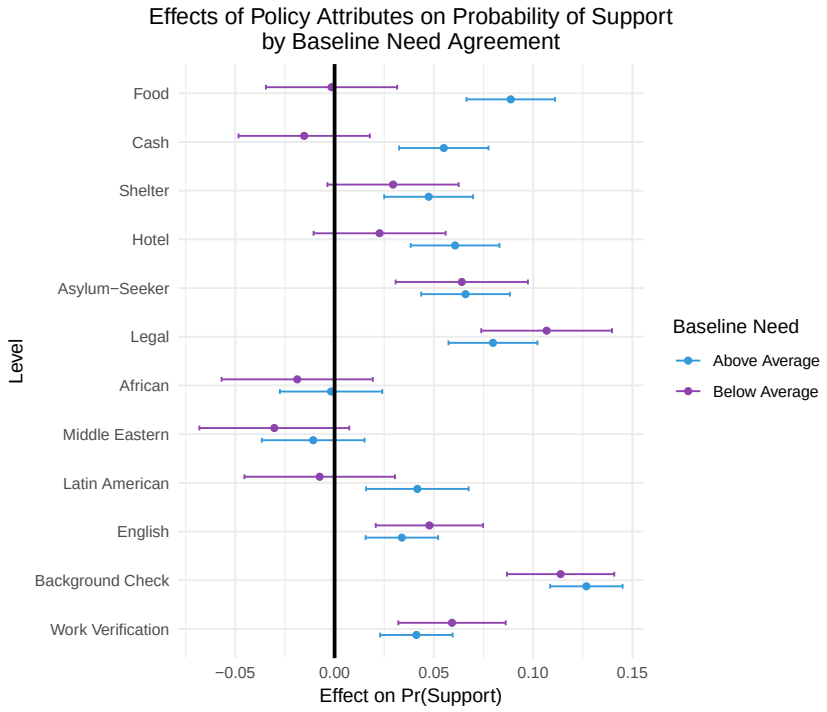



Figure 2.4: Policy support by baseline need perception of fairness above and below the average level of agreement. Those with above average agreement with this perspective revealed higher odds of supporting policy when it benefited Latin American immigrants. Social services had positive effects on support. Exclusion criteria increase the probability of support among both groups.

The next general fairness perspective is based on investment. The respondents rated their agreement with the following statement: *Allocation of resources to people should be based on their effort to contribute to the country.* The mean is 2.30, indicating lower average agreement than both the equality and need principles. It also has a median of two, which corresponds with "neither agree nor disagree." Heterogeneous treatment effects along this dimension uncover the greatest number of differences. Respondents more likely to disagree with this perception were more supportive policies that allocated social services like housing and aid. Exclusion criteria, while still influential, are moderately

less important as measured by effect size for those with a below average level of agreement. Respondents with a higher level of agreement with the investment perspective of fairness were found to be less supportive of policies that primarily benefit Middle Eastern immigrants. For respondents with stronger agreement with the investment perspective, social service attributes like aid and housing have almost no evidence of an effect on policy support, while exclusion criteria continue to be important and increase in effect size compared to the below average group. In particular, work verification has a stronger effect on those with stronger agreement with the investment perspective.[21] Overall, there are several key points of divergence between those with above and below average agreement with the investment perspective. Policies that proposed food aid, cash aid, and/or legal status verification elicited particularly different effects when comparing the strength of agreement with the investment perspective as a moderator.

[21]Finding supports exploratory hypothesis three in the pre-analysis plan.

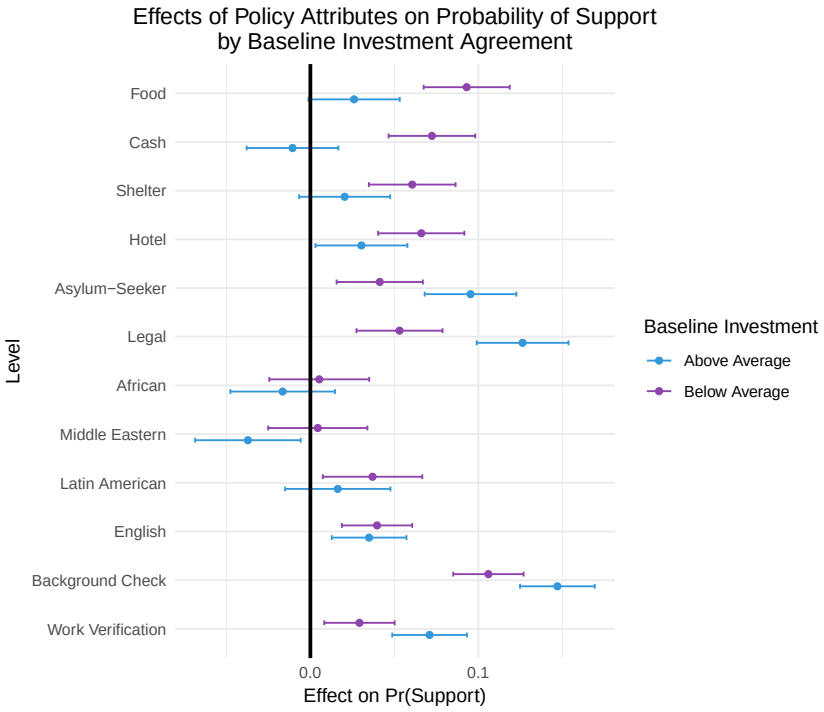



Figure 2.5: Policy support by investment baseline perception of fairness above and below average level of agreement. Those with above average agreement with this perspective revealed lower odds of supporting policy when it benefited Middle Eastern immigrants relative to the baseline and social services generally had no evidence of an effect on support in most cases. Exclusion criteria increase support among both groups relative to none.

Finally, the last general fairness perspective is based on ascription. The respondents rated their agreement with the following statement: *People naturally belong to different groups and some groups deserve more resources.* The average level of agreement with this statement is 1.80 and has a median of two, which corresponds with "neither agree nor disagree." This perspective on average has the lowest level of agreement across the four fairness baselines. The comparison between the groups above and below the average is quite similar both in terms of effect size on policy support and significance. Notably,

the immigrant region of origin primarily benefiting from this policy has no evidence of an effect on support among those with stronger agreement with this perspective.[22] Because there are no meaningful differences between those who agree or disagree with this perspective of fairness in a general setting, it suggests that ascription is not a particularly influential viewpoint impacting policy support in the context of immigration.

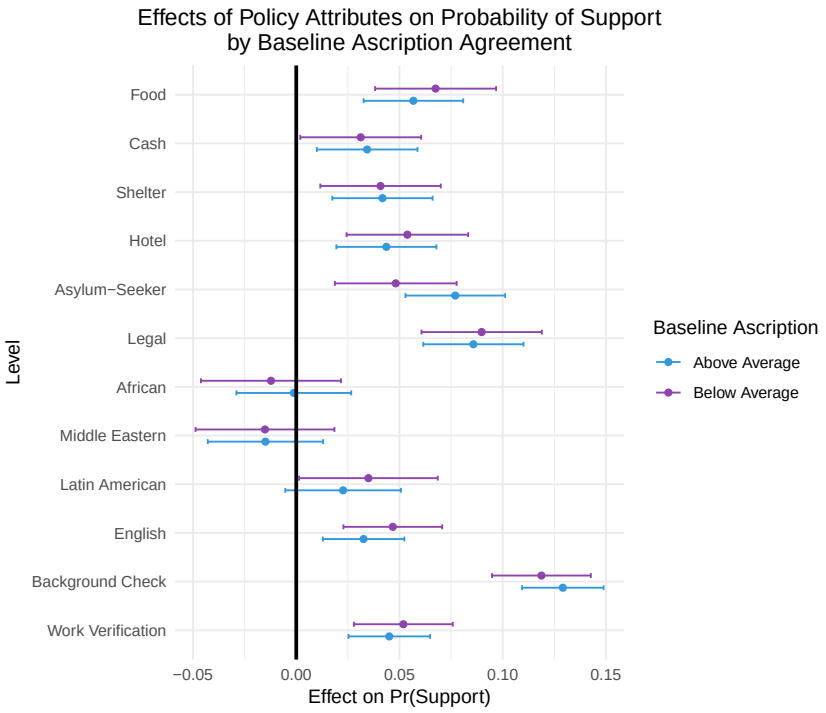



Figure 2.6: Policy support by ascription baseline perception of fairness above and below average level of agreement. There are few differences on policy support between those with above or below average agreement with the ascription perspective of fairness.

### 2.5.3 Fairness Perspectives are Distinct from Ideology

The analysis shows that ideology is distinct from fairness perceptions. Liberals were more likely to agree with the equality, need, and ascription perceptions of fairness, while

[22]Finding does not support exploratory hypothesis four in the pre-analysis plan.

conservatives were more likely to agree with the investment perception. In other words, fairness dimensions do not align with the political ideology spectrum, underscoring it as a distinctive and important perspective for explaining attitudes. Furthermore, there is a generally weak correlation between ideology and baseline fairness perspectives.[23] The baseline need perspective correlates most strongly with liberal ideology, while the baseline investment perspective correlates most strongly with conservatives. Because of the overall weak correlation, this suggests that the four fairness dimensions are unique and are not merely masking ideological reasoning.

Next, I compare the AMCE on policy support by political ideology.[24] The survey asked respondents their political ideology on a 5-point scale from very liberal (0) to very conservative (4), with moderate as the center option. Roughly one third of respondents selected "moderate," while 20% chose "somewhat conservative," 18.6% chose "somewhat liberal," 13% selected "very conservative," and 15% selected "very liberal." Analysis combined the two liberal and conservative categories into a binary ideology, omitting moderate respondents. This reduces the sample to 10,004 observations (or roughly 2,000 respondents due to clustering).

Figure 2.7 details the results comparing the two groups. There are distinct differences between the ideologies, however the results are not as stark as one might expect. Social services increase the probability of support for liberals, with the largest point estimate on food aid allocation. Offering cash aid decreases the probability of support for conservatives, but all other socials services have no detectable effects. In terms of eligibility criteria, both groups are overall are more likely to support a policy when it includes verification of immigration status and a background check. However, work verification has no evidence of an effect on liberals. Both ideological groups have very similar reac-

[23]See Appendix B.17.

[24]Heterogeneity by political ideology was pre-specified in the pre-analysis plan. The ideological results are very similar to the heterogeneity by party results. See Appendix B.6.1.

tions to asylum seekers, overall increasing the probability of support at roughly the same effect size. Background checks and legal status increase support among both groups, but the effect is greater for conservatives. The region of origin of the primary beneficiary of the policy has no evidence of an effect on conservatives and increases the probability of support among liberals when the policy primarily benefits Latin American immigrants relative to the baseline. In sum, both ideological groups prefer setting rules for accessing benefits and liberals in particular favor offering social services to immigrants. However, for most forms of social services tested in this study, conservatives are rather agnostic to offering such benefits.

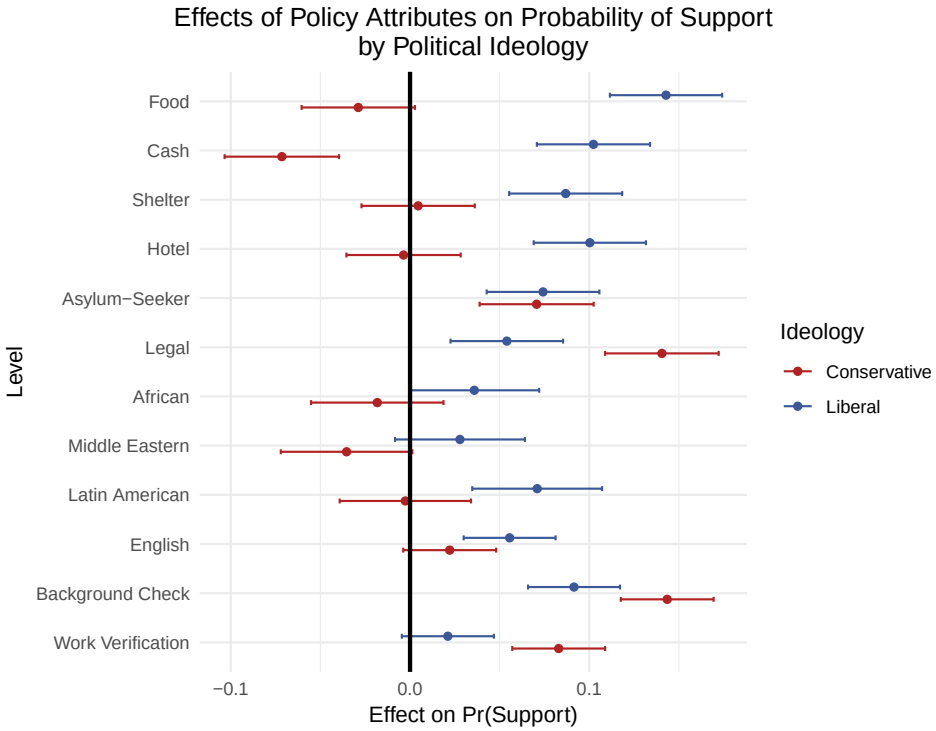



Figure 2.7: The effects of each level on support for the policy by political ideology group. Moderates were excluded from the analysis.

## 2.6 Robustness Checks

I check for satisficing and poor response quality in three ways. First, I identify respondents who selected the top option for each outcome variable. There are 1,547 instances of this (approximately 309 respondents). I drop these cases and run the same estimation again, resulting in very similar results to those reported above. Next, I examine survey duration outliers by dropping respondents with particularly short or long completion times. I do this in two ways. In one method, I calculate the interquartile range to subset to the middle 50% of the data as determined by survey duration. This reduces the median time to 8 minutes and 47 seconds. Removing duration outliers with this approach drops 1,620 observations (324 respondents). In addition, I manually set the lower threshold at three minutes and the upper threshold at 18 minutes. I find consistent results in both checks.

To assess construct validity, I test whether my fairness measurements are empirically distinct from Moral Foundations Theory (MFT) survey items. MFT measures different aspects of morality across populations [3]. I included four MFT questionnaire items in the survey to examine the construct validity of the unique measurement of fairness used in this paper. Using Pearson correlation tests, I examine the relationships between the variables. I find that each of the baseline measures of fairness in this study have weak correlation with the MFT fairness items, suggesting divergence in measurement. This means that the items measure distinct concepts. This is unsurprising because the MFT items do not address different dimensions of fairness. Rather, MFT assesses a unidimensional measure of fairness despite the use of multiple items.[25]

Survey experiments can be unintentionally manipulated by the survey design flow

[25]A subsequent survey also tested the four fairness dimensions against the Migrant Deservingness Scale, egalitarianism, humanitarianism, and zero-sum thinking. The results indicate that the fairness dimensions are unique constructs, with the strongest correlation between the equality perception of fairness and egalitarianism, suggesting a valid measurement. See Trummel (2026).

and wording, potentially causing priming or demand effects. However, while there is certainly evidence of priming issues in identity-related experimental research [145], recent work also shows that concerns over wording and pre-treatment bias may be overblown [146, 147, 148, 149]. Nonetheless, to address potential issues of priming, the survey was constructed in such a way that the majority of the sociodemographic questions occurred after the experiment [145], with only zip code, age, and gender occurring at the beginning. These were followed by four baseline general fairness measures. None of the baselines use the word "fair" explicitly and all four principles are asked about, which avoids biasing the respondent perspective in one direction or another. Demand effects can occur when respondents assume an experiment's objective and answer in a way that supports the researcher's hypothesis. Research has found that experiments are relatively resistant to such effects [150], and furthermore conjoint experiments in particular make it difficult for the respondent to glean what in particular is being tested. Conjoints are also susceptible to measurement error, however even after correcting for bias, results are largely consistent [151].

To further assess cultural threat, I examine prejudice and symbolic racism [48, 45, 46, 77]. I use prejudice indices from Carmines et al. (2011) and Kinder and Sanders (1996) to sort respondents into higher and lower levels of prejudice and compare the results of the conjoint. Both indices are similar in construction, but Kinder and Sanders (1996) include racial resentment statements in their measurement of racial prejudice in addition to stereotypes and policy preferences.[26] The results for lower prejudice respondents are very similar to the main results, regardless of which index is used. However, there are differences among the higher prejudice respondents following the Kinder and Sanders (1996) method. Policies that offer forms of aid and hotel vouchers decrease the probability of policy support among the higher prejudice respondents. Most notably though, the

[26]Thorough description of the index items and discussion of results is in Appendix B.5.

primary beneficiary attribute continues to have no detectable effects in both approaches. This means that even for higher prejudice individuals, the region of origin of the primary beneficiary group is not a significant factor in weighing policy support. It also suggests that symbolic racism is weakly constructed as a measurement, as argued by Carmines et al. (2011) and Schuman (2000). As conjoints reduce social desirability bias [139, 152], this experiment is well positioned to detect prejudicial bias in immigration-related policy preferences among respondents. Even for those that reveal prejudice, the primary beneficiary attribute does not explain policy support.

## 2.7 Discussion

Policies that introduce exclusion criteria are viewed as more fair than those that do not include exclusion criteria under all four dimensions of fairness. Beyond comparison to the baseline, there are limited differences among the attributes and levels across the three forms of exclusion criteria. In some cases the point estimates fluctuate in magnitude, but comparing the effect of work verification to legal status verification shows little difference across most dimensions of fairness. A notable exception to this example is in the equality perspective, where legal status verification is meaningfully greater than work verification. This means that under the equality perspective of whether the policy treats immigrants the way everyone deserves to be treated, requiring legal status verification has a greater effect on agreement with fairness than whether someone can provide work verification. However, the broader takeaway is that imposing rules for access to benefits is almost always seen as more fair than having no exclusion criteria at all.

Compared to exclusion criteria, most welfare components have smaller effect sizes on fairness perceptions. This is particularly the case for the investment perspective of fairness. Here, respondents were less likely to agree that policies that offered forms of

redistribution would help immigrants that will contribute to the country. While this may not be surprising, the overall positive effect runs contrary to expectations and suggests that even under a fairness perspective that values effort to contribute to a community, offering public benefits to immigrants does not result in a perception that the policy is unfair. Observed in the need perspective, I show that redistribution components affect fairness agreement similarly to exclusion criteria. This likewise may not be surprising as policies that help those most in need would be expected to include elements of public assistance. Like the exclusion criteria, most comparisons across the redistribution levels do not result in immediately detectable differences. However, what does matter is that relative to no services, policies that offer different forms of social services increased perceptions of fairness across all four perspectives. Running contrary to expectations, this finding could be an area for further work. When respondents are reminded that social services are generally paid for by taxpayers, do the findings hold?

For support and most fairness perspectives, I find that the primary beneficiary group either has positive effects or no evidence of an effect. In particular, policies that benefit Latin American immigrants are generally supported at a higher rate and are seen as more fair, broadly construed, than ones that benefit European immigrants. One concern could be that the Latin American support bump is an artifact of the survey timing in April 2025, a period with headline news of deportations to Central America and perceptions of an increasingly anti-immigrant national climate. This could be a reflection of thermostatic politics, meaning public attitudes shift against government action [153]. As the salience of immigration has increased, the topic has shown signs of thermostatic behavior [154]. Prior work examining far-right parties in Europe [155] and President Donald Trump's "Muslim Ban" [156], have found pro-immigration backlash to such political climates. Altogether, this could be suggestive of warmer attitudes toward Latino immigrants, but whether these attitudes are durable remains to be seen. Furthermore, future work could extend

upon this study by specifying either the country of origin or the race of the immigrant that would most likely benefit from a policy. This could assess specific cultural threat reactions beyond assumed general regional differences, as well as examine whether more favorable attitudes toward Latinos or Latin American countries hold.

Hainmueller and Hopkins (2015) show evidence that sociotropic and norms-based reasoning explain American immigration attitudes [89]. However this work, and a large body of literature, focus on attitudes toward individual immigrant profiles. While clearly related, fewer studies focus on immigration policy design and its impact on public opinion [14, 157], with even fewer focused on subnational integration policy. Moreover, related studies have examined immigration and moral values [78], humanitarianism [57, 79], empathy [80], and cognitive frames like zero-sum thinking [158], however almost no work has explicitly unpacked the multidimensional nature of fairness in this context. While Bansak et al. (2017) show that Europeans prefer the proportional allocation of asylum seekers based on country capacity by testing two conceptualizations of fairness [14], this work does not distinguish between perceptions of fairness and policy support, nor capture the broader dimensions of fairness as theorized by Cavaille (2023) and Hochschild (1981). Although future work should continue to assess the construct validity of fairness measures in the context of immigration, this research further establishes a foundation for the utilization of fairness in other issue areas such as policing, criminal justice, housing, and climate policy. Furthermore, the framework used in this paper could be tested in other liberal democracies offering welfare benefits to immigrants, as well as can be extended to municipal-level policy design.

## 2.8 Conclusion

Policies that benefit immigrants through social services, but include exclusion criteria garner support and are viewed as fair through multiple dimensions of fairness. This paper finds limited evidence of xenophobia influencing policy support and fairness perceptions, which undermines cultural threat-based explanations of immigration attitudes. Rather, Americans are supportive of providing services to relatively new members of the state when they meet particular exclusion criteria such as undergoing a background check, having proof of legal status, and to a lesser extent work verification. While they create barriers to access for some, these components are common in other U.S. welfare policies. Because these services can be costly, the consistent support for offering state-provided social services to immigrants also undermines sociotropic economic threat-based arguments. Instead, Americans indicate that they believe it is fair, under multiple views of fairness, to offer government assistance to immigrants.

Ultimately, the results suggest that American immigration attitudes are generally inclusive of most immigrants. Finding only limited evidence of cultural and economic threat motivations for policy support, I argue immigrant integration policy design influences perceptions of fairness and that this moral lens should be included in future attitudinal research. While cultural threat and economic threat have been shown to matter a great deal to the discussion of immigration, I show that policy design choices in particular can influence perceptions of fairness and policy support. Importantly, this work contributes a perspective on immigration attitudes that goes beyond conventional pro and anti-immigration debates, and offers insights on consensus among Americans for one of the most contentious issues of our time. Finally, this conceptual framework provides opportunities for the application of fairness dimensions in other issue areas, as well as the extension of the theory to immigration contexts beyond the United States.

# Chapter 3

# Restrictions Increase Willingness to Pay for Immigrant Integration Policy

## 3.1 Introduction

While President Donald Trump's second term has been characterized by a significant expansion of immigration enforcement, this policy environment has occurred amid record high public support for immigration.[1] We're seeing an increasingly hostile and exclusionary policy landscape alongside inclusive immigration demands from the public.[2] Several explanations can help account for this contrast. These attitudes and behaviors of the public could be the product of thermostatic politics [154, 153], meaning the public

[1]ICE's budget, which hovered around $10 billion for years, was substantially increased by the One Big Beautiful Bill Act enacted in July 2025, making it the highest-funded federal law enforcement agency in the United States. See report **here**.

[2]A June 2025 Gallup poll found that a record-high 79% of U.S. adults say immigration is a good thing for the country (a 15-point jump from 2024) while the share wanting immigration reduced fell from 55% to 30%. See the polls **here**.

swings directionally against policy action. However, a more fundamental problem may be that standard measures of immigration attitudes are too blunt to capture what the public actually wants [159]. Most voters do not hold blanket positions on immigration, but rather have specific policies or policy combinations that reflect their preferences and values [160, 161, 142]. These conditional preferences [162] suggest that the gap between public opinion and policy may be less about attitude change and more about policymakers failing to identify where voters actually stand. Identifying more precise policy preferences enables policymakers to meet voters where they are rather than attempt to persuade or shift attitudes [80, 163, 164]. Extending upon Kustov (2026) and Trummel (2026), this article identifies the specific policy trade-offs U.S. residents are willing to accept when it comes to subnational immigrant integration policy and services for immigrants [159, 15].

Recent work has identified that state policies that include social services and exclusion criteria increase perceptions of fairness and policy support relative to those without these features [15]. Using a nationally representative sample of U.S. respondents, Trummel (2026) found that eligibility criteria to utilize the policy, such as employment verification, legal immigration status, and passing a background check, all increased perceptions of fairness [15]. But this experiment, like most in this literature, presented respondents with policy designs absent any stated price tag. Research on climate policy attitudes has shown that support expressed without reference to costs tends to be inflated, and that explicitly stating personal costs is necessary to identify preferences that reflect real trade-offs [165, 166]. A well-established finding in public opinion research holds that support for policy declines when respondents are given more specific information about what policies entail [39, 167, 168]. We apply this logic to immigrant integration policy. When Americans are told what a program will cost them as taxpayers, does support hold? And if not, what policy design features can offset that opposition?

A substantial body of work suggests Americans are sensitive to the perceived fiscal implications of immigration. Haselswerdt (2021) shows that perceptions of fiscal threat increase assumptions about immigrant reliance on social services [128]. Brader et al. (2008) find that cost-based appeals sharpen opposition to immigration, particularly among White respondents and when costs are associated with Latino immigrants [91]. Hainmueller and Hopkins (2015) and Adida et al. (2019) demonstrate that Americans favor immigrants perceived as likely to integrate economically and contribute to society [89, 90]. Because of this, deservingness and fiscal contribution may be central to how the public evaluates immigration-related policy. Taken together, this literature would predict that Americans will resist welfare expansionist integration policies and that resistance will intensify as costs rise.

Trummel (2026) argues that the contradictory support for welfare services for immigrants can be explained by perceptions of fairness [15]. If policies apply procedural rules that limit access to a public good under a socially derived standard of inclusiveness, these policies can command higher support because the public considers it fair. This is true under a variety of views about what fairness actually means. Earlier work has developed key outcome measurements of fairness that unpack different dimensions of the concept both at baseline in a general context and as dependent variables in the context of immigration [1, 12, 169, 15]. In this paper, we use a pre-registered conjoint experiment to test whether support for integration policies hold when policies include the explicit financial costs associated with them.[3] In the design, we assign policy attributes such as eligibility requirements, economic costs, and the primary beneficiaries to hypothetical policy proposals. As covariates, we also assess descriptively and through heterogeneous treatment effects whether certain policy components align with different dimensions of fairness per-

[3]See the pre-analysis plan **here** and the pre-registered R code **here**. All analysis was pre-registered unless otherwise stated.

ceptions. Finally, we examine what Americans are willing to pay for certain immigrant integration policy components. We theorize that eligibility requirements function as a signal of conditionality that restrict access under "fair" terms of use. This mechanism parallels findings in the welfare state literature on public support for different varieties of welfare programs [130, 122] and in the tax policy literature showing that political trust moderates willingness to fund public goods through taxation [170].

As expected, we find that as the average annual cost to the taxpayer increases, support for the policy decreases. However, eligibility requirements such as a criminal background check and proof of legal immigration status substantially offset this opposition, inducing the highest willingness to pay among respondents. We call this the *restriction premium*: the additional willingness to pay for integration programs that attach clear eligibility criteria to service access. Evidence also provides support for the claim that "fair" policy, as defined by the respondents, elicits a higher willingness to pay when policies contain features that promote a particular perspective of fairness. This paper proceeds by conceptualizing fairness, detailing the research design, reporting the results, and ends with a discussion of what this means for policymaking.

## 3.2 Conditional Preferences and the Fairness Mechanism

First, fairness is broadly defined by two principles: equality and differentiation [12]. These principles range from absolute equality to pure differentiation, where groups receive different shares of a good. There are two additional dimensions of determining what is fair: need and investment. Strict equality asserts that all community members deserve equal shares of a good being divided. The need perspective asserts that all members

of a community deserve equal satisfaction. This perspective is similar to equity in that it sees that it is fair to give a bit more of a good to some groups based on need to achieve equality. Investment perspectives see that community members deserve rewards in proportion to what they contribute. Ascription perspectives assert that community members deserve rewards based on natural, fixed traits. These four dimensions provide leverage to analyzing how policy attributes affect perceptions of fairness.

Reciprocity plays a central role in shaping cooperative behavior within communities [67, 68]. When individuals believe others are contributing their fair share, they are more willing to invest in shared goals, and those who shirk their obligations can face exclusion from the benefits that cooperation produces [69]. Resource allocation decisions are similarly shaped by whether the need appears legitimate or whether providing assistance aligns with reciprocal expectations [70]. This norm also underlies parochial altruism, a framework under which fairness is defined by restricting benefits to in-group members while excluding outsiders [71, 1].

Because public support for redistributive spending is sensitive both to cost and to the perceived deservingness of beneficiaries [12, 123, 71], we expect opposition to intensify as the stated price of immigrant integration programs increases. We also expect that respondents who agree with a particular baseline view of fairness and agree that a certain policy component promotes fair access under that dimension, will be willing to pay more for those policy components.

## 3.3 Research Design

In order to identify ideal policy bundles, this paper uses a paired profile conjoint design to estimate the causal effects of immigrant integration policy features on support. In the conjoint design, we ask respondents to imagine that their state is adopting a new

law to provide aid to immigrants. They are then presented with two randomized profiles of policy attributes. Attribute ordering is fixed and the survey disables two of the exact same profiles from appearing at the same time. Table 3.1 details the policy features and levels of the conjoint design using policy feature labels. Importantly, a conjoint design can reduce the likelihood of socially desirable responses by embedding the policy attribute of interest among multiple competing attributes, making it harder for respondents to identify and respond to the focal feature alone and is well externally validated under similar experimental design conditions [140]. The conjoint forces respondents to make trade-offs across multiple policy dimensions simultaneously, which more closely resembles the complexity of real policy choices than would be possible in a typical vignette design.

### 3.3.1 Conjoint

The conjoint consists of the following six features and 19 levels [141], totaling 480 possible combinations. The content of the prompt is based on the results of Trummel (2026), in which food aid was shown to be the least controversial social service offered via hypothetical new policies [15]. Least controversial in this case refers to food aid being the policy aid feature that garnered the greatest probability of support and had the narrowest gap in partisan preferences. The prompt reads:

"Imagine that your state is considering the adoption of a new policy. **The policy will provide food aid to newly arrived immigrants for four months.** In addition, lawmakers are considering whether the policy should have the following features and it will serve the same number of immigrants either way:"

| **Features** | **Levels** |
|---|---|
| **Requires proof of legal status** | • No *(baseline)*<br>• Yes |
| **Requires proof of employment** | • No *(baseline)*<br>• Yes |
| **Requires a background check** | • No *(baseline)*<br>• Yes |
| **Restricted to low-income households** | • No *(baseline)*<br>• Yes |
| **Primarily benefits** | • Ukrainian immigrants *(baseline)*<br>• Mexican immigrants<br>• Chinese immigrants<br>• Somali immigrants<br>• Nigerian immigrants |
| **Annual cost of program to average taxpayer** | • \$1 *(baseline)*<br>• \$12<br>• \$36<br>• \$60<br>• \$120<br>• \$600 |

Table 3.1: Features and levels of the conjoint design.

A conjoint experiment can theoretically include many features and levels, but each addition reduces the share of the sample exposed to any given combination and larger conjoints increase the risk of satisificing [141]. Conversely, too few features risk respondents inferring values for those left unspecified. Explicit treatment assignment with an

appropriate number of features and levels is therefore essential.[4] Between the information in the content of the prompt and the conjoint attributes, this design balances such concerns. Table 3.1 outlines the features and levels of the design, as well as identifies the reference point for each attribute as the baseline [171].

Across a wide variety of policies in the country, many welfare policies apply different forms of means-tested eligibility and exclusion criteria. The different forms of restrictions included in this conjoint design are based on real policies in the country. When it comes to the "primarily benefits" feature, many U.S. immigration policies have historically either targeted specific national groups for access or benefited some groups more than others based on settlement patterns. The nationalities selected for this study aim to identify how respondents react to assumed cultural differences along racial and ethnic dimensions. They are also timely and grounded in reality as either large, growing, or salient shares of the immigrant population in the United States. While Trummel (2026) uses region of origin to test cultural distance, this experiment applies national origins because the goal is to identify more specific reactions to policy bundles. Finally, the last component assigns an explicit cost to fund the proposed program. While Americans have been shown to support immigrant integration policies [15], this feature adds an essential component in the bundle to measure what trade-offs Americans are really prepared to make and identify their willingness to pay. It is also ecologically grounded in the reality that voters regularly make policy judgments and determine spending outcomes through ballot propositions in many subnational governments. In some states, tax and spending questions are frequently put directly to the public through the initiative process. The question of whether to provide integration benefits to immigrants is no exception, having been brought to popular vote on multiple occasions.[5]

[4] A priori power analysis indicates that this design approaches 100% power. See Appendix C.6.

[5] Proposition 187 in California in 1994 did exactly this, as Californians voted to reduce access to a number of benefits available to immigrants.

The dependent variable is policy support and respondents choose between Policy A and Policy B in order to express their support. They repeat the randomization five times and respondents have the option to skip questions if neither policy bundle is suitable. In other words, they are not forced to choose an option as commonly seen in other conjoint experiments [172, 89]. This improves the ecological validity of the experiment as people rarely are forced to choose between two policies if in reality they find either undesirable.

### 3.3.2 Do people think about policy bundles in terms of fairness?

While the experiment is focused on identifying the policy features people are willing to support, as well as how much they're willing to spend for things they consider important, this paper also examines *why* certain policy components are considered important. Drawing on Trummel (2026), we use a variety of pre-treatment items to assess whether certain policy features are considered fair under particular dimensions of fairness [15]. In the first approach, respondents indicate a level of agreement with statements that link the policy components of the conjoint to particular dimensions of fairness based on connections the authors believe are salient. We call these the researcher-chosen policy-fairness linkages. Later in the survey, respondents are asked to choose one policy component from a list that they believe is most important to upholding each dimension of fairness, more plainly stated. They can also choose "none of the above" if this is not a factor that reflects their reasoning. This ordering of the items in the list were shuffled per respondent. We refer to these items as respondent-chosen policy-fairness linkages. For both approaches, the wording of each item is intended to mirror the wording of the baseline measurements of fairness.[6] Tables 3.2 and 3.3 outline these items.

This facet of the study aims to identify which aspects of fairness people subscribe to and how they see each aspect of fairness applying to immigrant integration policies.

[6]See Trummel (2026) [169].

The central idea is that if a respondent agrees, for example, that national origin restrictions helps ensure that immigrants more likely to fit in can access benefits *and* they have higher probability of supporting policies that discriminate based on country of origin, this suggests that the ascription dimension of fairness plays a key role in the respondent's evaluation. In the respondent-chosen scenarios, if requiring background checks significantly increases the odds of policy support *and* respondents choose background checks as upholding standards of equality, this suggests that the equality dimension plays an important role in shaping policy judgments. The observations made from this section are by no means causal, but offer insight to how policy components relate to different dimensions of fairness.

| **Fairness Dimension** | **Question** |
|---|---|
| *Now think about immigrants in the United States. Please state your level of agreement with the following statements:* | |
| Ascription | When thinking about social services for immigrants, restricting access based on **national origin helps ensure that the immigrants most likely to fit into the country can access benefits.** |
| Equality | When thinking about social services for immigrants, requiring a **criminal background check helps ensure that immigrants are treated just like everyone else.** |
| Equality | When thinking about social services for immigrants, requiring **legal immigration status helps ensure that immigrants are treated just like everyone else.** |
| Investment | When thinking about social services for immigrants, requiring **proof of employment helps ensure that immigrants who are contributing can access benefits.** |
| Need | When thinking about social services for immigrants, directing services to **low-income households helps ensure that immigrants in greatest need can access benefits.** |

Table 3.2: Researcher-chosen links between fairness dimensions and policy components. Respondents did not see the fairness dimension title. Respondents rated their level of agreement from strongly agree to strongly disagree.

| **Fairness Dimension** | **Question** |
|---|---|
| *Some social policies are intended to help immigrants integrate, but states apply different rules for access and sometimes they benefit some groups more than others.* | |
| Equality | Which of the following policy considerations is most important to you when it comes to **helping everyone equally**? |
| Need | Which of the following policy considerations is most important to you when it comes to **helping those most in need**? |
| Investment | Which of the following policy considerations is most important to you when it comes to **helping those who contribute**? |
| Ascription | Which of the following policy considerations is most important to you when it comes to **helping those who will fit in**? |

Table 3.3: Respondent-chosen importance of policy components that align with fairness dimensions. Respondents did not see the fairness dimension title. Respondents rated their level of agreement from strongly agree to strongly disagree.

## 3.4 Analysis

### 3.4.1 Estimation

We will follow a standard approach for analyzing conjoint experiments, using least-squares regressions to estimate the average marginal component effect (AMCE) for each attribute level [144]. Each respondent completes five choice tasks, with two profiles per task, yielding ten observations per respondent. Standard errors are clustered at the individual respondent level.

### 3.4.2 Data

The sample was drawn from the U.S. general population and was collected by Prolific. It was web-based and utilized quotas to be nationally representative of the United States population by race, ethnicity, and gender as determined by the U.S. Census.[7] The survey was constructed in Qualtrics by the authors. The median length of the survey was 16 minutes and the sample size is 2,584. The survey underwent benchtesting and a short pilot period prior to full launch from April 10 to May 9, 2026.[8] Respondents needed to be at least 18 years old and living in the United States to qualify.[9] There was one attention check and two bot detection points in the survey to verify the quality of the data. Furthermore, Prolific as a survey platform has been found to present the least evidence of sample corruption by AI bots [76].

## 3.5 Results

Respondents indicate a higher willingness to pay for policies with eligibility criteria, providing evidence for the restriction premium. Furthermore, when policies align with dimensions of fairness that respondents value, they are more willing than policies without those features to pay more for such policy conditions. The results are particularly pronounced for restrictions that impose a criminal background check and legal immigration status. Policies that include a background check or legal status requirements not only increase the probability of policy support, but among those who believe these features uphold standards of treating everyone equally, they also yield a higher willingness to

[7]It is also very nearly representative by age, with only the oldest age group (55 years old+) marginally underrepresented.

[8]The data collection period was nearly a month long in order to fill all age bracket quotas, however the oldest age bin is ultimately slightly underrepresented. The vast majority of the sample was collected within one week.

[9]The study was exempted by UC Santa Barbara IRB on January 16, 2026. Participants gave informed consent to qualify.

pay compared to those who don't believe these policy components promote standards of equality. We report the results of the conjoint experiment first, before examining what Americans are willing to pay. We then analyze heterogeneous effects by partisanship and baseline views about fairness, before further examining the relationship between fairness attitudes and policy design features.

Consistent with prior work, as the average annual cost to the taxpayer increases, support for the policy decreases.[10] The effect is particularly large for policies that would cost $600 per year. Relative to $1, even a cost of $12 per year decreases the probability of support. This suggests that Americans have a low tolerance for funding immigrant integration policies through taxes. When it comes to which groups would primarily benefit from the policy, Chinese, Nigerian, and Somali immigrants decrease the probability of policy support relative to Ukrainian immigrants. Mexican immigrants, however, increase the probability of policy support relative to Ukrainian immigrants. Among the policy eligibility criteria, requiring a criminal background check and proof of legal immigration status increase the probability of support relative to policies that do not include these features. Requiring proof of employment and restricting access to low income households have little to no effect on the odds of policy support. This means that these features were likely not the focus of respondents' decision when determining policy support. Overall, the most dramatic negative effects are on cost. Among the features tested, requiring background checks and legal status have the largest positive effects on support. There are small, yet statistically significant negative and positive effects on the national origin of the groups that would primarily benefit from the policy relative to the baseline (Figure 3.1).

[10]Finding supports pre-registered Hypothesis 1.

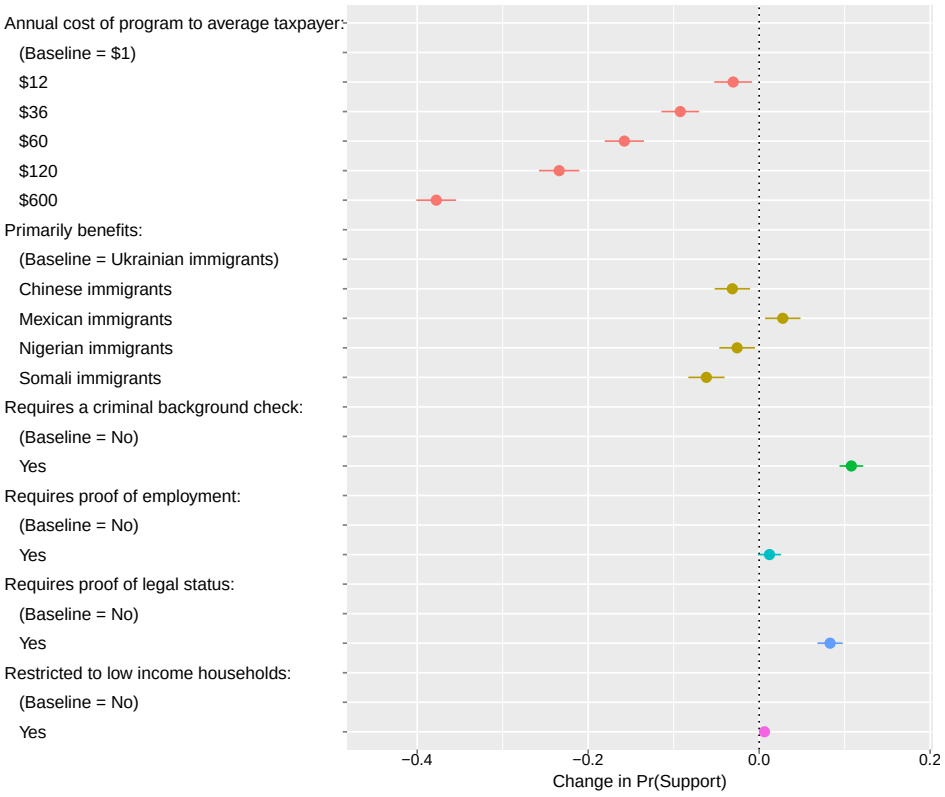



Figure 3.1: Average marginal component effect of each policy level on policy support. 95% confidence intervals and clustered by respondent.

### 3.5.1 What are Americans willing to pay?

While on their own, costs decrease the probability of policy support. However, certain policy features help offset this lack of support. The policy components of requiring a criminal background check and legal immigration status command higher support and willingness to pay (Figure 3.2). If the policy primarily benefits Mexican immigrants, Americans are also willing to pay more relative to if it benefits Ukrainian immigrants. On average, the results find that respondents were willing to pay roughly $150 per year for a policy that required legal immigration status compared to one without this feature at all. The willingness to pay is even greater for background checks, where Americans

indicate a willingness to pay of nearly $200 per year. Respondents were willing to pay roughly $50 per year for policies that primarily benefit Mexican immigrants, while the other nationalities decrease willingness to pay relative to Ukrainian immigrants. The negative point estimate is largest for Somali immigrants. Proof of employment and restricting access to low income households has no observable effect on willingness to pay. Overall, as prices increase, the largest predictor on whether respondents supported a particular policy is whether it includes a criminal background check or not. The largest predictor on whether respondents opposed a policy is if the policy primarily benefited Somali immigrants relative to Ukrainian immigrants. The aversion, at roughly -$110, however, is smaller in magnitude size than the support for background checks.[11] This provides evidence for the restriction premium: Two forms of eligibility criteria tested in this study yield higher willingness to pay compared to the opposition triggered by whether a policy benefited a particular immigrant group.

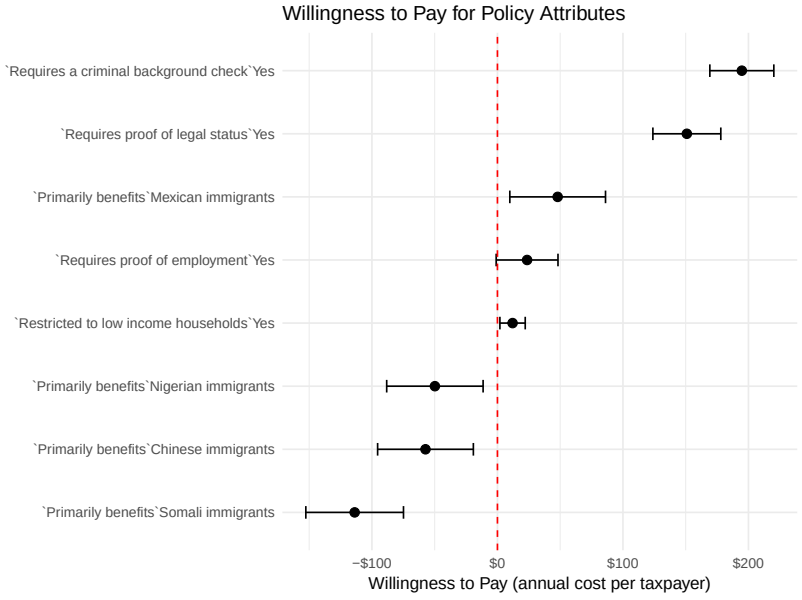



Figure 3.2: Willingness to pay for policy features. 95% confidence intervals.

[11]Negative estimates on willingness to pay can be interpreted as the amount respondents would need to be compensated for a policy to contain the feature, on average.

Turning to the linkages between fairness and policy features, Figure 3.3 demonstrates that when policies include a component respondents consider to be fair under a particular dimension of fairness, they are willing to pay more for that feature than those who do not agree. Among respondents who value equality as a fairness principle at baseline, beliefs about whether background checks uphold equal treatment are associated with meaningfully higher willingness to pay for immigrant integration policies. Both those who agree and disagree with this premise exhibit declining support as costs increase, consistent with the main findings. However, respondents who agree that background checks constitute a fair application of the equality principle sustain higher levels of support across every increasing cost threshold. At lower cost levels, the two groups begin as nearly identical and the confidence intervals overlap, with both around 70% support at $1 annually. The gap widens as costs rise, with agreers maintaining roughly 58% percent support at $60 compared to 50% among disagreers, and the divergence persists through the highest cost condition. However, the confidence intervals overlap at the two highest price points, suggesting that there is only a meaningfully higher willingness to pay at the moderate price points. At the highest points, cost considerations override in importance, while at the lowest price points, scrutiny influenced by fairness perceptions over the policy features is less salient. The plot on the right shows that there are no detectable differences between respondents who agree or disagree that "requiring a criminal background check helps ensure that immigrants are treated just like everyone else" when subset to those who disagree with the equality principle at baseline. When respondents did not agree that "resources should be allocated equally to people," there are no detectable effects on the linkage between background checks and treating immigrants equally. The comparison between the two panels in Figure 3.3 suggest that baseline views about the equality principle are influential toward respondents' willingness to pay for features they consider to promote equality.




Figure 3.3: The plot on the left shows that at the middle price points, those who agree with the equality principle at baseline and agree that background checks help "ensure that immigrants are treated just like everyone else" are willing to pay more when policies include background checks compared to those who disagree with this statement.

We also observe significant effects on the legal immigration status requirement and equality fairness perception linkage (Figure 3.4). Sorted between respondents who agree with the equality principle and those who do not, believing that legal immigration status requirements uphold equal treatment is consistently associated with higher willingness to pay across all cost levels except one where there are very marginally no detectable differences between the groups at $120 price point. However, the significance returns at the $600 price point. Notably though, the pattern is similar across both panels, suggesting that the relationship between legal status fairness perceptions and policy support does

not depend on whether someone endorses the equality principle in the first place. In other words, agreeing that a legal immigration status requirement treats immigrants the way everyone deserves to be treated is associated with a higher willingness to pay when the policy includes a legal status requirement, however one's position on equality in the abstract does not reveal meaningful differences.[12]

[12]Analysis of the three other researcher-chosen fairness-policy linkages did not yield many significant effects. See Appendix C.13.

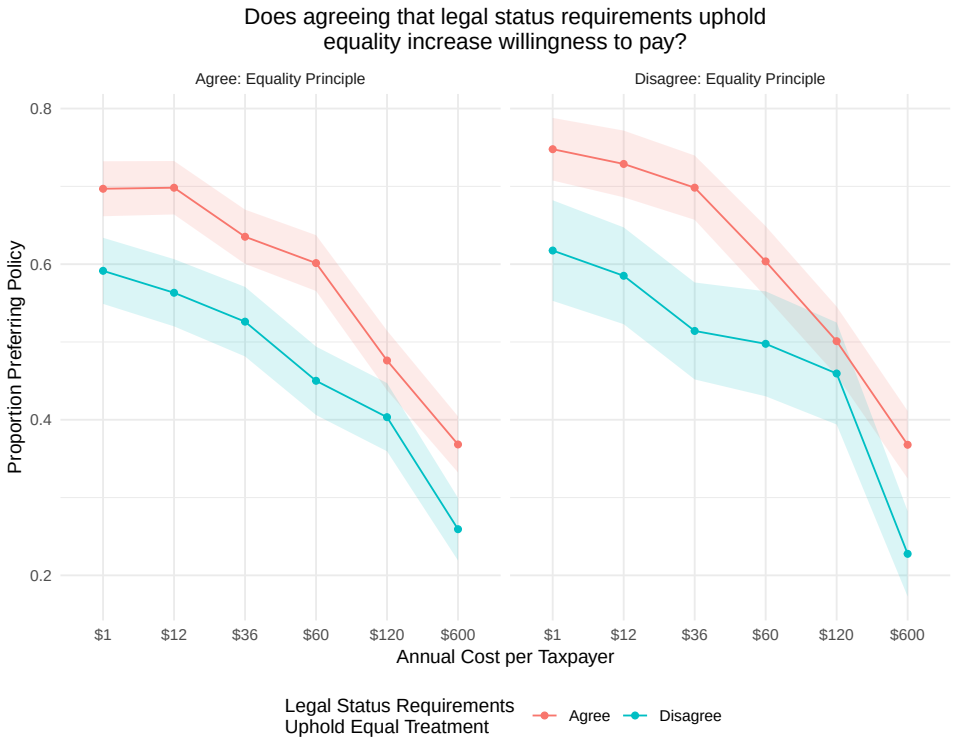



Figure 3.4: The panel on the left shows that for those who agree with the equality principle, those who agree that a legal status requirement helps uphold equal treatment are more likely to be willing to pay more for a policy that contains that feature. However, those who disagree with the equality principle also show a larger proportion willing to pay. So while agreeing that legal status helps uphold equal treatment increases the share of respondents willing to pay, the baseline views about fairness show mixed evidence for their linkage to policy application.

Overall, the policy features that respondents believe "treat immigrants the way everyone deserves to be treated" command a higher willingness to pay when those policy features are present. In this study, those features have been identified as a legal status requirement and criminal background checks. The most compelling evidence for the mechanism behind the restriction premium comes from Figure 3.3, where fairness-

aligned policy features increase willingness to pay. Here, respondents who both endorsed the equality principle and agreed that background checks uphold equal treatment showed meaningfully higher support at moderate price points. We find evidence that equality-based perception of fairness is influential and including policy components that align with those fairness values increase the willingness to pay for immigrant integration policies.

### 3.5.2 Similarity Among Partisans

Overall, partisans indicate a great deal of consensus on subnational immigrant integration policy features (Figure 3.5). Directionally, Republicans and Democrats express similar preferences. In many cases the magnitude is also very similar. The largest difference is on the requirement of legal immigration status to access benefits. Here, we observe the largest positive effect on support where it moves Republicans far more than Democrats, albeit the requirement still increases the probability of support for Democrats as well. This suggests that Republicans feel much more intensely about this feature than Democrats. As observed with Trummel (2026), a background check requirement increases the probability of support for Republicans and Democrats at a similar magnitude and is one of the most important policy attributes in increasing the probability of support as measured by effect size [15]. When it comes to cost, Republicans are less sensitive to an increased cost at the $12 level, but both partisans fall off in their support as the costs increase. A low income household restriction has no statistically significant effect on either partisan group.

Finally, if Somali immigrants are the primary beneficiary group, this decreases the probability of support relative to Ukrainian immigrants for both Democrats and Republicans with a larger negative effect among Republicans. There is a slight negative effect for Nigerian immigrants among Republicans relative to the baseline, while there is no

statistically discernible effect for Democrats. Democrats have a higher probability of support when the policy primarily benefits Mexican immigrants, while this is statistically indistinguishable from zero among Republicans. There is no observable effect if the policy benefits primarily Chinese immigrants for Republicans relative to the baseline, while this marginally decreases the odds of support among Democrats. Overall, national origin has a mix of null and negative effects for Republicans and a mix of positive, negative, and null effects for Democrats. With the exception of Somali immigrants among Republicans, the primary beneficiary group has not only mixed effects, but very small effects for both groups. Rather, cost and eligibility criteria have stronger positive and negative effects on support. The largest positive effect on support that moves Republicans and Democrats similarly is on criminal background checks, suggesting a popular area for policy agreement among both partisans.[13] [14]

[13]For effects by ideology, see Appendix C.9. The results are generally similar, but there are key differences. For example, the legal status has no observable effect and proof of employment decreases the probability of support among liberals. The majority of the primary beneficiary levels have no observable effects for both liberals and conservatives.

[14]A pre-registered hypothesis stated that Republicans would be less likely than Democrats to support policy with rising economic costs. The evidence does not support this hypothesis. Both partisans are roughly equal in responsiveness to rising costs.

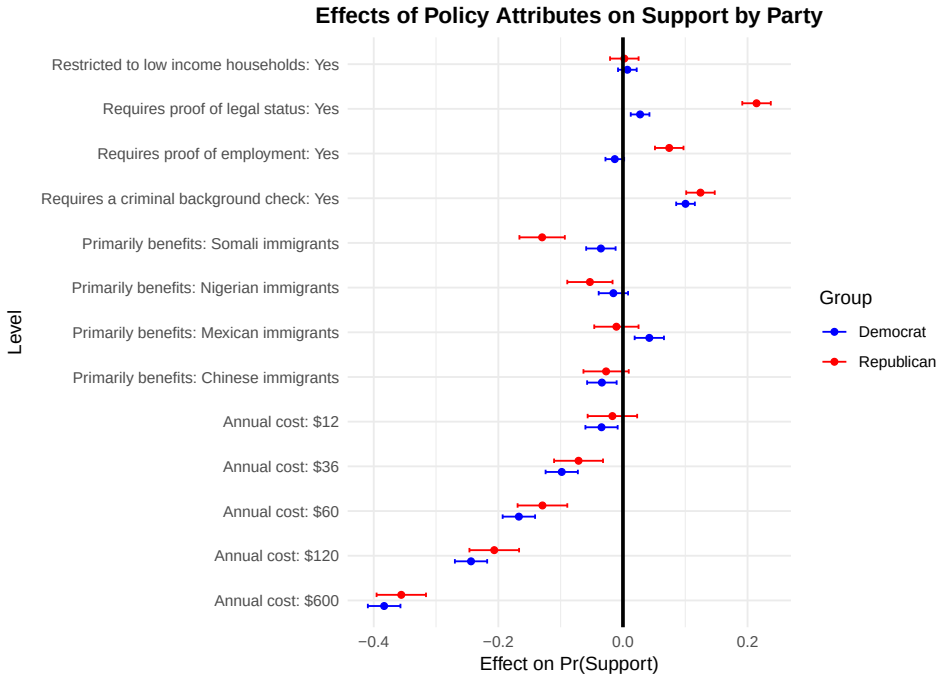



Figure 3.5: Heterogeneous treatment effects of each policy attribute on support by party. Independents were excluded from the analysis in this section.

### 3.5.3 Abstract Fairness Beliefs Alone Don't Drive Effects

Next, we turn to heterogeneous treatment effects by baseline agreement with different dimensions of fairness. Across all four dimensions of fairness, there are few meaningful differences between those who agree or disagree with each baseline assessment of fairness. This suggests that abstract beliefs about fairness on their own do not drive policy support. As observed in other results, cost is the largest driver of opposition. Both agreers and disagreers become increasingly opposed to a policy as the annual cost to the taxpayer rises.[15] Eligibility criteria increases the probability of support among those who disagree with the equality principle, with the largest difference between the two groups on the legal

[15]We hypothesized that people who agree with the equality perception of fairness at baseline would be more likely than those who disagree to support policy with higher economic costs (HTE3). Evidence for this hypothesis is not found.

status requirement (Figure 3.6). No discernible effects and a very marginal effects among those who agree with the equality principle are observed on the income requirement, proof of employment, all primary beneficiary groups, and the $12 cost increase. This is largely true for those who disagree with the equality principle, with a slight exception to the Somali immigrant level of the primary beneficiary attribute where the effect size is slightly larger. Overall, there is little difference between those who agree with the equality fairness dimension at baseline and those who do not. As found in other work [15], general worldviews about fairness does not translate to meaningful differences when applied to a specific context like immigrant integration policy design.[16]

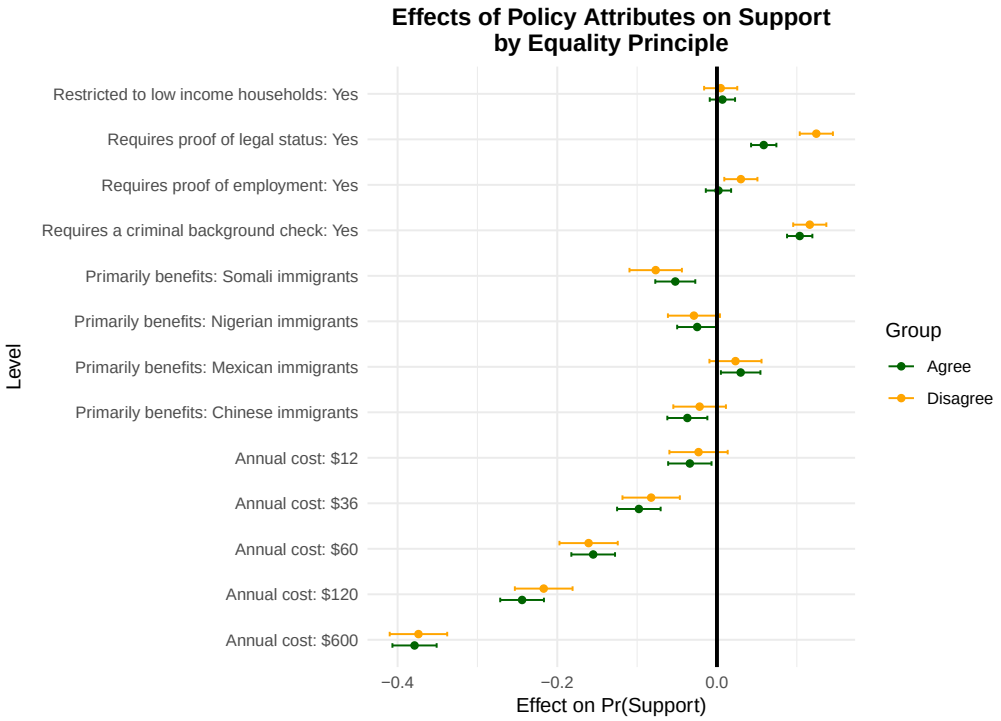



Figure 3.6: Heterogeneous treatment effects of each policy attribute on support by agreement with the baseline perception of fairness on the equality dimension.

[16]Analysis of the three other baseline fairness views are found in Appendix C.10. The results are largely similar to those reported here.

### 3.5.4 Further Analyzing Fairness-Policy Connections

Next, we analyze how some policy features may align with particular definitions of fairness. To start, we examine whether those who agree with each respondent-chosen pairing of policy and fairness were more likely to value a given feature of the policy in the conjoint. For example, for respondents who select legal immigration status as the feature that is most important when it comes to treating everyone equally, the effect of this policy feature should be significant if the equality view of fairness influences their assessment of policies. In fact, we find this to be true.

Legal status is the most influential factor among those who believe it upholds standards of equality. Among respondents who chose legal status as the most important equality feature, requiring proof of legal status has the largest positive effect on support, with a point estimate around 0.25 and a narrow confidence interval. Employment verification and background checks also show positive effects, suggesting this group broadly favors screening requirements. Cost is again the dominant negative driver, with a monotonically increasing penalty as annual cost rises. Although not all reach significance, nationality effects are consistently negative relative to the reference category, with Somali and Nigerian immigrants associated with the largest negative effects and Chinese immigrants near zero. Low income restrictions show no detectable effects. The most important observation in Figure 3.7 is that for those who believe that requiring a legal immigration status helps treats immigrants like everyone else does in fact significantly increase the probability of policy support.[17] This support even exceeds the positive effects for background checks, the component that most consistently yields large positive effects. This adds additional evidence that when a policy aligns with one's beliefs about fairness, they are more likely to support policies that contain those features.

[17]See Appendix C.11 for other plots of the respondent-chosen fairness dimensions and policy links.

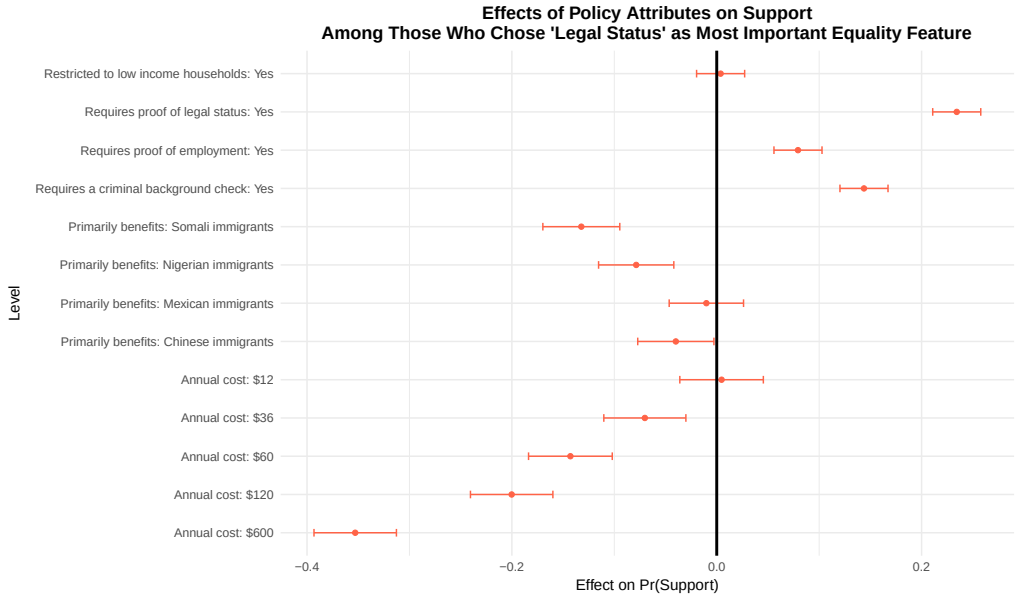



Figure 3.7: Respondents were asked to choose which policy component best ensures people are treated equally. This plot shows the effect for those who chose legal immigration status among all options, including "none of the above."

Likewise, Figure 3.8 shows that among respondents who chose criminal background checks as the most important equality feature, the presence of a background check requirement in the policy profile has by far the largest positive effect on support, with a point estimate around 0.20.[18] Legal status requirements also show a modest positive effect. Cost is the dominant negative driver, with effects becoming increasingly negative as annual cost rises from $12 to $600, the latter associated with roughly a 0.45 percentage point reduction in support. The nationality of the primarily benefiting group shows mixed results, with Chinese and Mexican immigrants associated with slightly positive effects relative to the reference category, while Somali immigrants show a negative effect. Employment verification and low income restrictions are near zero and indistinguishable

[18] Although pre-specified, the original analysis displayed all "most important features" on a single plot. Due to visual complexity, the presentation was revised to separate each feature into its own plot per fairness dimension.

from null effects. The most important observation from Figure 3.8 is that those who chose criminal background checks as the feature that was most important to treating everyone equally were significantly more likely to support a policy when it included criminal background checks.

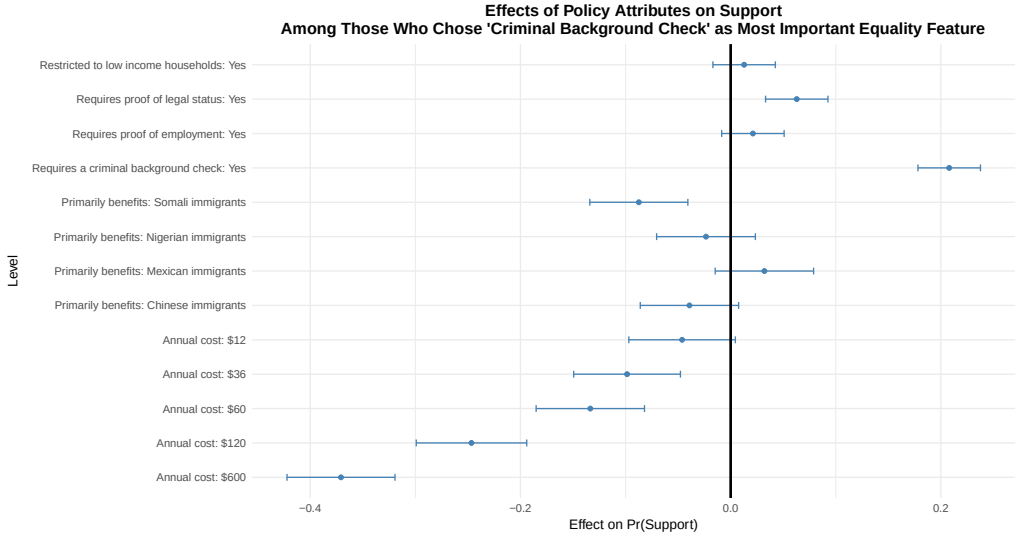



Figure 3.8: Respondents were asked to choose which policy component best ensures people are treated equally. This plot shows the effect for those who chose background checks among all options, including "none of the above."

Turning to researcher-chosen pairings between policy components and fairness perceptions, meaning those we believed ex-ante to align based on our hypotheses and understanding of results in earlier work [15], we see the cost of the policy has similar effects across the groups whether they agree or disagree with the component-dimension pairs. As an example, we observe that those who agree that work verification helps ensure those who are contributing can access benefits were more likely to support a policy when it included proof of employment. Conversely, including this provision decreased the probability of agreement among those who disagreed with this pairing.[19] Moreover, proof

[19]See Appendix C.12 for all pairings.

of employment had more marginal effects in the main analysis, however for people who value contribution and policies that ensure it, the effects are directionally opposed and statistically significant compared to those who disagree with this policy-fairness pairing.

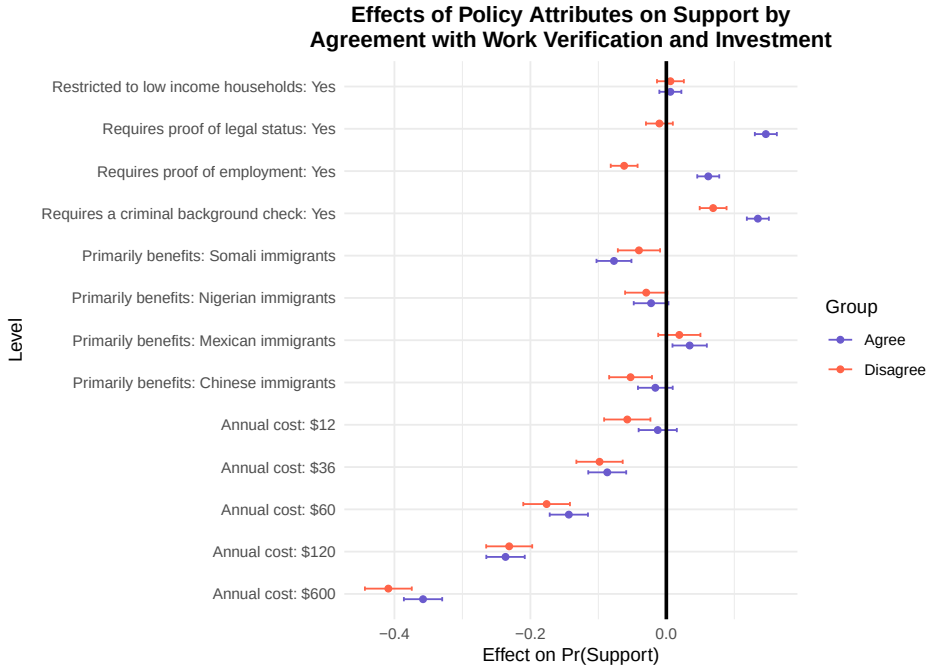



Figure 3.9: Agreement with researcher-chosen link between proof of employment and the investment principle. Those that agree that requiring proof of employment ensures those who contribute can access benefits were more likely to choose policies that included this attribute. Conversely, those who disagreed were less likely to support policies that required proof of employment.

## 3.6 Robustness and Quality Checks

As a quality check, we drop potential satisficers from the experiment. Potential saticifers are those who chose the top option for all iterations of the conjoint (Policy A). This removes roughly 100 respondents from the survey. Results remain substantively the

same. Next, we identify time duration extremes. We use the interquartile range of the data to focus on those who took between 12 and 21 minutes. We repeat the analysis of the experiment and results once again remain substantively the same.[20]

Efforts to ensure a human-validated sample include the use of two AI checks placed throughout the survey. The survey starts with a reCAPTCHA following the consent statement. Because AI has been shown to be effective at bypassing such checks [76], we also use a cognition trap in the survey to detect for artificial respondents [173, 174]. We use a modified Muller-Lyer test to verify human respondents as AI agents failed the question in 94.1% of instances, while humans passed it in 92.8% of instances in recent research [173].[21] Our results show that 4% of respondents failed our modified Muller-Lyer question, resulting in a 96% pass rate. This suggests that the data is well validated.[22]

Finally, we assess the construct validity of the fairness items against the Migrant Deservingness Scale (MDS). As perceptions of deservingness can influence support for the provision of public goods [28], De Coninck (2024) develops a migration specific measurement of deservingness [36]. Results indicate that there is low correlation between the baseline dimensions of fairness used in this paper and the MDS. Despite the similarity of the concepts, all fairness items have little to no relationship with the MDS Index. This is likely due to the MDS Index being measured in a specific migration context and the fairness baselines being measured in a general context. The findings here highlight the fairness dimensions as distinct from migrant deservingness.[23] Other research has validated the multidimensional fairness items as distinct from humanitarianism, zero-sum thinking, ideology, Moral Foundations Theory, symbolic racism, and egalitarianism

[20]See Appendix C.3 and C.4 for the resulting AMCE plots for each approach respectively.

[21]See Appendix C.2 for example of what respondents saw and further explanation of this optical illusion test.

[22]The modified Muller-Lyer test was also manually tested in Claude AI by the author and it failed to answer the question correctly.

[23]See Appendix C.7 for the correlation matrix and distribution of the index.

[169, 15].

## 3.7 Discussion

We find evidence for a restriction premium in immigrant integration policy design. Two of the four forms of eligibility criteria included in the study yielded positive significant results, while two others had no detectable effects. This suggests that restrictions on their own may not influence policy support, but rather the particular type of restriction matters. Polices that include restrictions that are considered to encourage "treating immigrants like everyone else" yield a higher share of support. These effects are observed with criminal background checks and legal immigration status, both of which relate to rule-based and civic order expectations [17]. The absence of significant effects on proof of employment and a restriction to low-income households suggests that these factors play little role in shaping policy support in this context. Unlike background checks and legal status, these restrictions relate to economic contribution and individual life circumstances. Furthermore, their connects to the need and investment principles reveal little to no significant effects.[24] This suggests that such policy components on their own have little effect on support and that views about fairness that connect to these policy features do not drive the probability of policy support. Instead, the evidence points to the merit of background checks and requiring legal immigration status in affecting policy support and that fairness views about equality in particular not only link to these components, but increase the willingness to pay for immigrant integration policies. Implications of the restriction premium suggest that policies that aid immigrants may command higher support when even a universal civic norm is included for accessing benefits.

A clear finding of this research is that criminal background checks are popular for

[24]See Appendix C.11 and C.13.

access to social services. However, implementing this as a policy component would require an expansion in state capacity in many cases. This would likely increase costs and slow down the efficiency of processing claims, both of which can negatively blow back on policymakers and politicians seeking reelection. While respondents are likely not thinking about these consequences even further downstream, the policy effect of background checks may be largely symbolic. As a screening mechanism, criminal background checks are unlikely to meaningfully reduce the pool of eligible applicants. This is both because serious criminal actors represent only a small fraction of the immigrant population and because the checks themselves face significant practical limitations. Immigrants who have spent little time in the United States will have limited domestic criminal histories and records from their countries of origin are often inaccessible to state-level U.S. officials. State capacity to conduct thorough cross-national vetting is constrained, meaning that background checks may function more as a signal of conditionality than as an effective gatekeeping tool. Their political value, then, lies in the reassurance they provide to skeptics that the program operates on terms they recognize as fair. Moreover, background checks may also be double-barreled in that if someone takes the risk of exposing themselves to officials and can pass a background check, they are not only likely to hold a legal immigration status, but are also unlikely to fail the check.[25] This largely limits policy access not only to those with a legal immigration status, but those that are also not known to be involved in criminal activity.[26]

Should immigrant integration policies be guided by popular demands? The findings

[25]Not only do immigrants use less welfare than native-born U.S. citizens, there is a well-known disparity between authorized and unauthorized immigrants in their usage of welfare services. Even for policies where legal status is not required, unauthorized immigrants are less likely to use the services because they do not want to risk exposure to the state [175, 176].

[26]Holding legal immigration status to some degree can be characterized by this "double-barreling" too. In order to enter the United States under a valid visa, most immigrants undergo some degree of a background check prior to entry at the federal level. Background checks for integration services take this one step further though by also ensuring that applicants are not known criminals within the United States.

presented here suggest that eligibility criteria, particularly criminal background checks and proof of legal status, substantially increase public willingness to fund integration services. But this raises difficult normative questions. Limiting services to those who can pass a background check and hold legal immigration status builds barriers to inclusion. In particular, unauthorized immigrants, who are among the most economically vulnerable and socially marginalized populations in the United States, would be systematically excluded from programs designed to facilitate integration. Denying this group aid and services likely would compound inequities. At the same time, ignoring public preferences entirely carries its own risks. Integration programs that lack broad legitimacy are politically fragile and can cause backlash. Including eligibility criteria could increase public trust in integration policies and improve perceptions of the use of such benefits. Pairing services with clear eligibility criteria may therefore be a pragmatic strategy for building durable support around programs that would otherwise struggle. A policy that reaches fewer people but maintains funding and support may ultimately serve more individuals over time than a more inclusive, universalistic immigrant integration program that collapses under political opposition. Policymakers will need to weigh these potential trade-offs. The right balance will likely vary by state depending on the composition of the immigrant population and the political landscape. Future work could provide tangible answers to policymakers by applying this research design to a representative sample of particular state, especially those experiencing backlash and with fairly large immigrant populations such as Texas, Florida, and Minnesota.

Finally, Trummel (2026) identified a positive effect on policy support when policies primarily benefited Latin American immigrants, while all other regional groups had no detectable effects [15]. Consistent with those findings, a survey fielded one year later likewise found that when policies primarily benefited Mexican immigrants, the probability of support increased. Contrary to the 2025 survey however, the other national origin groups

overall elicited negative effects relative to the baseline. So, while general cultural distance as measured through region of immigrant origin resulted in primarily null findings, the experiment in this paper found statistically significant opposition for Chinese, Nigerian, and Somali immigrants relative to Ukrainian immigrants. However, the negative effect sizes on average are smaller than the positive effects of eligibility criteria such as a criminal background check and legal immigration status. This suggests that rules for access can more powerfully impact positive support than less "popular" immigrant groups effect opposition. Future work could explore how the framing of eligibility criteria for specific policies can potentially override backfiring effects, especially among those who hold more intense immigration preferences [155, 164, 159].

## 3.8 Conclusion

Results indicate that support for immigrant integration policies declines sharply as taxpayer costs increase. However, eligibility requirements such as criminal background checks and proof of legal immigration status substantially offset this opposition, providing evidence for a restriction premium regardless of partisanship. Americans are not only more supportive of integration policies that include eligibility criteria, but are also willing to pay more for them. General worldviews about fairness do not translate into meaningful differences in policy support when applied to the specific context of immigrant integration policy design. However, the findings suggest that the relationship between fairness and policy support is not activated by abstract values alone, but by the perceived alignment between specific policy features and the fairness principles respondents apply to them. Background checks and a requirement for legal immigration status consistently garner greater support than other tested features and are considered fair, multidimensionally defined. Respondents who indicate that these policy components align with the equality

dimensions of fairness also reveal a higher willingness to pay for integration policies when such policy components are included. Subnational governments seeking to build public support for integration service provision should therefore consider pairing such programs with clear law-based eligibility criteria, particularly when funding depends on increasing taxes.

# Appendix A

# Chapter 1 Appendix

## A.1 Data Demographics in Study 1

The median household income of respondents is between $50,000 to $99,999 and over 60% of the sample works full or part-time. 50.37% of the sample is female. The median age is 45-64 while the median respondent has "some college" level education. 27% of the sample has a high school education or less, consistent with the national average. 33.47% of the sample identifies as a Democrat, 34.6% as a Republican, and 24.95% as an Independent.

Only 5.45% of the sample is foreign-born, well below the national rate of roughly 13.9%. While the survey platform used quotas to screen respondents, the survey itself also contained race and ethnicity questions. 18.52% identified themselves as Hispanic or Latino. Among the racial categories collected in a single-selection forced choice question, 0.70% selected Native Hawaiian or other Pacific Islander, 2.72% selected American Indian or Alaska Native, 5.93% selected Asian, 14.75% selected Black or African American, and 75.90% chose White. These rates are consistent with the American Community Survey.

| **Category** | **Characteristic** | **Percent** |
|---|---|---|
| Gender | Female | 50.37% |
| | Male | 47.86% |
| Party ID | Democrat | 33.47% |
| | Republican | 34.60% |
| | Independent | 24.95% |
| Ethnicity | Hispanic or Latino | 18.52% |
| Race | Native Hawaiian or Pacific Islander | 0.70% |
| | American Indian or Alaska Native | 2.72% |
| | Asian | 5.93% |
| | Black or African American | 14.75% |
| | White | 75.90% |
| Education | No high school diploma | 3.02% |
| | High school diploma | 23.83% |
| | Some college | 38.00% |
| | Bachelor's degree | 24.71% |
| | Graduate degree | 9.85% |

Table A.1: Snapshot of the sample's descriptive characteristics.

## A.2 Data Demographics in Study 2

| Category | Characteristic | Percent |
|---|---|---|
| Gender | Female / Other | 52.1% |
| | Male | 47.9% |
| Race / Ethnicity | White | 63.2% |
| | Black / African American | 12.5% |
| | Hispanic / Latino | 10.6% |
| | Asian / Asian American | 6.4% |
| | Other / Multiracial | 5.7% |
| | Native American / Alaska Native | 1.3% |
| | Native Hawaiian / Pacific Islander | 0.3% |
| Education | Less than high school | 0.9% |
| | High school diploma / GED | 13.6% |
| | Some college, no degree | 21.1% |
| | Associate's degree | 10.5% |
| | Bachelor's degree | 32.5% |
| | Some graduate school | 13.6% |
| | Master's degree | 2.4% |
| | Doctoral / professional degree | 2.1% |
| Party ID | Democrat / Lean Democrat | 67.5% |
| | Republican / Lean Republican | 29.1% |

Table A.2: Snapshot of the sample's descriptive characteristics in Study 2.

# A.3 Descriptive Results

## A.3.1 Outcome Distributions in Study 1

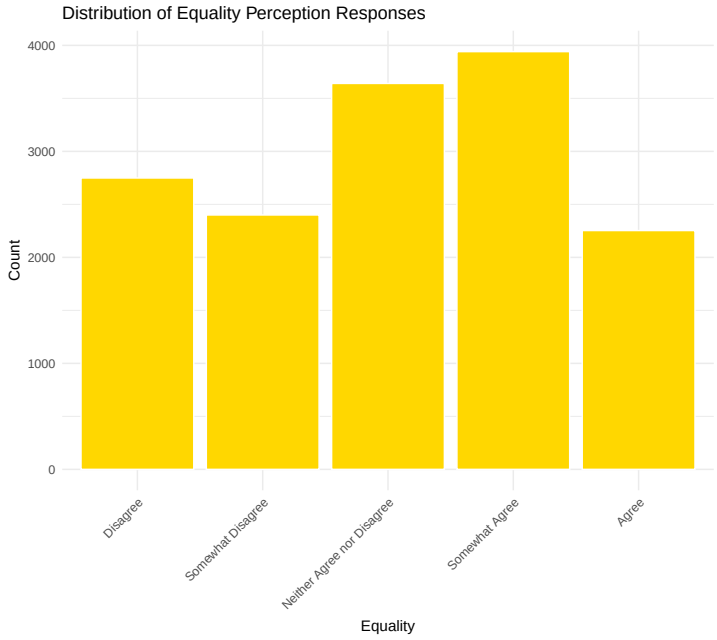



Figure A.1: The distribution of agreement that "this policy treats immigrants the way everyone deserves to be treated."

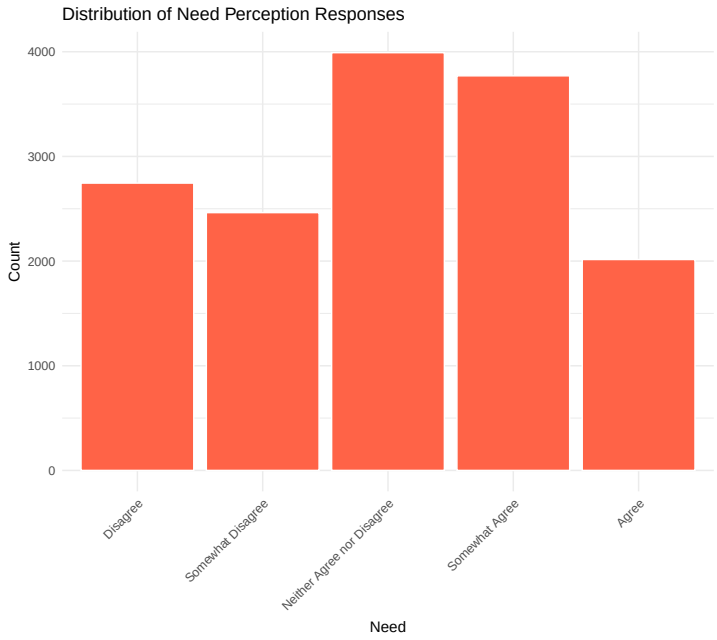



Figure A.2: The distribution of agreement that "this policy helps immigrants in greatest need."

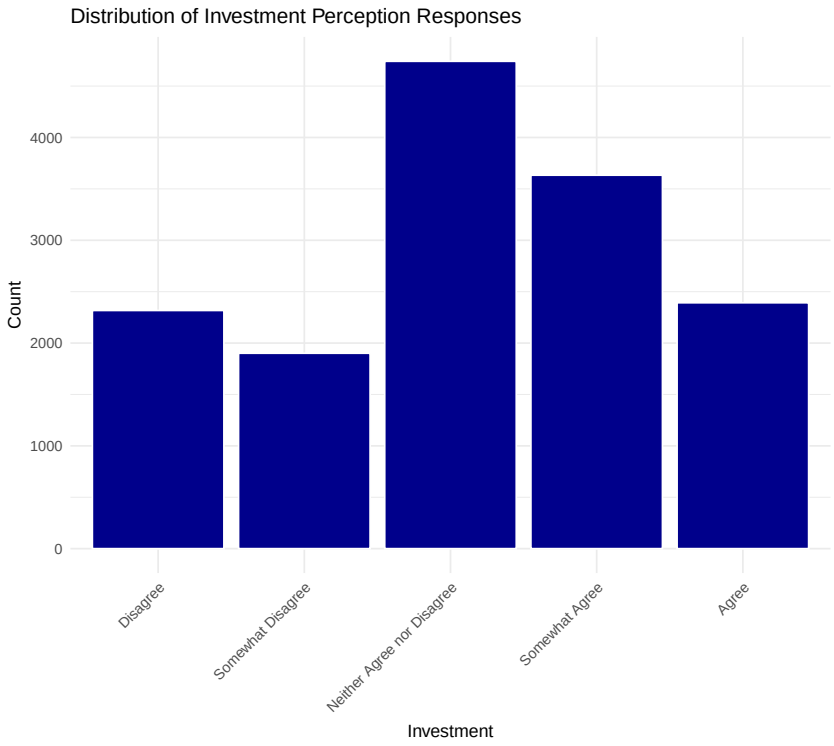



Figure A.3: The distribution of agreement that "this policy helps immigrants who are going to contribute to the country."

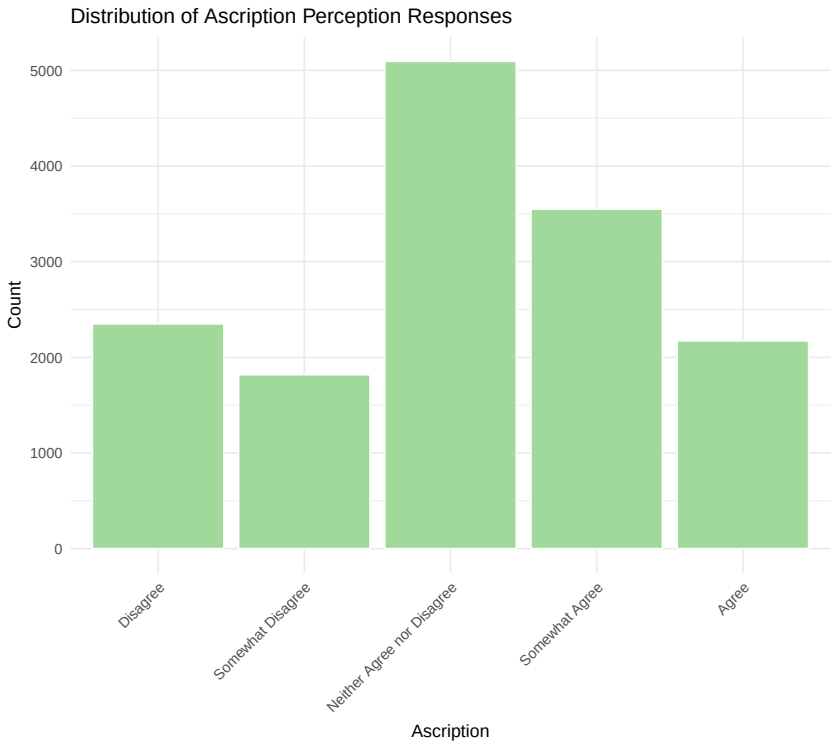



Figure A.4: The distribution of agreement that "this policy helps immigrants who are going to fit into the country."

### A.3.2 Baseline Fairness Distributions in Study 1

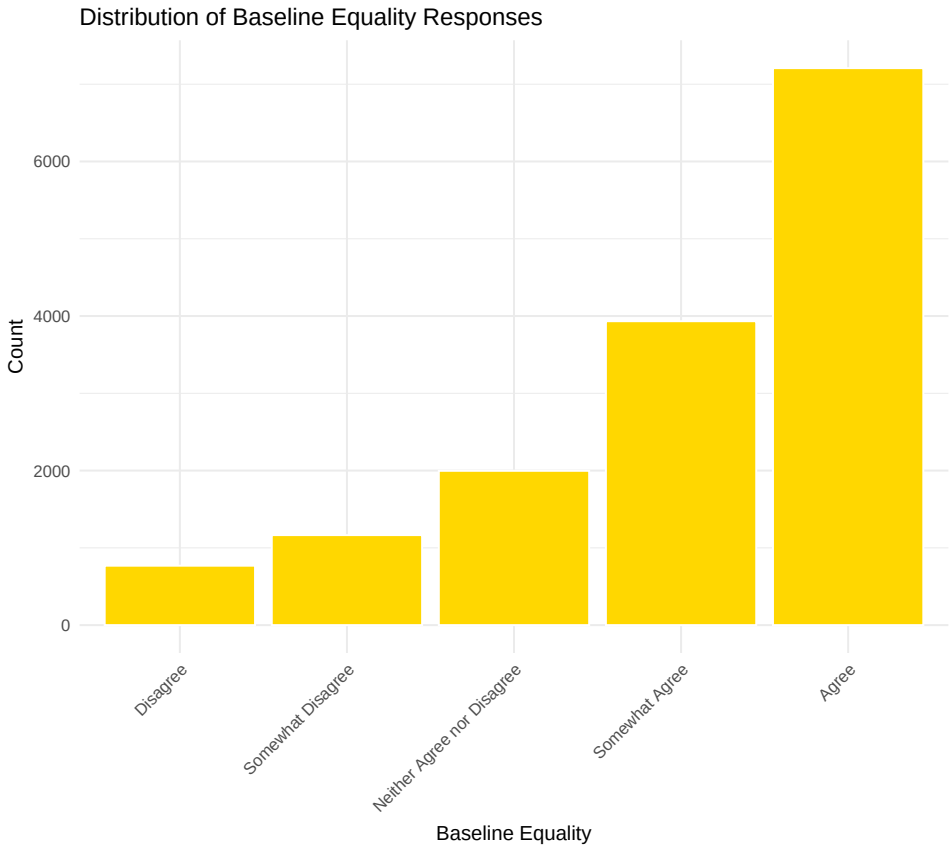



Figure A.5: The distribution of agreement that "the human worth of all people is equal and resources should be allocated equally."

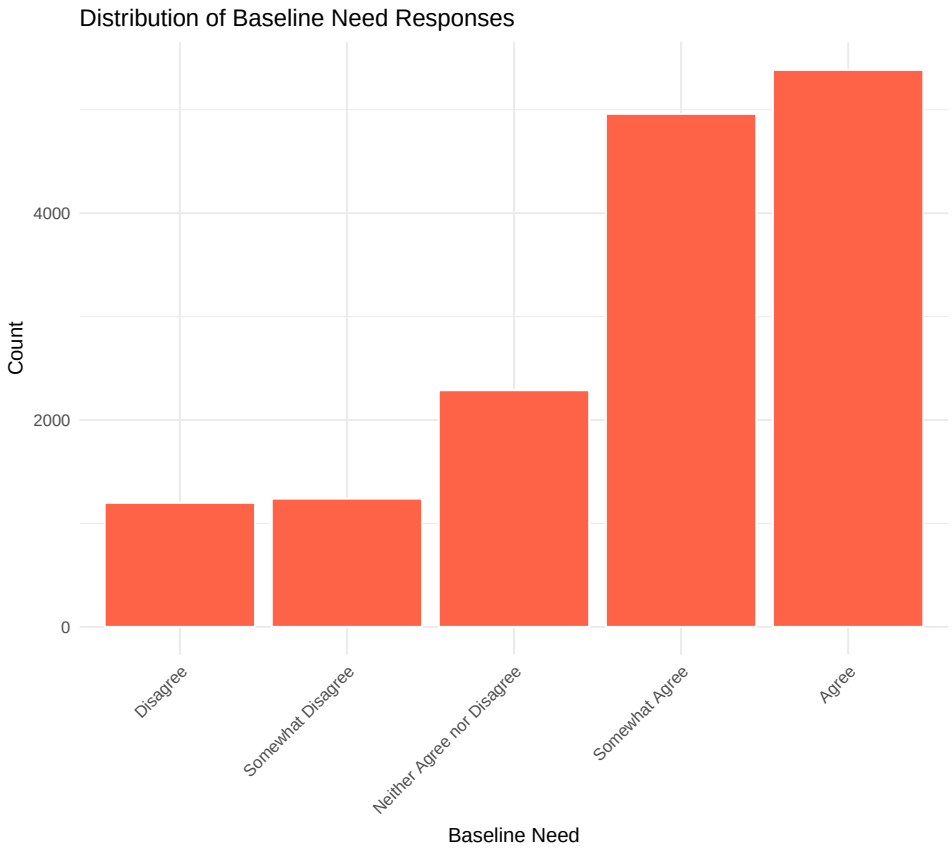



Figure A.6: The distribution of agreement that "the human worth of all people is equal, but some people need more resources than others to achieve equality."

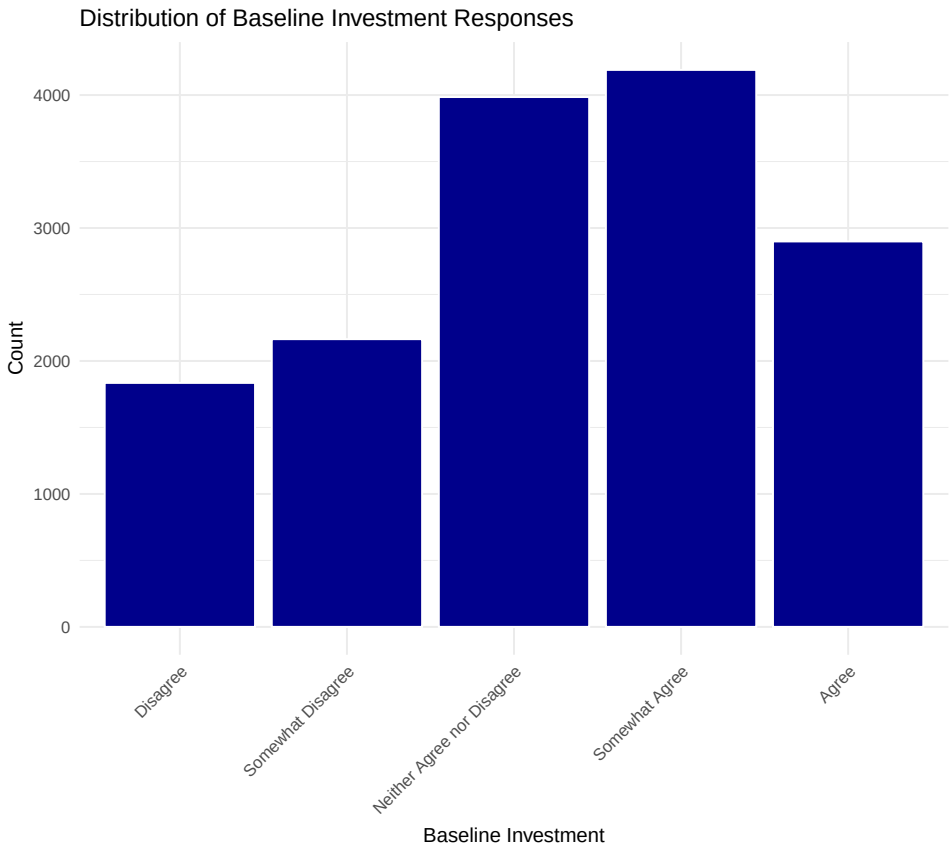



Figure A.7: The distribution of agreement that "allocation of resources to people should be based on their effort to contribute to the country."

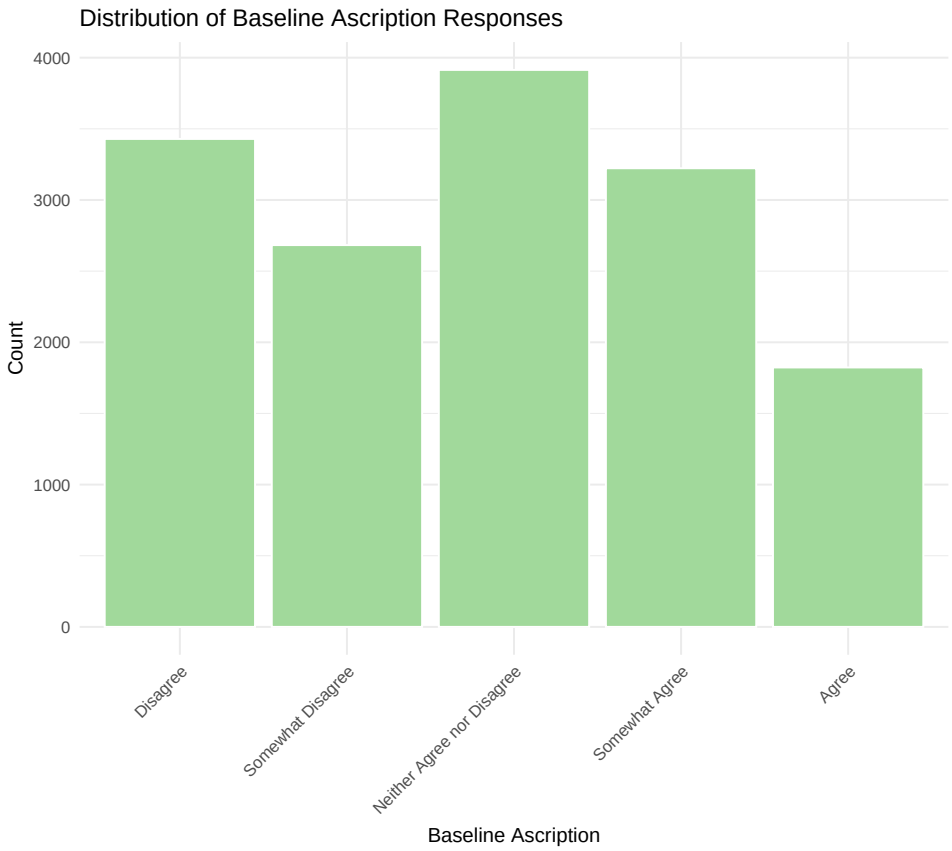



Figure A.8: The distribution of agreement that "people naturally belong to different groups and some groups deserve more resources."

### A.3.3 Baseline Fairness Distributions in Study 2

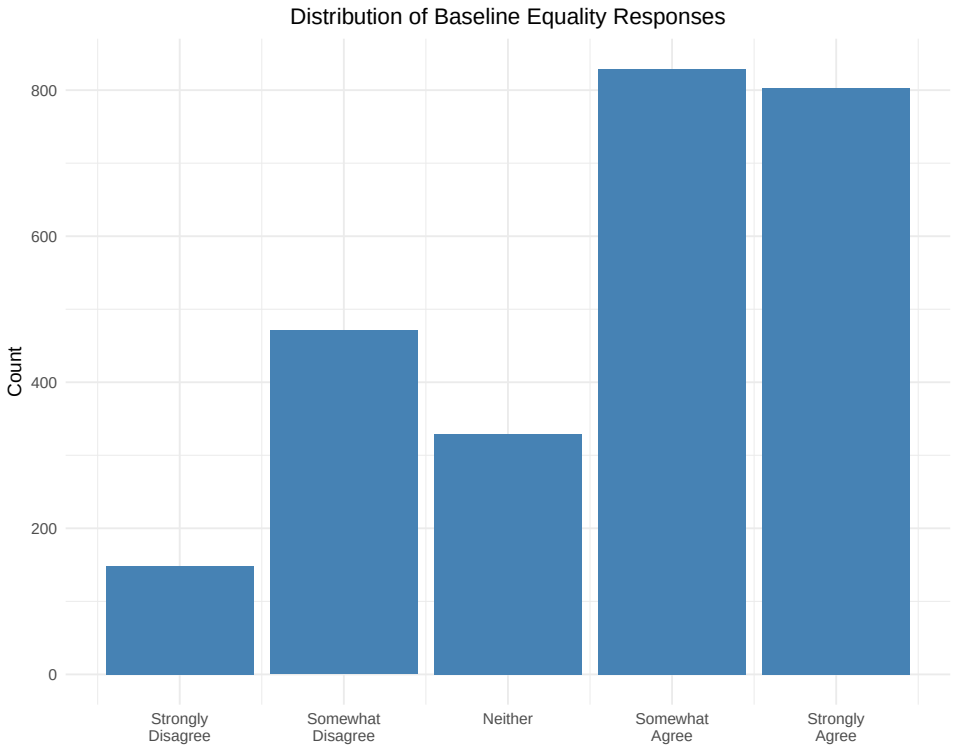



Figure A.9: The distribution of agreement that "resources should be allocated equally to people."

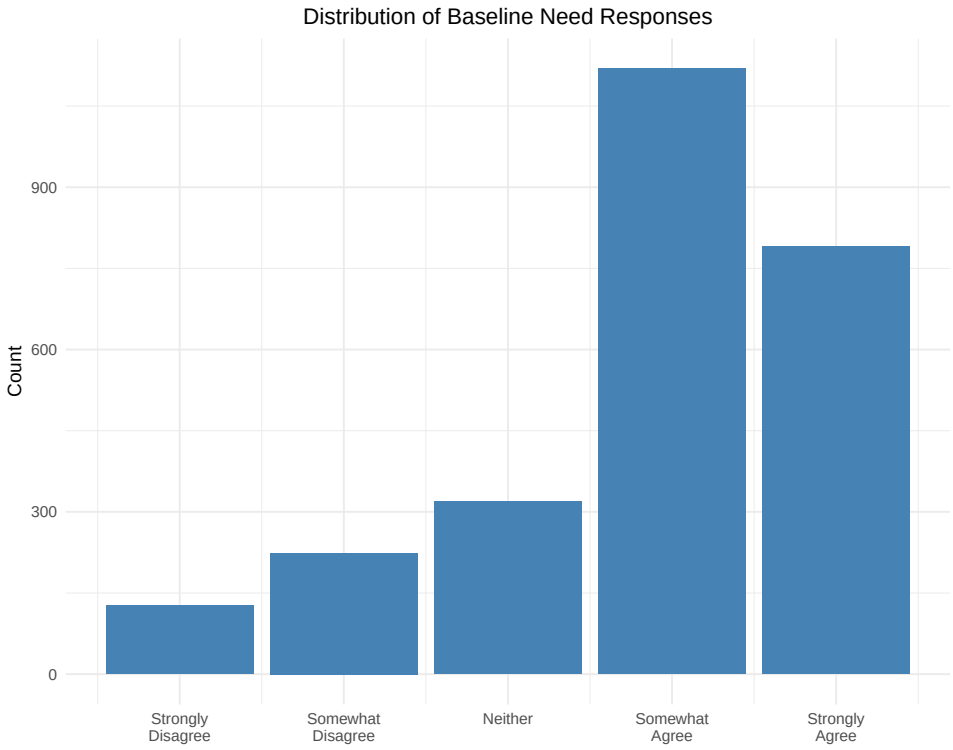



Figure A.10: The distribution of agreement that "some people need more resources than others to achieve equality."

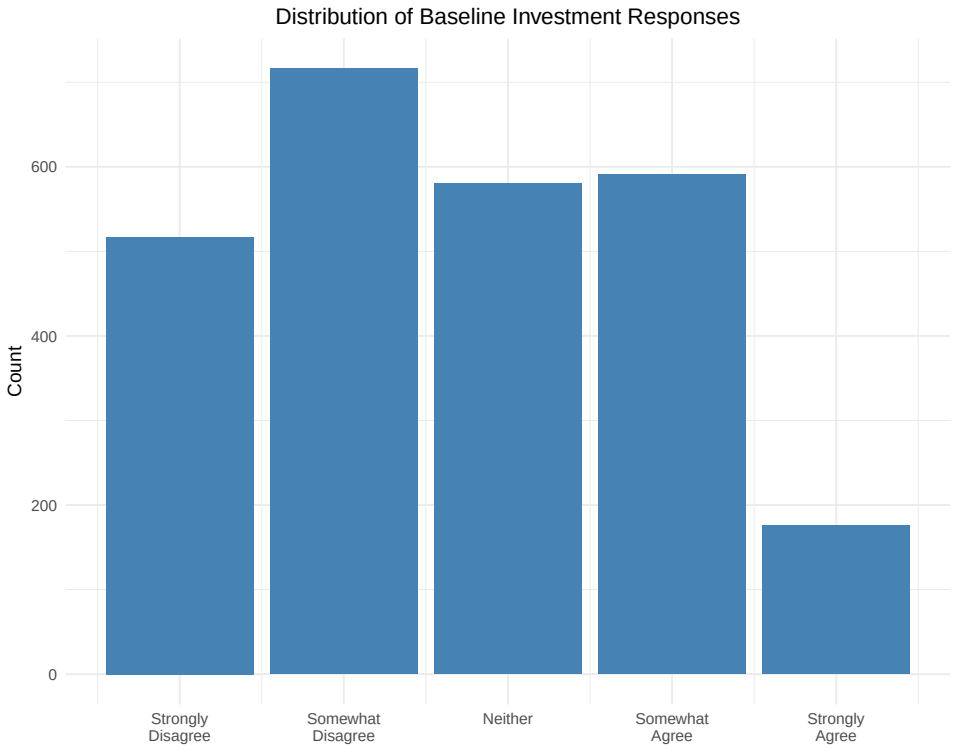



Figure A.11: The distribution of agreement that "allocation of resources to people should be based on their contributions to the country."

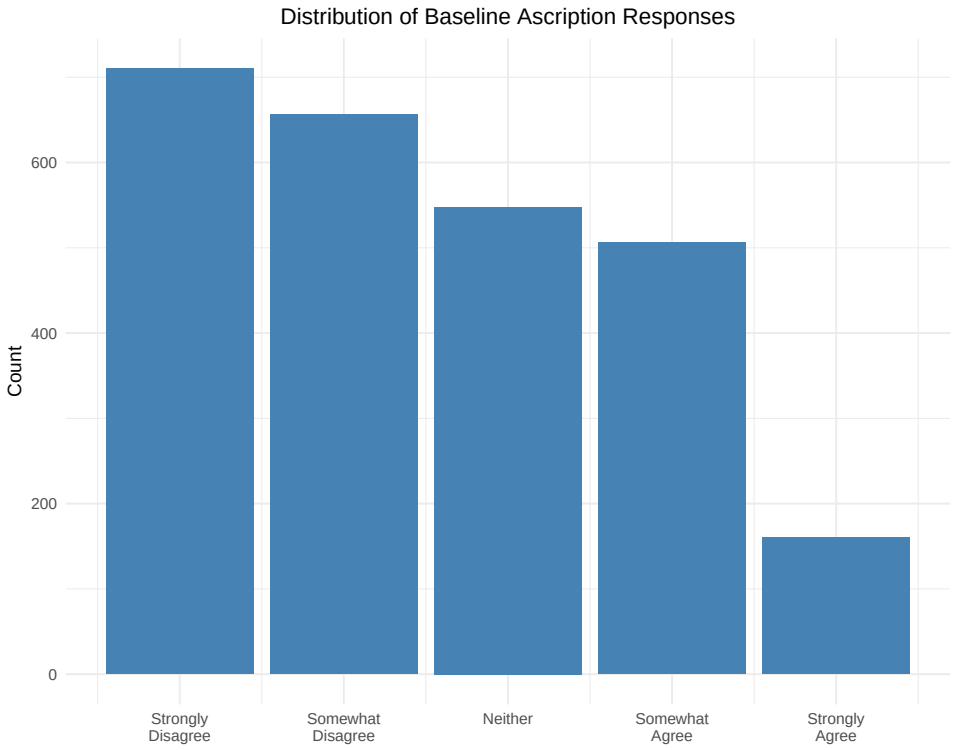



Figure A.12: The distribution of agreement that "people naturally belong to different groups, so some groups deserve more resources."

### A.3.4 Distribution of the Tested Scales

#### Egalitarianism

Most respondents score highly on the egalitarianism index, meaning most endorse principles of equality.

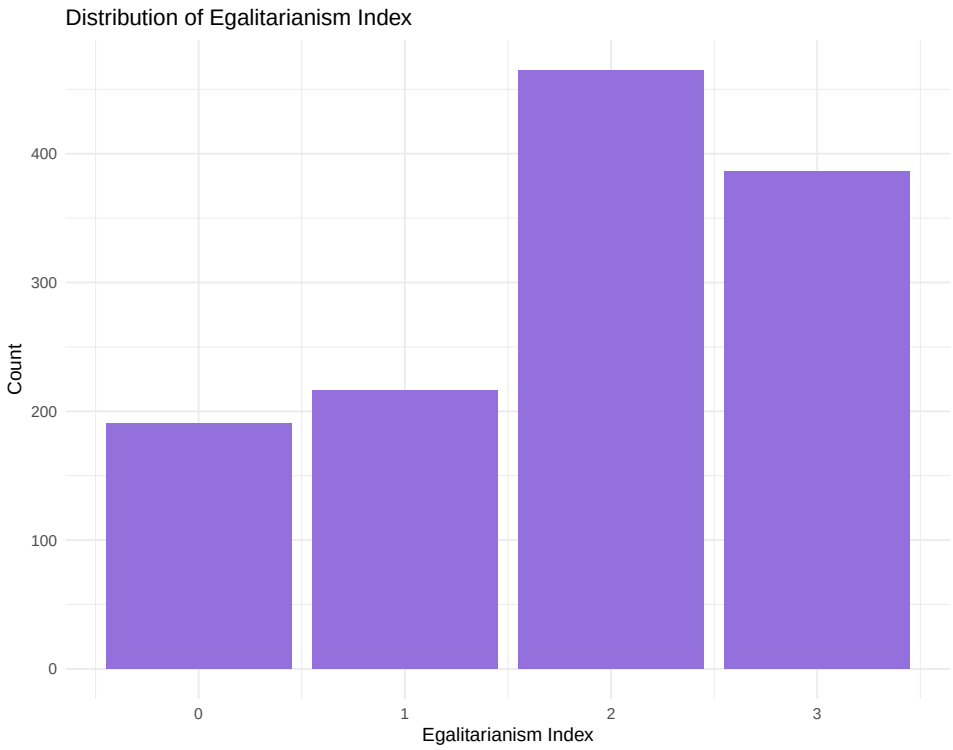



Figure A.13: The distribution of agreement with statements related to equality of opportunity.

### Humanitarianism

Most respondents score highly on the humanitarianism index, meaning most endorse principles of humanitarian and equal treatment of others.

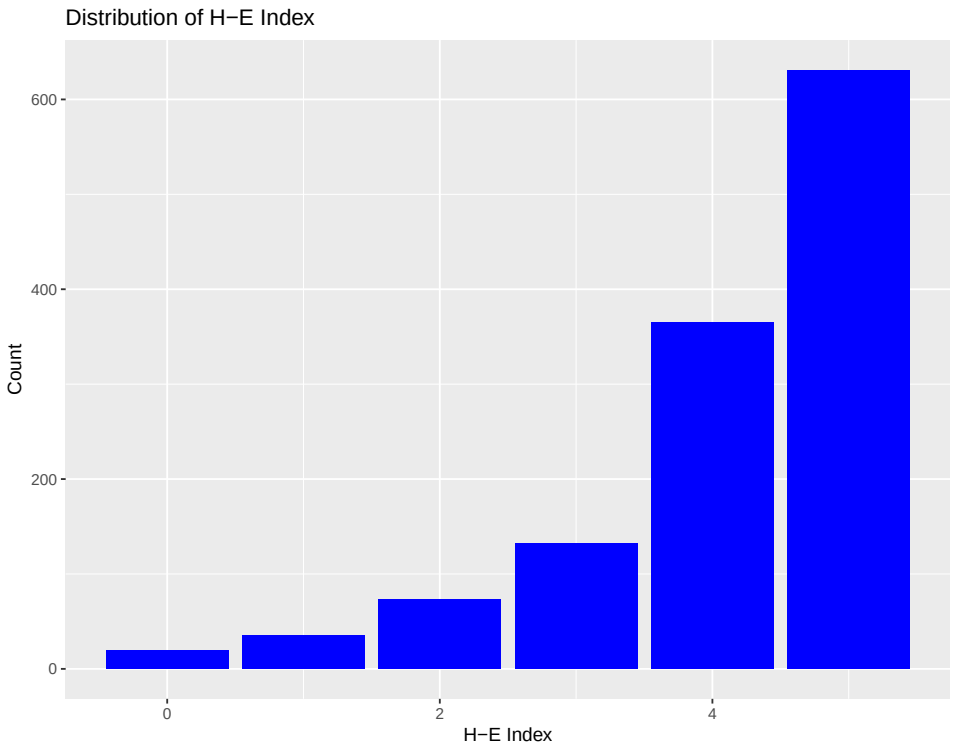



Figure A.14: The distribution of agreement with humanitarianism values. H-E = Humanitarian and Egalitarian as defined by Katz and Hass (1988).

### Zero-sum Thinking

Vast majority of respondents do not view the world through zero-sum mindset. Just over 5% of respondents strongly agree with zero-sum statements using Chinoy et al. (2026) measurement approach (CNS) [54].

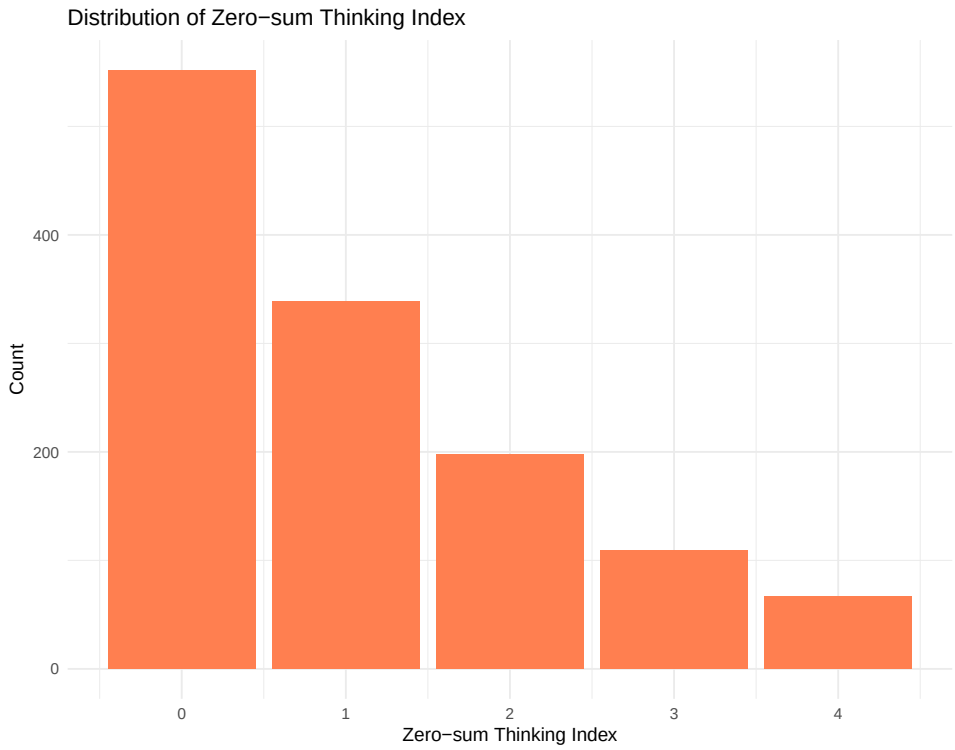



Figure A.15: The distribution of agreement with zero-sum thinking (CNS measurement).

### Migrant Deservingness Scale

The distribution is skewed left with most respondents scoring low on the scale. Very few endorse migrant deservingness across all five dimensions, suggesting most people do not view migrants' welfare access through a lens of deservingness. Less than 1% strongly agreed with all five position statements.

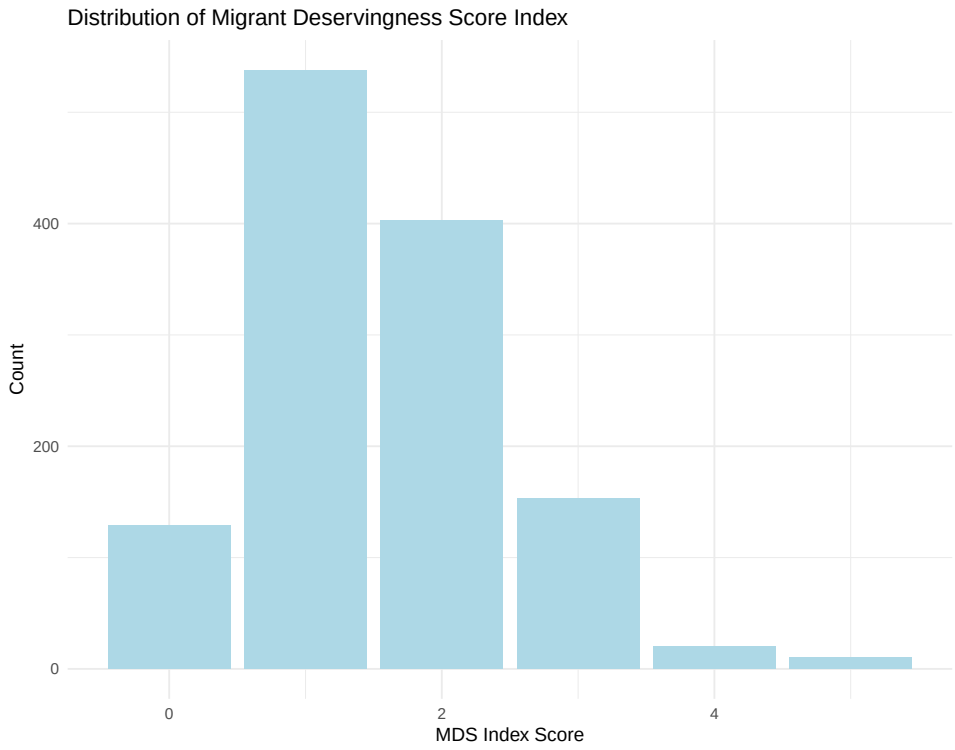



Figure A.16: The distribution of agreement with migrant deservingness evaluations.

## A.4 Modified Zero-sum Thinking Scale

Similar to the conventional scale used by Chinoy et al (2026), there is low agreement with zero-sum thinking statements [54]. The modified statements made by Nall and Trummel (2026) increase the level of agreement, but this is still an uncommon worldview. The second figure in this section details the low correlation between the zero-sum thinking scale (CNS Index) and each fairness dimension. There is nearly zero relationship.

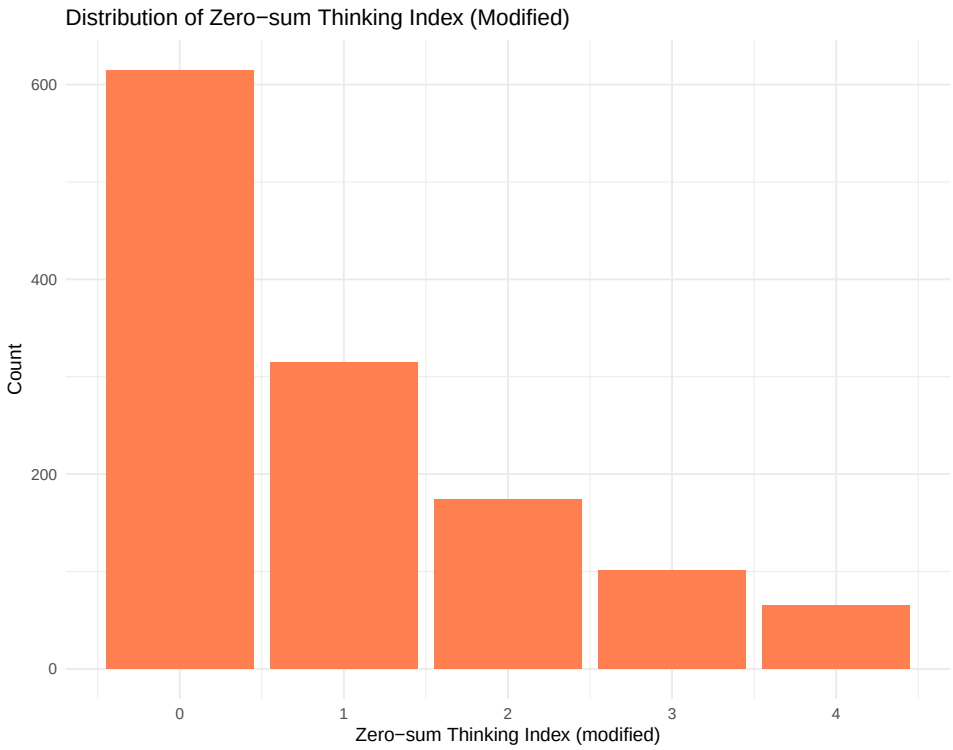



Figure A.17: The distribution of agreement with the modified items of the zero-sum thinking scale.

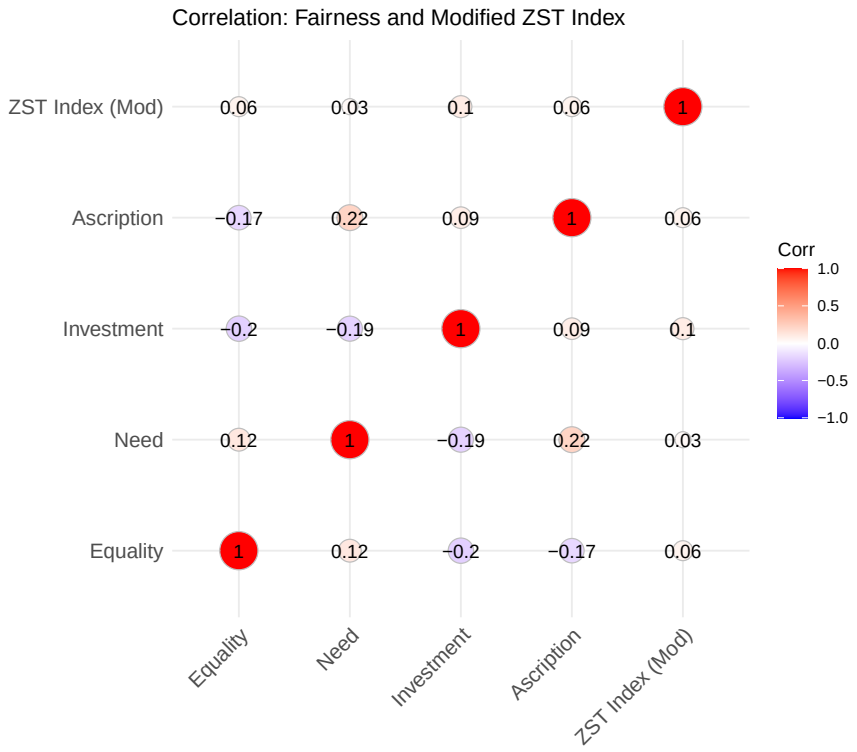



Figure A.18: Correlation between the modified zero-sum thinking scale and each fairness dimension.

## A.5 Fairness Baseline Items in Study 1

In Study 2, I used similar statements to analyze the different dimensions of fairness. However, given some feedback on Study 1, I reduced the potential of double-barreling in some items by simplifying the language. Yet, the wording was also meant to be as similar as possible to compare the distribution of agreement across two samples and time periods. The table below contains the wording used to measure baseline fairness perceptions in the first survey (April 2025).

An additional difference between Study 1 and Study 2 is that the ordering of the fairness baseline questions are randomized within their block in Study 2. The ordering of the block in Study 1 was fixed. The change from Study 1 to Study 2 is intended to

reduce the potential of ordering effects by randomizing the statement order. In both cases, baseline fairness responses were collected very early in the survey flow.

| **Measurement Target** | **Item Wording** | **Response Options** |
|---|---|---|
| *Baseline Fairness Principles* | | |
| Equality Principle | The human worth of all people is equal and resources should be allocated equally. | 5-point Likert |
| Need Principle | The human worth of all people is equal, but some people need more resources than others to achieve equality. | 5-point Likert |
| Investment Principle | Allocation of resources to people should be based on their effort to contribute to the country. | 5-point Likert |
| Ascription Principle | People naturally belong to different groups and some groups deserve more resources. | 5-point Likert |

Table A.4: Measurement baseline items in Study 1. Respondents did not see the measurement target.

## A.6 Dissecting the Ascription Principle Further

The ascription principle is frequently shown to have a weak relationship in the correlation plots with the existing related measurement approaches, as well as very limited predictive power in explaining immigration attitudes. Here, I further evaluate ascription by subgrouping between Republicans and Democrats, as people who hold ascriptionist views from each group may actually have very different worldviews, yet arrive at a point of agreement on the fixed nature of groups.

| | Democrats | | Republicans | |
|---|---|---|---|---|
| | Log-Odds | Odds Ratio | Log-Odds | Odds Ratio |
| Ascription | −0.043 | 0.958 | 0.138* | 1.148 |
| | (0.036) | | (0.062) | |
| N | 1,743 | | 752 | |

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table A.5: Ordinal regression predicting immigration attitude by party. Each column pair is a bivariate ordered logit model subset to party identification. Standard errors in parentheses. Fairness items scaled 0–4.

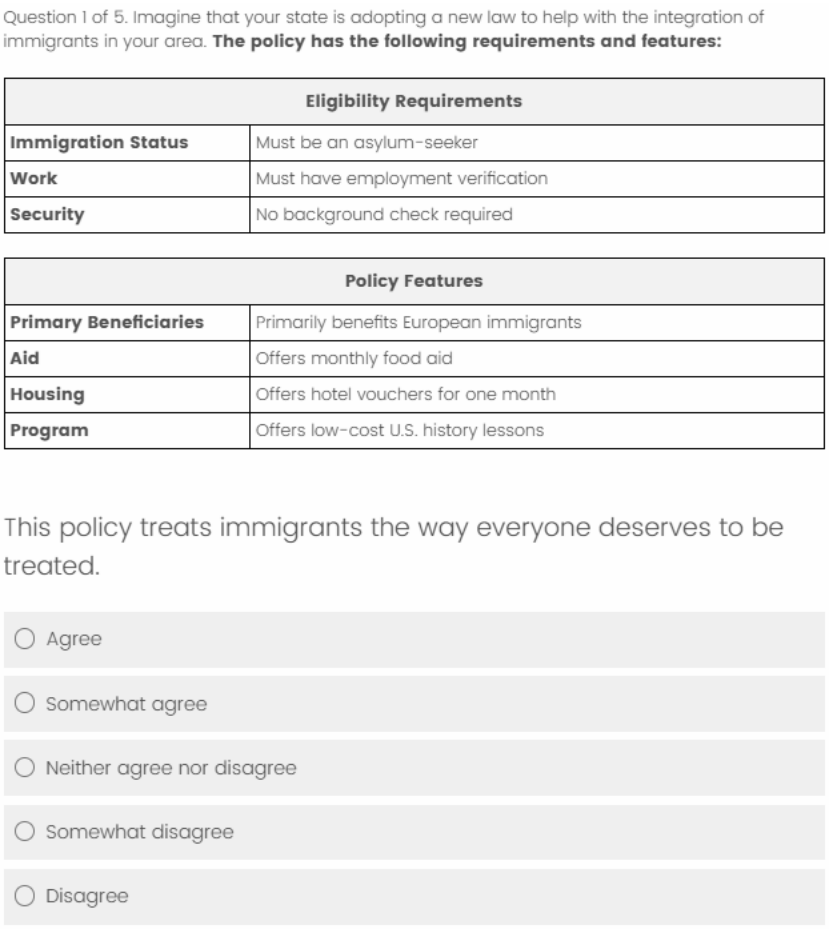
The results show that ascription works differently by party, but it is a weak predictor for both groups. For Democrats, there is no detectable relationship. Among Republicans, there's a small positive and significant effect. Higher agreement with ascription is associated with slightly more pro-immigration attitudes. Overall, it is a unclear why ascription is such a weak predictor, but partisanship does not seem to add much clarity to the ambiguity.

# Appendix B

# Chapter 2 Appendix

## B.1 Experiment Example

Below is an example of what the respondents saw in the survey. The remaining four outcome questions related to the mock policy presented would follow the first question. Then, respondents clicked next and a new policy was randomized for a total of five randomized policy profile assessments.



Question 1 of 5. Imagine that your state is adopting a new law to help with the integration of immigrants in your area. **The policy has the following requirements and features:**

| Eligibility Requirements | |
|---|---|
| **Immigration Status** | Must be an asylum-seeker |
| **Work** | Must have employment verification |
| **Security** | No background check required |

| Policy Features | |
|---|---|
| **Primary Beneficiaries** | Primarily benefits European immigrants |
| **Aid** | Offers monthly food aid |
| **Housing** | Offers hotel vouchers for one month |
| **Program** | Offers low-cost U.S. history lessons |

This policy treats immigrants the way everyone deserves to be treated.

- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree

Figure B.1: Example of what the survey respondents saw when they were presented the conjoint and first outcome question.

## B.2 Survey Instrument

### Consent

This is a survey conducted by a PhD candidate at the University of California, Santa Barbara. You will be asked some questions about immigration and your opinions about politics and public policy. The survey can be expected to take about 10 minutes. I cannot and do not guarantee or promise that you will receive any benefits from this study. If

you were directed to this study through an online survey platform, please note that compensation will be in accordance with your contract with that platform. Responses will be subject to quality checks.

There are minimal risks associated with this study. You will be asked questions about your opinion and will be asked to disclose your zip code. Please note that all information transmitted online carries some risk of being intercepted. If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study. The information collected will be recorded anonymously.

Questions about this project may be directed to the lead study investigators: Taylor Trummel (tntrummel@ucsb.edu) and Kathleen Bruhn (halcon@ucsb.edu). If you have any questions about your rights or treatment as a research participant in this study, please contact the University of California, Santa Barbara Institutional Review Board at 805-893-3807 or hsc@research.ucsb.edu.

If you agree to participate in this research, please click to the next page and complete the questionnaire survey.

## Attention and Warning

1. I check responses in order to make sure that people have read instructions for the task and responded carefully. I will only accept participants who demonstrate that they have read and understood the survey. There will be some simple questions in what follows to test whether you are reading the instructions. If you get these

wrong, you may be ineligible for participation. [I understand, I do not understand]

2. People are very busy these days and many do not have time to follow what goes on in politics. I am testing whether people read questions. To show that you've read this much, answer both "extremely interested" and "very interested." [Extremely interested, Very interested, Moderately interested, Somewhat interested, Not at all interested]

*Survey would auto-terminate if consent was not given and/or the respondent failed the attention check.*

## Main Body of Instrument

3. What is your age? [18-29, 30-44, 45-64, 65 or older]

4. What is your gender? [M, F, non-binary, prefer not to say]

5. What is your current zip code? [short response type-in, validated for 5 digits]

**[Baseline Fairness Questions]** Please rate your level agreement with the following statements:

6. (Equality Principle) The human worth of all people is equal and resources should be allocated equally. [5-point Likert scale of agreement]

7. (Need Principle) The human worth of all people is equal, but some people need more resources than others to achieve equality. [5-point Likert scale of agreement]

8. (Investment Principle) Allocation of resources to people should be based on their effort to contribute to the country. [5-point Likert scale]

9. (Ascription Principle) People naturally belong to different groups and some groups deserve more resources. [5-point Likert scale]

10. [**Second Attention Check**] Next you will see five hypothetical policies being considered by lawmakers. The policies will be presented one at a time and you will be asked your thoughts about them. Please select "somewhat interested" to confirm you are paying attention. [Very interested, Somewhat interested, Not at all interested]

**Conjoint Experiment**

Imagine that your state is adopting a new law to help with the integration of immigrants in your area. The policy has the following characteristics and conditions:

*Respondent sees a randomized policy profile*

[**Outcome Questions**] To what extent do you agree with the following:

11. This policy treats immigrants the way everyone deserves to be treated. [5-point Likert]

12. This policy helps immigrants in greatest need. [5-point Likert]

13. This policy helps immigrants who are going to contribute to the country. [5-point Likert]

14. This policy helps immigrants who are going to fit into the country. [5-point Likert]

15. Would you want your state to adopt this policy? [Yes, No]

*Experiment repeats five times*

16. (MFT Fairness Questions) When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale: 0 is not at all relevant and 5 is extremely relevant.

    Whether or not some people were treated differently than others.

17. Whether or not someone was denied his or her rights.

18. Please read the following sentences and indicate your agreement or disagreement using this scale: 0-5 where 0 is strongly disagree and 5 is strongly agree.

    When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.

19. Justice is the most important requirement for a society.

20. (Racial stereotypes) Next, think about groups and their work ethic in general. Where would you rate Latinos on a scale of 1 to 7? (Where 1 indicates lazy, 7 means hardworking, and 4 indicates most Latinos are not closer to one end or the other.) [7-point scale]

21. (Racial stereotypes) Now think about trustworthiness. Where would you rate Latinos on a scale of 1 to 7? (Where 1 indicates untrustworthy, 7 means trustworthy, and 4 indicates most Latinos are not closer to one end or the other.) [7-point scale]

22. (Racial policy) Some people say that because of past discrimination against Latinos, preference in hiring and promotion should be given to Latinos. Others say preferential hiring and promotion of Latinos is wrong because it gives Latinos advantages they have not earned. What about your opinion - are you for or against

preferential hiring and promotions of Latinos? [7-point favorability scale where 7 indicates strongly in favor]

23. (Racial policy) Please tell me how much you agree or disagree with the following statement. Equal opportunity for Latinos and Whites is very important, but it's not really the government's job to guarantee it. Do you agree strongly, agree somewhat, neither agree nor disagree, disagree somewhat, or disagree strongly with that statement? [7-point Likert scale]

24. (Racial Resentment) It's really a matter of some people not trying hard enough; if Latinos would only try harder they could be just as well off as Whites. [7-point Likert scale]

25. (Racial Resentment) Generations of discrimination have created conditions that make it difficult for Latinos to work their way out of the lower class. [7-point Likert scale]

26. Have you ever used any of the following government assistance programs? Please select all that apply. [Medicaid, supplemental nutrition assistance (food stamps), unemployment insurance, Social Security]

27. How would you describe your political ideology? [5-point Likert liberal to conservative]

28. Which political party do you most closely identify with? [list]

29. What is your highest level of education? [no high school diploma, high school diploma, some college, bachelor's degree, graduate degree]

30. Which best describes your current employment status? [Full-time employee, part-time employee, unemployed but seeking work, unemployed and not seeking work]

31. Which best reflects your annual household income? [$49,999 or less, $50,000 to $99,999, $100,000 to $149,999, $150,000 to $199,999, $200,000 or more, not sure]

32. Do you consider yourself to be Hispanic or Latino?

33. If you had to choose one, which best describes your race? [list, other]

34. Were you born in the United States? [Yes, No, prefer not to say]

35. Do you think the number of immigrants coming to the United States to live should be increased, decreased, or kept about the same? [Increase, decrease, kept about the same, unsure]

36. Do you support or oppose allowing immigrants from countries experiencing conflict or natural disasters to stay in the U.S. under Temporary Protected Status (TPS)? [4-point support, unsure]

37. Some people feel like asylum-seekers are "cutting in line," meaning they aren't following the rules and it's not fair. In your opinion, do you agree or disagree? [agree, disagree, unsure]

38. (If agree) Who do you feel like they are cutting in front of? [Americans, other immigrants, neither, unsure]

## B.3 Data Demographics

The median household income of respondents is between $50,000 to $99,999 and over 60% of the sample works full or part-time. 50.37% of the sample is female. The median age is 45-64 while the median respondent has "some college" level education. 27% of the sample has a high school education or less, consistent with the national average.

33.47% of the sample identifies as a Democrat, 34.6% as a Republican, and 24.95% as an Independent.

Only 5.45% of the sample is foreign-born, well below the national rate of roughly 13.9%. While the survey platform used racial quotas to screen respondents, the survey itself also contained race and ethnicity questions. 18.52% identified themselves as Hispanic or Latino. Among the racial categories collected in a single-selection, forced-choice question, 0.70% selected Native Hawaiian or other Pacific Islander, 2.72% selected American Indian or Alaska Native, 5.93% selected Asian, 14.75% selected Black or African American, and 75.90% chose White. These rates are consistent with the American Community Survey.

| Category | Characteristic | Percent |
|---|---|---|
| Gender | Female | 50.37% |
| | Male | 47.86% |
| Party ID | Democrat | 33.47% |
| | Republican | 34.60% |
| | Independent | 24.95% |
| Ethnicity | Hispanic or Latino | 18.52% |
| Race | Native Hawaiian or Pacific Islander | 0.70% |
| | American Indian or Alaska Native | 2.72% |
| | Asian | 5.93% |
| | Black or African American | 14.75% |
| | White | 75.90% |
| Education | No high school diploma | 3.02% |
| | High school diploma | 23.83% |
| | Some college | 38.00% |
| | Bachelor's degree | 24.71% |
| | Graduate degree | 9.85% |

Table B.1: Snapshot of the sample's descriptive characteristics.

## B.4 AMCE Details

The following figures present a closer view of the fairness outcome plots. They are the same plots as those found in the main body of the paper.

### B.4.1 Fairness Outcome - Equality

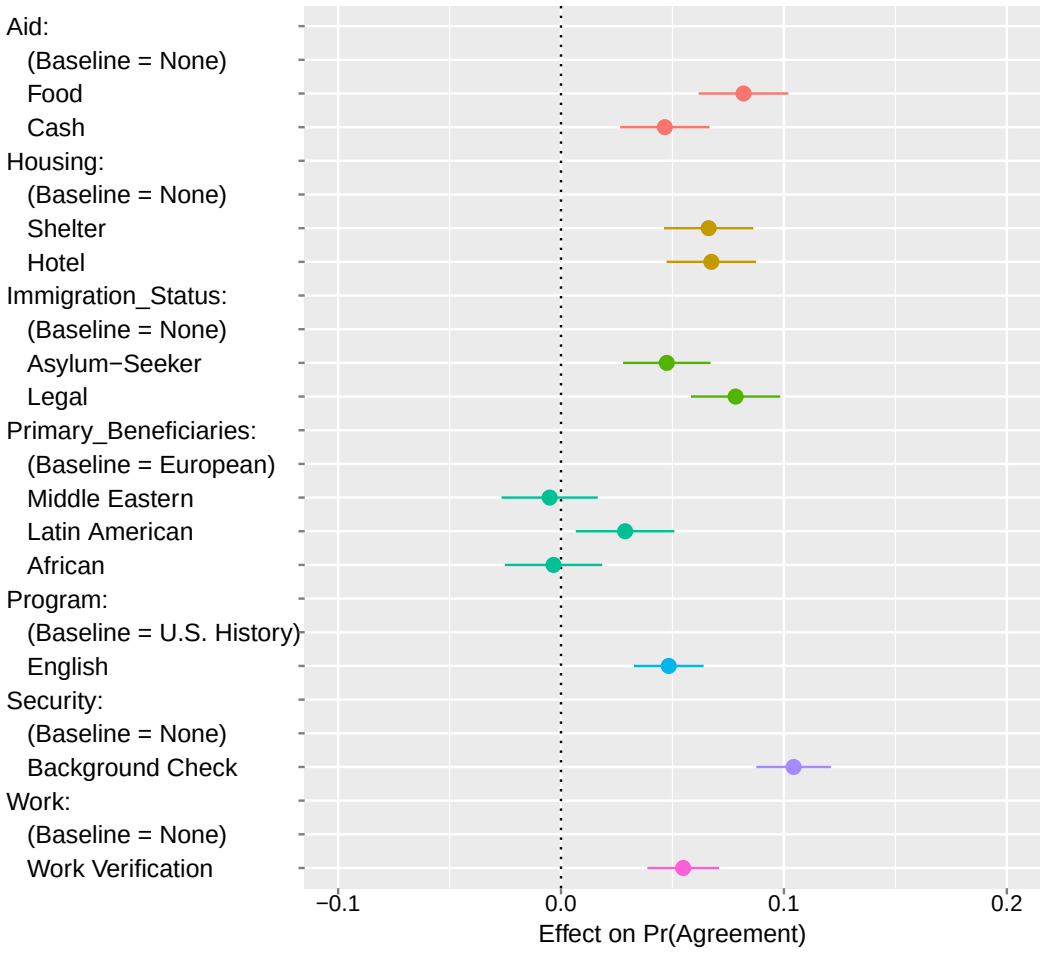



Figure B.2: AMCE of policy attributes on whether the respondent agrees that "this policy treats immigrants the way everyone deserves to be treated."

### B.4.2 Fairness Outcome - Need

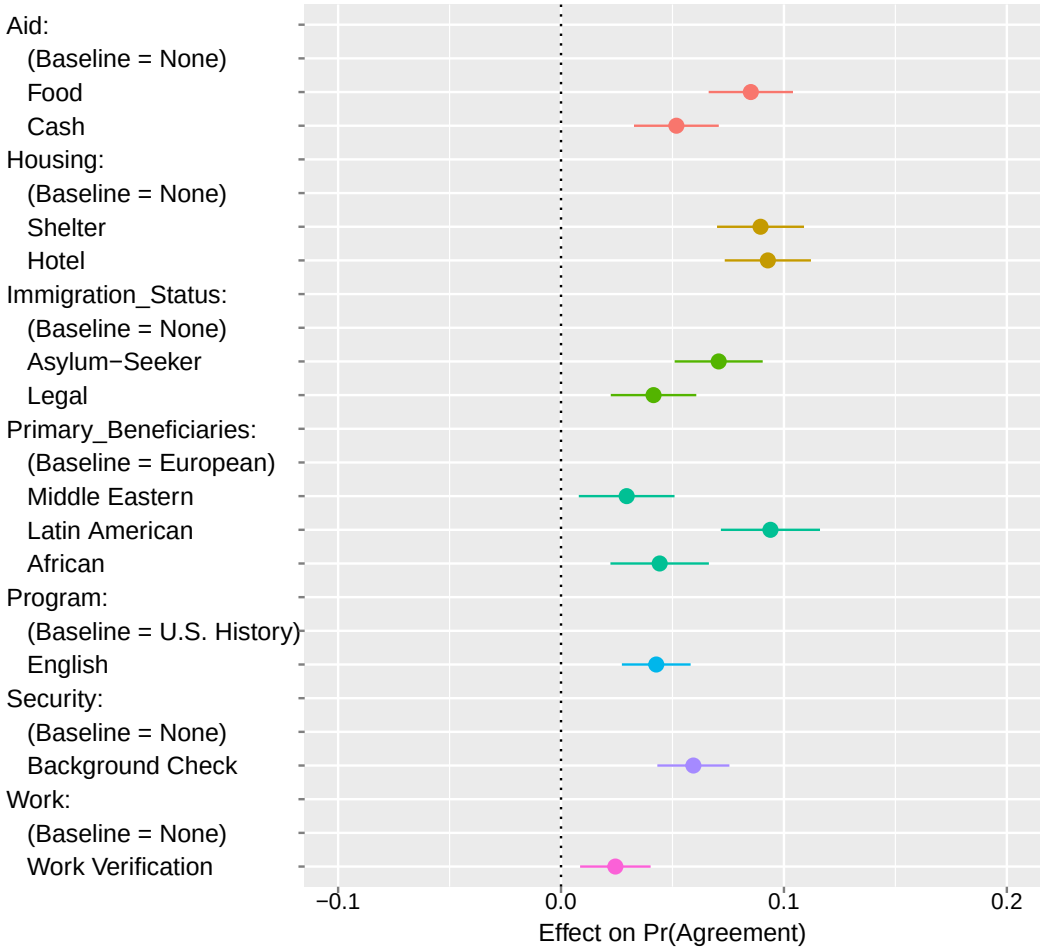



Figure B.3: AMCE of policy attributes on whether the respondent agrees that "this policy helps immigrants in greatest need."

### B.4.3 Fairness Outcome - Investment

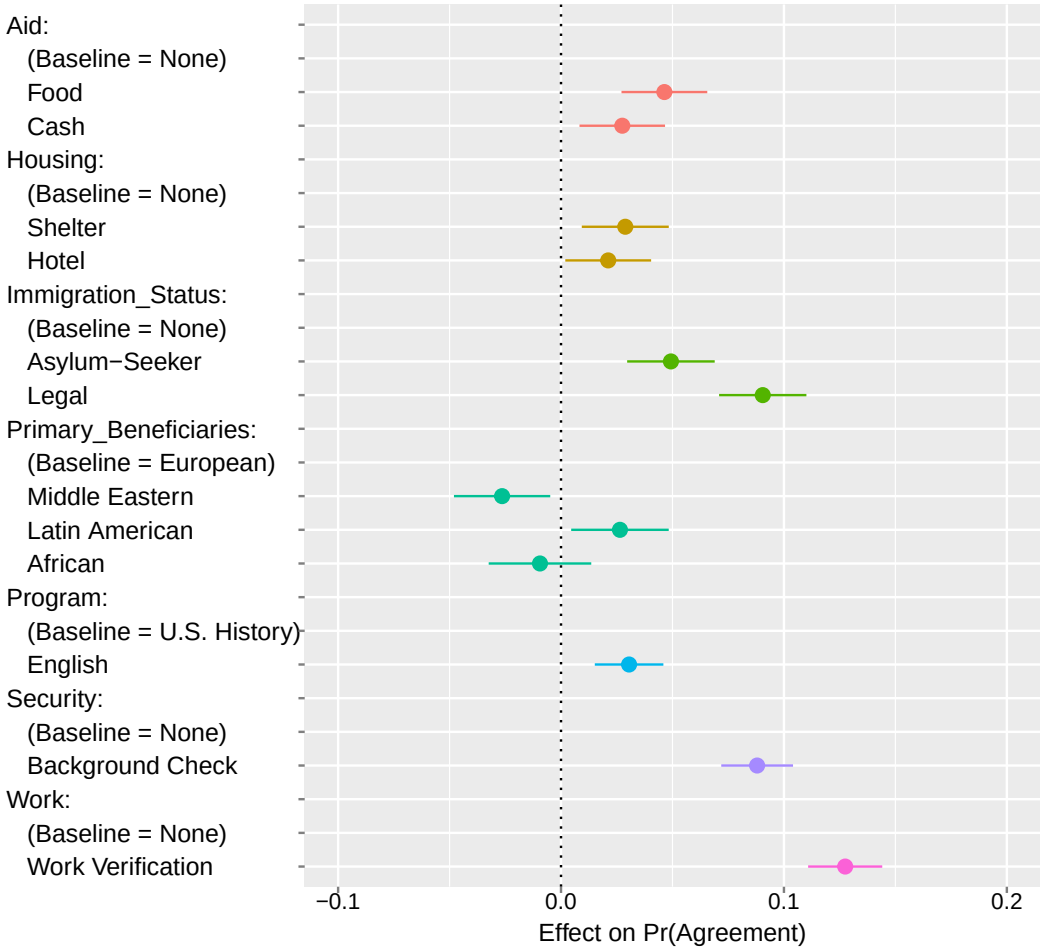



Figure B.4: AMCE of policy attributes on whether the respondent agrees that "this policy helps immigrants who are going to contribute the country."

### B.4.4 Fairness Outcome - Ascription

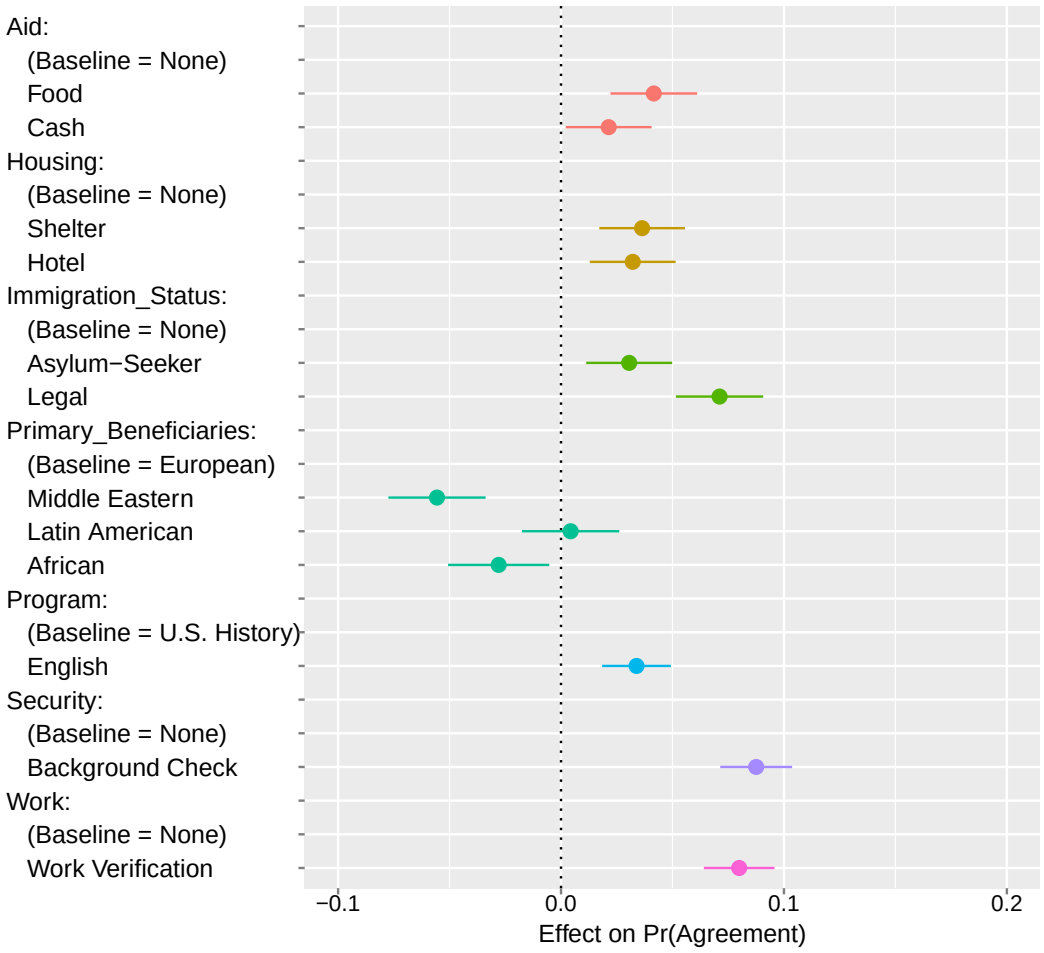



Figure B.5: AMCE of policy attributes on whether the respondent agrees that "this policy helps immigrants who are going to fit into the country."

## B.5 Sub-group Analysis: Prejudice

### B.5.1 Racial Prejudice: Carmines et al. (2011) Model

I examine six survey questions stemming from racial resentment, racial stereotypes, and racial policy research. Taken directly from Carmines et al. (2011), I included ques-

tions in the survey that asked respondents attitudinal questions about racial groups and racial policy. From their instrument, I changed each reference from Black or African American to Latino.[1] I chose to use Latino in this context because Latinos make up the largest share of immigrants in the United States and they are often racialized as immigrants whether or not they are foreign-born [74]. The six items, almost verbatim from Carmines et al. (2011) with the exception of the word Latino(s), are described in Table B.2.

First, a descriptive comparison of median responses between the full sample and a self-identified Latino-only subgroup reveal highly similar results (full discussion further below). On the racial stereotype questions, both Latinos and the full sample rate the group the same on average. The full sample and the subgroup consider Latinos hardworking and more trustworthy than not. These descriptive comparisons suggest there is little difference between how ethnic in-group and out-group members view Latinos among the racial stereotype questions. The racial policy questions likewise show similarity between the full sample and a Latino-only subsample. However, the racial resentment questions show a slight divergence between Latinos and the full sample, with Latinos less likely to express racial resentment toward their group relative to the full sample. Overall though, there is no discernible difference between ethnic in-group and out-group members on items related to stereotypes and policy.

Next, I compare the results of the policy support experiment between those with lower prejudice attitudes toward Latinos and those with higher prejudice attitudes toward Latinos. I build an additive prejudice index following the Carmines et al. (2011)[2] method

[1]Many agree that Latino/a/x is not a racial group, but rather better describes an ethnicity [72]. The Hispanic and Latino identities, also not perfectly interchangeable, have been socially and politically constructed in American politics. High racial diversity exists within the Latino ethnic group, but in a general sense to the majority of Americans and many Latinos themselves it can be considered a racial group [73].

[2]Referred to the CSE model for brevity.

| **Category** | **Question** | **Response Scale** |
|---|---|---|
| Racial Stereotypes | In thinking about how hard some groups work, where would you rate Latinos on a scale of 1 to 7? | 1 (Lazy) – 7 (Hardworking), 4 = Neutral |
| | In thinking about how trustworthy some groups are, where would you rate Latinos on a scale of 1 to 7? | 1 (Untrustworthy) – 7 (Trustworthy), 4 = Neutral |
| Racial Policy | Some people say that because of past discrimination against Latinos, preference in hiring and promotion should be given to Latinos. Others say preferential hiring and promotion of Latinos is wrong because it gives Latinos advantages they have not earned. What about your opinion - are you for or against preferential hiring and promotions of Latinos? | 5-point level of support |
| | Equal opportunity for Latinos and Whites is very important but it's not really the government's job to guarantee it. | 5-point level of agreement |
| Racial Resentment | It's really a matter of some people not trying hard enough; if Latinos would only try harder they could be just as well off as Whites. | 5-point level of agreement |
| | Generations of discrimination have created conditions that make it difficult for Latinos to work their way out of the lower class. | 5-point level of agreement |

Table B.2: The survey questions on racial attitudes toward Latinos. Respondents did not see the category label.

which includes the rating scale of how hardworking and trustworthy respondents consider Latinos to be [48]. Lower scores indicate greater agreement with negative stereotypes. I sort respondents into a binary variable where respondents who moved their rating scale towards untrustworthy or lazy even by one interval fall into the higher prejudice category. This method is necessary because less than 1% individuals rated Latinos at the lowest possible levels. Meanwhile, individuals who either thought that Latinos are hardworking, trustworthy, or "are not closer to one end or the other" compose the second bin at low prejudice.

Results indicate the policy attribute effects on individuals with low prejudice beliefs are highly similar to the full sample. This is unsurprising as it composes the vast majority of the full sample. Higher prejudice individuals represent 7.5% of the sample, which is also why the confidence intervals become wider. Among the higher prejudice respondents, legal status and a background check are the only significant attributes. While the point estimates of primary beneficiary group attributes decrease, they fail to have significance. This means that the primary beneficiary group was not a meaningful attribute in assessing policy support among higher prejudice individuals. Eligibility criteria such as legal status and a background check positively influence support, but I find no evidence of an effect for region of origin among higher prejudice respondents.

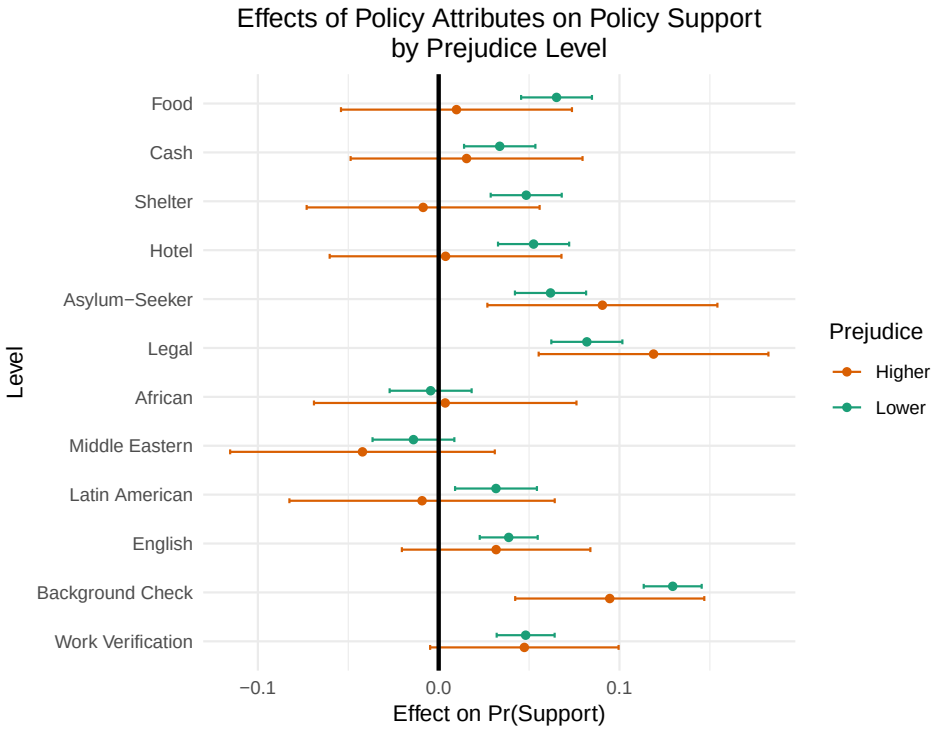



Figure B.6: Policy support by those who express higher agreement with racial stereotypes compared to those with lower agreement. Index built following the Carmines et al. (2011) model of racial resentment. Wide confidence intervals among higher prejudice respondents are due to the small sample size. Exclusion criteria for some form of legal status and required background checks increase the probability of policy support for both higher and lower prejudice respondents.

Overall, the analysis in this section suggests that even among more prejudiced individuals, the region of origin of the primary beneficiary immigrant group is not the motivating attribute when weighing policy support considerations. Rather, norms of law and order as seen in preference for proof of legal status and a background check are the influential attributes for policy support. As a caveat however, this analysis is limited by a relatively small subset of the sample that expressed prejudice against Latinos. Because of the small sample, precision is low. While this is a statistical issue, it may be an

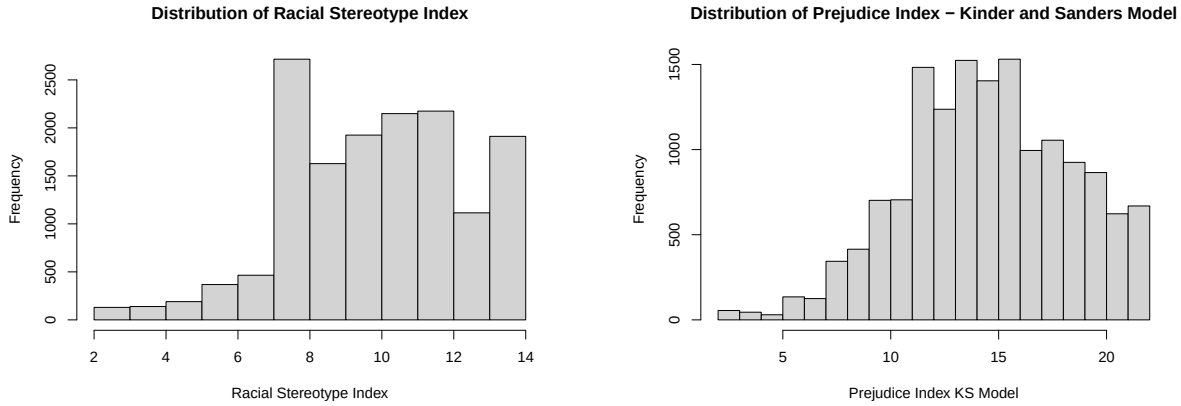
overall reflection of more positive feelings toward Latinos among the U.S. population, a statement bolstered by the results of the conjoint that finds generally more support and greater perceptions of fairness when policies benefit Latin American immigrants. Interpretations of these results in particular should be made cautiously, as social desirability bias can also influence responses to the racial prejudice measurement items. Although, recent research demonstrates that social desirability may be less of a concern in online surveys than previously thought [177]. As another robustness check and precaution, I also assess racial resentment and prejudice using the Kinder and Sanders (1996) measurement approach.

### B.5.2 The Kinder and Sanders Model vs Carmines, Sniderman, and Easter Model

The histogram in the left panel below depicts the distribution of scores on the prejudice index following the methods of Carmines et al. (2011). The index is composed of the two racial stereotype questions included in the survey. In the survey, lower scores corresponded with more negative feelings toward Latinos. Scores below eight were binned in the higher prejudice category. These make up a small share of the data at 7.5%.

For comparison, I also test the AMCE of policy attribute levels on support by higher and lower prejudice following the methods of Kinder and Sanders (KS). Both approaches include perceptions of Latinos' trustworthiness and work ethic (the stereotype questions), but the KS approach also includes what Carmines et al. (CSE) refer to as racial resentment. These two items include agreement with statements that assert that Latinos need to try harder to be as well off as Whites and that generations of discrimination make it difficult for Latinos to achieve upward mobility. These two items are a measurement of symbolic racism according to Kinder and Sanders (1996), while they are more accurately

a measurement of political ideology according to CSE. The KS index is an additive index of these four items. Like the approach for developing a binary for CSE, respondents that express either ambivalence or positive feelings toward Latinos are considered low prejudice, while those who express either slight or great animus to Latinos fall into the higher prejudice category. Again, less than 1% of respondents fall into the most hostile attitude toward Latinos bin and because of this I include those with even slightly negative attitudes as measured by these four survey items to better power the analysis. The right panel of the histograms below depict the distribution of the racial prejudice index following the approach of KS and includes both the stereotypes and resentment items in its construction.




(a) Carmines et al. Model (b) Kinder and Sanders Model

Figure B.7: Distribution of Prejudice Index Scores - Comparison of Two Models

As before, the sample size of those with higher prejudice is relatively small, resulting in wide confidence intervals. However, the results of the KS racial prejudice model differ from the CSE model. While lower prejudice respondents have very similar results to both the main AMCE estimates and the CSE model, those with higher prejudice scores according to the KS index have statistically significant negative effects on the aid

attributes. Like the CSE model, proof of a legal immigration status and requiring a background check increase the probability of policy support. The integration program, U.S. history lessons compared to English lessons, has no detectable effect for the higher prejudice group. Finally, the region of origin of the immigrants primarily benefiting from the randomized, hypothetical policy has no detectable effect for all groups among higher prejudiced individuals. This suggests that for higher prejudice respondents, the primary beneficiary group is not a significant influence on the probability of whether a respondent supported the policy. As before though with the CSE model, the higher prejudice group is relatively small which limits the power to identify effects. While this is a problem for statistics, it is perhaps a normatively positive outcome that very few U.S. respondents intentionally expressed even slight animus against Latinos.

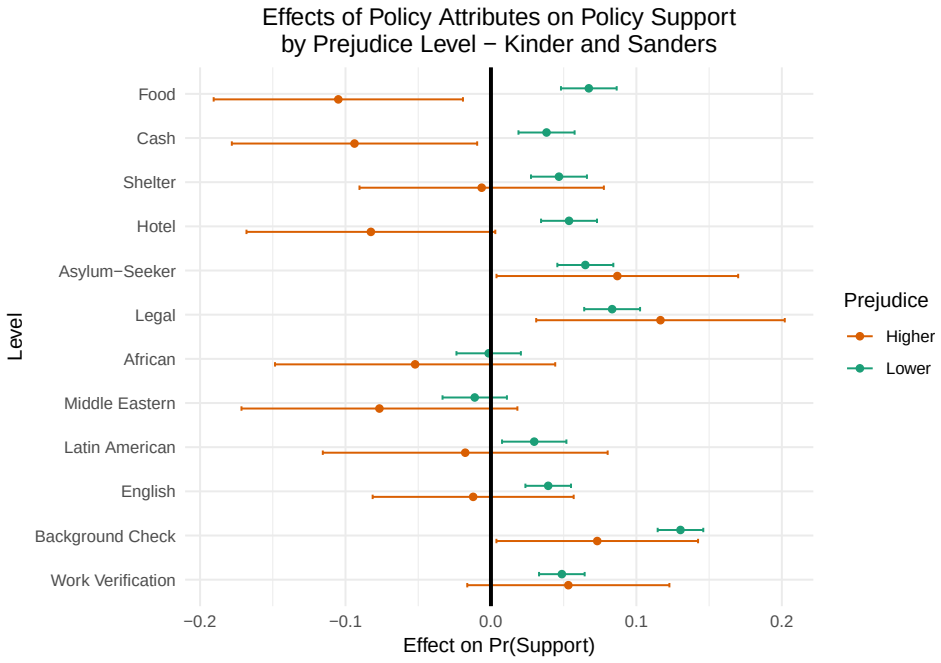



Figure B.8: Policy support by those who express higher agreement with racial stereotypes and racial resentment compared to those with lower agreement. Index built following the Kinder and Sanders model of racial prejudice.

### B.5.3 Descriptive Results of Latino Prejudice Items

I examine the descriptive results of these survey items. On the racial stereotype questions, the full sample median response to the perceptions of the work ethic of Latinos is a 6 on a scale ranging 1 to 7 where 7 is the most hardworking. This means that most respondents consider Latinos to be very hardworking. When subset to a self-identified Latino only sample (n = 554), the median is the same. On the second stereotype question, the perception of trustworthiness of Latinos is a 5/7, indicating that most respondents consider Latinos to be quite trustworthy. Subset to only self-identified Latinos again, the median response to trustworthiness is 5/7.

Turning to the racial policy questions, the first one deals with support for preferential hiring of Latinos. The median response is "somewhat against," with 37.1% of respondents selecting either against or somewhat against. 27.7% of respondents chose somewhat in favor or in favor, with the rest falling into the center at neither in favor nor against. Although there is a percentage shift toward greater favorability, the median response among Latinos is also "somewhat against." On average, this means that Latinos are in opposition to policy that would theoretically benefit their own group. Next, I examine a question about the government's role in protecting equal opportunities for Latinos. Respondents were asked to express the strength of their agreement with the assertion that it is not the government's job to protect equal opportunity. The median response with the full sample is "neither agree nor disagree." When subset to a Latino only sample, the median is the same.

Finally, I examine the racial resentment descriptive results. The first racial resentment question assesses perceptions of Latino work ethic relative to Whites. It asks for respondents' level of agreement with whether Latinos could be just as well off as Whites if they tried harder. The median response is "neither agree nor disagree." 47.5% of respondents

either disagreed or somewhat disagreed with this statement, while 26.9% either agreed or somewhat agreed. The remainder took the center option. Among those who took a position on this statement, nearly twice as many disagreed than agreed. When subset to Latinos only, the median response is "disagree." While 53.6% of Latinos disagreed with this statement, 25.6% agreed that if they tried harder they could be as well off as Whites. On the second racial resentment question, I asked respondents to consider the impact of systemic racism, although not explicitly stated as so. Respondents were asked to state their level of agreement with whether they thought generations of discrimination have made upward social mobility more difficult. The median response to this statement is "neither agree nor disagree." 29.0% agreed or somewhat agreed with this statement, while 48.9% disagreed or somewhat disagreed. The remainder chose "neither agree nor disagree." Among Latinos, the median response was "somewhat agree," reflecting a departure from the full sample. 19.6% disagreed, while 61.01% agreed with the statement. This question resulted in the largest divergence from the full sample, meaning Latinos were more likely to agree that discrimination hurts their upward socioeconomic mobility. Overall though, an important pattern emerges when comparing the descriptive results between the racial stereotype, policy, and resentment questions: In the majority of tested cases, there is little difference between ethnic in-group and out-group members on items related to stereotypes and policy, while there is a divergence on resentment. Latinos overall express less racial resentment toward their group relative to the full sample. However, Carmines et al. (2011) and Schuman (2000) contend that resentment items such as these a better measurement of ideological and racial policy preferences.

### B.5.4 Heterogeneous Treatment Effects by Prejudice on Fairness

I examine the heterogeneous treatment effect outcomes on the different fairness dimensions by prejudice level. The following figures depict these results. They follow the prejudice index coding method of Carmines et al. (2011). The confidence intervals for higher prejudice respondents are wide because there are far fewer higher prejudice respondents than lower prejudice respondents.

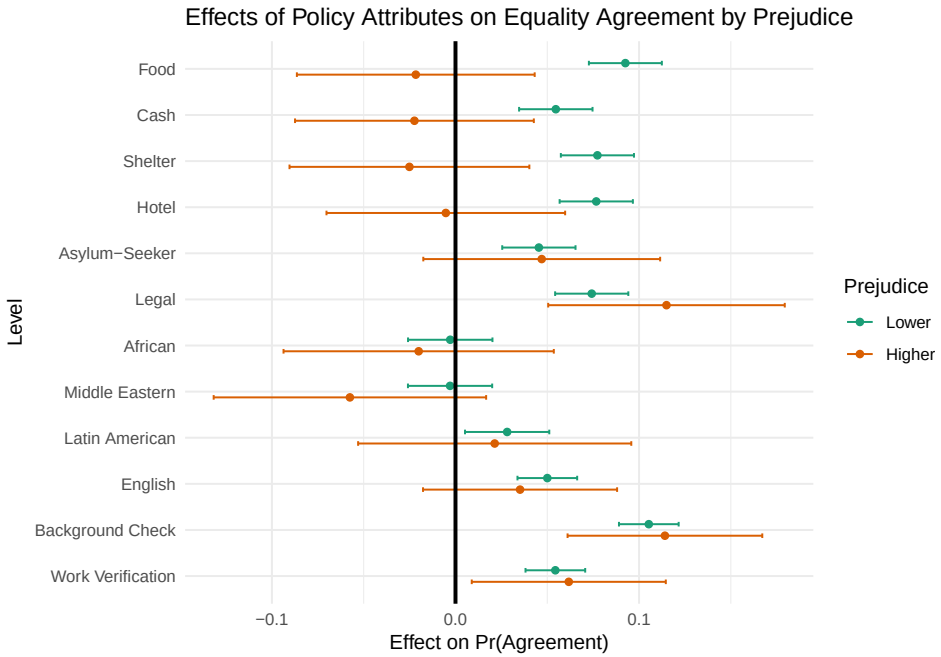



Figure B.9: The effects of each level on the probability of agreement with the equality perspective of fairness by level of prejudice.

The results for the probability of agreement with the equality principle find three outcomes where significance is shown among the higher prejudice respondents. Relative to no requirements, legal status, a background check, and work verification all increase odds of agreement with the equality perception of fairness among higher prejudice respondents

and lower prejudice respondents alike. The region of origin has no detectable effect on the probability of agreeing with the equality statement for higher prejudice individuals.

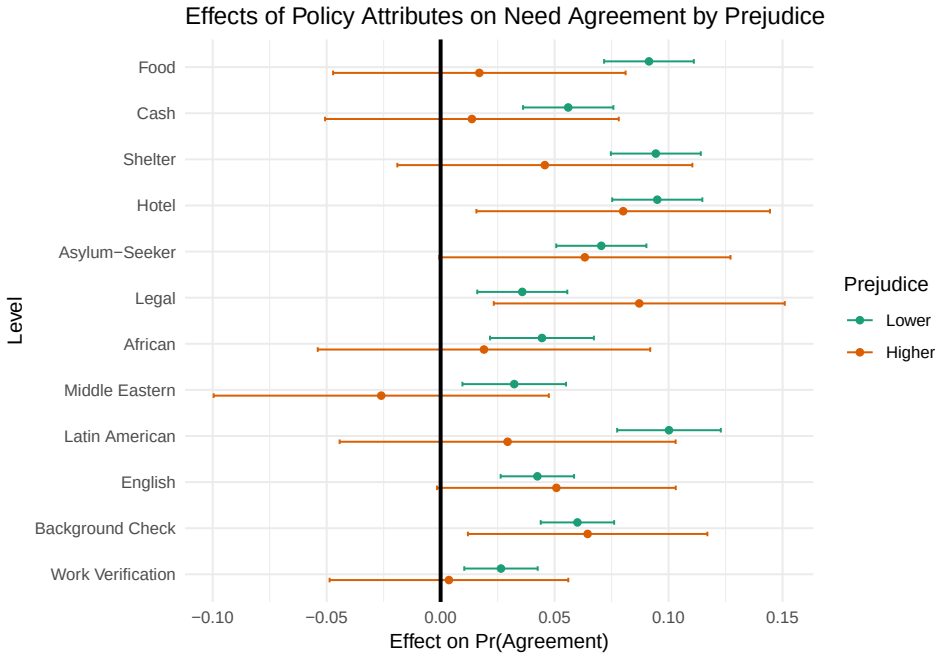



Figure B.10: The effects of each level on the probability of agreement with the need perspective of fairness by level of prejudice.

For the need principle, higher prejudice respondents were more likely to agree when there was a hotel voucher offered, when the policy required legal status, and/or when a background check was required compared to the baseline. These levels had a similar effect on lower prejudice individuals as well, although the magnitude of the effect varies. No evidence of an effect is found on immigrant region of origin for higher prejudice individuals for this outcome variable.

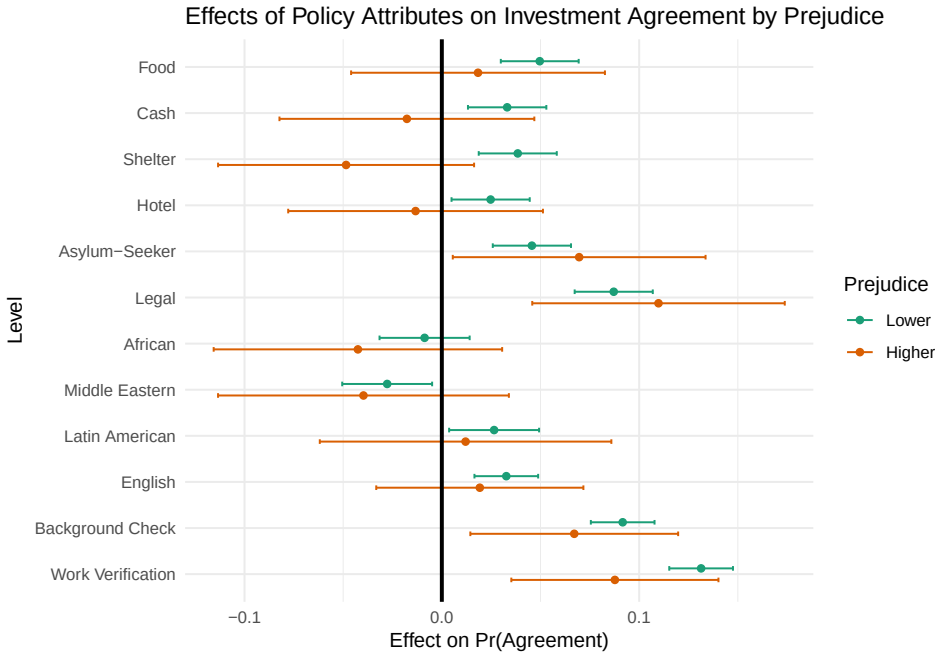



Figure B.11: The effects of each level on the probability of agreement with the investment perspective of fairness by level of prejudice.

Higher prejudiced individuals were more likely to agree with the investment principle when the policy required legal status, asylum seeker status, a background check, and/or work verification compared to the baseline. In other words, all the eligibility criteria increased the probability of agreement with the investment perception of fairness. African origin immigrants being the primary beneficiary decreased the odds of agreement with the investment perspective among groups of respondents, but it is not significant. Among the lower prejudice respondents, the trends are similar to those already reported for the investment perspective, with a small notable penalty on Middle Eastern immigrants. Like many other results described in the paper, Latin American immigrants being the primary beneficiary increase odds of agreement compared to European immigrants at baseline.

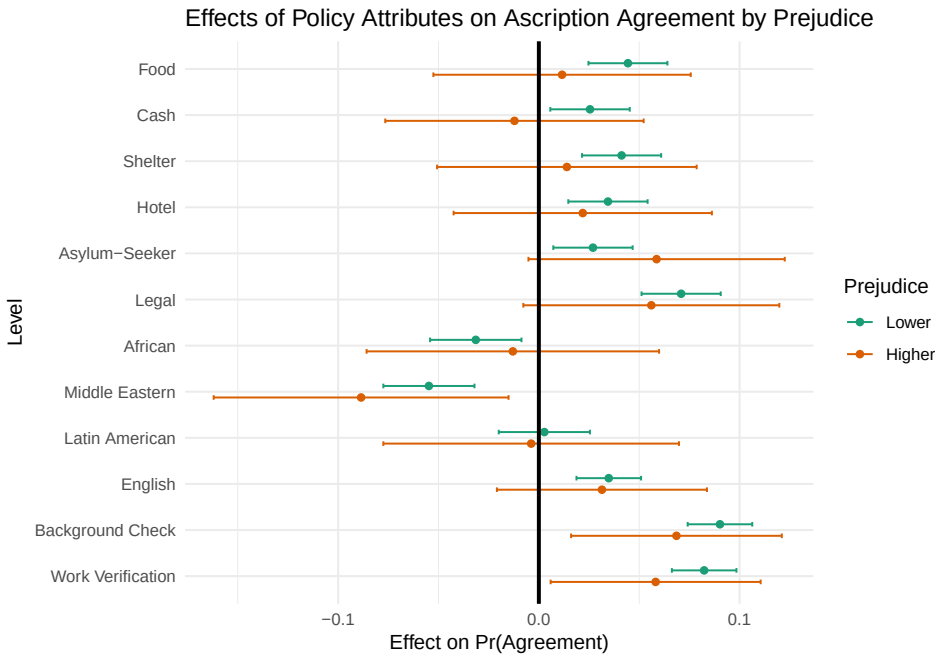



Figure B.12: The effects of each level on the probability of agreement with the ascription perspective of fairness by level of prejudice.

For agreement with the ascription perspective of fairness, when the policy benefited Middle Eastern immigrants, the probability of agreement decreased for both higher and lower prejudice respondents relative to the baseline. All other levels have no detectable effects for higher prejudice respondents. Notably, the point estimates are highly similar to the lower prejudice respondents in many cases.

## B.6 Sub-group Analysis: Party

To measure partisanship, respondents selected which political party they most closely identified with between Republican, Democrat, Independent, or other. The following figures detail the results when the model subsets by party. The primary beneficiaries attribute generally has very limited negative effects, and only among Republicans. A

background check has a large positive effect for both partisan groups. Social services all increase the probability of support for Democrats relative to none, with the largest point estimate generally on food aid. In a departure from previous research [108], legal status has no evidence of an effect for Democrats.

Overall, the policy design features have some disparate effects on partisans, but both partisans favor eligibility criteria and view them as "fair." Democrats also support and view social services as fair, broadly defined, while in most cases they have no evidence of an effect for Republicans. This suggests a policy area of partisan agreement: state policies that provide social services with "rules" for access are supported and considered fair under multiple dimensions of fairness.

### B.6.1 Heterogeneous Treatment Effects by Party on Fairness

The following four figures depict the effect of each level on the four dimensions of fairness by partisanship. Self-identified Independents were excluded. Analysis was subset to a binary variable for Republicans (n =1,038) and Democrats (n = 1,005). Fairness scales were adapted to a binary where one equals agree or somewhat agree. This makes interpretation of the effects more straightforward.

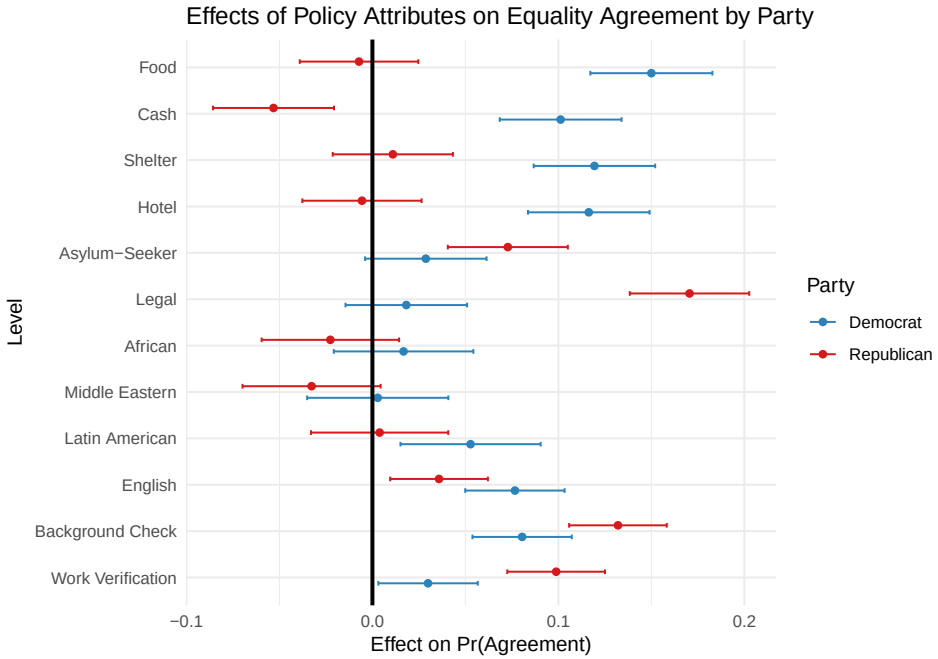



Figure B.13: The effects of each level on agreement with the equality perspective of fairness by political party.

Democrats were more likely to agree with the equality perspective of fairness when the policy offered a form social service (food, cash, shelter, or hotel). Food, shelter, and hotel vouchers had no evidence of an effect on the likelihood of agreeing with the equality fairness perception for Republicans, while offering cash made them less likely to agree. The region of origin has no evidence of an effect for Republicans, while Latin American immigrants are favored by Democrats relative to European immigrants. Among the eligibility criteria, only legal status has no evidence of an effect on Democrats, while a background check and work verification increase the probability of agreement relative to no requirements. All eligibility criteria increase the odds of agreement for Republicans.

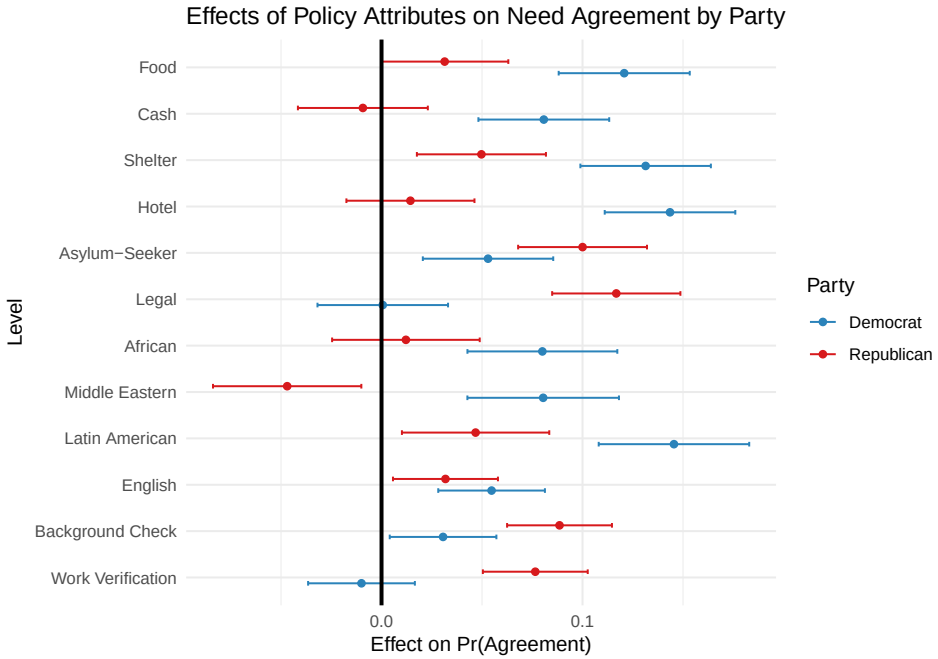



Figure B.14: The effects of each level on agreement with the need perspective of fairness by political party.

The next figure depicts the effect of each level on the likelihood of agreeing with the need perspective of fairness by party. Democrats were more likely to agree with this statement when the policy included social services. Food, cash, and hotel vouchers had no evidence of impact on the likelihood of Republican agreement with this perspective of fairness, while shelter increased the odds of agreement relative to none. Both Republicans and Democrats were more likely to agree when the policy required proof of asylum seeker status, suggesting that this group is perceived as needier. Otherwise the eligibility criteria mostly have no evidence of an effect on Democrats, with the consistent exception being for background checks (albeit this effect is only very marginally statistically significant in this case for Democrats). Republicans are less likely to agree that the policy benefits those in need when it benefits Middle Eastern immigrants relative to the baseline, meanwhile all three regions of origin increase agreement relative to European immigrants among

Democrats, with a relatively large effect for Latin American immigrants.

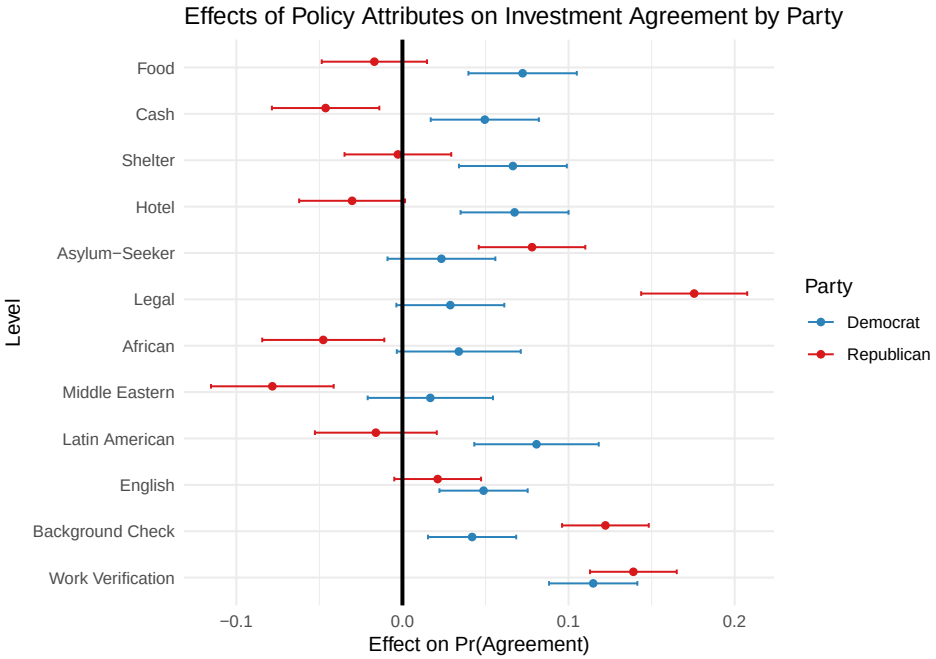



Figure B.15: The effects of each level on agreement with the investment perspective of fairness by political party.

Next, I examine the effects of the levels on the investment perspective by party. Most social services have no evidence of an effect on Republicans, with the exception of cash which decreases the odds of agreement with the investment perspective of fairness. All social services increase agreement odds among Democrats. Legal forms of immigration status have no evidence of an effect on Democrats, while legal status is a very important factor for Republicans. Background checks and work verification also increase the odds of agreement among both partisans. Republicans are more likely to disagree with the statement "this policy helps immigrants who are going to contribute to the country" when the policy benefits African and Middle Eastern immigrants relative to the baseline, all else held equal. This is suggestive that Republicans may be more prejudiced or discriminatory to African and Middle Eastern immigrants. Latin Americans have no evidence of an effect

on Republicans in this case. For Democrats, African and Middle Eastern immigrants have no evidence of an effect while Latin American immigrants increase the odds of agreement relative to the baseline.

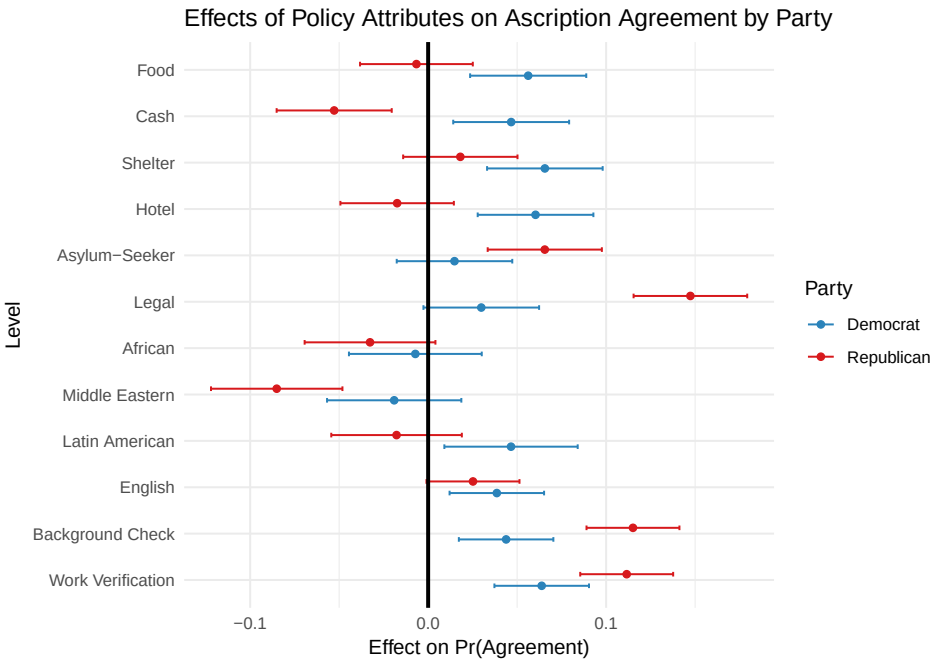



Figure B.16: The effects of each level on agreement with the ascription perspective of fairness by political party.

Finally, I compare the effects of each level on the ascription perspective of fairness for Republicans and Democrats. Again, most social services have no evidence of an effect on Republicans, with cash being a notable exception that decreases agreement with the statement "this policy helps immigrants who are going to fit into the country." Relative to the baseline, when the policy benefits primarily Middle Eastern immigrants this also decreases the probability of agreement with this fairness statement among Republicans. Forms of exclusion criteria such a legal status, a background check, and work verification increase odds of agreement among Republicans. This is mostly true for Democrats as well, with the exception of legal status levels. Democrats express greater agreement with

the statement when the policy benefits Latin Americans, while the other regions of origin have no evidence of an effect. All forms of social services indicate higher probability of agreement with this statement among Democrats than Republicans.

### B.6.2 Heterogeneous Treatment Effects by Party on Support

Not only is partisanship highly correlated with policy attitudes, but immigration policy is impacted by an importance asymmetry between partisans [178, 179]. Because of this, partisanship influences a particular baseline worldview that can impact immigrant integration policy support and perceptions of fairness, although salience is not measured in this study. The results show that policy attributes do indeed have disparate effects on policy support. Social services are shown to have more positive impacts on Democrats, while they generally show no evidence of influence on Republican support. An exception to this is the negative effect of cash aid among Republicans. While asylum seeker status increases the chances of policy support for both parties, among Democrats requiring proof of legal status relative to none has no evidence of an effect. This is an important departure from prior work that shows the importance of the legal/illegal divide [89, 108]. These results suggest that Democrats in particular may not experience the categorical rejection of immigrants based on their immigration status. Other exclusion criteria such as the background check requirement continues to be positively associated with support, however work verification finds no evidence of an effect among Democrats.

In contrast, work verification increases support among Republicans relative to the baseline. For Republicans, legal status and a background check have large impacts on the probability of policy support relative to no requirements at all. Additionally, there are disparate effects on the primary beneficiary group attribute. Democrats are more supportive of policy that benefits Latin American immigrants relative to European im-

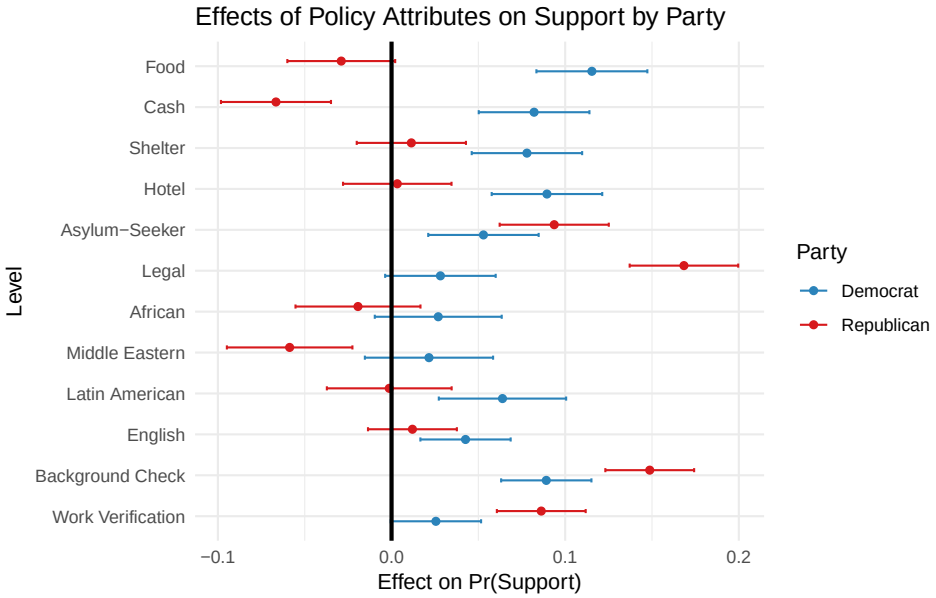



Figure B.17: The effect of each level on support by partisanship. Relative to the baseline, Republicans are less supportive when policies include cash and benefit Middle Eastern immigrants. Democrats are supportive of all benefit programs and policies that benefit Latin Americans. Legal status has the largest effect for Republicans, followed closely by background check.

migrants, while Latin Americans beneficiaries have no detectable effect on support for Republicans. Policy that benefits Middle Eastern immigrants decreases the probability of support among Republicans relative to the baseline, constituting the only statistically significant negative effect on the primary beneficiaries feature in this context. For both partisans, African immigrants have no evidence of an effect.

## B.7 Sub-group Analysis: Nativity

I compare the AMCE results for policy support by nativity. The following figure depicts the comparison of results between those that are U.S. born versus those that immigrated to the United States. The immigrant sample in the dataset is 164, resulting in an underpowered analysis. This explains why the 95% confidence intervals are much wider relative to the native-born respondents.[3]

Results in this subgroup comparison indicate that exclusion criteria such as proof of a documented form of legal status and a background check significantly and positively influence policy support among immigrants and the native-born alike. The exclusion criteria of work verification has no evidence of an effect for immigrants, as do all the primary beneficiary group treatments. Allocation of aid has almost no evidence of an effect on policy support with the exception of food aid which increases support. This is somewhat surprising as foreign-born respondents theoretically have the most to gain from policies that offer aid to immigrants. The point estimates are generally larger, but fail to reach significance in most cases. Immigrants also show slight policy support preference for low-cost English lessons relative to the baseline.

Based on the results, immigrant preferences are very similar to U.S. native-born respondents. The most noticeable difference is in support for policy that requires proof of

[3]The pre-analysis plan specified nativity as a primary subgroup comparison, however because immigrants are underrepresented and underpowered, I have moved this analysis to the appendix.

asylum seeker status. The point estimates on primary beneficiaries also follow a different pattern, however the confidence intervals are too wide to make conclusive inferences. The only positive effect among immigrants on this attribute is for Middle Eastern immigrants, while Latin American and African immigrants are slightly penalized. However, none reach statistical significance. Yet, given the small sample of immigrants, these observed patterns should be interpreted with caution.

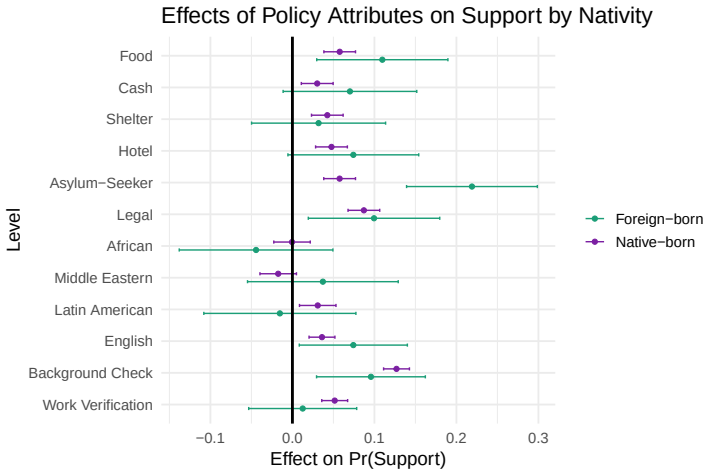



Figure B.18: Policy support by nativity. Results are similar between the two groups. An exception is that the effect of requiring asylum seeker status is markedly larger for foreign-born than native-born respondents.

## B.8 Power Analysis

The experimental design of this paper assigns five tasks (the repeat profile assessments) to just over 3,060 respondents. The attribute with the greatest number of levels is "Primary Beneficiaries" with four levels. The following figure depicts the sample size needed to power the detection of a 0.05 effect size [180]. Results reveal a substantially powered conjoint experiment.

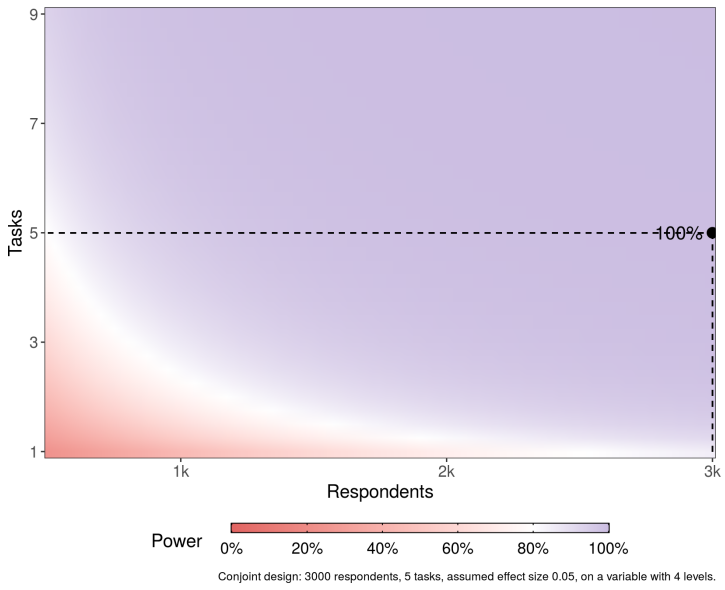



Figure B.19: Power analysis for conjoint design.

## B.9 Satisficing and Outlier Quality Checks

Satisficing occurs when respondents rush through the survey by selecting the top option of each question. I check for this, as well as other quality issues, in this section. To check for satisficers, I examine how often respondents chose the topline option on each of the five outcome questions. If they chose "Agree" or "Yes" for all five dependent variables, that could suggest satisficing. There are 1,547 instances of this in the data

(roughly 309 respondents). As a robustness check, I drop these observations from the sample and run the same estimation on fairness agreement and policy support. Results are highly similar to those reported in the main body of the paper.

The length of time spent on the survey is another clue that can help detect satisficing and overall poor quality responses. These can present as both very fast surveys, as well as very long durations. I drop duration outliers using two methods. First, I calculate the inter-quartile range and run the same estimation as a quality check. This reduces the sample to 13,452 observations. Second, I manually set the lower threshold for survey duration length at 3 minutes and the upper bound at 18 minutes. The second method is even more narrow and reduces the sample to 12,183 observations for support and 12,124 for the fairness dimensions. The discrepancy is due to some skipped questions (NA) by respondents. The main takeaway is that the AMCE for support and on each of the fairness outcomes are highly similar to the those found in the full dataset.

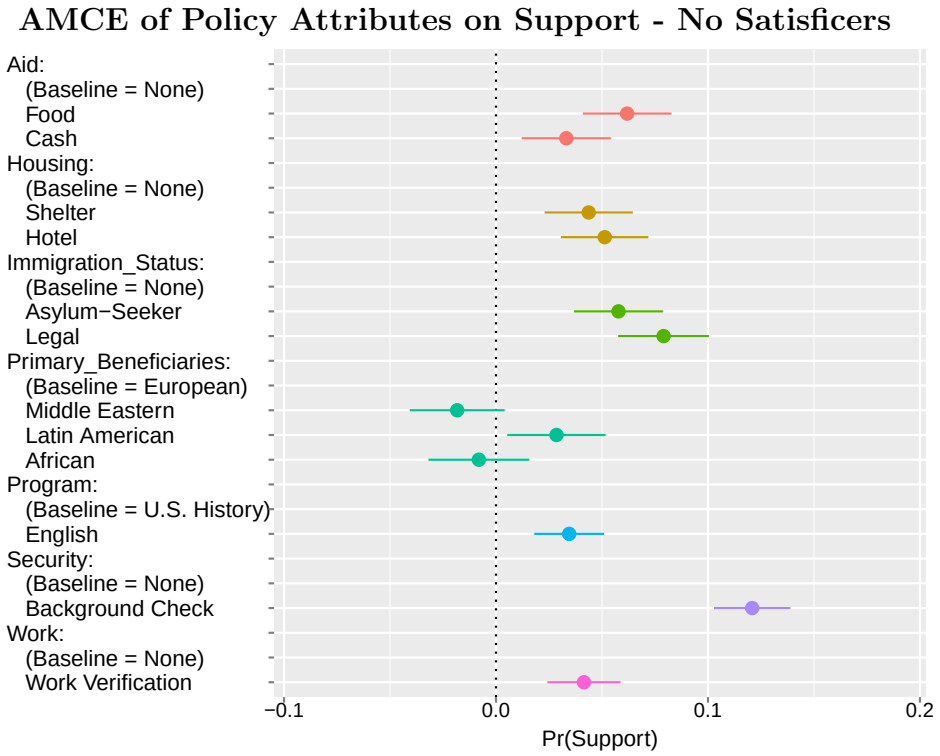



Figure B.20: Sample dropped potential satisficers of roughly 309 respondents or 1,547 observations. The figure shows the effect of policy attributes on support for policy being adopted in respondents' state. Outcome variable is binary where a positive coefficient means the attribute was more likely to increase the probability that the respondent supports policy adoption. The model includes respondent-level fixed effects and clusters standard errors by respondent.

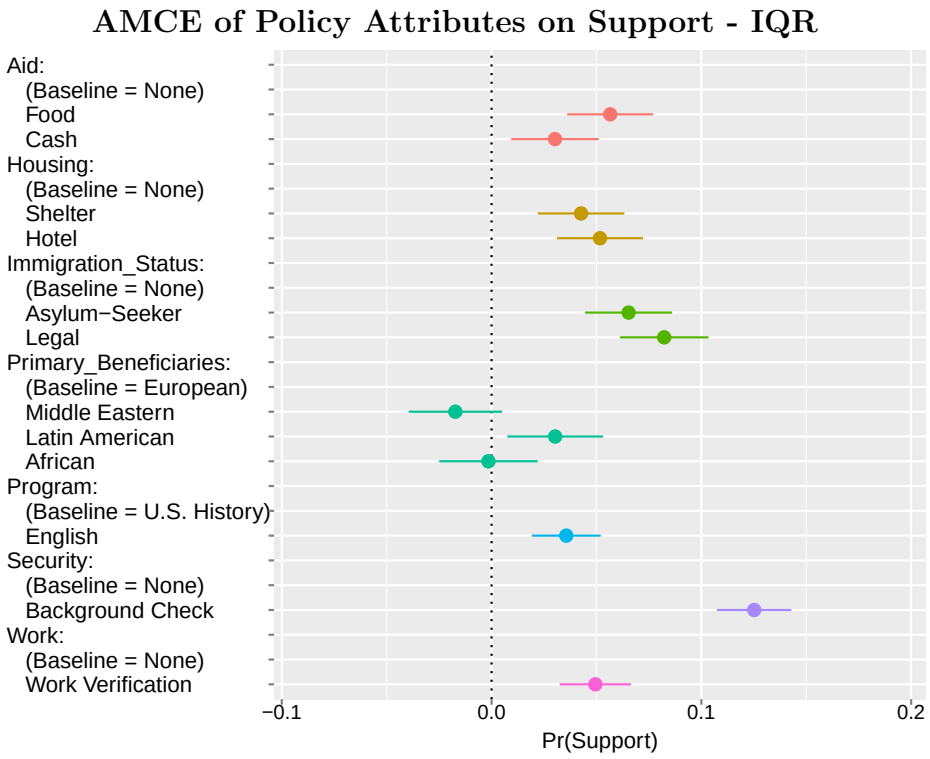



Figure B.21: Sample is limited to middle 50% of data as determined by the inter-quartile range of the duration time of survey. This is done to remove outliers. The figure shows the effect of policy attributes on support for policy being adopted in respondents' state. Outcome variable is binary where a positive coefficient means the attribute was more likely to increase the probability that the respondent supports policy adoption. The model includes respondent-level fixed effects and clusters standard errors by respondent. Number of unique respondent id = 2,699.

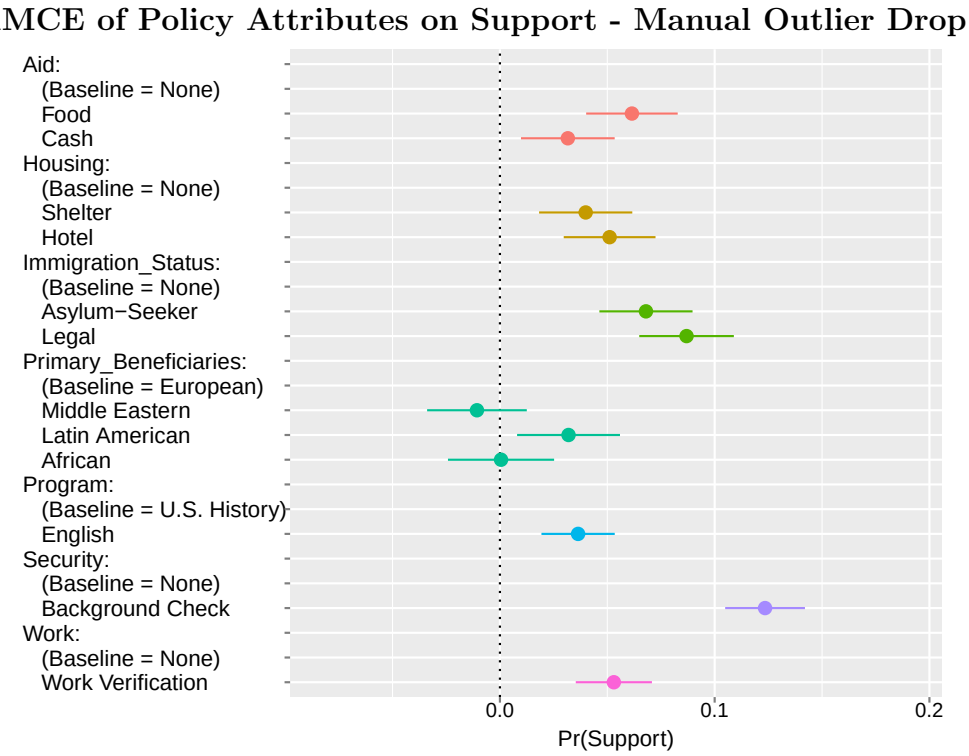
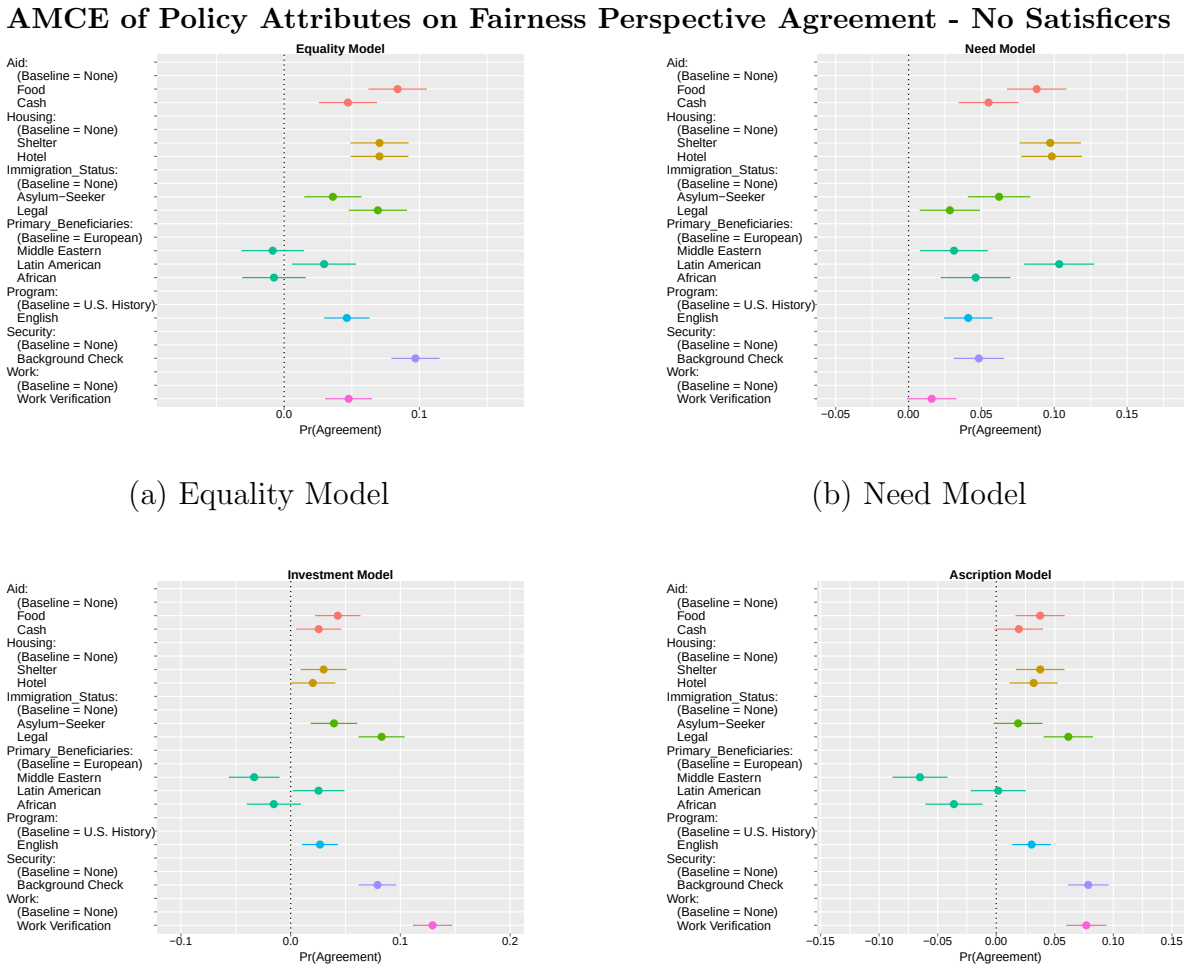



Figure B.22: Sample is limited to those who took 3 to 18 minutes to complete the survey. This method is more narrow than the IQR. Plot shows effect of policy attributes on support for policy being adopted in respondents' state. Outcome variable is binary where a positive coefficient means the attribute was more likely to increase the probability that the respondent supports policy adoption. The model includes respondent-level fixed effects and clusters standard errors by respondent.



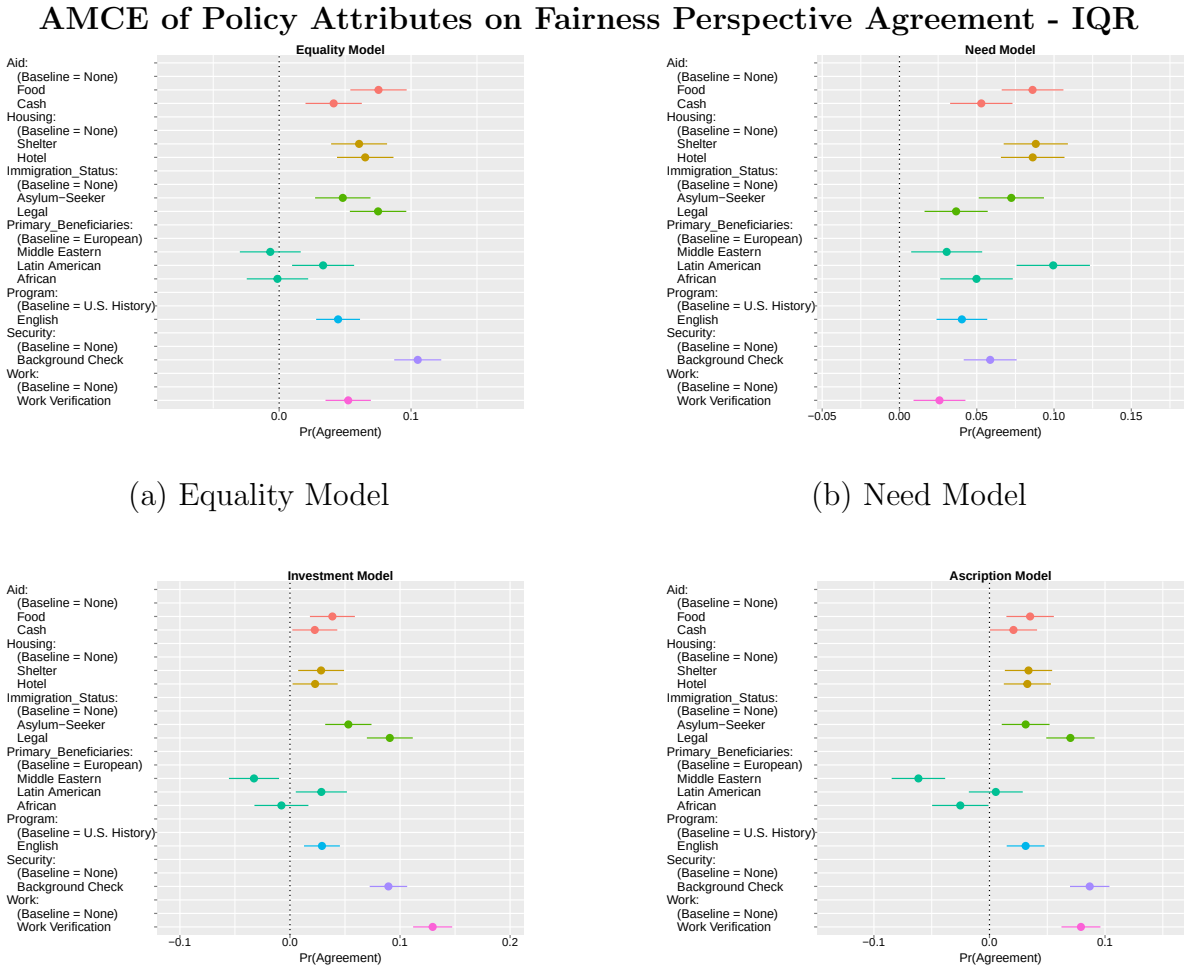

(a) Equality Model

(b) Need Model

(c) Investment Model

(d) Ascription Model

Figure B.23: Comparison of the AMCE results by fairness perspective with potential satisficers dropped from sample.



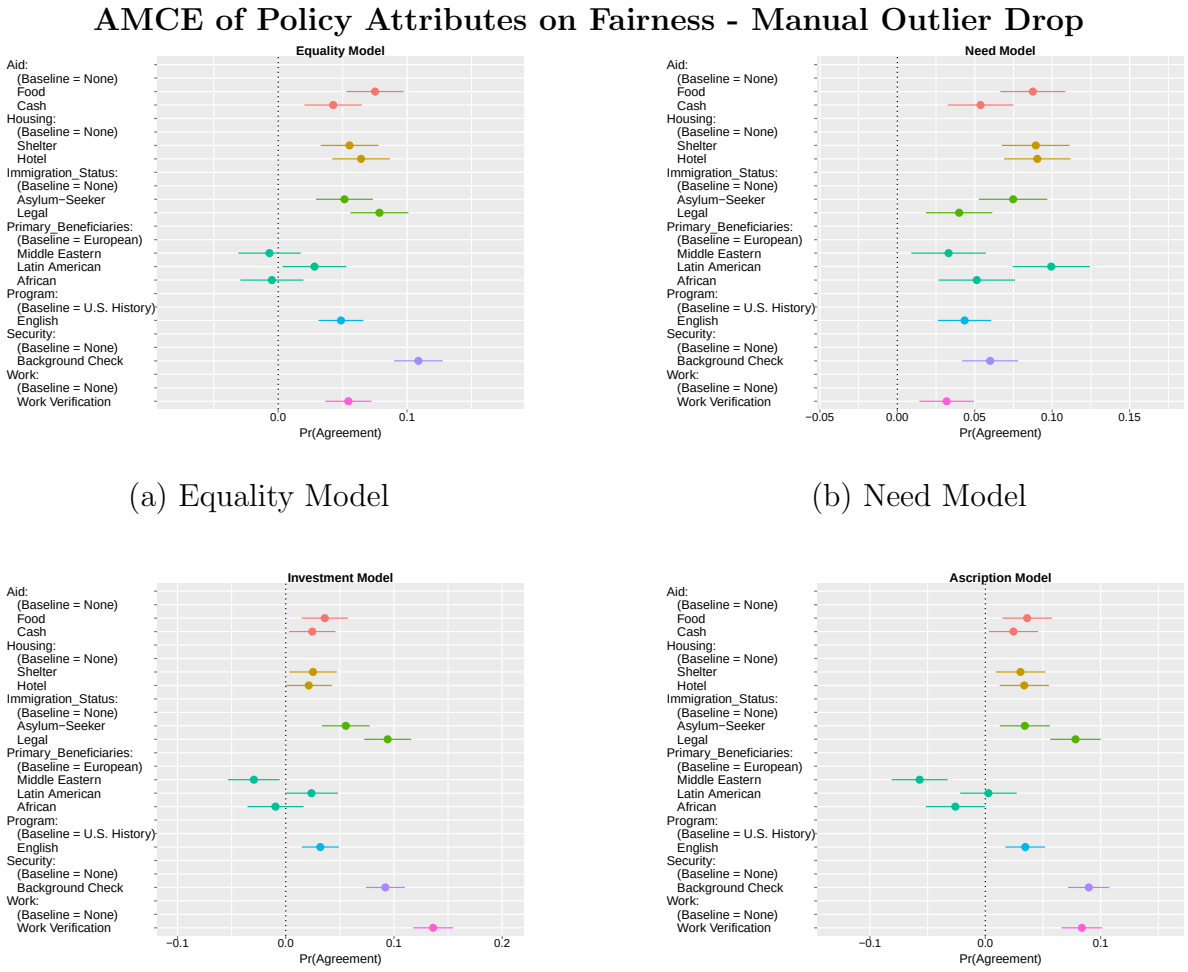

(a) Equality Model

(b) Need Model

(c) Investment Model

(d) Ascription Model

Figure B.24: Comparison of the AMCE results by fairness perspective using the middle 50% of data as measured by the inter-quartile range of the duration time of survey.




(a) Equality Model

(b) Need Model

(c) Investment Model

(d) Ascription Model

Figure B.25: Comparison of the AMCE results by fairness perspective using only respondents with a survey duration of 3 to 18 minutes. Number of unique respondents in this method = 2,443 (12,124 observations clustered by respondent).

## B.10 Media Coverage and Framing

To bolster ecological validity, I provide a selection of news publications describing state policies and migration that allude to fairness and the frustrations expressed during the asylum seeker influx. In some cases, these articles also describe to the general public how immigrants access social services and under what conditions. These examples lend greater validity to the research design of this paper and informed its construction.

| **Headline and Link** | **Source** | **Date** |
|---|---|---|
| Why Are We Spending Millions Housing Illegal Migrants While Americans Go Homeless? | *Newsweek* | Dec 29, 2022 |
| Migrants are staying on school grounds, in hotels or at police stations in several states – and some residents are furious | *CNN* | May 17, 2023 |
| As Crisis Grows, All of New York's Migrant Plans Are Met With Outrage | *The New York Times* | May 18, 2023 |
| Open-Armed Chicago Feels the Strains of a Migrant Influx | *The New York Times* | May 10, 2023 |
| California bill would allow undocumented immigrants paying taxes to get home loans | *ABC News* | August 29, 2024 |
| Illegal immigrants are offered an array of taxpayer funded benefits, enticing more to come: 'Pull factor' | *FOX News* | June 7, 2024 |

| **Headline and Link** | **Source** | **Date** |
|---|---|---|
| NYC gives migrants more ways to obtain city ID making it easier for them to get benefits, housing: report | *FOX News* | March 3, 2025 |
| Migrant crisis has US taxpayers on the hook for up to $451B, House GOP report says | *New York Post* | Nov 13, 2023 |
| Fights Break Out at NYC Shelters as Tensions Among Homeless Rise Amid Migrant Influx | *NBC New York* | Sept 24, 2022 |
| Furious NYCHA president: 'NYC shells out millions for migrants, but won't help us' | *New York Post* | Nov 23, 2022 |
| As New York City opens 12th emergency relief center for asylum seekers, poll shows residents are reluctant to help | *CBS News* | June 28, 2023 |
| NYC Mayor Adams says New Yorkers 'angry' over migrant crisis as he heads to DC | *FOX News* | Dec 7, 2023 |
| Voters Were Fed Up Over Immigration. They Voted for Trump. | *The New York Times* | Nov 6, 2024 |
| California lawmakers approve bill to extend home mortgage aid to undocumented immigrants | *The Los Angeles Times* | Aug 29, 2024 |

| **Headline and Link** | **Source** | **Date** |
|---|---|---|
| New York City Will Stop Giving Debit Cards to Migrants | *The New York Times* | Nov 7, 2024 |
| Outrage over Democrat-run Maine town's luxury digs for migrants: Asylum seekers live rent-free in 'palace' apartments with balconies while hundreds of US-born homeless sleep rough | *Daily Mail* | Jan 12, 2024 |
| Chicago residents sound off on illegal immigrants in neighborhood: 'They disrespect us, rob us, harass us' | *FOX News* | Jul 28, 2023 |
| Black Chicago residents infuriated over migrant surge: 'Enough!' | *FOX News* | May 16, 2023 |

Table B.3: Sample of the news coverage of the asylum seeker crisis. Articles describe a tension between inclusive policies and the needs of native-born residents.

## B.11 Moral Foundations Theory

I included four items related to fairness from the Moral Foundations Theory (MFT) questionnaire in the survey [3]. These can be used to compare the baseline fairness statements used in this study to other related items. These questions, drawn directly from prior MFT surveys, are:

- When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale: 0 is not at all relevant and 5 is extremely relevant.

  - (Variable name: treated) Whether or not some people were treated differently than others.
  - (Variable name: rights) Whether or not someone was denied his or her rights.

- Please read the following sentences and indicate your agreement or disagreement:
  - (Variable name: fairly) When the government makes laws, the number one principle should be ensuring that everyone is treated fairly. [5-point Likert]
  - (Variable name: justice) Justice is the most important requirement for a society. [5-point Likert]

To assess whether the four baseline fairness items used in this study are merely redundancies of MFT items, I examine Pearson correlations between each item. The results across all four suggest discriminate validity. The top row of the following five figures demonstrates the strength and direction of the linear relationship of two continuous variables. All cases show a weak correlation, suggesting the baseline measures of fairness each capture a unique dimension not captured in the MFT items.

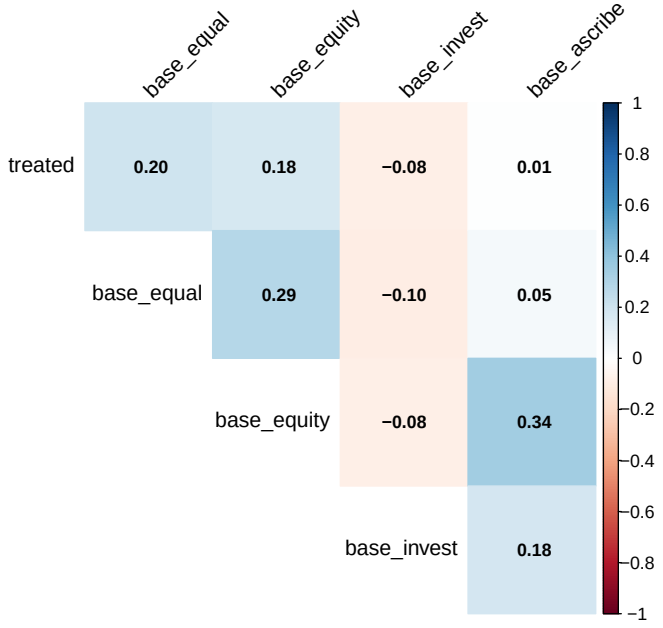



Figure B.26: Pearson correlation between MFT variable "treated" and the fairness baseline questions. Weak correlation found, suggesting divergent validity.

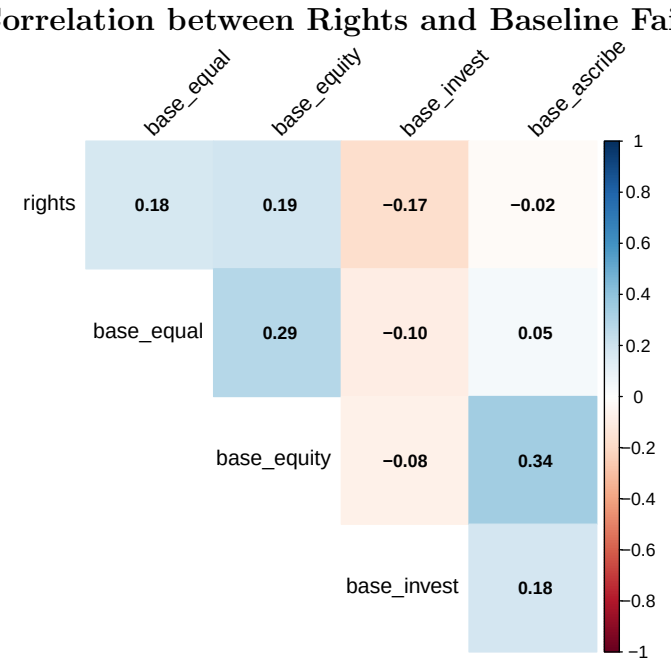



Figure B.27: Pearson correlation between MFT variable "rights" and the fairness baseline questions. Weak correlation found, suggesting divergent validity.

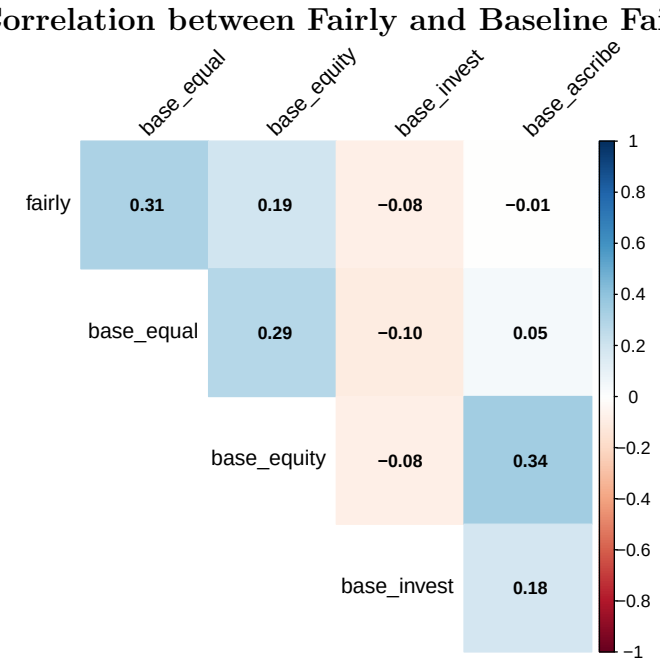



Figure B.28: Pearson correlation between MFT variable "fairly" and the fairness baseline questions. Weak correlation found, suggesting divergent validity.

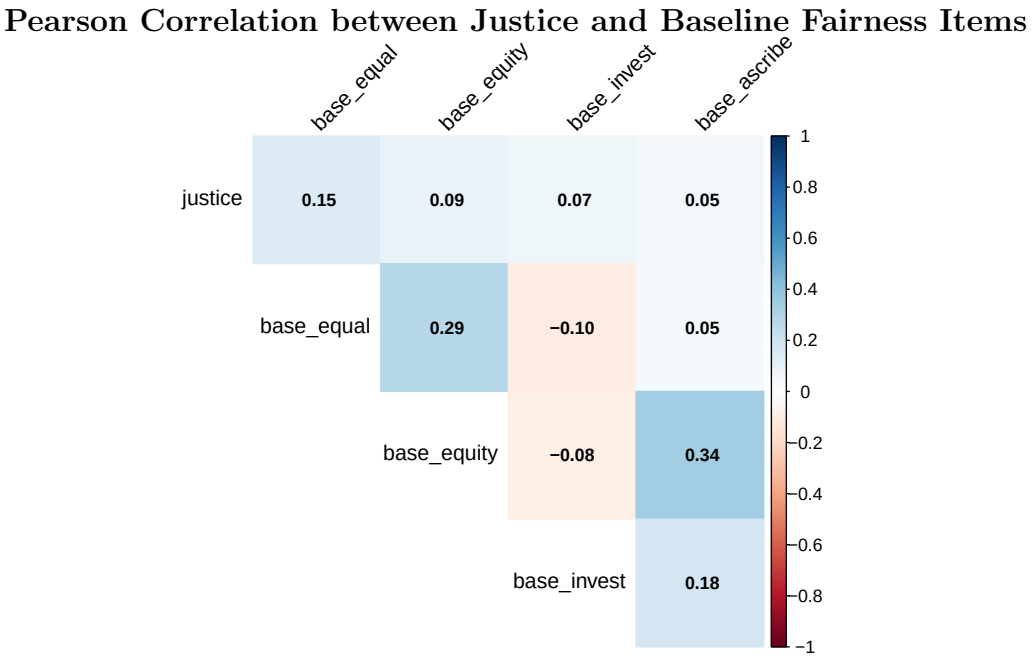



Figure B.29: Pearson correlation between MFT variable "justice" and the fairness baseline questions. Weak correlation found, suggesting divergent validity.

## B.12 Is Support Distinct from Fairness?

Support is weakly correlated with all four baseline fairness items, suggesting that measuring support is not a substitute for perceived fairness. Perceptions of fairness at baseline are distinct from policy support as conceptual measurements. It would be inaccurate to assert that just because someone supports a policy, they think it is fair or vice versa.

I also examine the correlation between support and each outcome measure of fairness. Results show moderately strong relationships. This indicates that when a respondent agreed with a particular fairness perspective, they were more likely to support policy adoption. The strongest relationship as measured by the coefficient size is between support and the equality perception of fairness. However, all coefficients are relatively close in size, suggesting that agreement with any four perceptions of fairness was reasonably likely to be associated with policy support. This could be an indicator of ad hoc rationalizing. I conduct further analysis on the relationship between support and fairness in other sections. The first figure in this section examines general, baseline views of fairness and the policy support outcome in the conjoint. The second figure examines the outcome fairness views and policy support.

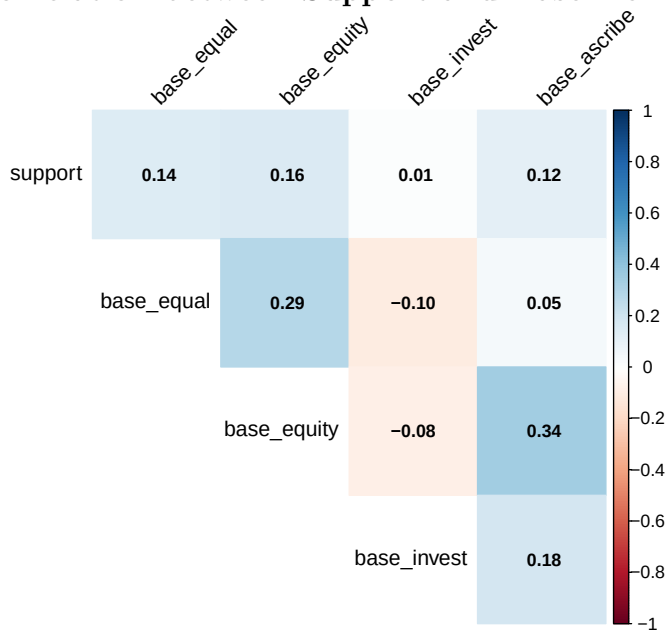



Figure B.30: Pearson correlation between support and the fairness baseline questions. Weak correlation found, suggesting they are distinct measurements. Baseline fairness is stated in a general context while policy support is strictly within the experimental immigration context. I would not expect a strong relationship here and in fact the correlations are among the weakest examined through the paper. I primarily include it for comparison to the next figure: outcome fairness items.

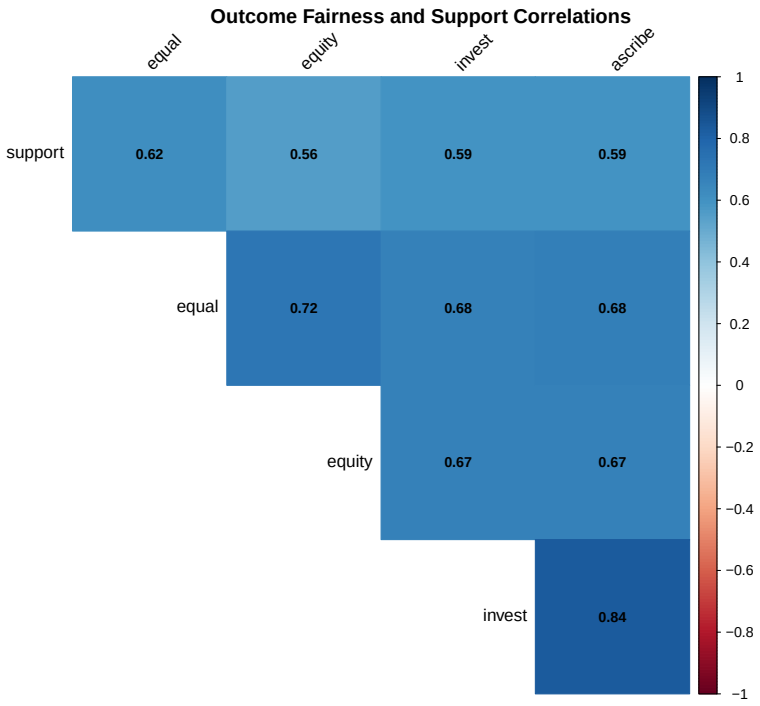



Figure B.31: Correlation between support and the fairness outcome questions. Moderately strong correlations are found, indicating that as respondents agreed with the fairness perspective, they were more likely to support policy adoption. In the top row, the strongest relationship is between support and the equality perception of fairness. However, all coefficients are relatively close in size, suggesting that agreement with any four perceptions of fairness was reasonably likely to be associated with policy support. While this could be an indicator of ad hoc rationalizing, the relationship are not 1:1, highlighting that support and fairness perceptions are not interchangeable.

## B.13 Relationship between the Baseline Fairness Items and the Outcome Fairness Items

I assess the relationship between baseline fairness and post-treatment, outcome fairness measurements by using a linear regression model. Both baseline and outcome items for each fairness perception are dichotomized so that "agree" or "somewhat agree" equals 1, while all else equals 0. The following four tables in this section detail the results. All four fairness items show a strong positive relationship, meaning that if a respondent agreed with the baseline fairness statement, they were more likely to agree with the immigration specific outcome fairness statement along that dimension. The largest coefficient is seen in ascription, followed by equality. The coefficient for the relationship between baseline agreement that "People naturally belong to different groups and some groups deserve more resources" and the outcome "this policy helps immigrants who are going to fit into the country" is 0.17. This means that when baseline ascription equals 1, the probability that agreement with outcome ascription increases by 17 percentage points.

Table B.4: Regression Results for Agreement with Binary Baseline Equality Perception and Binary Equality Outcome

| | Equality |
|---|---|
| Baseline Equality | 0.152*** (0.032) |
| Immigration Status | 0.064*** (0.019) |
| Work | 0.110*** (0.019) |
| Security | 0.070*** (0.015) |
| Primary Beneficiaries | 0.136*** (0.015) |
| Aid | 0.013 (0.021) |
| Housing | 0.026 (0.022) |
| Program | −0.024 (0.022) |
| Baseline Equal x Immigration Status | 0.048** (0.019) |
| Baseline Equal x Work | −0.015 (0.019) |
| Baseline Equal x Security | 0.035* (0.019) |
| Baseline Equal x Primary Beneficiaries | 0.028 (0.019) |
| Baseline Equal x Aid | 0.050*** (0.015) |
| Baseline Equal x Housing | −0.024 (0.022) |
| Baseline Equal x Program | −0.041* (0.022) |
| base_equal_binary:WorkWork Verification | −0.019 (0.018) |
| base_equal_binary:SecurityBackground Check | −0.043** (0.018) |
| base_equal_binary:Primary_BeneficiariesMiddle Eastern | −0.023 (0.025) |
| base_equal_binary:Primary_BeneficiariesLatin American | 0.004 (0.025) |
| base_equal_binary:Primary_BeneficiariesAfrican | 0.028 (0.025) |
| base_equal_binary:AidFood | 0.046** (0.022) |
| base_equal_binary:AidCash | 0.083*** (0.022) |
| base_equal_binary:HousingShelter | 0.045** (0.022) |
| base_equal_binary:HousingHotel | 0.055** (0.022) |

| | Equality |
|---|---|
| base_equal_binary:ProgramEnglish | −0.004 (0.018) |
| Constant | 0.060** (0.027) |
| Observations | 15,072 |
| $R^2$ | 0.057 |
| Adjusted $R^2$ | 0.056 |
| Residual Std. Error | 0.478 (df = 15046) |
| F Statistic | 36.682*** (df = 25; 15046) |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 |

Table B.5: Regression Results for Agreement with Binary Baseline Need Perception and Binary Need Outcome

| | Need |
|---|---|
| Baseline Need | 0.083*** (0.030) |
| Immigration Status | 0.081*** (0.017) |
| Work | 0.064*** (0.017) |
| Security | 0.049*** (0.014) |
| Primary Beneficiaries | 0.064*** (0.014) |
| Aid | 0.014 (0.019) |
| Housing | 0.054*** (0.019) |
| Program | 0.013 (0.019) |
| Baseline Need x Immigration Status | 0.027 (0.017) |

| | Need |
|---|---|
| Baseline Need x Work | 0.0003 (0.017) |
| Baseline Need x Security | 0.066*** (0.017) |
| Baseline Need x Primary Beneficiaries | 0.055*** (0.017) |
| Baseline Need x Aid | 0.041*** (0.014) |
| Baseline Need x Housing | −0.016 (0.020) |
| Baseline Need x Program | −0.029 (0.020) |
| base_equity_binary:WorkWork Verification | −0.038** (0.017) |
| base_equity_binary:SecurityBackground Check | −0.010 (0.017) |
| base_equity_binary:Primary_BeneficiariesMiddle Eastern | 0.019 (0.023) |
| base_equity_binary:Primary_BeneficiariesLatin American | 0.056** (0.023) |
| base_equity_binary:Primary_BeneficiariesAfrican | 0.041* (0.023) |
| base_equity_binary:AidFood | 0.083*** (0.020) |
| base_equity_binary:AidCash | 0.075*** (0.020) |
| base_equity_binary:HousingShelter | 0.035* (0.020) |
| base_equity_binary:HousingHotel | 0.055*** (0.020) |
| base_equity_binary:ProgramEnglish | 0.003 (0.017) |
| Constant | 0.082*** (0.025) |
| Observations | 15,072 |
| $R^2$ | 0.053 |
| Adjusted $R^2$ | 0.051 |
| Residual Std. Error | 0.474 (df = 15046) |
| F Statistic | 33.470*** (df = 25; 15046) |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 |

Table B.6: Regression Results for Agreement with Binary Baseline Investment Perception and Binary Investment Outcome

| | Investment |
|---|---|
| Baseline Investment | 0.080*** (0.028) |
| Immigration Status | 0.020 (0.013) |
| Work | 0.051*** (0.013) |
| Security | 0.117*** (0.011) |
| Primary Beneficiaries | 0.070*** (0.011) |
| Aid | −0.003 (0.015) |
| Housing | 0.038** (0.015) |
| Program | 0.005 (0.015) |
| Baseline Invest x Immigration Status | 0.069*** (0.013) |
| Baseline Invest x Work | 0.054*** (0.013) |
| Baseline Invest x Security | 0.043*** (0.013) |
| Baseline Invest x Primary Beneficiaries | 0.038*** (0.013) |
| Baseline Invest x Aid | 0.031*** (0.011) |
| Baseline Invest x Housing | 0.063*** (0.019) |
| Baseline Invest x Program | 0.085*** (0.019) |
| base_invest_binary:WorkWork Verification | 0.022 (0.016) |
| base_invest_binary:SecurityBackground Check | 0.039** (0.016) |
| base_invest_binary:Primary_BeneficiariesMiddle Eastern | −0.048** (0.022) |
| base_invest_binary:Primary_BeneficiariesLatin American | −0.024 (0.022) |
| base_invest_binary:Primary_BeneficiariesAfrican | −0.031 (0.022) |
| base_invest_binary:AidFood | −0.048** (0.019) |
| base_invest_binary:AidCash | −0.055*** (0.019) |
| base_invest_binary:HousingShelter | −0.030 (0.019) |
| base_invest_binary:HousingHotel | −0.034* (0.019) |

| | Investment |
|---|---|
| base_invest_binary:ProgramEnglish | −0.002 (0.016) |
| Constant | 0.154*** (0.019) |
| Observations | 15,072 |
| $R^2$ | 0.045 |
| Adjusted $R^2$ | 0.043 |
| Residual Std. Error | 0.479 (df = 15046) |
| F Statistic | 28.305*** (df = 25; 15046) |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 |

Table B.7: Regression Results for Agreement with Binary Baseline Ascription Perception and Binary Ascription Outcomes

| | Ascription |
|---|---|
| Baseline Ascription | 0.170*** (0.029) |
| Immigration Status | 0.026** (0.012) |
| Work | 0.072*** (0.012) |
| Security | 0.091*** (0.009) |
| Primary Beneficiaries | 0.083*** (0.009) |
| Aid | −0.045*** (0.013) |
| Housing | 0.011 (0.013) |
| Program | −0.030** (0.013) |
| Baseline Ascribe x Immigration Status | 0.032*** (0.012) |

| | Ascription |
|---|---|
| Baseline Ascribe x Work | 0.019 (0.012) |
| Baseline Ascribe x Security | 0.040*** (0.012) |
| Baseline Ascribe x Primary Beneficiaries | 0.037*** (0.012) |
| Baseline Ascribe x Aid | 0.039*** (0.009) |
| Baseline Ascribe x Housing | 0.009 (0.020) |
| Baseline Ascribe x Program | 0.003 (0.020) |
| base_ascribe_binary:WorkWork Verification | −0.036** (0.016) |
| base_ascribe_binary:SecurityBackground Check | 0.013 (0.016) |
| base_ascribe_binary:Primary_BeneficiariesMiddle Eastern | −0.032 (0.023) |
| base_ascribe_binary:Primary_BeneficiariesLatin American | −0.024 (0.023) |
| base_ascribe_binary:Primary_BeneficiariesAfrican | 0.002 (0.023) |
| base_ascribe_binary:AidFood | 0.026 (0.020) |
| base_ascribe_binary:AidCash | 0.011 (0.020) |
| base_ascribe_binary:HousingShelter | −0.014 (0.020) |
| base_ascribe_binary:HousingHotel | −0.022 (0.020) |
| base_ascribe_binary:ProgramEnglish | −0.007 (0.016) |
| Constant | 0.167*** (0.017) |
| Observations | 15,072 |
| $R^2$ | 0.045 |
| Adjusted $R^2$ | 0.044 |
| Residual Std. Error | 0.475 (df = 15046) |
| F Statistic | 28.650*** (df = 25; 15046) |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 |

## B.14 Correlation Plots Subset by Agreement with Baseline Fairness Perceptions

The below figures tell us how policy support is correlated with the fairness outcome questions when the sample is subgrouped by those who agree or disagree with each baseline perception of fairness. Overall, all four fairness outcomes have moderately strong correlations with policy support regardless of the baseline group. Of all the correlations, the equality principle has the strongest relationship with support for all subgroups. This suggests that for all subgroups regardless of baseline beliefs, policy support has the closest relationship with whether respondents believed that the policy treated immigrants the way everyone deserves to be treated. However, the correlations are quite similar across the fairness items.

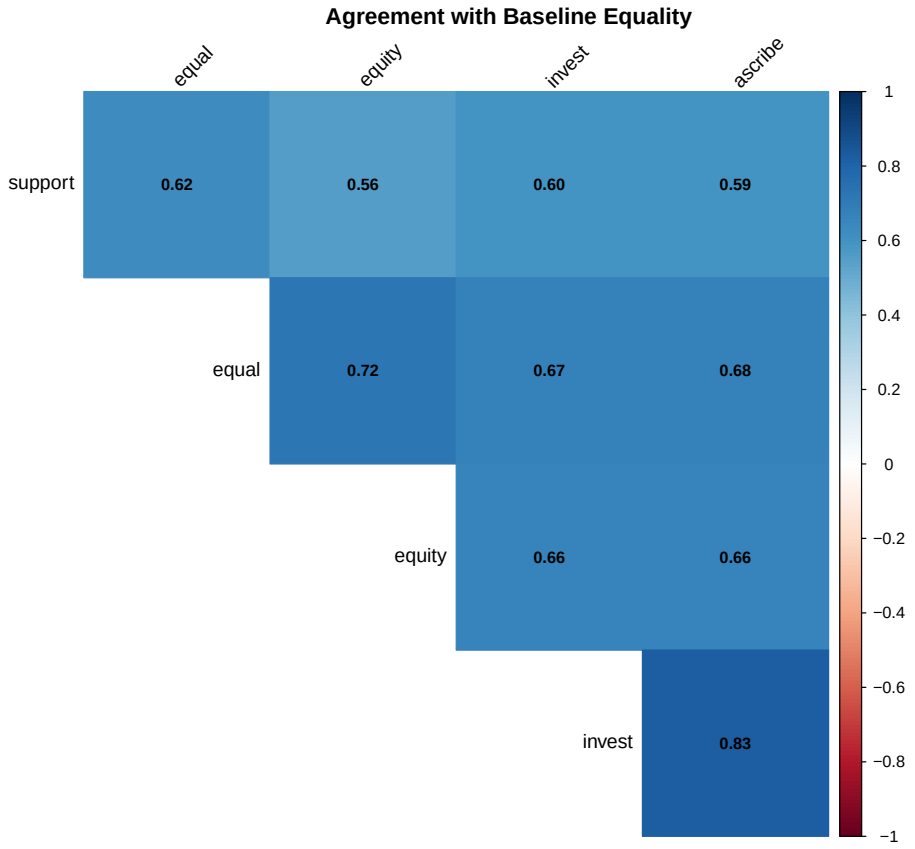



Figure B.32: Correlation between outcome fairness items and support when subset to agreement with baseline equality statement. Support most strongly correlates with equality, suggesting a stronger match between these two. However, the other fairness items also have moderately strong correlations with support.

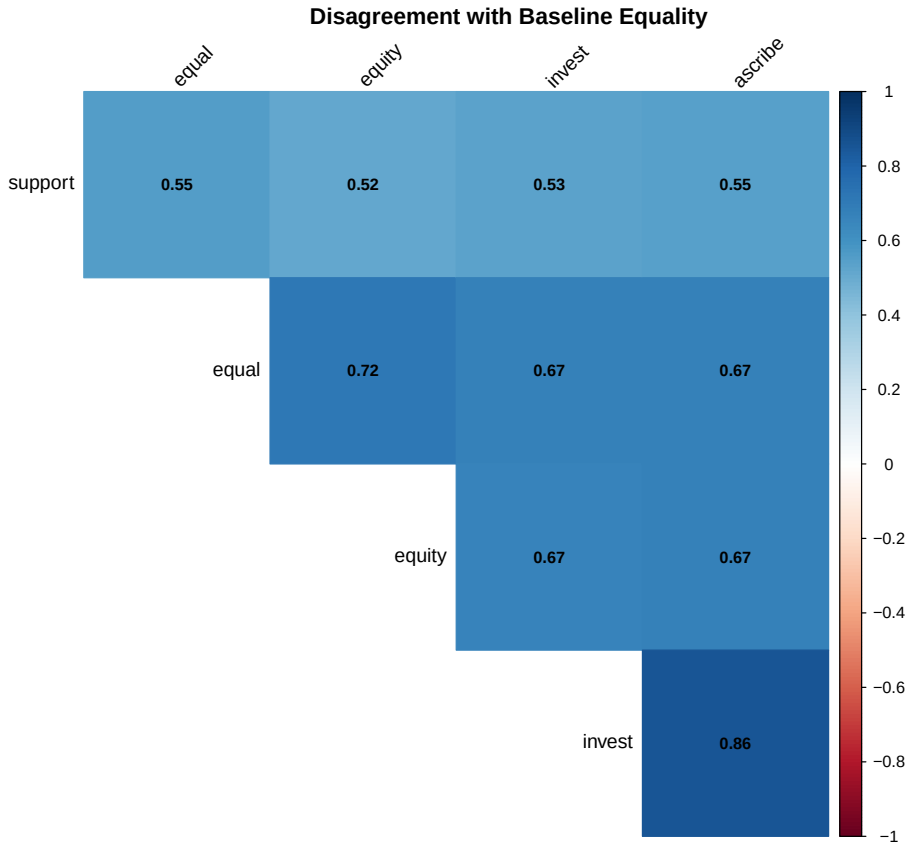



Figure B.33: Correlation between outcome fairness items and support when subset to disagreement with baseline equality statement. Correlations are marginally weaker than for for those with agreement with the baseline equality fairness perception.

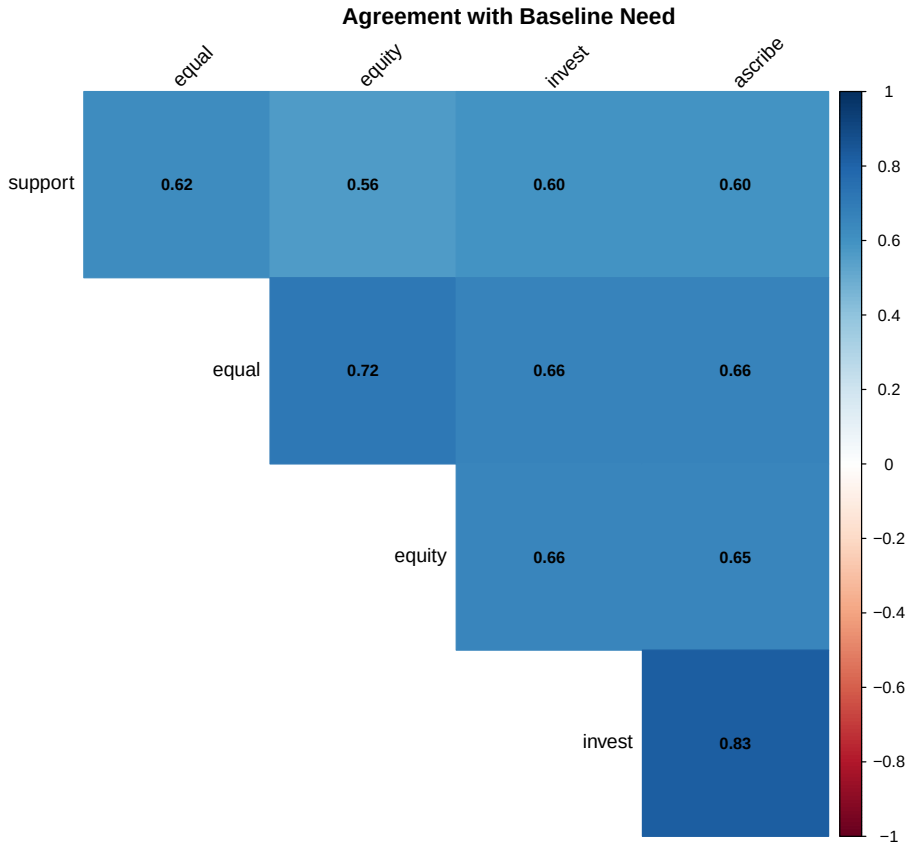



Figure B.34: Correlation between outcome fairness items and support when subset to agreement with baseline need statement. Support is most weakly correlated with the need/equity principle. Support is moderately correlated with all four fairness dimensions.

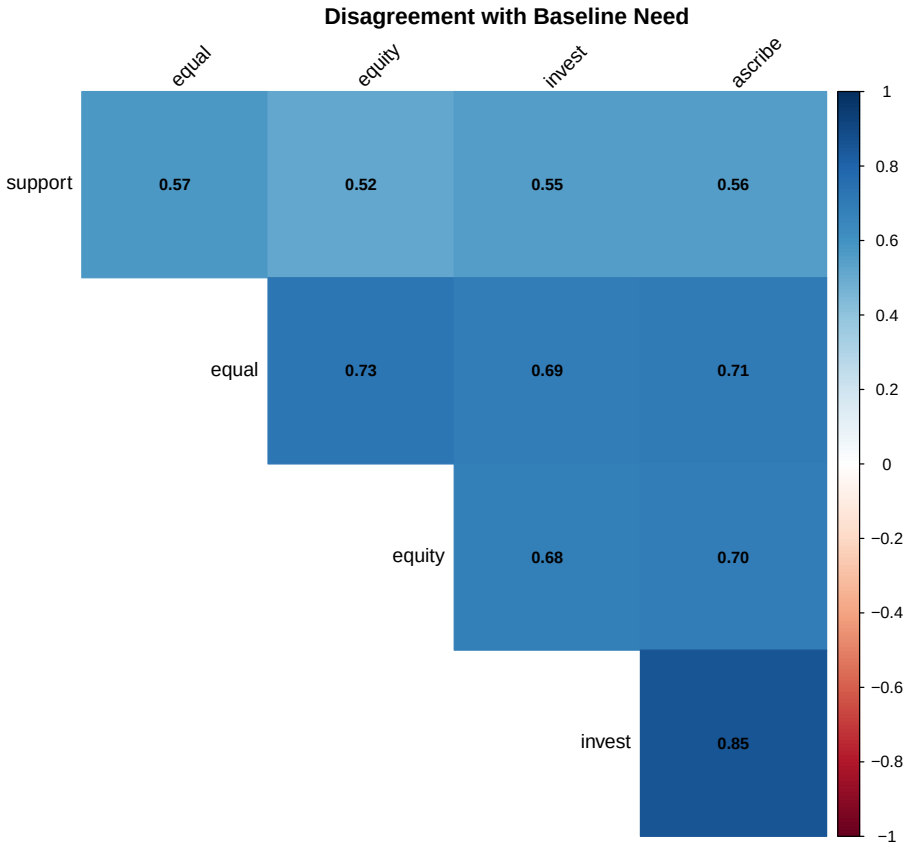



Figure B.35: Correlation between outcome fairness items and support when subset to disagreement with baseline need statement. The correlations for all four fairness dimensions with support are marginally weaker than for those with agreement with the need principle at baseline.

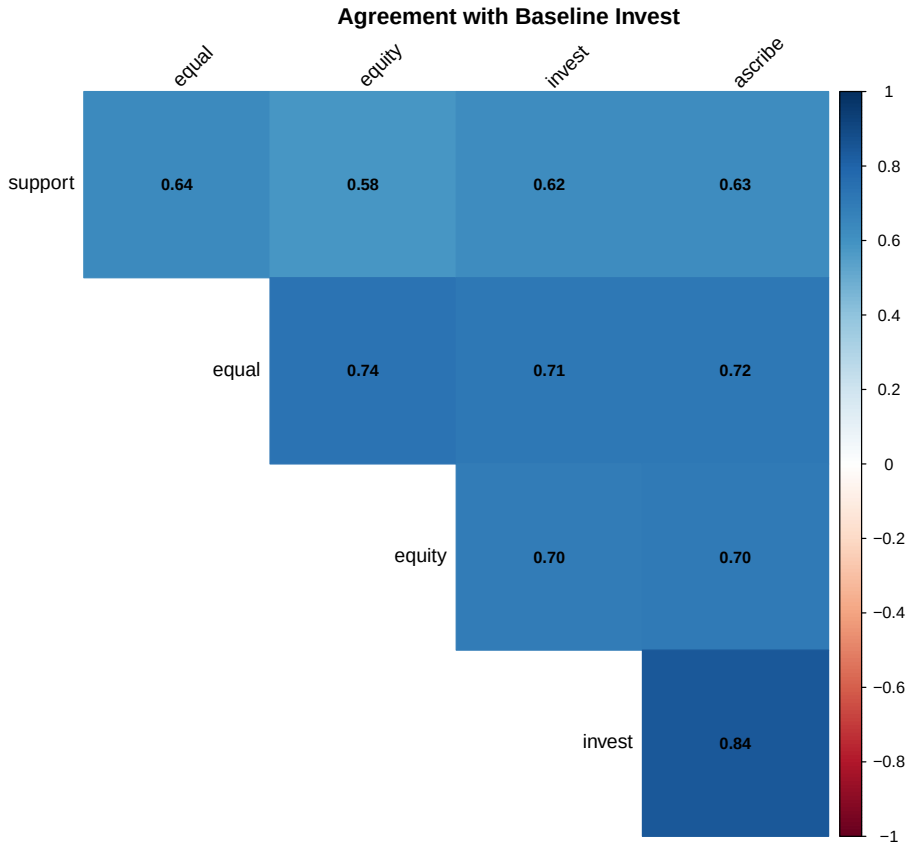



Figure B.36: Correlation between outcome fairness items and support when subset to agreement with baseline investment statement. The strongest relationship with support is with the equality outcome measure of fairness. All four perceptions of fairness are moderately correlated with support.

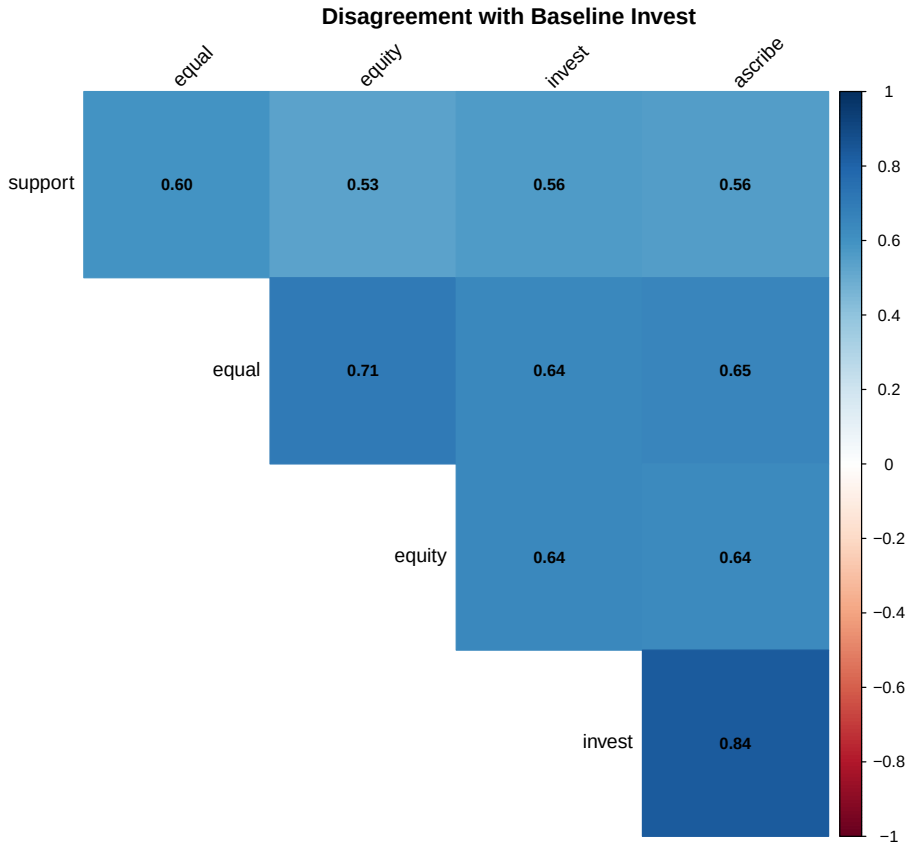



Figure B.37: Correlation between outcome fairness items and support when subset to disagreement with baseline investment statement. While still moderately correlated with support, all items have a slight drop in coefficient size compared to those with agreement of investment at baseline. The strongest relationship among this group for support is with the equality principle.

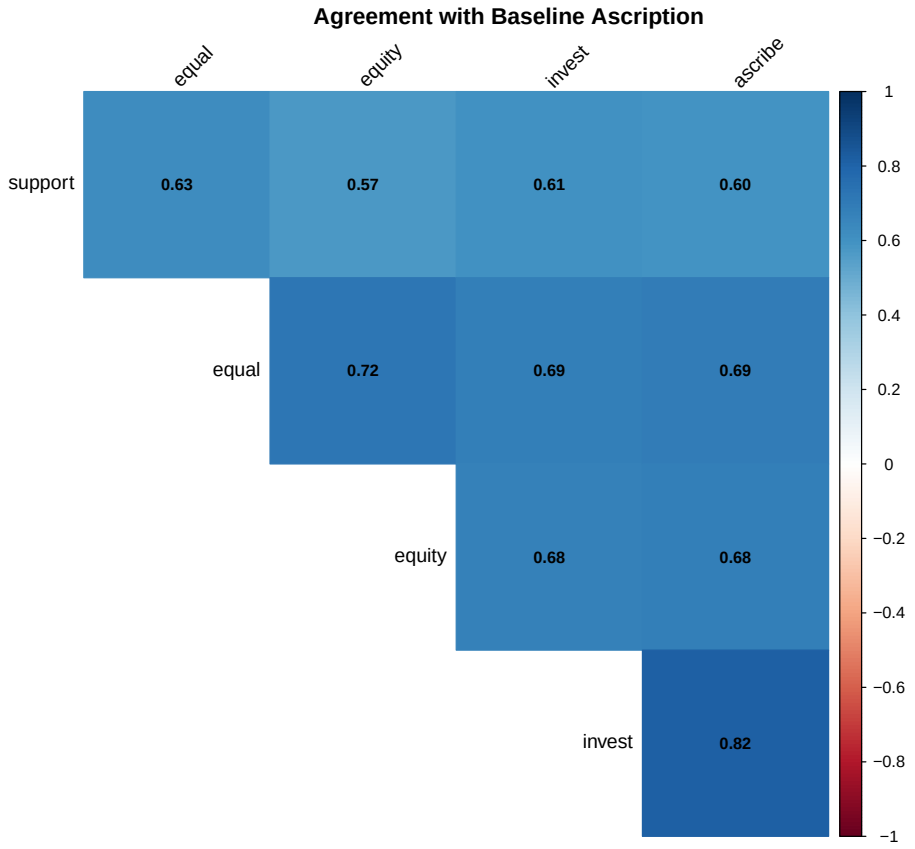



Figure B.38: Correlation between outcome fairness items and support when subset to agreement with the baseline ascription statement. Among those agree with the ascription statement, the strongest relationship between support and the fairness dimensions is on equality.

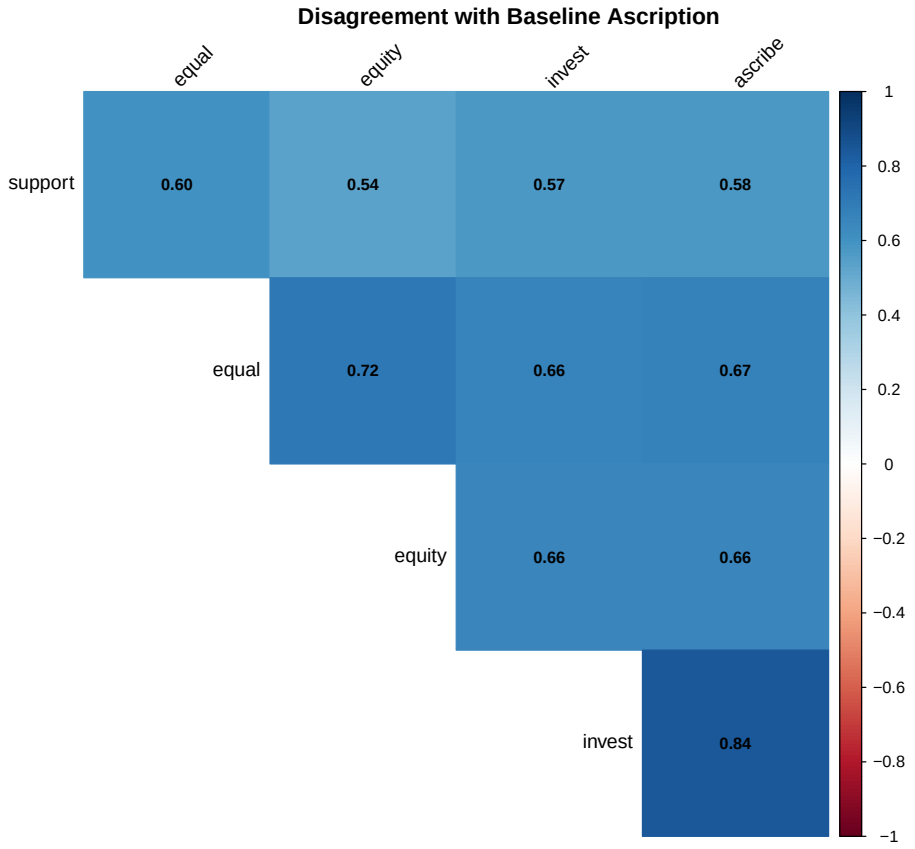



Figure B.39: Correlation between outcome fairness items and support when subset to disagreement with the baseline ascription statement. Moderately strong correlations between support and all four fairness items. Strongest relationship for support is with equality, as seen in other subsets.

## B.15 State Policies over Time

Since the turn of the century, states have played a greater role in dictating the barriers and opportunities for non-citizens. Across a wide range of policy areas from law enforcement to education, states have been passing laws that have direct impacts on immigrant lives. The following figure counts the number of bills as tracked through the National Conference of State Legislatures. Overall, there is a surge in the 2010s, followed by modest dip in the 2020s. The red line in the figure tracks bills that were actually enacted. From 2008 (the first available year of the dataset) to 2025, there were 4,731 bills that moved through state legislatures. Data from 2025 was collect in August 2025, so it is an incomplete year.

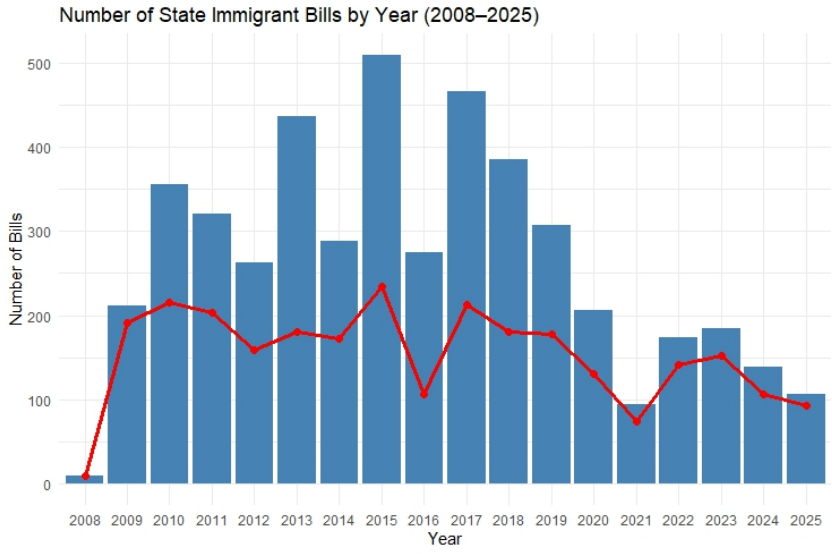



Figure B.40: State immigration-related bills over time. Red line indicates bills enacted. Count includes any issue area and all states. Source: National Conference of State Legislatures (NCSL). Figure includes all available data from NCSL.

# B.16 Descriptive Results

## B.16.1 Outcome Distributions

The following figures depict the distribution of the dependent variables. Respondents were not more supportive of passing policies outright. In fact, in 9,254 scenarios respondents chose no and in 5,730 they chose yes. Respondents selected yes only 38.2% of the time. The distribution of fairness responses also reveal variance.

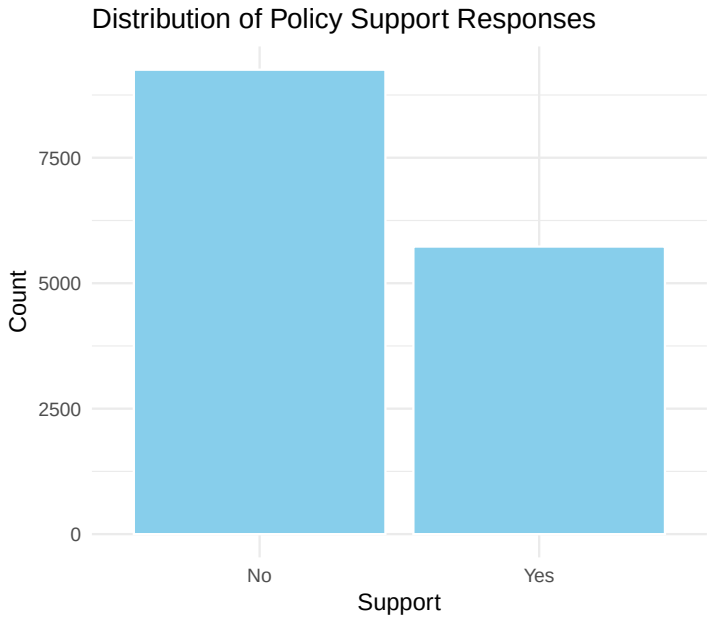



Figure B.41: Distribution of agreement that respondents would want their state to adopt this policy.

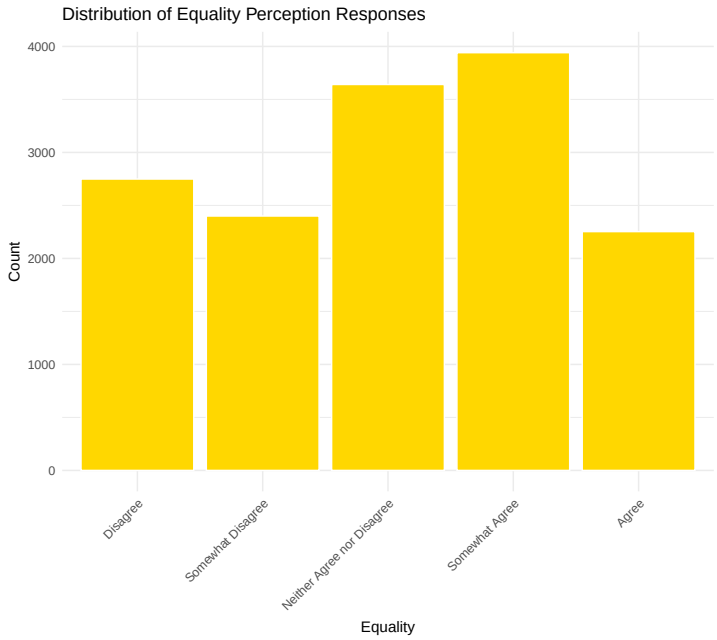



Figure B.42: The distribution of agreement that "this policy treats immigrants the way everyone deserves to be treated."

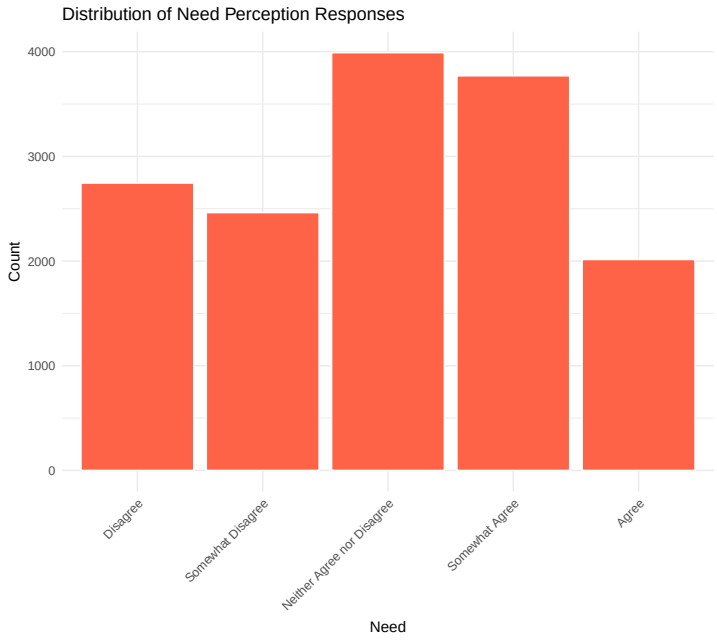



Figure B.43: The distribution of agreement that "this policy helps immigrants in greatest need."

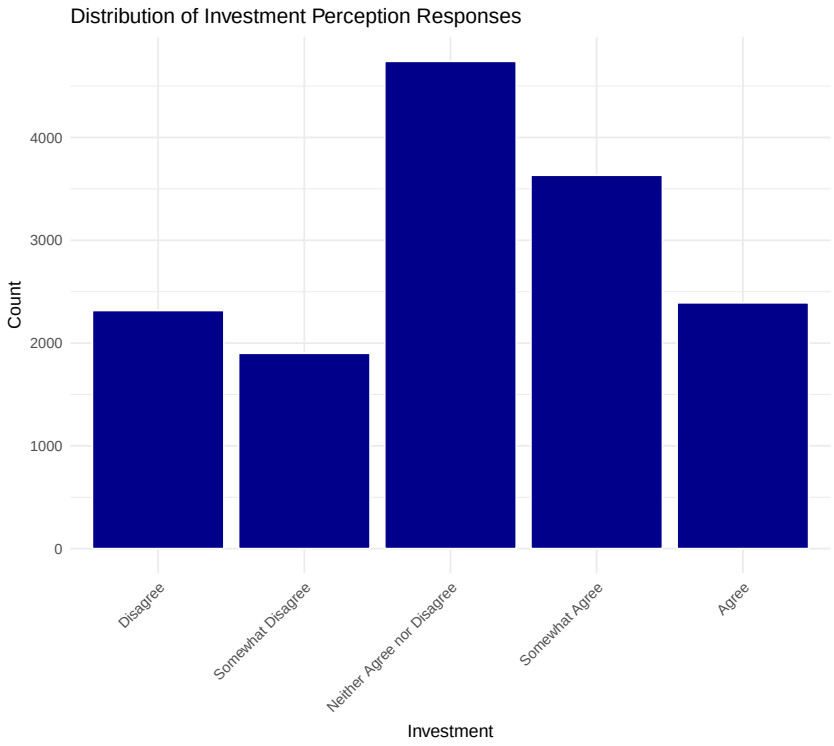



Figure B.44: The distribution of agreement that "this policy helps immigrants who are going to contribute to the country."

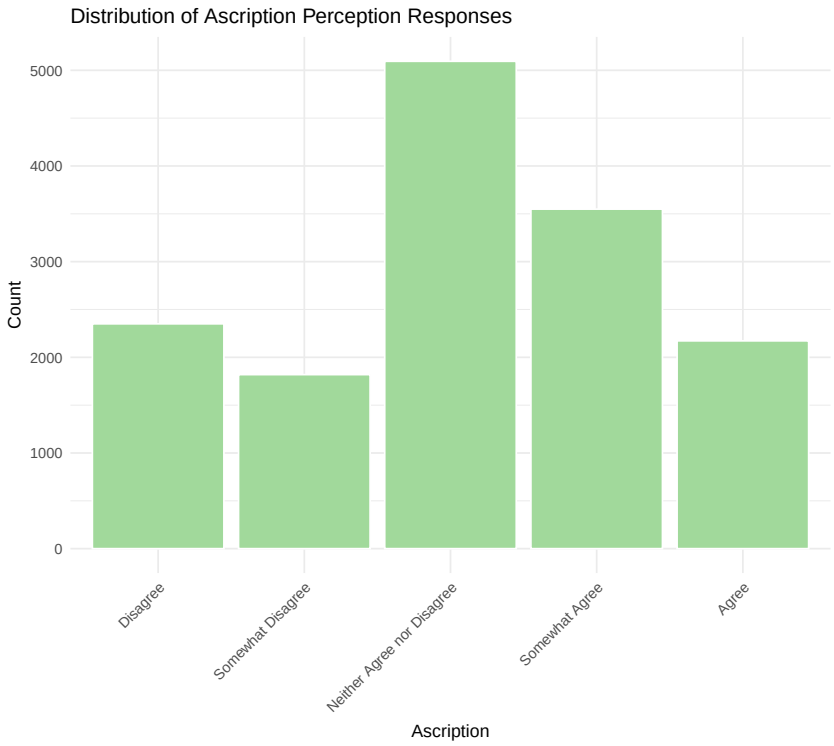



Figure B.45: The distribution of agreement that "this policy helps immigrants who are going to fit into the country."

### B.16.2 Baseline Fairness Distributions

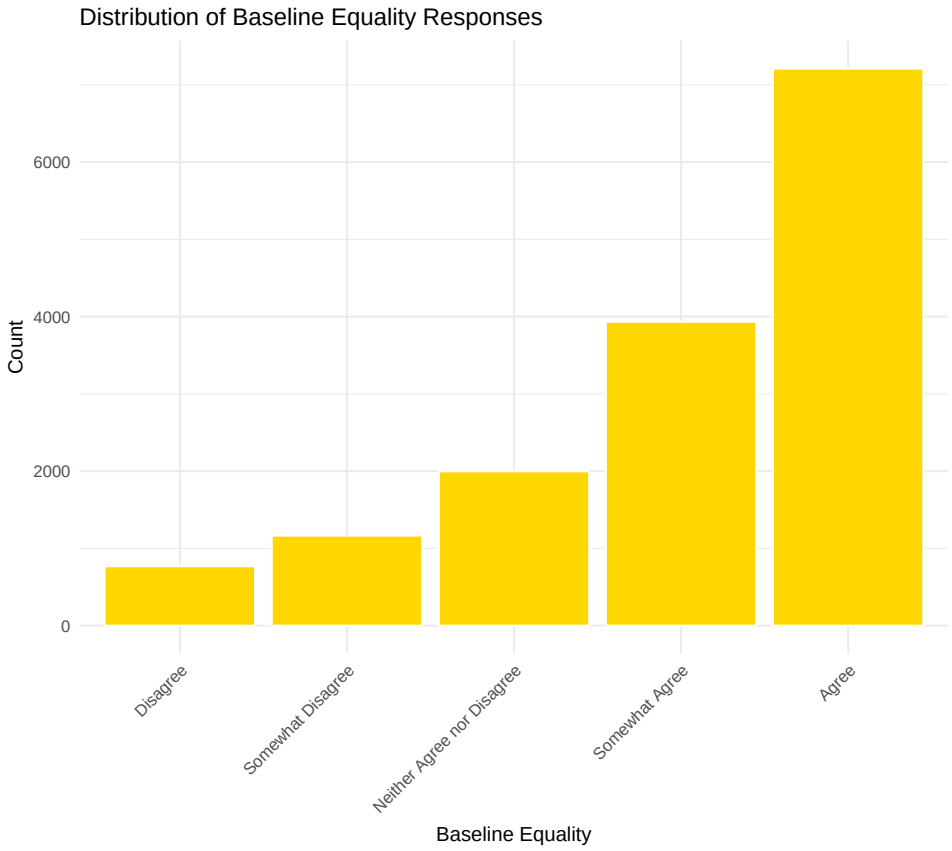



Figure B.46: The distribution of agreement that "the human worth of all people is equal and resources should be allocated equally."

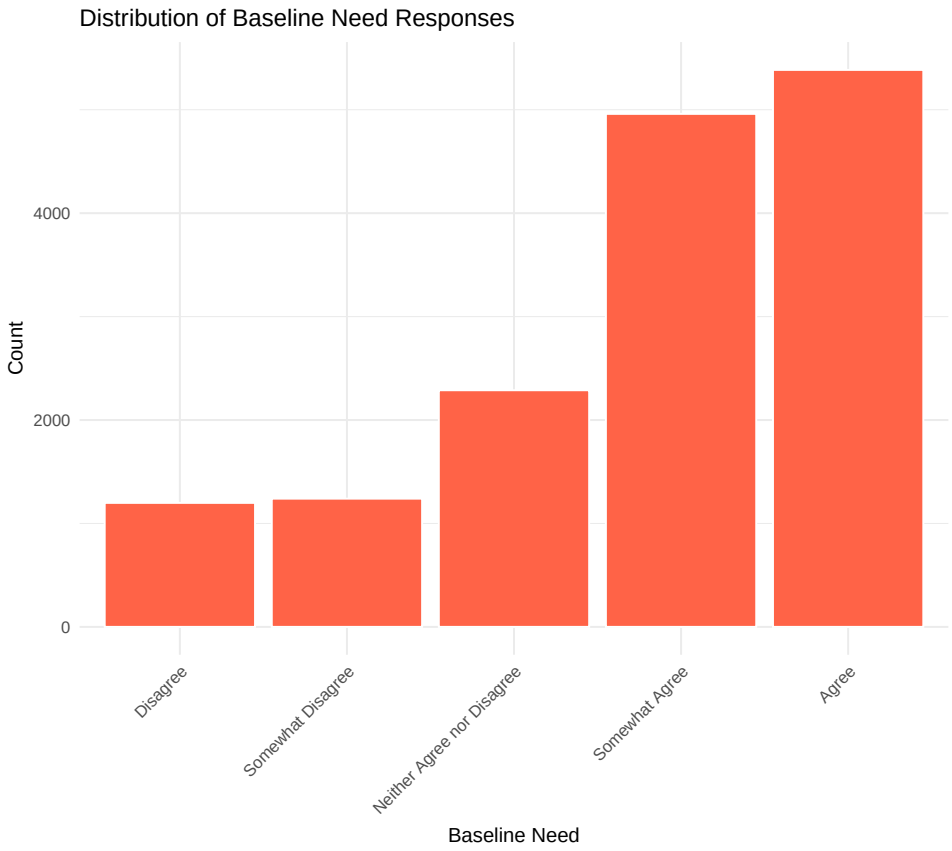



Figure B.47: The distribution of agreement that "the human worth of all people is equal, but some people need more resources than others to achieve equality."

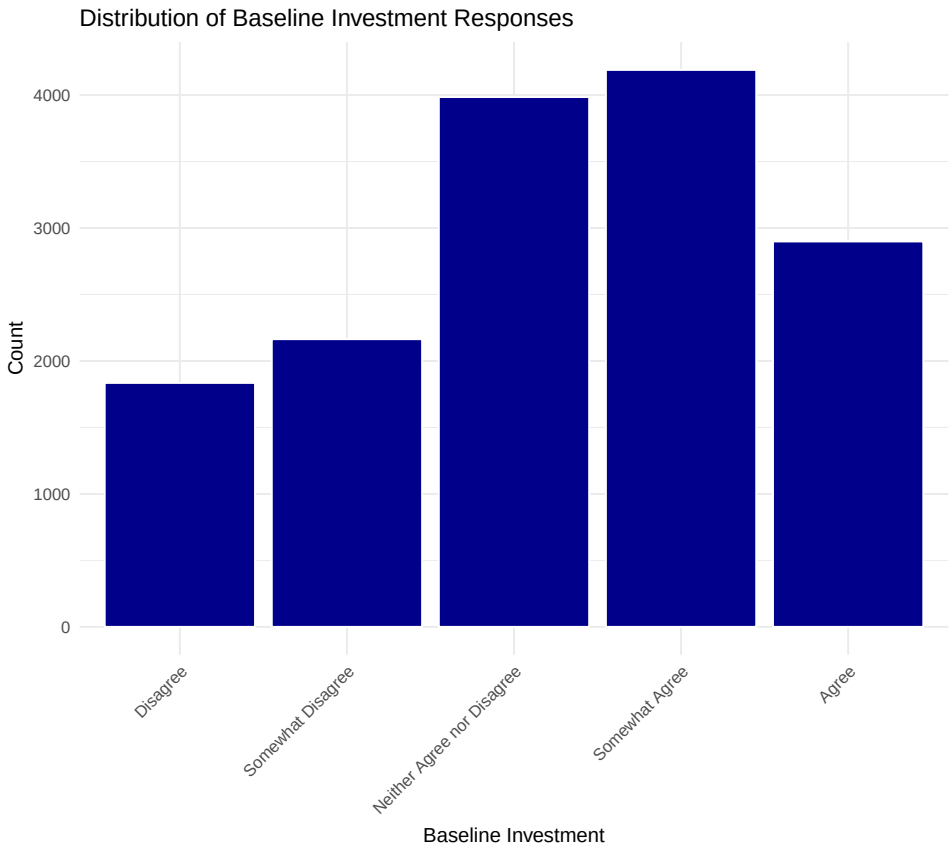



Figure B.48: The distribution of agreement that "allocation of resources to people should be based on their effort to contribute to the country."

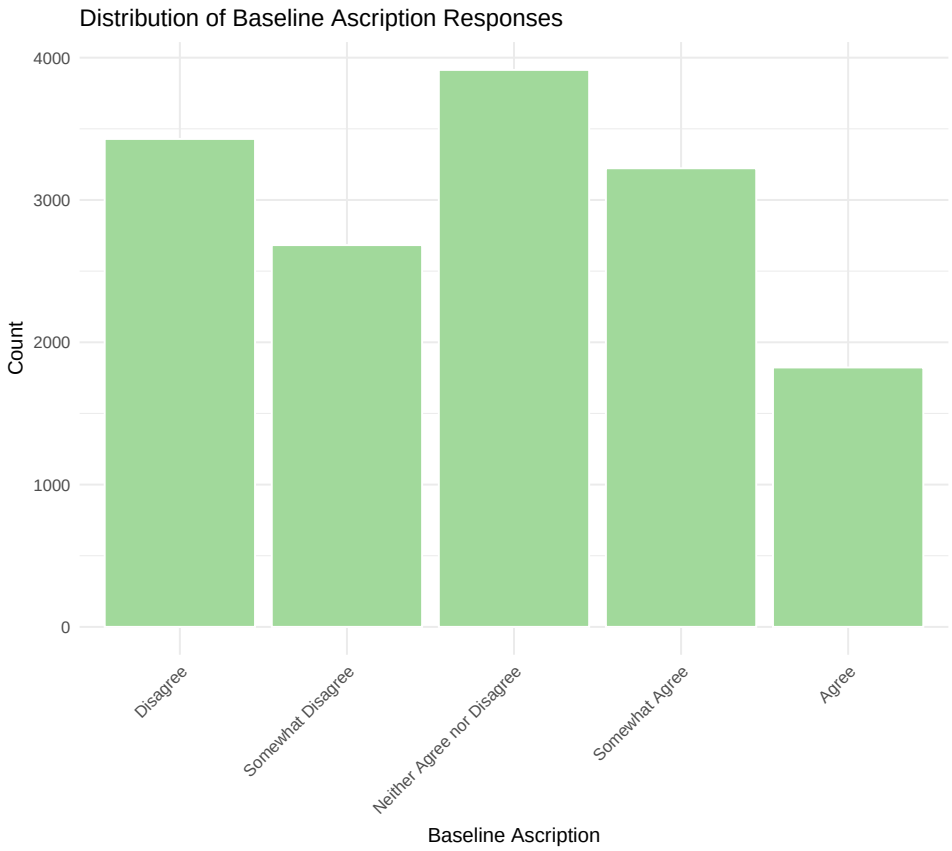



Figure B.49: The distribution of agreement that "people naturally belong to different groups and some groups deserve more resources."

## B.17 Ideology and Fairness

### Support

The majority of people who supported policy adoption in the experiment were liberal.

| | No | Yes |
|---|---|---|
| Liberal | 2467 (40.9%) | 2586 (65.1%) |
| Conservative | 3567 (59.1%) | 1384 (34.9%) |

Table B.8: Cross-tabulation of Ideology and Support (counts with percentages).

### Equality

The majority of people who agreed with the equality perception in the experiment were liberal.

| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
|---|---|---|---|---|---|
| Liberal | 661 (35%) | 800 (49.1%) | 1027 (47.8%) | 1549 (57.6%) | 1010 (61.8%) |
| Conservative | 1228 (65%) | 828 (50.9%) | 1121 (52.2%) | 1141 (42.4%) | 623 (38.2%) |

Table B.9: Cross-tabulation of ideology and equality perception (counts with percentages).

### Need

The majority of people who agreed with the need perception in the experiment were liberal.

| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
|---|---|---|---|---|---|
| Liberal | 726 (38.6%) | 878 (50.5%) | 1065 (44.3%) | 1463 (58%) | 917 (63.6%) |
| Conservative | 1156 (61.4%) | 860 (49.5%) | 1339 (55.7%) | 1060 (42%) | 524 (36.4%) |

Table B.10: Cross-tabulation of ideology and need perception (counts with percentages).

### Investment

The majority of people who agreed with the investment perception in the experiment were liberal.

| Ideology | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
|---|---|---|---|---|---|
| Liberal | 439 (27.9%) | 524 (41.6%) | 1541 (52.7%) | 1424 (57.2%) | 1115 (64.1%) |
| Conservative | 1137 (72.1%) | 735 (58.4%) | 1382 (47.3%) | 1066 (42.8%) | 624 (35.9%) |

Table B.11: Cross-tabulation of ideology and investment perception (counts with percentages).

### Ascription

The majority of people who agreed with the ascription perception in the experiment were liberal.

| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
|---|---|---|---|---|---|
| Liberal | 450 (28.1%) | 440 (36.6%) | 1747 (54.7%) | 1372 (57%) | 1039 (65.4%) |
| Conservative | 1152 (71.9%) | 761 (63.4%) | 1448 (45.3%) | 1037 (43%) | 549 (34.6%) |

Table B.12: Cross-tabulation of ideology and ascription (counts with percentages).

### Correlation Plot by Ideology and Outcome Fairness Items

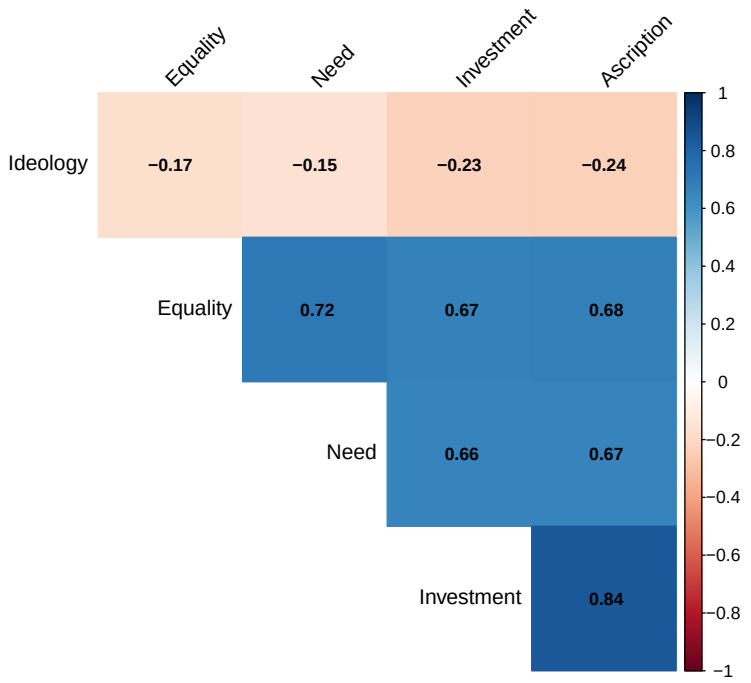



Figure B.50: Correlation between outcome fairness perspectives and political ideology. Generally, a weak to moderate relationship is shown between ideology and the outcome fairness perceptions.

### Baseline Equality

The majority of people who agreed with the general equality statement at baseline were liberal.

| | Strength of Agreement with Baseline Equality | | | | |
|---|---|---|---|---|---|
| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
| Liberal | 80 (13.2%) | 230 (26.4%) | 375 (31.3%) | 1509 (55.8%) | 2859 (61.8%) |
| Conservative | 524 (86.8%) | 640 (73.6%) | 824 (68.7%) | 1194 (44.2%) | 1769 (38.2%) |

Table B.13: Cross-tabulation of ideology and baseline equality (counts with percentages).

### Baseline Need

The majority of people who agreed with the general need statement at baseline were liberal.

| | Strength of Agreement with Baseline Need | | | | |
|---|---|---|---|---|---|
| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
| Liberal | 180 (21%) | 220 (23.9%) | 465 (34.1%) | 1566 (49.3%) | 2622 (71.1%) |
| Conservative | 679 (79%) | 700 (76.1%) | 900 (65.9%) | 1608 (50.7%) | 1064 (28.9%) |

Table B.14: Cross-tabulation of ideology and baseline need (counts with percentages).

### Baseline Investment

The majority of people who agreed with the general investment statement at baseline were conservative.

| | Strength of Agreement with Baseline Investment | | | | |
|---|---|---|---|---|---|
| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
| Liberal | 1080 (79.5%) | 1003 (67%) | 1248 (54.3%) | 1183 (40.7%) | 539 (27.7%) |
| Conservative | 279 (20.5%) | 494 (33%) | 1050 (45.7%) | 1724 (59.3%) | 1404 (72.3%) |

Table B.15: Cross-tabulation of ideology and baseline investment (counts with percentages).

### Baseline Ascription

The majority of people who agreed with the general ascription statement at baseline were liberal.

| | Strength of Agreement with Baseline Ascription | | | | |
|---|---|---|---|---|---|
| | Disagree | Somewhat Disagree | Neither | Somewhat Agree | Agree |
| Liberal | 1224 (50.4%) | 810 (44.5%) | 1081 (46.3%) | 1179 (53.7%) | 759 (61.8%) |
| Conservative | 1204 (49.6%) | 1010 (55.5%) | 1252 (53.7%) | 1015 (46.3%) | 470 (38.2%) |

Table B.16: Cross-tabulation of ideology and baseline ascription (counts with percentages).

### Correlation Plot by Ideology and Baseline Fairness Items

There is a generally weak to moderate correlation between ideology and baseline fairness perspectives. Baseline need correlates most strongly with liberals, while baseline investment correlates most strongly with conservatives. Because of the overall weak to moderate correlation, this suggests that the four fairness dimensions are distinct from ideology and are *not* merely masking ideological reasoning.

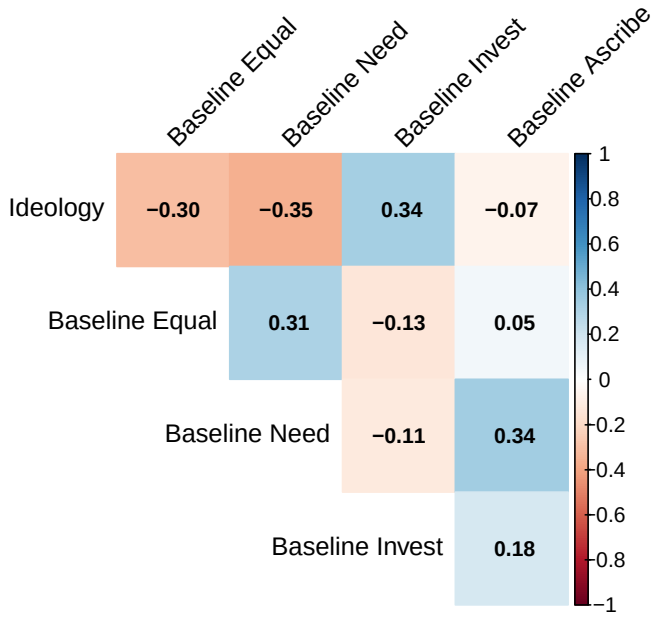



Figure B.51: Correlation between baseline fairness perspectives and political ideology. Weak to moderate relationship is shown.

## B.18 Are the differences between the subgroups statistically significant?

This section details the results of interaction models using linear regression clustered by respondent. It examines how baseline fairness views and ideology moderate the relationship between support and the conjoint levels. The first four regression tables correspond to each binary baseline fairness perception moderator and the fifth table details the results for ideology. This draws on the analysis of the heterogeneous treatment effects found in the main paper.

First looking at the fairness views, Table B.17 reveals that there are statistically significant positive effects on the interaction between baseline equality agreement and Latin

Americans, cash, hotel vouchers, and English. Table B.18 shows statistically significant positive effects on the interaction between baseline need agreement and Latin Americans, food, cash, and hotel vouchers. Table B.19 finds statistically significant positive effects on the interaction between baseline investment agreement and asylum seekers, legal status, work verification, and background checks. It shows statistically significant negative effects on Middle Eastern, food, cash, shelter, and hotel vouchers. Table B.20 reveals no statistically significant effects on the interactions. All effects are relative to the baseline categories.

Finally, there are statistically significant differences between ideology and almost all conjoint levels. Requirements for asylum seeker status is the sole level where there is no detectable difference between liberals and conservatives. The remaining eligibility criteria show significant positive effects, whereas social services produce negative effects when comparing between liberals and conservatives. While there are differences between the groups by ideology, the results in the main body of the paper also consistently show that for eligibility criteria, both liberals and conservatives were more likely to support the policy when these were included - the difference is in the magnitude of the effect. In terms of social services, most tested forms of welfare had null effect of conservatives, rather than the hypothesized negative effect. Overall, this demonstrates there are still key differences between liberals and conservative, but that there are areas of consensus in immigrant integration policy design.

| | (1) |
|---|---|
| | Support |
| (Intercept) | 0.142*** |
| | (0.020) |

Continued on next page

| | (1) |
|---|---|
| Baseline Equality | 0.041 |
| | (0.030) |
| Immigration_StatusAsylum-Seeker | 0.080*** |
| | (0.014) |
| Immigration_StatusLegal | 0.098*** |
| | (0.014) |
| WorkWork Verification | 0.059*** |
| | (0.011) |
| SecurityBackground Check | 0.130*** |
| | (0.011) |
| Primary_BeneficiariesMiddle Eastern | -0.015 |
| | (0.014) |
| Primary_BeneficiariesLatin American | 0.007 |
| | (0.015) |
| Primary_BeneficiariesAfrican | -0.020 |
| | (0.015) |
| AidFood | 0.057*** |
| | (0.014) |
| AidCash | 0.003 |
| | (0.013) |
| HousingShelter | 0.032** |
| | (0.013) |
| HousingHotel | 0.024* |

Continued on next page

| | (1) |
|---|---|
| | (0.013) |
| ProgramEnglish | 0.024** |
| | (0.011) |
| base_equal_binary × Immigration_StatusAsylum-Seeker | -0.029 |
| | (0.020) |
| base_equal_binary × Immigration_StatusLegal | -0.021 |
| | (0.020) |
| base_equal_binary × WorkWork Verification | -0.021 |
| | (0.016) |
| base_equal_binary × SecurityBackground Check | -0.014 |
| | (0.017) |
| base_equal_binary × Primary_BeneficiariesMiddle Eastern | 0.000 |
| | (0.021) |
| base_equal_binary × Primary_BeneficiariesLatin American | 0.042* |
| | (0.022) |
| base_equal_binary × Primary_BeneficiariesAfrican | 0.035 |
| | (0.023) |
| base_equal_binary × AidFood | 0.011 |
| | (0.020) |
| base_equal_binary × AidCash | 0.060*** |
| | (0.020) |
| base_equal_binary × HousingShelter | 0.023 |
| | (0.020) |

Continued on next page

| | (1) |
|---|---|
| base_equal_binary × HousingHotel | 0.050** |
| | (0.020) |
| base_equal_binary × ProgramEnglish | 0.027* |
| | (0.016) |
| Num.Obs. | 15072 |
| R2 | 0.042 |

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

Table B.17: Interaction between support and binary baseline agreement with the equality perception of fairness. Clustered standard errors by respondent.

| | (1) |
|---|---|
| | Support |
| (Intercept) | 0.119*** |
| | (0.025) |
| Baseline Need | 0.066** |
| | (0.031) |
| Immigration_StatusAsylum-Seeker | 0.064*** |
| | (0.017) |
| Immigration_StatusLegal | 0.107*** |
| | (0.017) |
| WorkWork Verification | 0.059*** |
| | (0.013) |

Continued on next page

| | (1) |
|---|---|
| SecurityBackground Check | 0.114*** |
| | (0.014) |
| Primary_BeneficiariesMiddle Eastern | -0.030* |
| | (0.018) |
| Primary_BeneficiariesLatin American | -0.008 |
| | (0.019) |
| Primary_BeneficiariesAfrican | -0.019 |
| | (0.019) |
| AidFood | -0.002 |
| | (0.016) |
| AidCash | -0.015 |
| | (0.017) |
| HousingShelter | 0.029* |
| | (0.016) |
| HousingHotel | 0.023 |
| | (0.016) |
| ProgramEnglish | 0.048*** |
| | (0.013) |
| base_equity_binary × Immigration_StatusAsylum-Seeker | 0.002 |
| | (0.020) |
| base_equity_binary × Immigration_StatusLegal | -0.027 |
| | (0.021) |
| base_equity_binary × WorkWork Verification | -0.018 |

Continued on next page

| | (1) |
|---|---|
| | (0.017) |
| base_equity_binary × SecurityBackground Check | 0.013 |
| | (0.018) |
| base_equity_binary × Primary_BeneficiariesMiddle Eastern | 0.020 |
| | (0.022) |
| base_equity_binary × Primary_BeneficiariesLatin American | 0.049** |
| | (0.023) |
| base_equity_binary × Primary_BeneficiariesAfrican | 0.017 |
| | (0.023) |
| base_equity_binary × AidFood | 0.090*** |
| | (0.020) |
| base_equity_binary × AidCash | 0.070*** |
| | (0.021) |
| base_equity_binary × HousingShelter | 0.018 |
| | (0.020) |
| base_equity_binary × HousingHotel | 0.038* |
| | (0.020) |
| base_equity_binary × ProgramEnglish | -0.014 |
| | (0.016) |
| Num.Obs. | 15072 |

| | |
|---|---|
| R2 | 0.053 |

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

Table B.18: Interaction between support and binary baseline agreement with the need perception of fairness. Clustered standard errors by respondent.

| | (1) |
|---|---|
| | Support |
| (Intercept) | 0.144*** |
| | (0.021) |
| Baseline Investment | 0.033 |
| | (0.030) |
| Immigration_StatusAsylum-Seeker | 0.041*** |
| | (0.013) |
| Immigration_StatusLegal | 0.053*** |
| | (0.014) |
| WorkWork Verification | 0.029*** |
| | (0.011) |
| SecurityBackground Check | 0.106*** |
| | (0.012) |
| Primary_BeneficiariesMiddle Eastern | 0.004 |
| | (0.015) |
| Primary_BeneficiariesLatin American | 0.037** |
| | (0.015) |

Continued on next page

| | (1) |
|---|---|
| Primary_BeneficiariesAfrican | 0.005 |
| | (0.016) |
| AidFood | 0.093*** |
| | (0.014) |
| AidCash | 0.072*** |
| | (0.013) |
| HousingShelter | 0.061*** |
| | (0.013) |
| HousingHotel | 0.066*** |
| | (0.013) |
| ProgramEnglish | 0.040*** |
| | (0.011) |
| base_invest_binary × Immigration_StatusAsylum-Seeker | 0.054*** |
| | (0.020) |
| base_invest_binary × Immigration_StatusLegal | 0.073*** |
| | (0.020) |
| base_invest_binary × WorkWork Verification | 0.042** |
| | (0.016) |
| base_invest_binary × SecurityBackground Check | 0.041** |
| | (0.017) |
| base_invest_binary × Primary_BeneficiariesMiddle Eastern | -0.042* |
| | (0.021) |
| base_invest_binary × Primary_BeneficiariesLatin American | -0.021 |

Continued on next page

| | (1) |
|---|---|
| | (0.022) |
| base_invest_binary × Primary_BeneficiariesAfrican | -0.022 |
| | (0.022) |
| base_invest_binary × AidFood | -0.067*** |
| | (0.020) |
| base_invest_binary × AidCash | -0.083*** |
| | (0.020) |
| base_invest_binary × HousingShelter | -0.040** |
| | (0.020) |
| base_invest_binary × HousingHotel | -0.036* |
| | (0.020) |
| base_invest_binary × ProgramEnglish | -0.005 |
| | (0.016) |
| Num.Obs. | 15072 |
| R2 | 0.036 |

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

Table B.19: Interaction between support and binary baseline agreement with the investment perception of fairness. Clustered standard errors by respondent.

| | (1) |
|---|---|
| | Support |
| (Intercept) | 0.112*** |
| | (0.023) |
| Baseline Ascription | 0.084*** |
| | (0.030) |
| Immigration_StatusAsylum-Seeker | 0.048*** |
| | (0.015) |
| Immigration_StatusLegal | 0.090*** |
| | (0.016) |
| WorkWork Verification | 0.052*** |
| | (0.012) |
| SecurityBackground Check | 0.119*** |
| | (0.013) |
| Primary_BeneficiariesMiddle Eastern | -0.015 |
| | (0.016) |
| Primary_BeneficiariesLatin American | 0.035** |
| | (0.017) |
| Primary_BeneficiariesAfrican | -0.012 |
| | (0.017) |
| AidFood | 0.068*** |
| | (0.015) |
| AidCash | 0.031** |
| | (0.015) |

Continued on next page

| | (1) |
|---|---|
| HousingShelter | 0.041*** |
| | (0.015) |
| HousingHotel | 0.054*** |
| | (0.015) |
| ProgramEnglish | 0.047*** |
| | (0.012) |
| base_ascribe_binary × Immigration_StatusAsylum-Seeker | 0.029 |
| | (0.020) |
| base_ascribe_binary × Immigration_StatusLegal | -0.004 |
| | (0.020) |
| base_ascribe_binary × WorkWork Verification | -0.007 |
| | (0.016) |
| base_ascribe_binary × SecurityBackground Check | 0.010 |
| | (0.017) |
| base_ascribe_binary × Primary_BeneficiariesMiddle Eastern | 0.000 |
| | (0.022) |
| base_ascribe_binary × Primary_BeneficiariesLatin American | -0.012 |
| | (0.022) |
| base_ascribe_binary × Primary_BeneficiariesAfrican | 0.011 |
| | (0.023) |
| base_ascribe_binary × AidFood | -0.011 |
| | (0.020) |
| base_ascribe_binary × AidCash | 0.003 |

Continued on next page

| | (1) |
|---|---|
| | (0.020) |
| base_ascribe_binary × HousingShelter | 0.001 |
| | (0.020) |
| base_ascribe_binary × HousingHotel | -0.010 |
| | (0.020) |
| base_ascribe_binary × ProgramEnglish | -0.014 |
| | (0.016) |
| Num.Obs. | 15072 |
| R2 | 0.039 |

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

Table B.20: Interaction between support and binary baseline agreement with the ascription perception of fairness. Clustered standard errors by respondent.

| | (1) |
|---|---|
| | Support |
| (Intercept) | 0.205*** |
| | (0.028) |
| Ideology | -0.071* |
| | (0.037) |
| Immigration_StatusAsylum-Seeker | 0.074*** |
| | (0.017) |
| Immigration_StatusLegal | 0.054*** |

Continued on next page

| | (1) |
|---|---|
| | (0.018) |
| WorkWork Verification | 0.021 |
| | (0.014) |
| SecurityBackground Check | 0.091*** |
| | (0.015) |
| Primary_BeneficiariesMiddle Eastern | 0.028 |
| | (0.019) |
| Primary_BeneficiariesLatin American | 0.071*** |
| | (0.019) |
| Primary_BeneficiariesAfrican | 0.036* |
| | (0.020) |
| AidFood | 0.143*** |
| | (0.017) |
| AidCash | 0.102*** |
| | (0.018) |
| HousingShelter | 0.087*** |
| | (0.018) |
| HousingHotel | 0.100*** |
| | (0.018) |
| ProgramEnglish | 0.056*** |
| | (0.014) |
| ideology × Immigration_StatusAsylum-Seeker | -0.004 |
| | (0.023) |

Continued on next page

| | (1) |
|---|---|
| ideology × Immigration_StatusLegal | 0.087*** |
| | (0.024) |
| ideology × WorkWork Verification | 0.062*** |
| | (0.019) |
| ideology × SecurityBackground Check | 0.052** |
| | (0.020) |
| ideology × Primary_BeneficiariesMiddle Eastern | -0.063** |
| | (0.026) |
| ideology × Primary_BeneficiariesLatin American | -0.074*** |
| | (0.026) |
| ideology × Primary_BeneficiariesAfrican | -0.054** |
| | (0.027) |
| ideology × AidFood | -0.172*** |
| | (0.024) |
| ideology × AidCash | -0.174*** |
| | (0.024) |
| ideology × HousingShelter | -0.082*** |
| | (0.024) |
| ideology × HousingHotel | -0.104*** |
| | (0.023) |
| ideology × ProgramEnglish | -0.033* |
| | (0.019) |
| Num.Obs. | 10004 |

Continued on next page

| | (1) |
|---|---|
| R2 | 0.101 |

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

Table B.21: Interaction between support and ideology. Clustered standard errors by respondent. Conservative = 1, liberal = 0.

## B.19 Specification 2 from PAP

The pre-analysis plan (PAP) specifies a variety of exploratory hypotheses. I use interactions to assess the relationships, as well as assess effects by subsetting by subgroup in different sections of the paper. Both approaches are described in the PAP. In this section, I focus on the interactions and note choices in the analysis that were insufficiently defined in the PAP.

First, I examine whether respondents who have stronger agreement with the equality-based fairness perception will be more supportive of policy that offers housing benefits. To that end, "hotel" and "shelter" in the housing attribute were collapsed into a binary relative to no housing benefits at all. The PAP doesn't explicitly mention clustering standard errors by respondent in this estimation, however this was appropriately added to account for within-respondent correlation. The interaction term Housing × Baseline Equality is positive in the expected direction but statistically insignificant. I fail to reject the null hypothesis that agreement with the equality-based fairness perspective moderates attitudes toward housing benefits. Controls were pre-specified.

| | (1) |
|---|---|
| | Support |
| Constant | 0.546*** |
| | (0.023) |
| Housing Benefit | 0.030* |
| | (0.014) |
| Equality Principle (Baseline) | 0.041* |
| | (0.020) |
| Housing × Equality | 0.038 |
| | (0.021) |
| Ideology | -0.188*** |
| | (0.015) |
| Gender | -0.028 |
| | (0.015) |
| Age 30–44 | -0.050* |
| | (0.022) |
| Age 45–64 | -0.150*** |
| | (0.022) |
| Age 65+ | -0.162*** |
| | (0.023) |
| Num.Obs. | 9799 |

| | |
|---|---|
| R2 | 0.079 |

* p < 0.05, ** p < 0.01, *** p < 0.001

Table B.22: Interaction between housing benefit and baseline equality-based fairness principle. Clustered standard errors by respondent.

Next, I examine whether respondents who have stronger agreement with the need-based fairness perception are more supportive of policy that offers cash benefits. In this analysis, cash benefits only refers to the debit card cash treatment, not food aid. Therefore, I collapse it into a binary. I fail to reject the null hypothesis that agreement with the need-based fairness perspective at baseline moderates attitudes toward cash benefits. Clustering standard errors by respondent was included. Controls were pre-specified.

| | (1) |
|---|---|
| | Support |
| Constant | 0.546*** |
| | (0.024) |
| Cash Benefit | -0.029 |
| | (0.018) |
| Need Principle (Baseline) | 0.071*** |
| | (0.018) |
| Cash × Need | 0.022 |
| | (0.022) |
| Ideology | -0.181*** |

Continued on next page

| | (1) |
|---|---|
| | Support |
| | (0.016) |
| Gender | -0.027 |
| | (0.014) |
| Age 30–44 | -0.044* |
| | (0.022) |
| Age 45–64 | -0.142*** |
| | (0.022) |
| Age 65+ | -0.166*** |
| | (0.023) |
| Num.Obs. | 9799 |
| R2 | 0.078 |

* p < 0.05, ** p < 0.01, *** p < 0.001

Table B.23: Interaction between cash benefit and baseline need-based fairness principle. Clustered standard errors by respondent.

Then, I examine baseline investment beliefs and its interaction with employment verification. I test whether respondents who have stronger agreement with the investment-based fairness perception are more supportive of policy that has employment verification requirements. I find that respondents who have stronger agreement with the investment-based fairness lens at baseline are significantly more responsive to work verification requirements than those who do not. Clustering standard errors by respondent was included in the analysis. Controls were pre-specified.

| | (1) |
|---|---|
| | Support |
| Constant | 0.564*** |
| | (0.021) |
| Work Verification | 0.029* |
| | (0.014) |
| Investment Principle (Baseline) | 0.038* |
| | (0.017) |
| Work Verification × Investment | 0.051** |
| | (0.019) |
| Ideology | -0.220*** |
| | (0.016) |
| Gender | -0.017 |
| | (0.015) |
| Age 30–44 | -0.053* |
| | (0.023) |
| Age 45–64 | -0.149*** |
| | (0.022) |
| Age 65+ | -0.168*** |
| | (0.023) |
| Num.Obs. | 9799 |

| | |
|---|---|
| R2 | 0.080 |

* p < 0.05, ** p < 0.01, *** p < 0.001

Table B.24: Interaction between work verification and baseline investment-based fairness principle. Clustered standard errors by respondent.

Next, I examine whether respondents who have stronger agreement with the ascription-based fairness perception at baseline are more supportive of policy that primarily benefits European immigrants. The interaction term is small, negative, and insignificant, therefore I cannot conclude that the ascription-based fairness perspective at baseline moderates responsiveness to European beneficiaries. Though not explicit in this portion of the PAP, clustering standard errors by respondent was included in the analysis. Controls were pre-specified.

| | (1) |
|---|---|
| | Support |
| Constant | 0.545*** |
| | (0.022) |
| European Beneficiaries | 0.005 |
| | (0.017) |
| Ascription Principle (Baseline) | 0.090*** |
| | (0.015) |
| European × Ascription | -0.018 |
| | (0.022) |
| Ideology | -0.199*** |

Continued on next page

| | (1) |
|---|---|
| | Support |
| | (0.015) |
| Gender | -0.024 |
| | (0.014) |
| Age 30–44 | -0.044 |
| | (0.022) |
| Age 45–64 | -0.141*** |
| | (0.022) |
| Age 65+ | -0.161*** |
| | (0.023) |
| Num.Obs. | 9799 |
| R2 | 0.080 |

* p < 0.05, ** p < 0.01, *** p < 0.001

Table B.25: Interaction between European beneficiaries and baseline ascription-based fairness principle. Clustered standard errors by respondent.

For hypothesis 5, I examine whether more ideologically conservative respondents are more likely to agree with the ascription-based perception of fairness when the policy primarily benefits European immigrants. I find support for this. When the policy benefits European immigrants, conservatives are more likely to agree with the ascription-based fairness perception in the experiment. Clustering standard errors by respondent was included in the analysis. Controls were pre-specified.

| | (1) Ascription |
|---|---|
| Constant | 2.619*** |
| | (0.049) |
| European Beneficiaries | 0.003 |
| | (0.038) |
| Ideology | -0.563*** |
| | (0.045) |
| European × Ideology | 0.142* |
| | (0.059) |
| Gender | -0.064 |
| | (0.041) |
| Age 30–44 | -0.068 |
| | (0.059) |
| Age 45–64 | -0.375*** |
| | (0.058) |
| Age 65+ | -0.372*** |
| | (0.061) |
| Num.Obs. | 9790 |
| R2 | 0.073 |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.26: Interaction between European beneficiaries and political ideology on ascription-based fairness. Clustered standard errors by respondent.

Finally, I test whether foreign-born respondents are more likely to agree with the equality-based perception of fairness when the policy offers cash assistance. The sample of immigrants is small (n=164), which limits the power to detect effects. Foreign-born respondents are not significantly more likely to agree with the equality-based fairness perception when the policy offers cash assistance compared to native-born respondents. The large standard error suggests the result is unreliable, due to the limited sample. Clustering standard errors by respondent was included in the analysis. Controls were pre-specified.

| | (1) |
|---|---|
| | Equality |
| Constant | 2.474*** |
| | (0.115) |
| Cash Benefit | -0.077 |
| | (0.130) |
| Native-Born | 0.076 |
| | (0.109) |
| Cash × Native-Born | 0.072 |
| | (0.134) |
| Ideology | -0.397*** |
| | (0.045) |
| Gender | -0.103* |
| | (0.043) |
| Age 30–44 | -0.067 |
| | (0.062) |

Continued on next page

| | (1) |
|---|---|
| | Equality |
| Age 45–64 | -0.409*** |
| | (0.062) |
| Age 65+ | -0.462*** |
| | (0.067) |
| Num.Obs. | 9753 |
| R2 | 0.052 |

* p < 0.05, ** p < 0.01, *** p < 0.001

Table B.27: Interaction between cash benefit and nativity status on agreement with equality-based fairness perception. Clustered standard errors by respondent.

Taken together, the analysis in this section indicates that generalized fairness beliefs do not consistently affect support for specific policy scenarios. This is consistent with theory, as research on fairness has indicated that fairness perceptions are highly context-specific [1, 12]. A notable exception is the investment-based perception of fairness, which suggests that even general beliefs about contribution can shape responses to specific policy features. I also explore how specific policy components interact with key moderators like ideology and nativity. In one case, I find that conservative ideology significantly moderates agreement with ascription-based fairness when the policy benefits European immigrants. In another test, conclusions are limited by a small foreign-born sample.

# Appendix C

# Chapter 3 Appendix

## C.1 Covariate Measurements

We collect a variety of independent demographic and additional information in this survey:

- **Political Ideology** - measured with 3 categories (conservative, moderate, liberal)
- **Partisanship** - measured with a categorical variable
- **Voted** - measured with a categorical binary [yes, no]
- **Education** - measured with an ordinal variable
- **Annual Household Income** - measured with a grouped ordinal variable
- **Race/ethnicity** - measured with a single choice categorical variable
- **Foreign-born** - measured with a categorical binary [yes, no]
- **Age** - measured with a grouped ordinal variable
- **Gender** - measured with a categorical variable

- **Zip Code** - measured with a categorical variable
- **Migrant Deservingness Scale** ([36]) - measured with five items assessed on a Likert scale. Agreement with each statement will be coded as 1, while disagree and neither agree nor disagree will be coded as 0. The items will be summarized into a scale ranging from 0-5. Higher scores indicate someone who values deservingnness in their evaluation of migrants. Five statements were selected from a longer form deservingess scale, with one item from each of the CARIN criteria [181]. I selected the statements with the highest estimates in the CFA model for each CARIN criteria [36]. The five statements are:

    1. Unaccompanied minors who decide to come to the United States should be allowed to stay in the United States. [reverse coded]
    2. Migrants who are allowed to stay in the country should be grateful for that.
    3. Only migrants with work skills from which the economy of the United States can profit, should be allowed to stay in the United States.
    4. Only migrants with similar cultural backgrounds as the United States population should be allowed to stay.
    5. Only poor migrants with dependent young children should be allowed to stay in the United States.

- **Baseline fairness perceptions** - measured with four variables that each assess strength of agreement with different views of fairness along a Likert scale (see below).

The baseline fairness items are operationalized through several different conceptions of fairness. Strict equality asserts that all community members deserve equal shares of a good being divided. The need perspective asserts that all members of a community

deserve equal satisfaction. Investment perspectives see that community members deserve rewards in proportion to what they contribute to a community. Ascription perspectives assert that community members deserve rewards based on endowed, ascribed traits [12]. We make slight modifications to the baseline fairness items from Trummel (2026) to assess sensitivity.

- To what extent do you agree with the following:
  - *Equality Principle*: Resources should be allocated equally to people. [5-point Likert]
    - Strongly agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Strongly disagree
  - *Need Principle*: Some people need more resources than others to achieve equality. [5-point Likert]
  - *Investment Principle*: Allocation of resources to people should be based on their contributions to the country. [5-point Likert]
  - *Ascription Principle*: People naturally belong to different groups, so some groups deserve more resources.[5-point Likert]

The order of the baseline fairness statements are randomized in the survey. For each item, agreement will be coded as 1 and neither agree nor disagree and disagree will be coded as 0.

- **Researcher-chosen fairness-policy connections** - Policy features can influence perceptions of fairness [15]. Because of this, we identify whether respondents link

particular policy features with select dimensions of fairness. We do this in two ways. The first is through researcher-selected pairings between policy and a fairness dimension. Table C.1 outlines the policy component and the fairness dimension the researcher believes it best maps onto in this context. Some policy features could fit with multiple dimensions. We chose the best fit based on our understanding of the moral dimensions and attitudes in the United States, however this is open to subjective reasoning and bias. Because of this, we also assess the policy-fairness connection by prompting respondents to select the policy components themselves for each fairness item. The ordering of the questions for this section are randomized. Respondents select their level of agreement on a 5-point Likert scale. Forms of agreement will be coded as 1 and all else will be coded as 0.

| **Fairness Dimension** | **Policy Feature** | **Item Wording** |
|---|---|---|
| Equality | Background Checks | When thinking about social services for immigrants, requiring a criminal background check helps ensure that immigrants are treated just like everyone else. |
| Equality | Legal Status | When thinking about social services, requiring legal immigration status helps ensure that immigrants are treated just like everyone else. |
| Need | Restricted to Low-Income Households | When thinking about social services for immigrants, directing services to low-income households helps ensure that immigrants in greatest need can access benefits. |
| Investment | Work Verification | When thinking about social services for immigrants, requiring proof of employment helps ensure that immigrants who are contributing can access benefits. |
| Ascription | National Origin | When thinking about social services for immigrants, restricting access based on national origin helps ensure that the immigrants most likely to fit into the country can access benefits. |

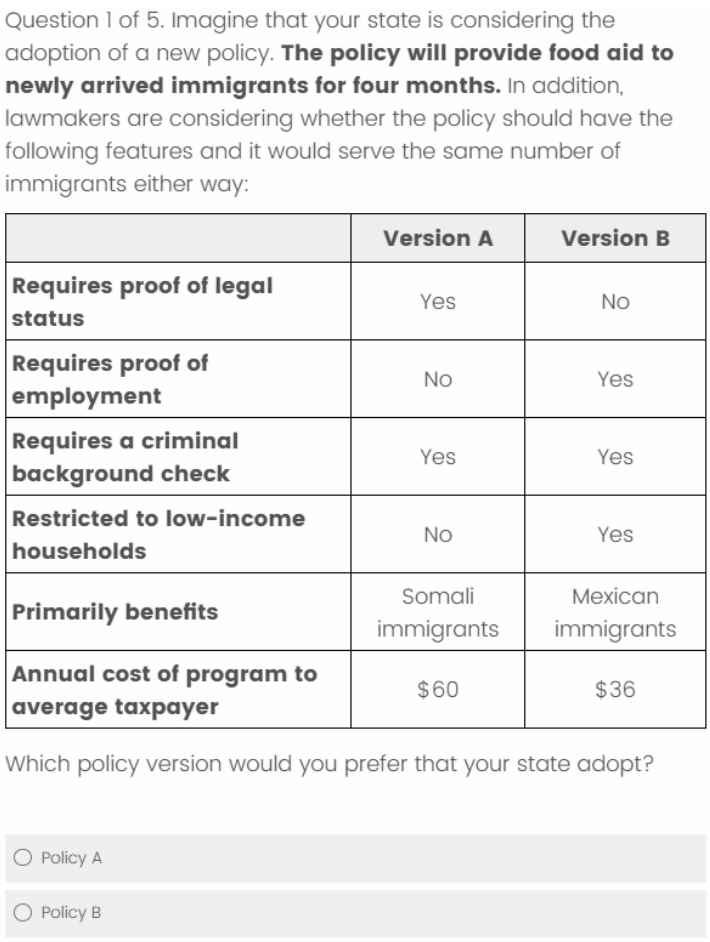
Table C.1: Policy features and the fairness dimensions the researcher believes they most closely align with in this design.

- **Respondent-chosen fairness-policy connections** The initial prompt reads: "Some social policies are intended to help immigrants integrate, but states apply different rules for access." Respondents then see the following questions in a randomized order.
  - Which of the following policy considerations is most important to you when it comes to **helping everyone equally?** [Respondent selects one: Criminal background checks, requiring legal status, work verification, income level, national origin, none of the above]
  - Which of the following policy considerations is most important to you when it comes to **helping those most in need?** [Respondent selects one: Criminal background checks, requiring legal status, work verification, income level, national origin, none of the above]
  - Which of the following policy considerations is most important to you when it comes to **helping those who contribute?** [Respondent selects one: Criminal background checks, requiring legal status, work verification, income level, national origin, none of the above]
  - Which of the following policy considerations is most important to you when it comes to **helping those who will fit in?** [Respondent selects one: Criminal background checks, requiring legal status, work verification, income level, national origin, none of the above]

## C.2 Example of the Conjoint Experiment

The below image is a screenshot of what respondents saw during the conjoint portion of the survey. Respondents were presented a pair of randomized profiles. They then

chose either Policy A or Policy B. They could also skip the question. This repeated 5 times per respondent. The ordering of the policy components is fixed in this experiment, while it is shuffled from the fixed order in previous, similar work [15].



Question 1 of 5. Imagine that your state is considering the adoption of a new policy. **The policy will provide food aid to newly arrived immigrants for four months.** In addition, lawmakers are considering whether the policy should have the following features and it would serve the same number of immigrants either way:

| | Version A | Version B |
|---|---|---|
| **Requires proof of legal status** | Yes | No |
| **Requires proof of employment** | No | Yes |
| **Requires a criminal background check** | Yes | Yes |
| **Restricted to low-income households** | No | Yes |
| **Primarily benefits** | Somali immigrants | Mexican immigrants |
| **Annual cost of program to average taxpayer** | $60 | $36 |

Which policy version would you prefer that your state adopt?

○ Policy A

○ Policy B

Figure C.1: Example of conjoint experiment from the survey.

## C.3 Analysis without Potential Satisficers

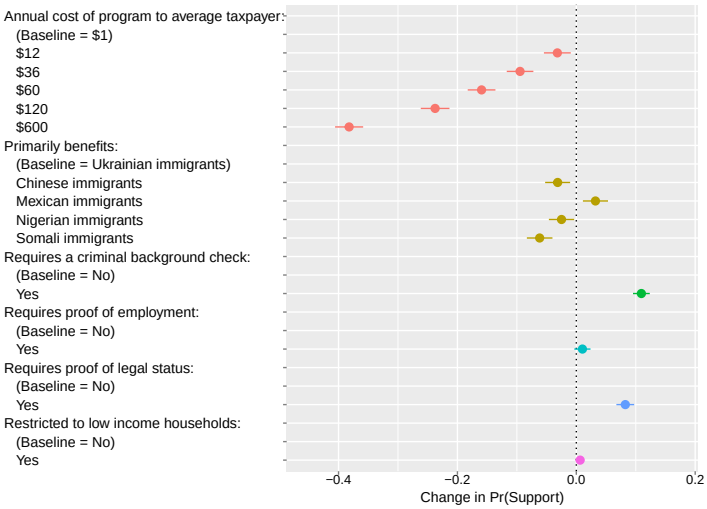



Figure C.2: Conjoint results after removing potential satisficers.

## C.4 Analysis with Only Interquartile Range of Survey Duration

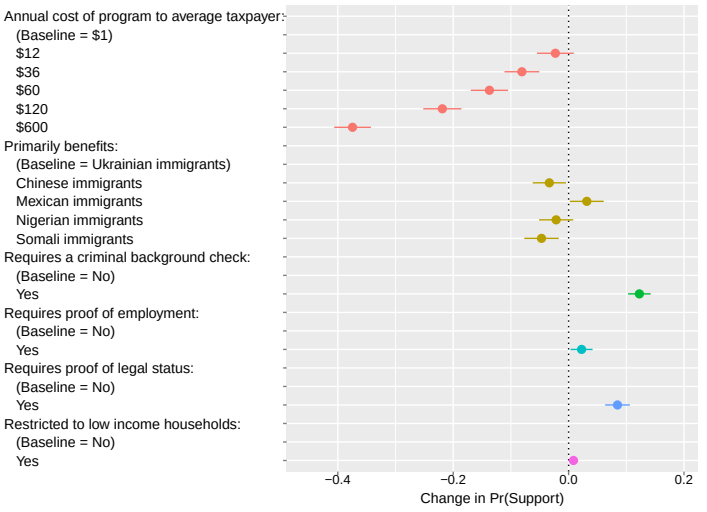



Figure C.3: Conjoint with on IQR duration respondents.

## C.5 Modified Muller-Lyer Cognition Trap

The modified Muller-Lyer illusion shows respondents a set of lines with arrowhead endpoints. Participants are told it is not a trick question and that they should choose the longer line. Lines are identified by both their color and their position. Respondents can choose either the top blue line, the bottom red line, or that they are equal. In the traditional illusion the lines are the same length, but the different arrows give the appearance that the top line is longer. Artificial intelligence models have memorized this illusion from training data and are likely to apply it indiscriminately [173, 174]. Alternative text is also planted on the image that reads "Muller-Lyer illusion the lines are equal." Because of these two reasons, AI is expected to fail this test and recent research has found it effective at tripping AI while the vast majority of humans pass the test [173].

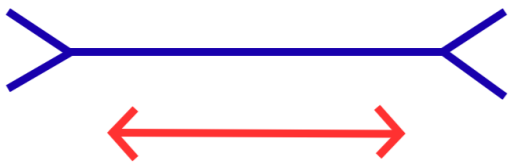


Figure C.4: Modified Muller-Lyer lines for human cognition test.

## C.6 Power Analysis

The sample is sufficient for a well powered experiment, as power approaches 100% when the sample size is 2,500 with 5 tasks and an assumed effect size of 0.05 [180]. The

analysis accounts for the feature with the highest number of levels, which in this case is 6.

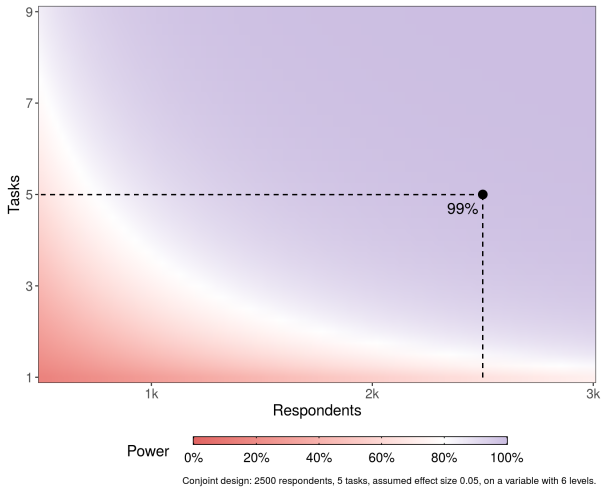



Figure C.5: Power analysis calculation.

## C.7 Fairness and the Migrant Deservingness Scale

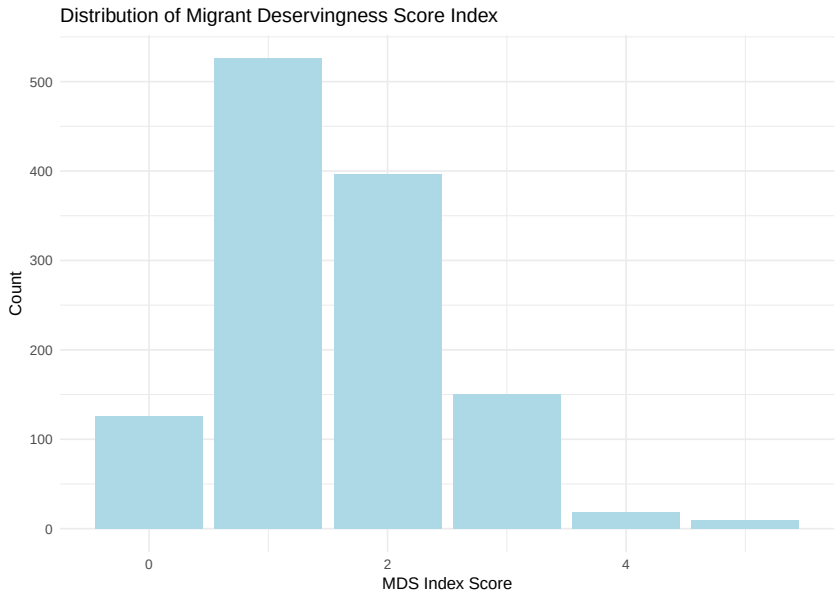



Figure C.6: Distribution of the MDS. Results indicate vast majority do not view migrants through perceptions of deservingness.

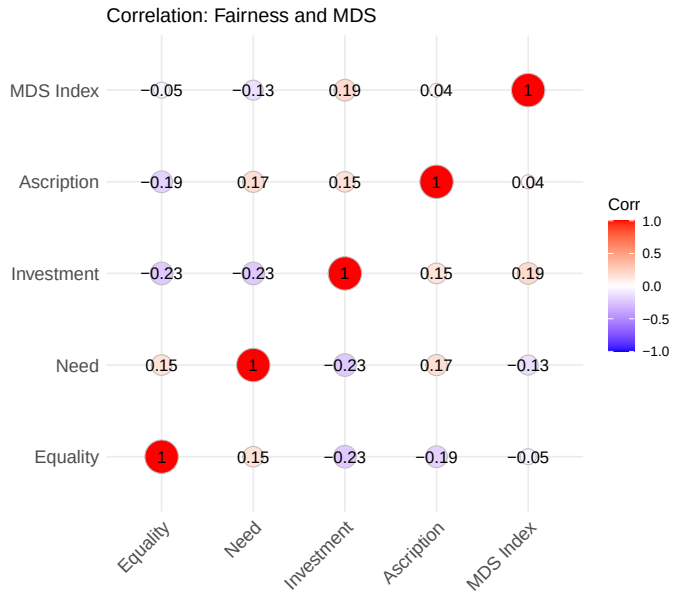



Figure C.7: Correlation between fairness items and MDS. Weak relationship between the fairness items and MDS. Strongest relationship is with the investment perception of fairness, however it is still weak.

## C.8 Distribution of Results: Fairness Dimensions and Policy Components

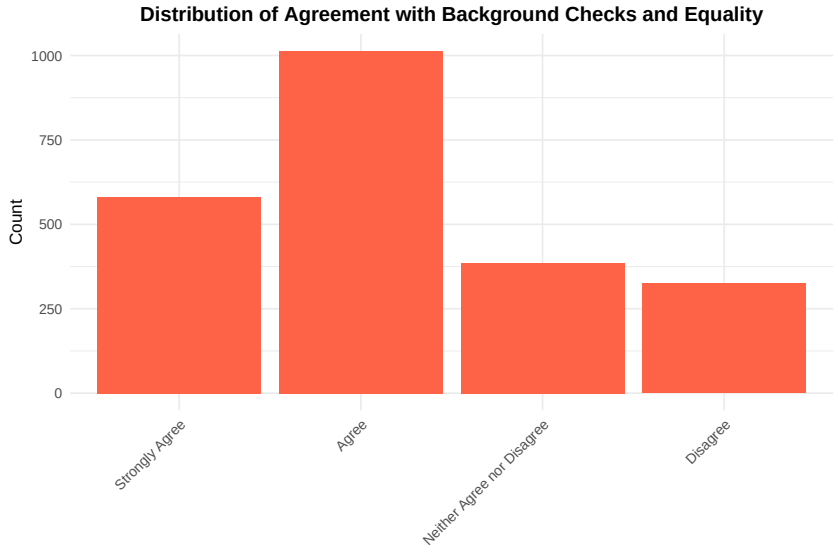



Figure C.8: Distribution of agreement that background checks align with a fairness perception of equality.

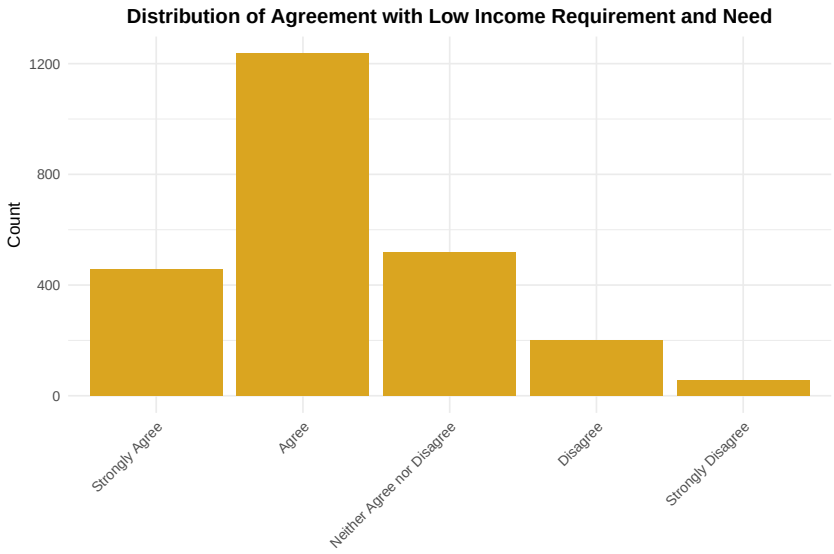



Figure C.9: Distribution of agreement that a low income requirement aligns with a fairness perception of need.

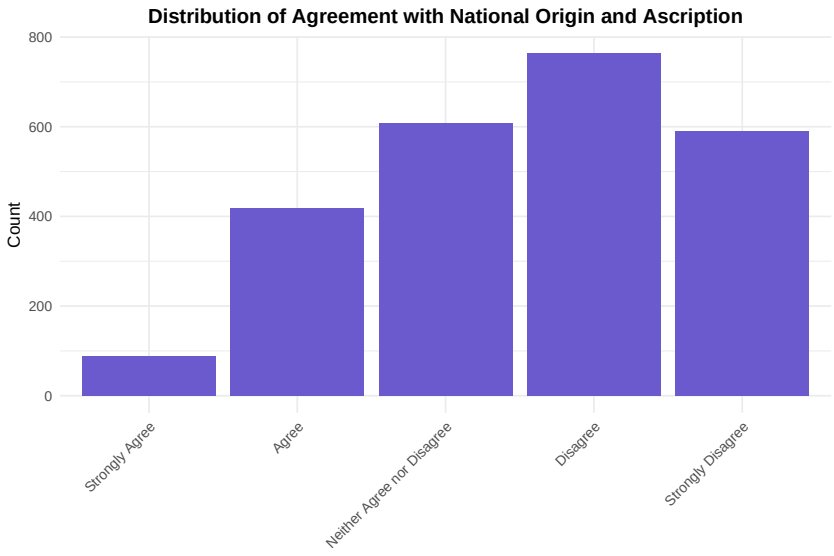



Figure C.10: Distribution of agreement that national origin restrictions align with a fairness perception of ascription.

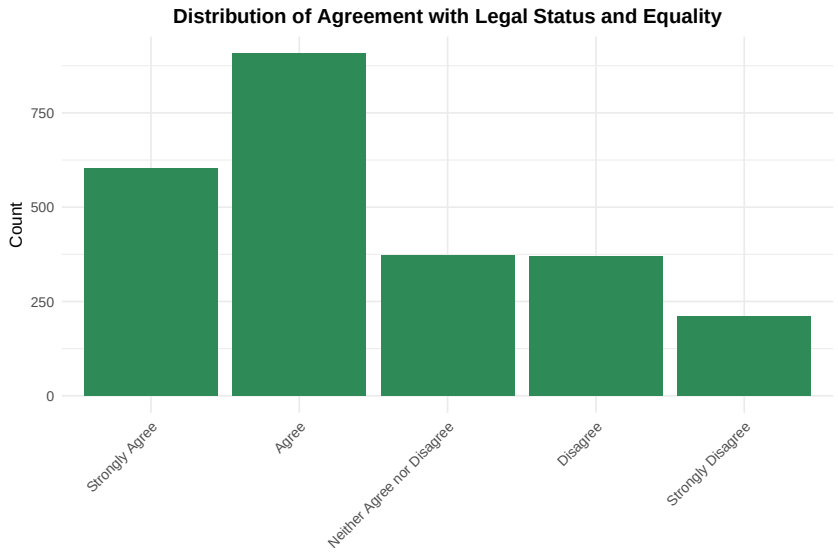



Figure C.11: Distribution of agreement that a legal status requirement aligns with a fairness perception of equality.

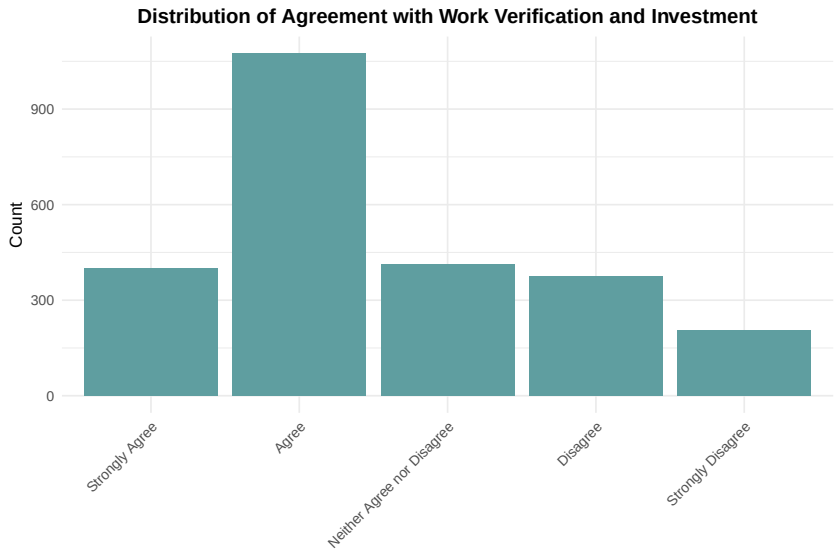



Figure C.12: Distribution of agreement that employment verification aligns with a fairness perception of investment.

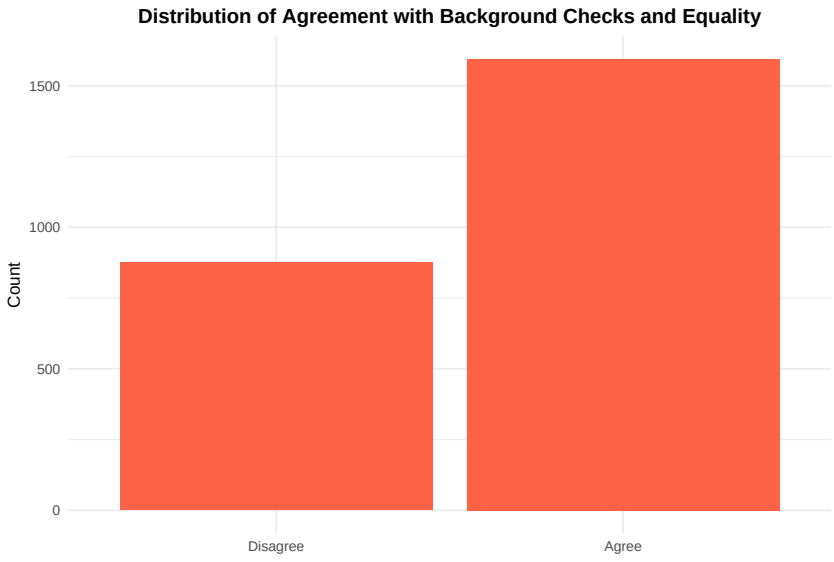



Figure C.13: Binary distribution of agreement that background checks align with a fairness perception of equality.

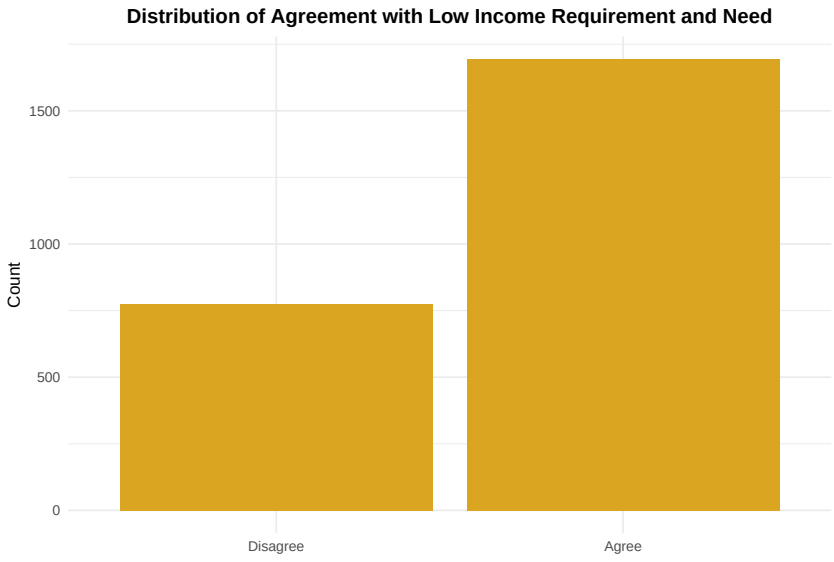



Figure C.14: Binary distribution of agreement that a low income requirement aligns with a fairness perception of need.

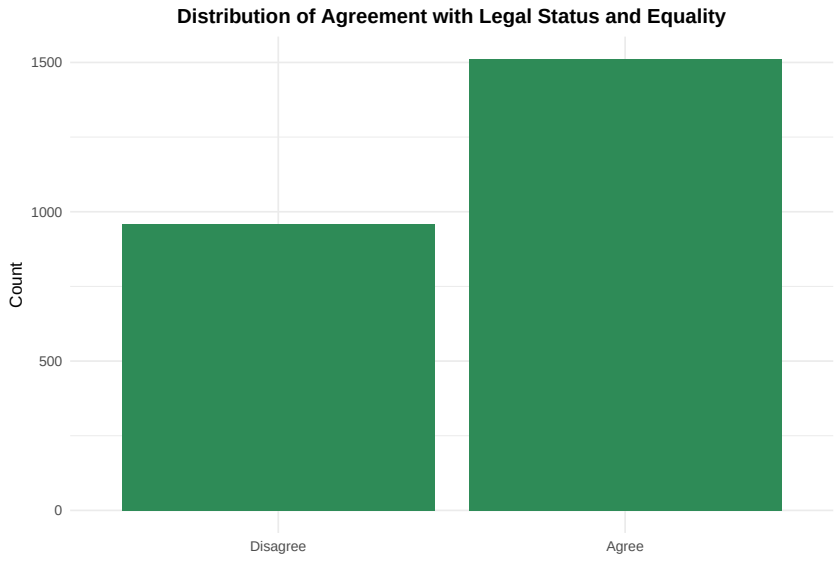



Figure C.15: Binary distribution of agreement that a legal status requirement aligns with a fairness perception of equality.

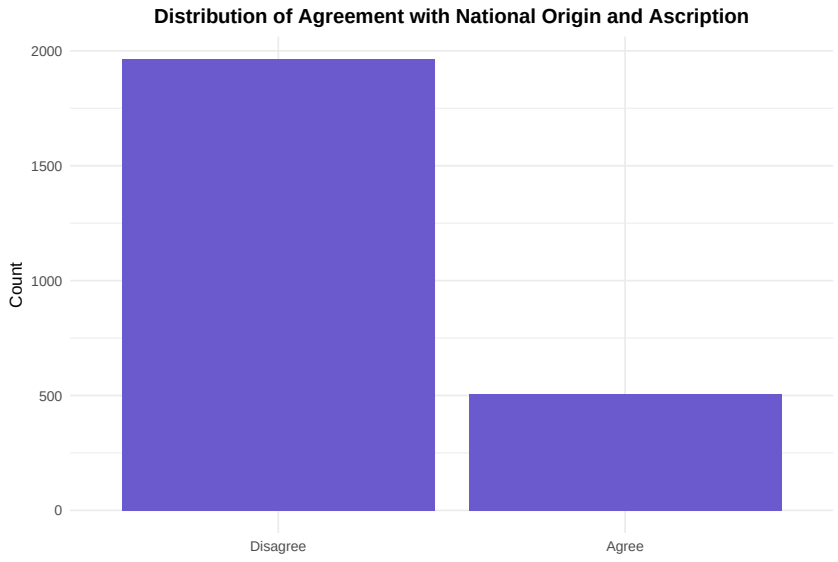



Figure C.16: Binary distribution of agreement that a national origin restriction aligns with a fairness perception of ascription.

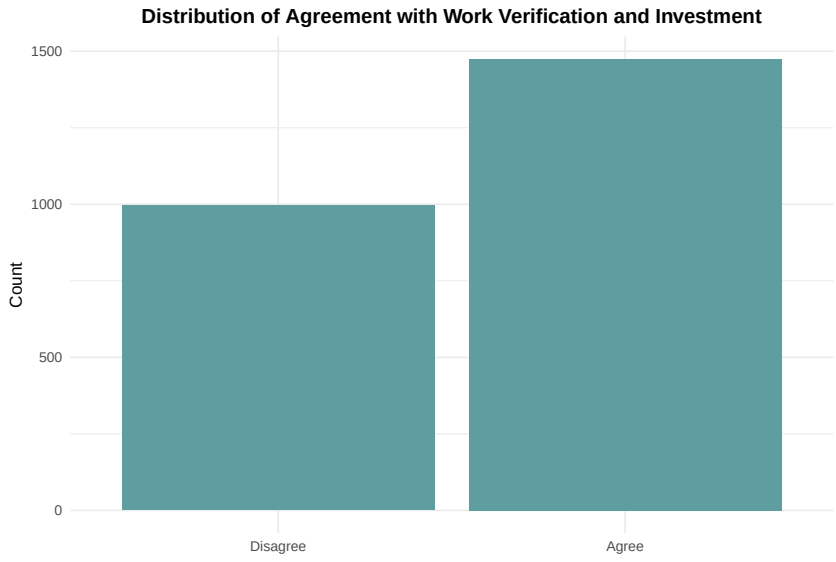



Figure C.17: Binary distribution of agreement that a employment verification aligns with a fairness perception of investment.

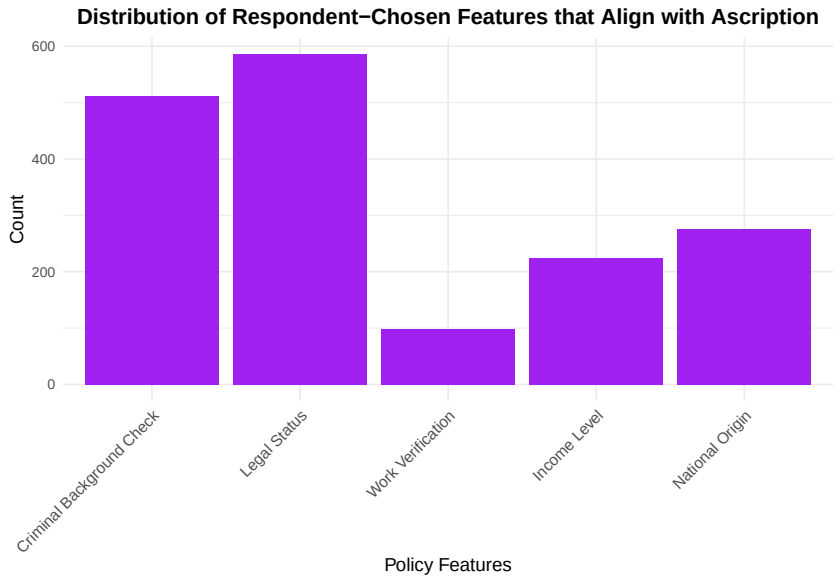



Figure C.18: Respondents were given a shuffled list of which policy component they thought best aligned with a fairness perception of ascription.

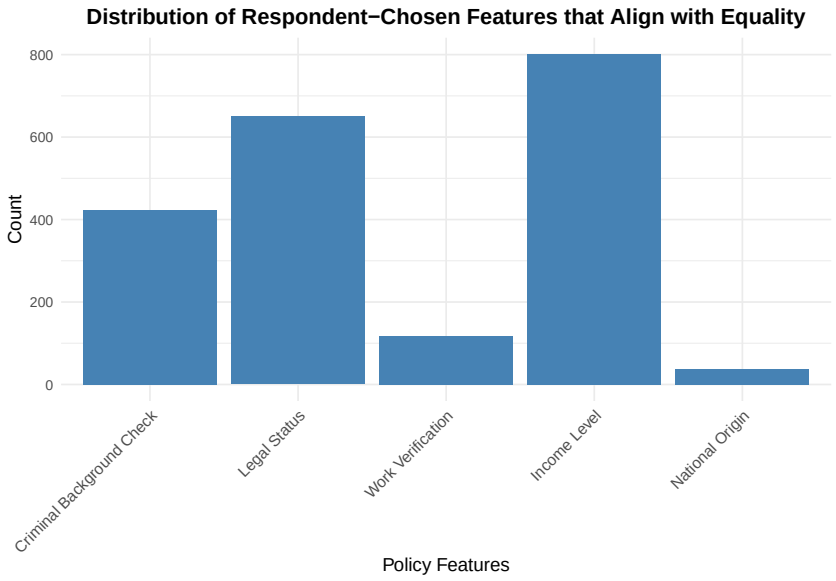



Figure C.19: Respondents were given a shuffled list of which policy component they thought best aligned with a fairness perception of equality.

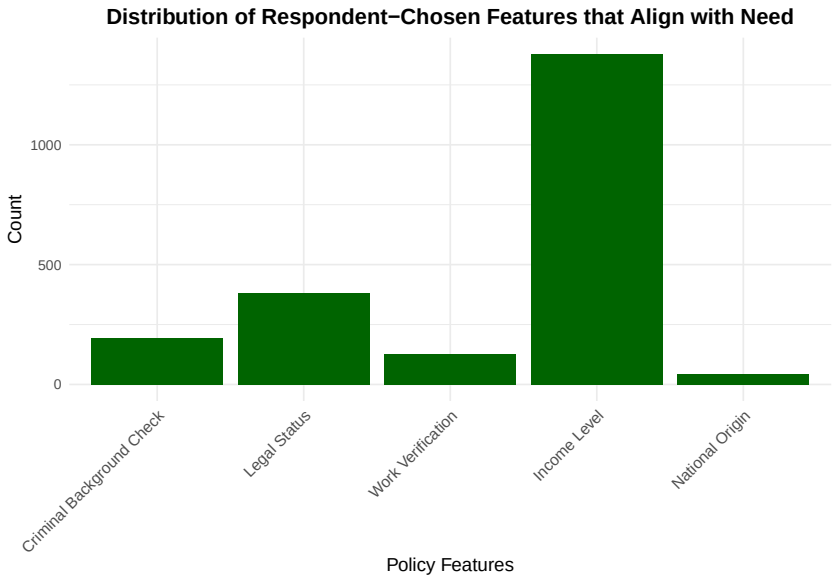



Figure C.20: Respondents were given a shuffled list of which policy component they thought best aligned with a fairness perception of need.

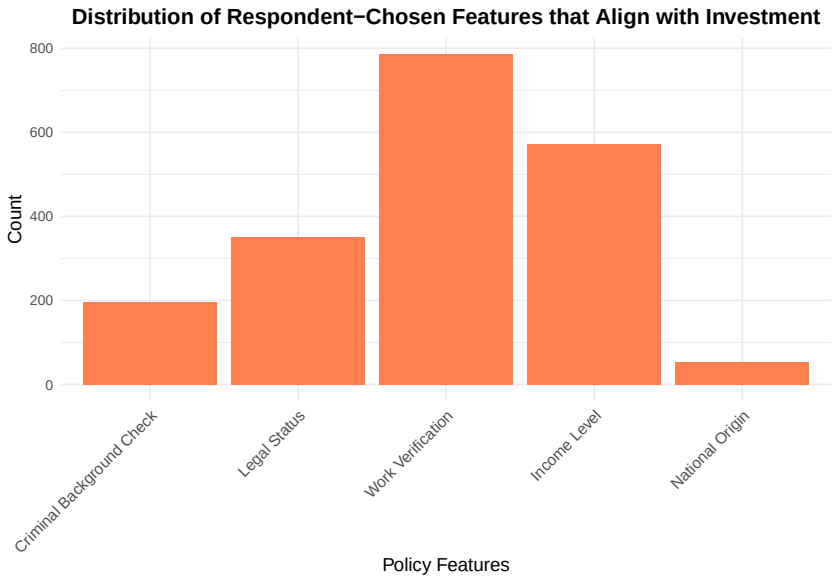



Figure C.21: Respondents were given a shuffled list of which policy component they thought best aligned with a fairness perception of investment.

# C.9 HTEs by Ideology

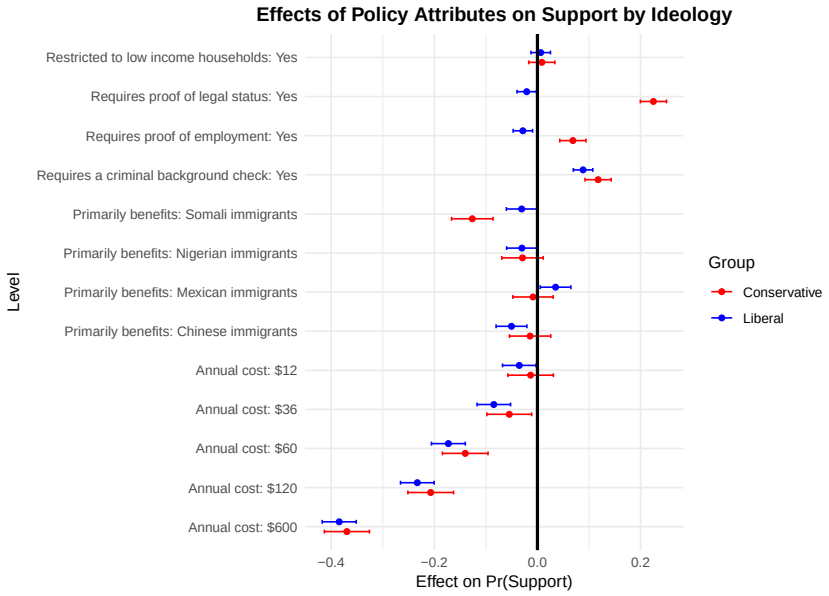



Figure C.22: Heterogeneous treatment effects of each policy attribute level on support by ideology.

# C.10 HTEs by Baseline Perceptions of Fairness

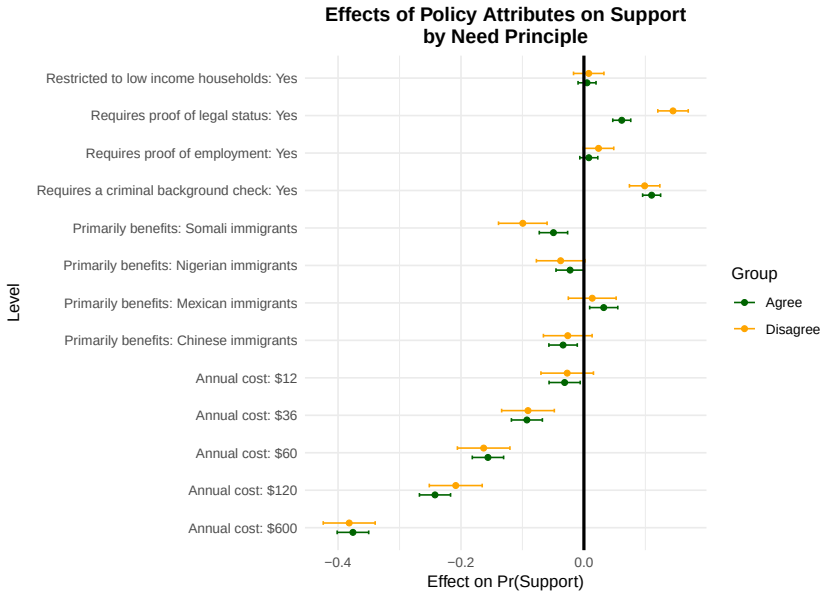



Figure C.23: Heterogeneous treatment effects of each policy attribute level on support by baseline need principle.

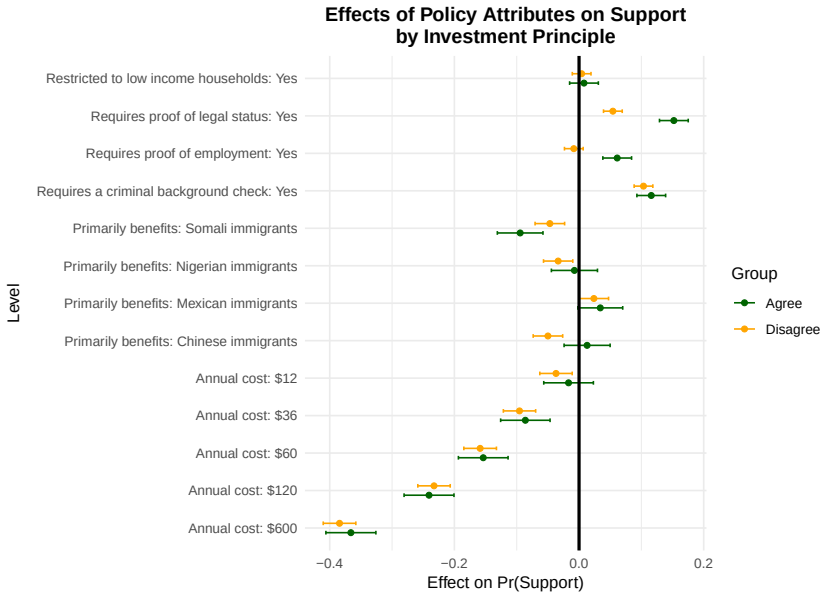



Figure C.24: Heterogeneous treatment effects of each policy attribute level on support by baseline investment principle.

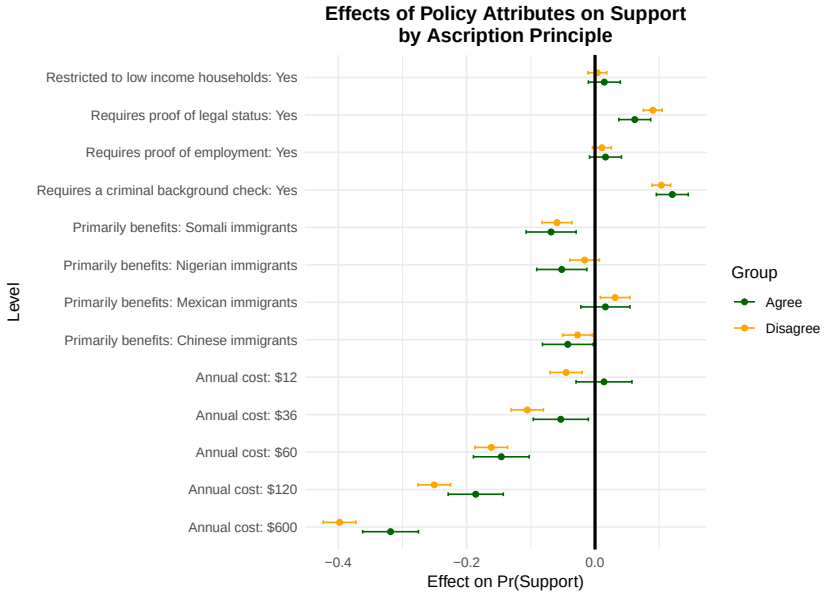



Figure C.25: Heterogeneous treatment effects of each policy attribute level on support by baseline ascription principle.

## C.11 HTEs by Most Important Policy Feature for Each Fairness Dimension

Respondents were presented the following text: *Some social policies are intended to help immigrants integrate, but states apply different rules for access and sometimes they benefit some groups more than others.* They were then asked to choose one component per fairness dimension that they believed helped uphold that dimension of fairness. For analysis, we subset the data to respondents who selected each component as the most important feature for each dimension of fairness. The following figures show the marginal effects to show how each attribute level shifts the probability of support relative to its reference category. The first set plot all policy features on the same figure per fairness dimensions, as pre-registered. Then, for easier visual interpretation, we disaggregated them into separate plots.

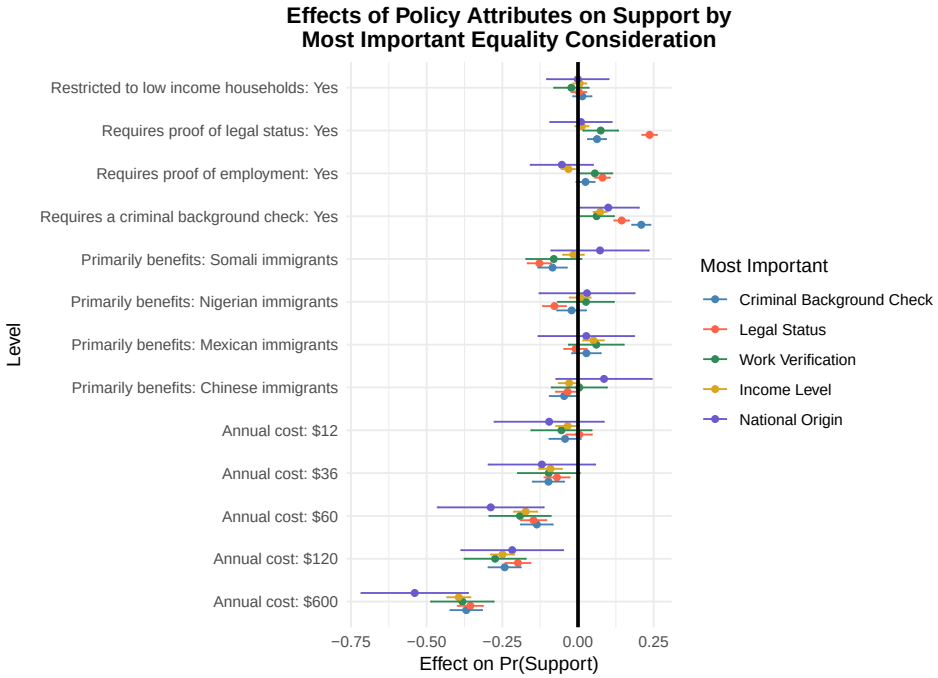



Figure C.26: Respondent-chosen most important feature for the equality dimension. Wide confidence intervals, such as those seen on "national origin," indicate fewer respondents chose this feature as upholding the equality dimension. Very narrow confidence intervals indicate that many respondents chose this feature, such as those seen on "legal status" and "criminal background check."

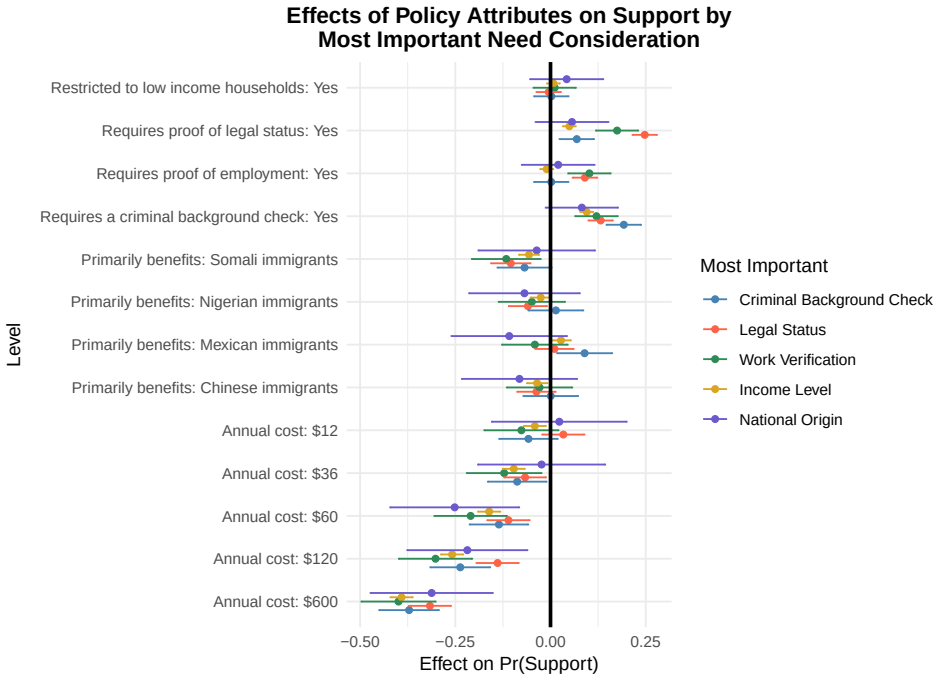



Figure C.27: Respondent-chosen most important feature for the need dimension.

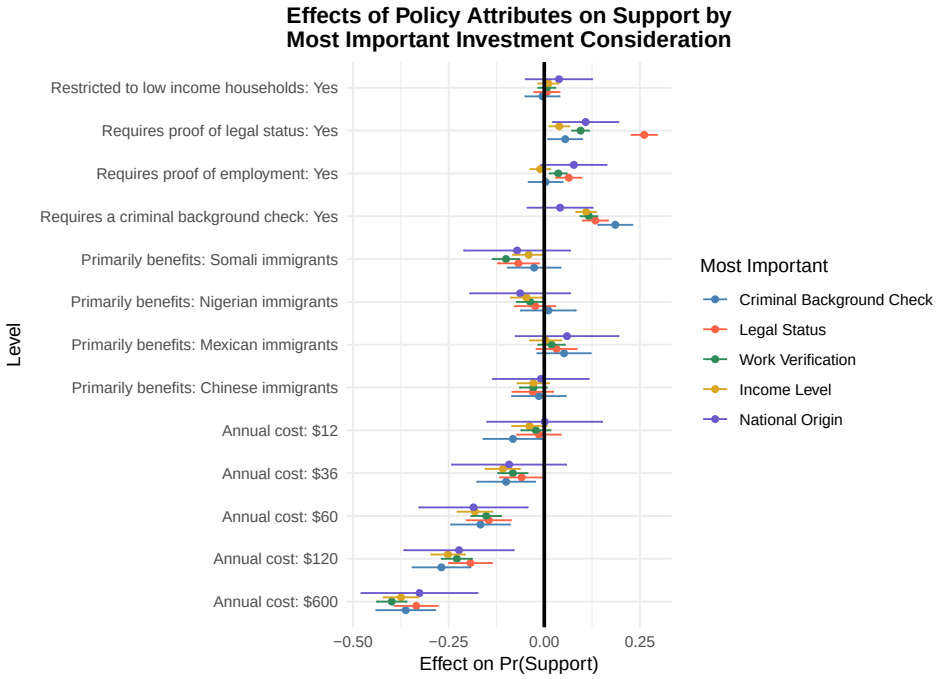



Figure C.28: Respondent-chosen most important feature for the investment dimension.

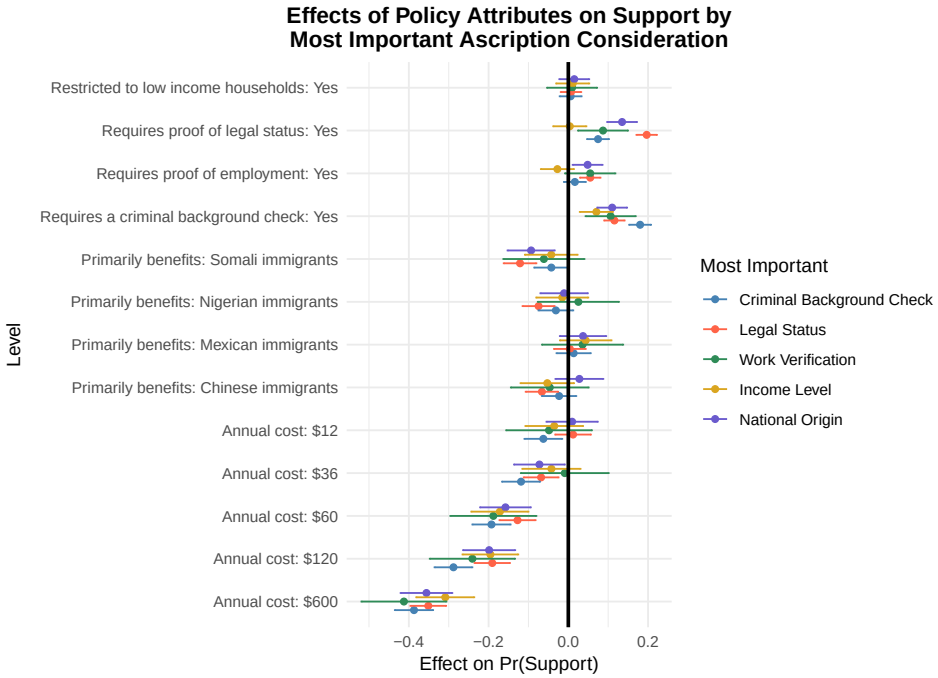



Figure C.29: Respondent-chosen most important feature for the ascription dimension.

### C.11.1 Equality

Respondents were asked, "Which of the following policy considerations is most important to you when it comes to helping everyone equally?"

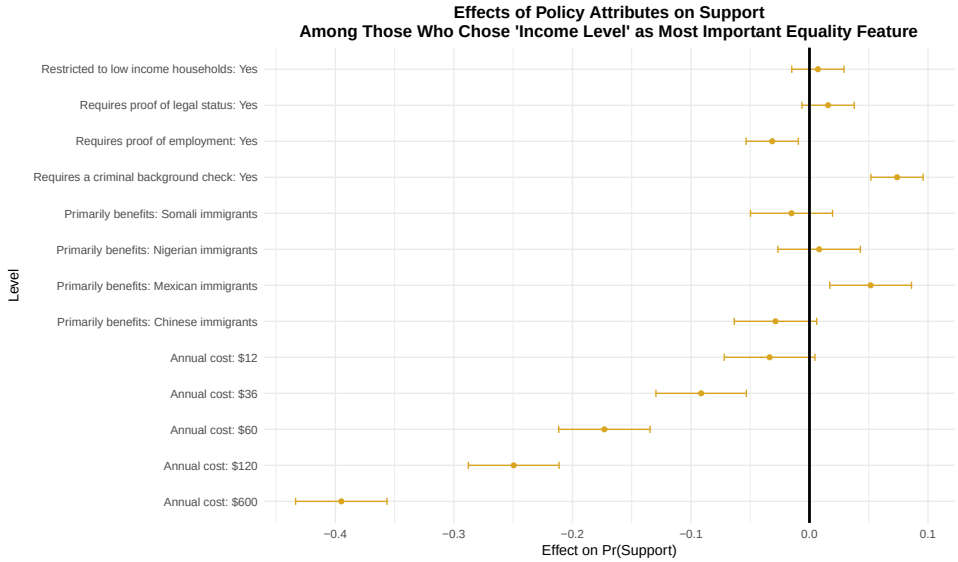



Figure C.30: Respondents were asked to choose which policy component best ensures people are treated equally. This plot shows the effect for those who chose income level among all options, including "none of the above." A low-income restriction had no detectable effect among this subgroup however.

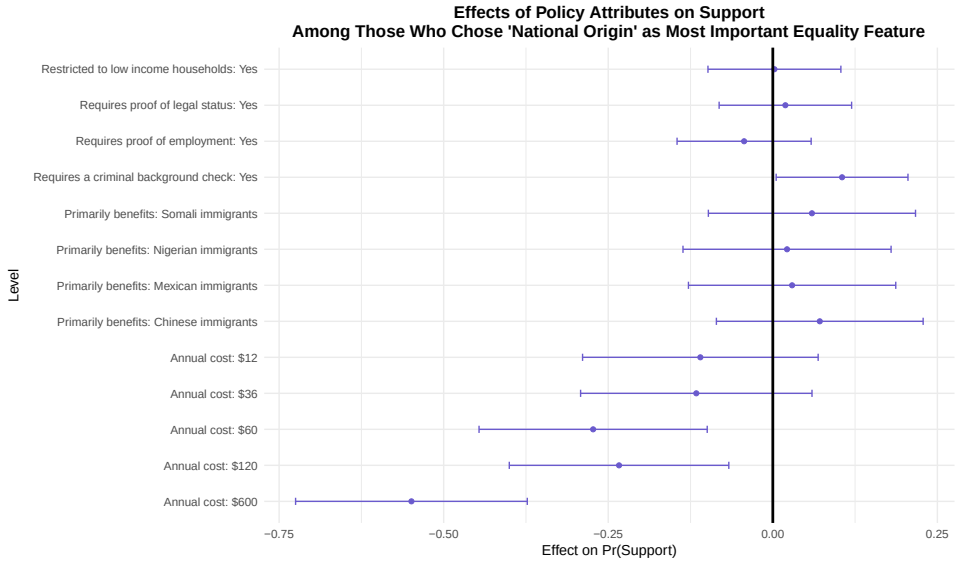



Figure C.31: Respondents were asked to choose which policy component best ensures people are treated equally. This plot shows the effect for those who chose national origin among all options, including "none of the above." Confidence intervals widen because many fewer people chose this option as a dimension of equality. For those who chose national origin, this did not result in statistically significant effects on the national groups in either direction in influencing policy support.

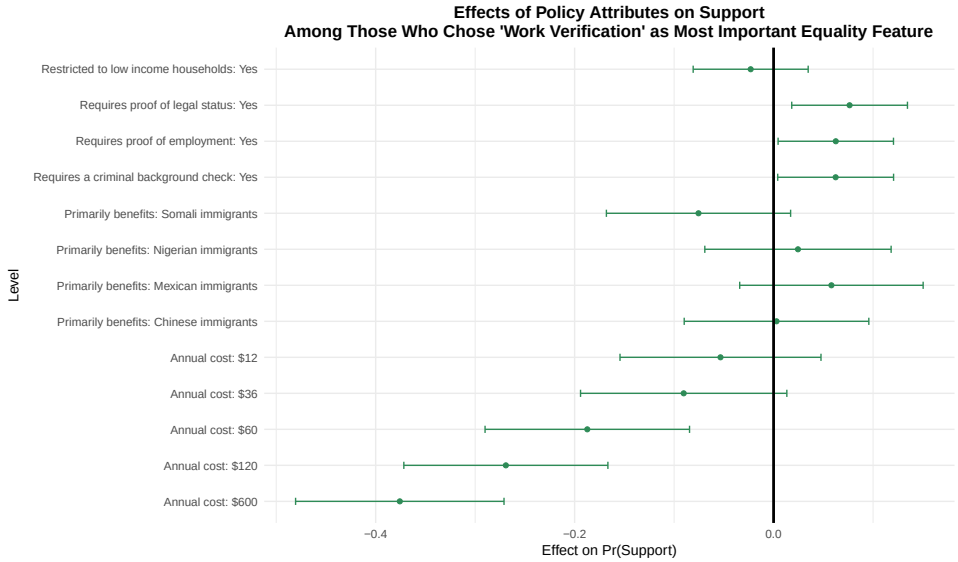



Figure C.32: Respondents were asked to choose which policy component best ensures people are treated equally. This plot shows the effect for those who chose work verification among all options, including "none of the above." Confidence intervals widen because many fewer people chose this option as a dimension of need. Proof of employment has marginally positive and statistically significant effects among this subgroup. While the confidence intervals are wide, the directional shift is notable.

### C.11.2 Need

Respondents were asked, "Which of the following policy considerations is most important to you when it comes to helping those most in need?"

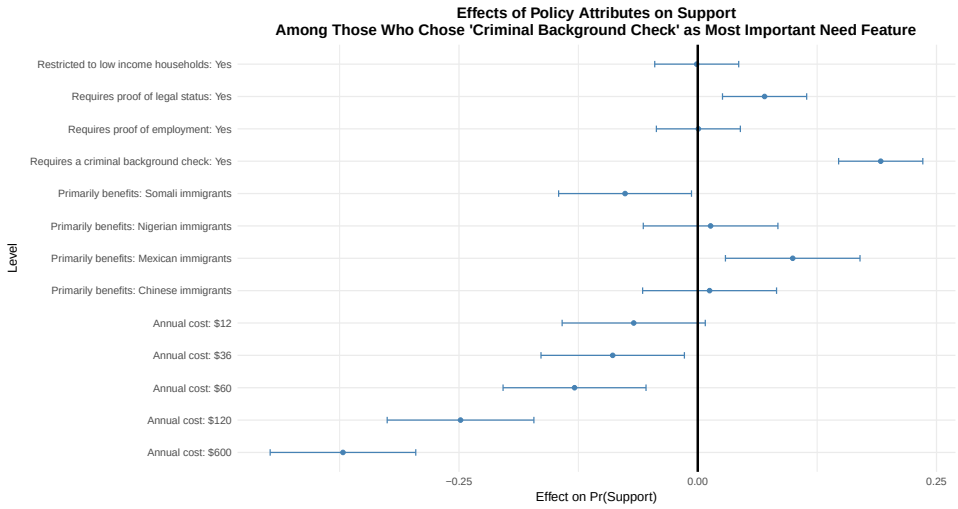



Figure C.33: Respondents were asked to choose which policy component is most important when it comes to helping those most in need. This plot shows the effect for those who chose criminal background checks among all options, including "none of the above." Confidence intervals widen because fewer people chose this option as a dimension of need. Background checks demonstrate large positive effects, even under a need-based dimension of fairness.

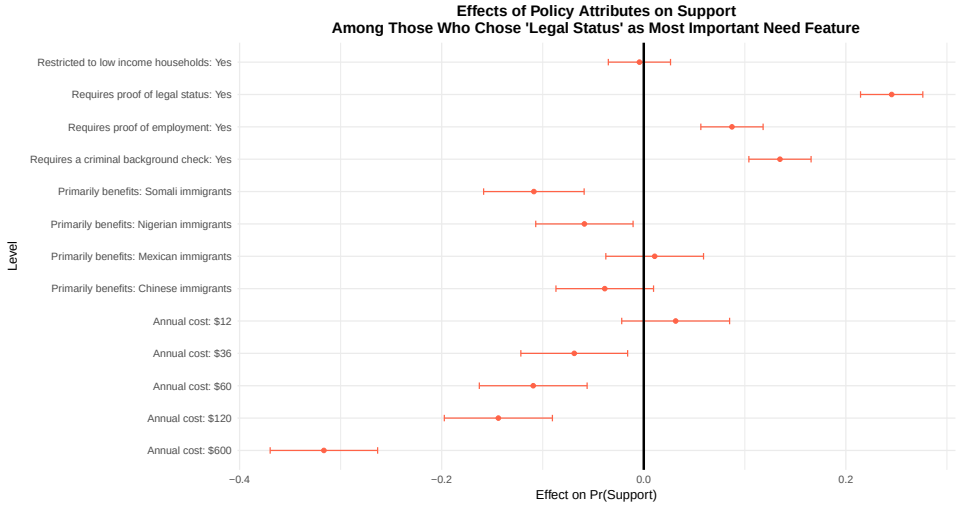



Figure C.34: Respondents were asked to choose which policy component is most important when it comes to helping those most in need. This plot shows the effect for those who chose legal status among all options, including "none of the above." Requiring legal status has large, statistically significant effects on policy support among this subgroup.

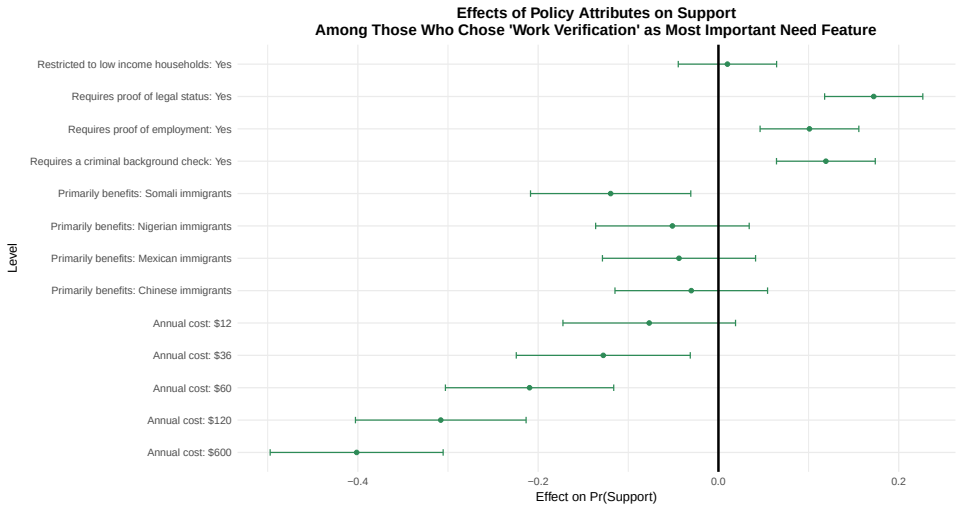



Figure C.35: Respondents were asked to choose which policy component is most important when it comes to helping those most in need. This plot shows the effect for those who chose work verification among all options, including "none of the above." Confidence intervals widen because fewer people chose this option as a dimension of need. For those who chose work verification as important for upholding need-based perceptions of fairness, this features has statistically significant positive effects on policy support.

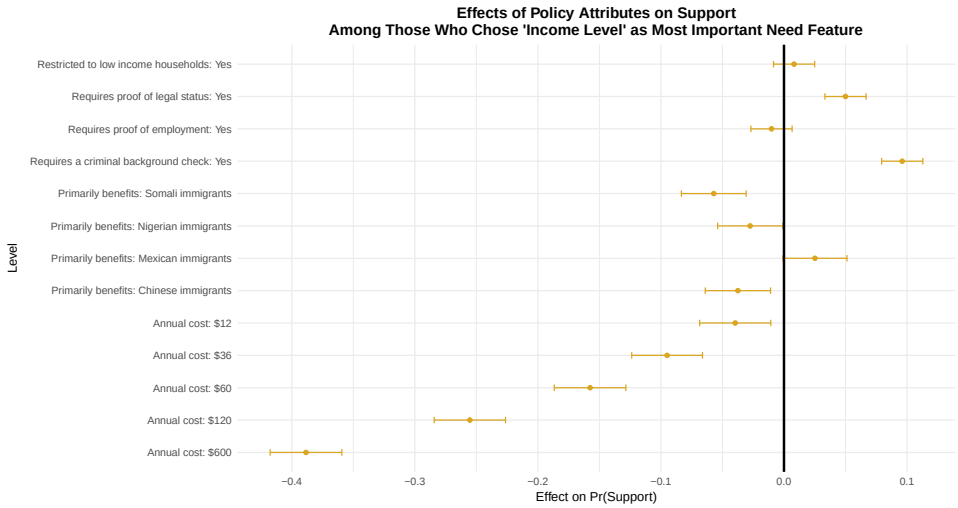



Figure C.36: Respondents were asked to choose which policy component is most important when it comes to helping those most in need. This plot shows the effect for those who chose income level among all options, including "none of the above." Even for those who chose low-income restrictions as the most important policy feature for helping those most in need, this policy feature does not have any detectable effects on policy support. This suggests that low-income restrictions have little to no effect on policy support, even in conditions that emphasize need-based fairness perspectives.

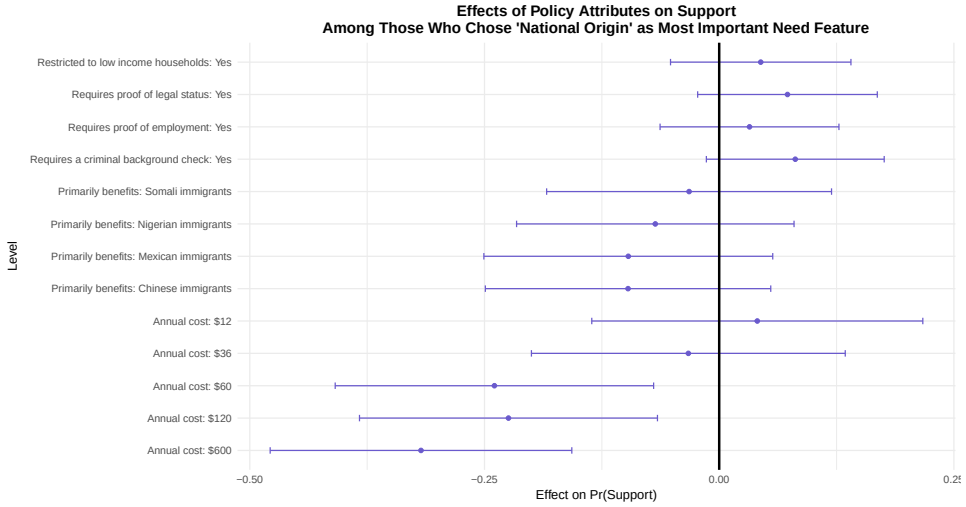



Figure C.37: Respondents were asked to choose which policy component is most important when it comes to helping those most in need. This plot shows the effect for those who chose national origin among all options, including "none of the above." Confidence intervals widen because much fewer people chose this option as a dimension of need. There are hardly any detectable effects.

### C.11.3 Investment

Respondents were asked, "Which of the following policy considerations is most important to you when it comes to helping those who contribute?"

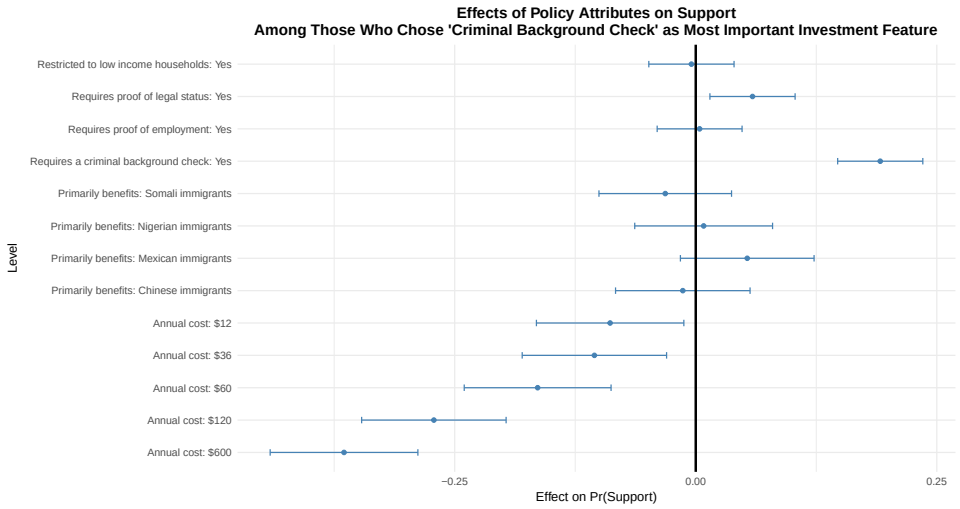



Figure C.38: Respondents were asked to choose which policy component is most important when it comes to helping those who contribute. This plot shows the effect for those who chose a criminal background check among all options, including "none of the above." Among those who indicated that they believe background checks help uphold a dimensions of investment-based fairness, requiring background checks caused statistically significant positive effects on policy support.

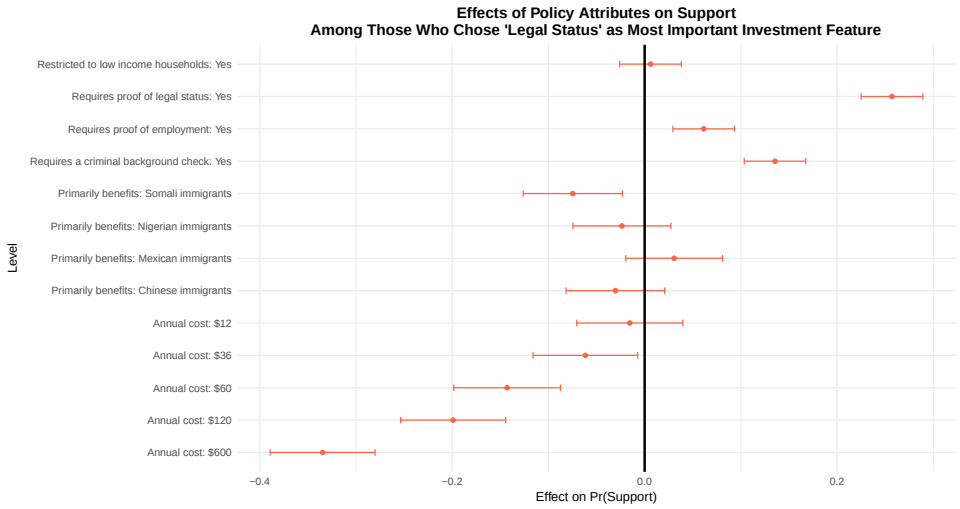



Figure C.39: Respondents were asked to choose which policy component is most important when it comes to helping those who contribute. This plot shows the effect for those who chose legal status among all options, including "none of the above." Among those who indicated that they believe requiring legal status helps uphold a dimensions of investment-based fairness, requiring legal status caused statistically significant positive effects on policy support, even outweighing the effect size of background checks.

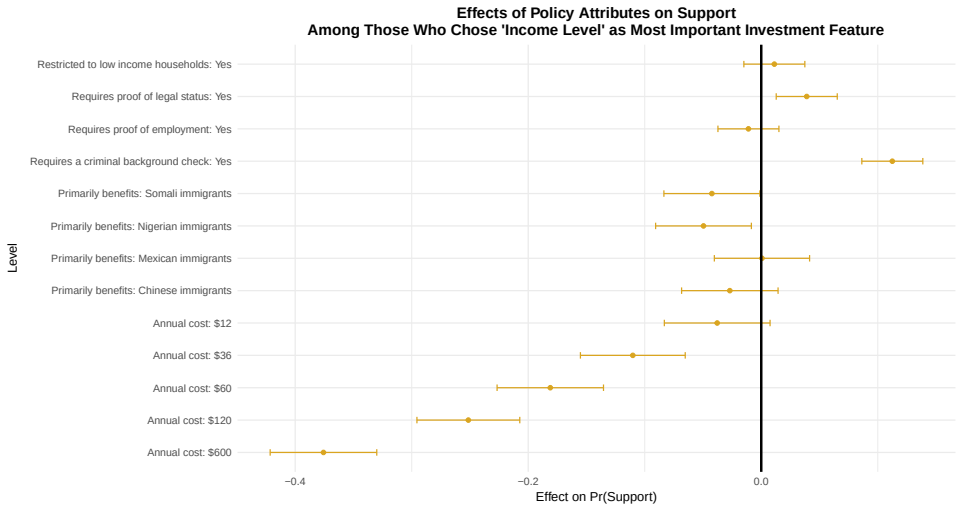



Figure C.40: Respondents were asked to choose which policy component is most important when it comes to helping those who contribute. This plot shows the effect for those who chose income level among all options, including "none of the above." There are no detectable effects for low-income restrictions on policy support.

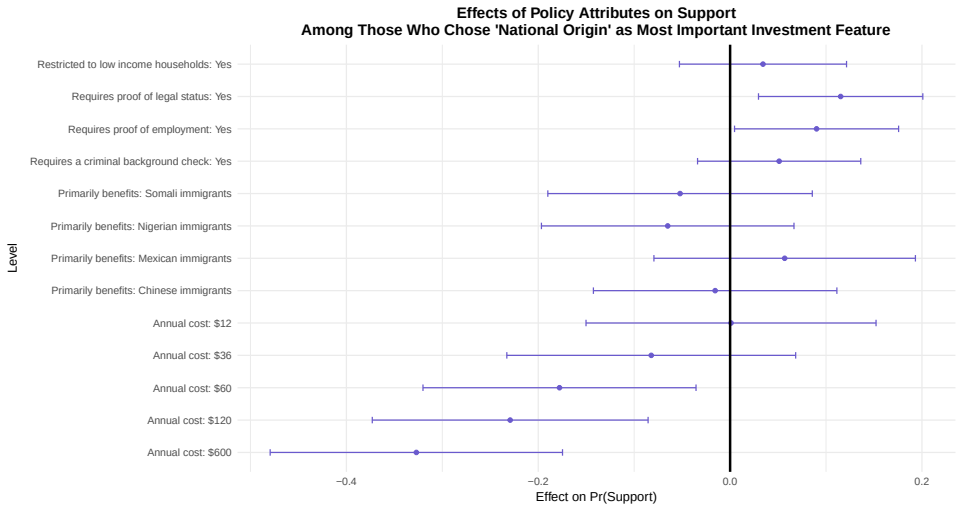



Figure C.41: Respondents were asked to choose which policy component is most important when it comes to helping those who contribute. This plot shows the effect for those who chose national origin among all options, including "none of the above." Confidence intervals widen because much fewer people chose this option as a dimension of investment. There are few significant effects, and none on the features related to national origin.

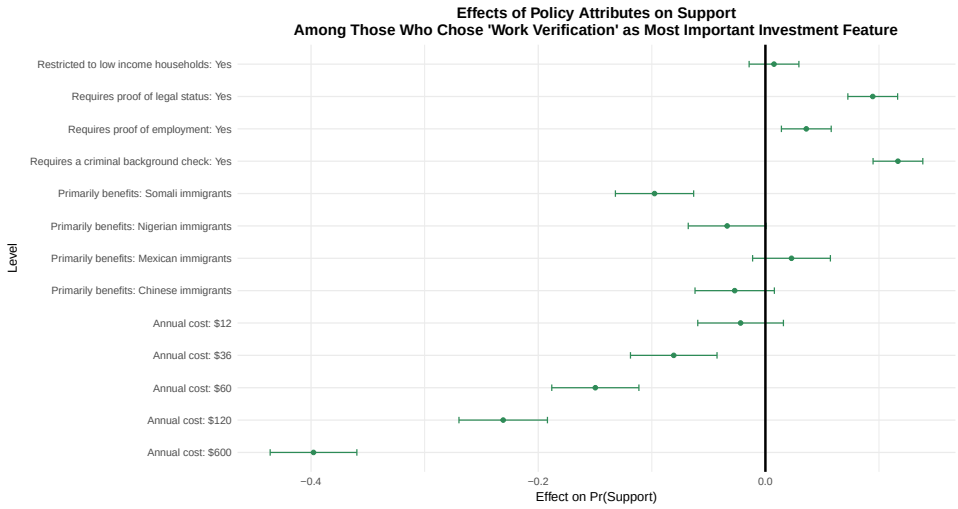



Figure C.42: Respondents were asked to choose which policy component is most important when it comes to helping those who contribute. This plot shows the effect for those who chose work verification among all options, including "none of the above." There are statistically significant positive effects on proof of employment for those who chose work verification as an important policy component to uphold investment-based views of fairness.

## C.11.4 Ascription

Respondents were asked, "Which of the following policy considerations is most important to you when it comes to helping those who will fit in?"

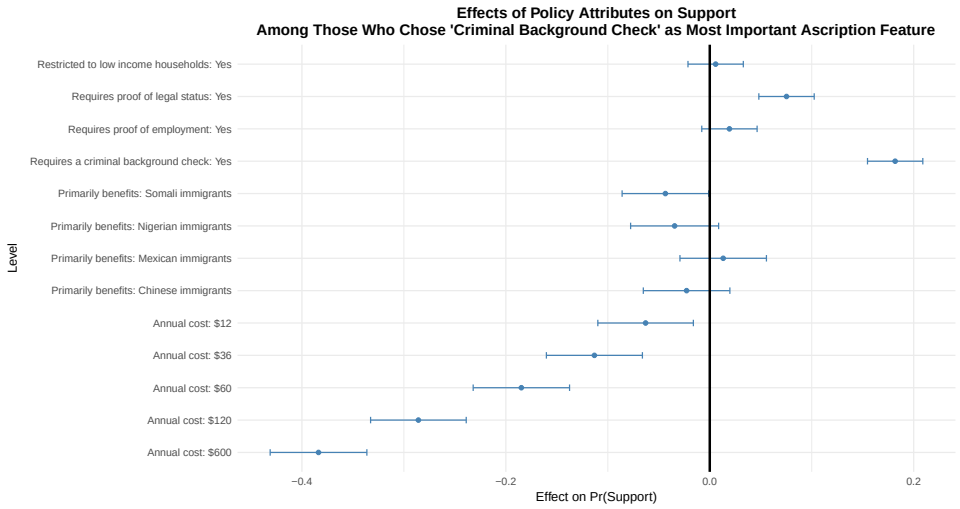



Figure C.43: Respondents were asked to choose which policy component is most important when it comes to helping those who will fit in. This plot shows the effect for those who chose criminal background checks among all options, including "none of the above." There are significant positive effects for background checks on policy support among this subgroup.

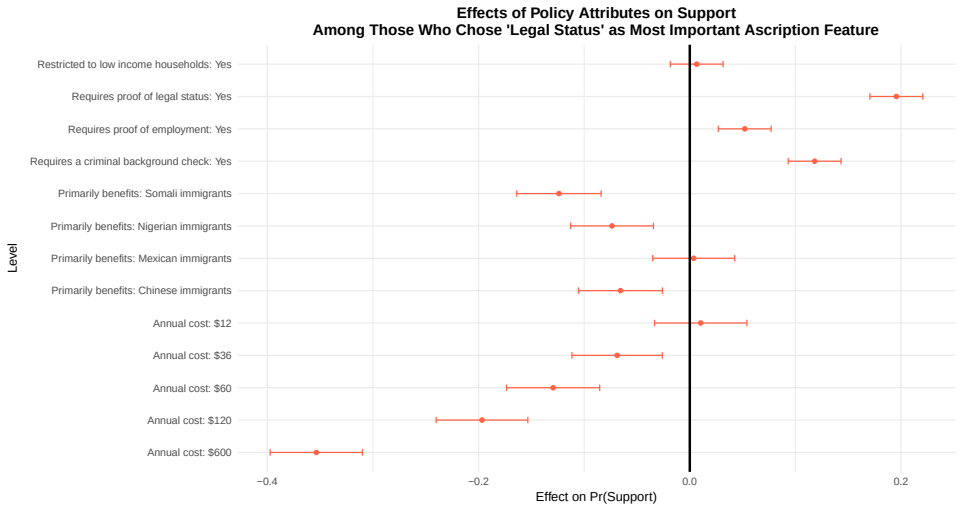



Figure C.44: Respondents were asked to choose which policy component is most important when it comes to helping those who will fit in. This plot shows the effect for those who chose legal status among all options, including "none of the above." There are significant positive effects for legal status on policy support among this subgroup.

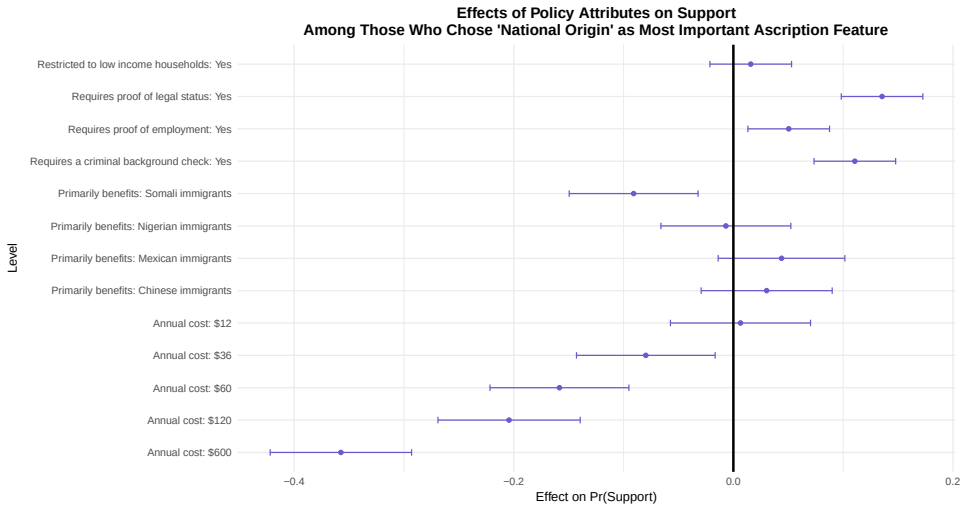



Figure C.45: Respondents were asked to choose which policy component is most important when it comes to helping those who will fit in. This plot shows the effect for those who chose national origin among all options, including "none of the above." Confidence intervals widen because fewer people chose this option as a dimension of ascription. There are no detectable effects among the primary beneficiaries among this subgroups despite the weight given to national origin on this dimension of fairness.

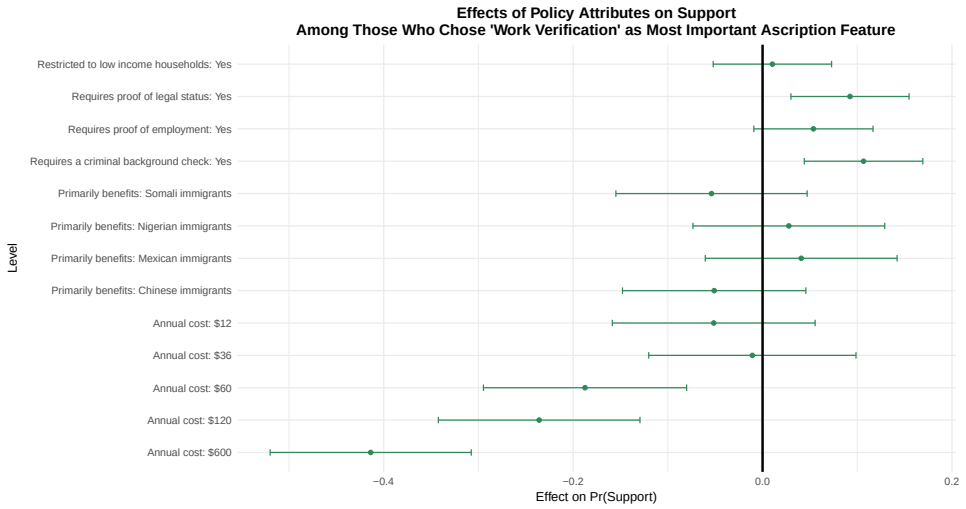



Figure C.46: Respondents were asked to choose which policy component is most important when it comes to helping those who will fit in. This plot shows the effect for those who chose work verification among all options, including "none of the above." Confidence intervals widen because much fewer people chose this option as a dimension of ascription. There are few significant effects at all this this figure, and none relate to proof of employment.

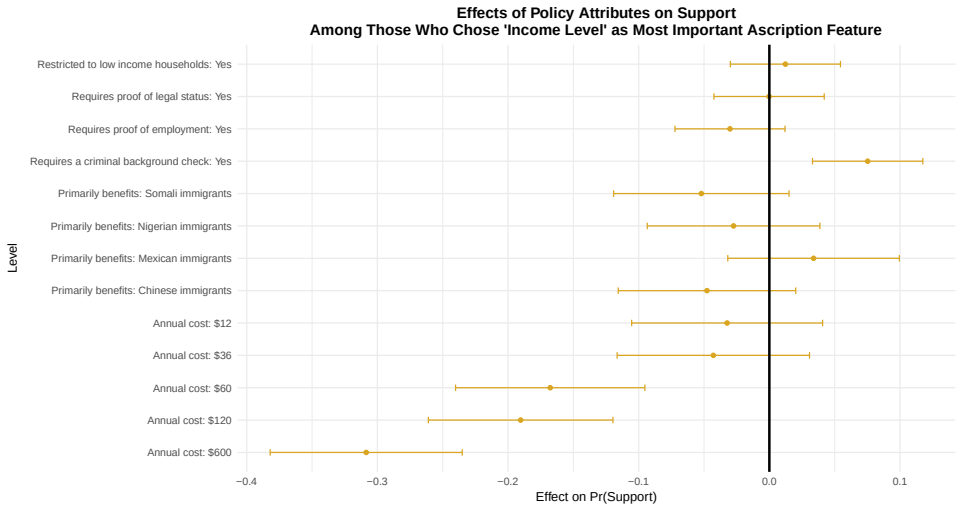



Figure C.47: Respondents were asked to choose which policy component is most important when it comes to helping those who will fit in. This plot shows the effect for those who chose income level among all options, including "none of the above." Confidence intervals widen because few people chose this option as a dimension of ascription. There are only four significant effects in this this figure, and none relate to a low-income threshold restriction.

## C.12 HTEs by Agreement with Policy-Fairness Links

This section reports the additional results for the other researcher-chosen policy-fairness links not already included in the main paper.

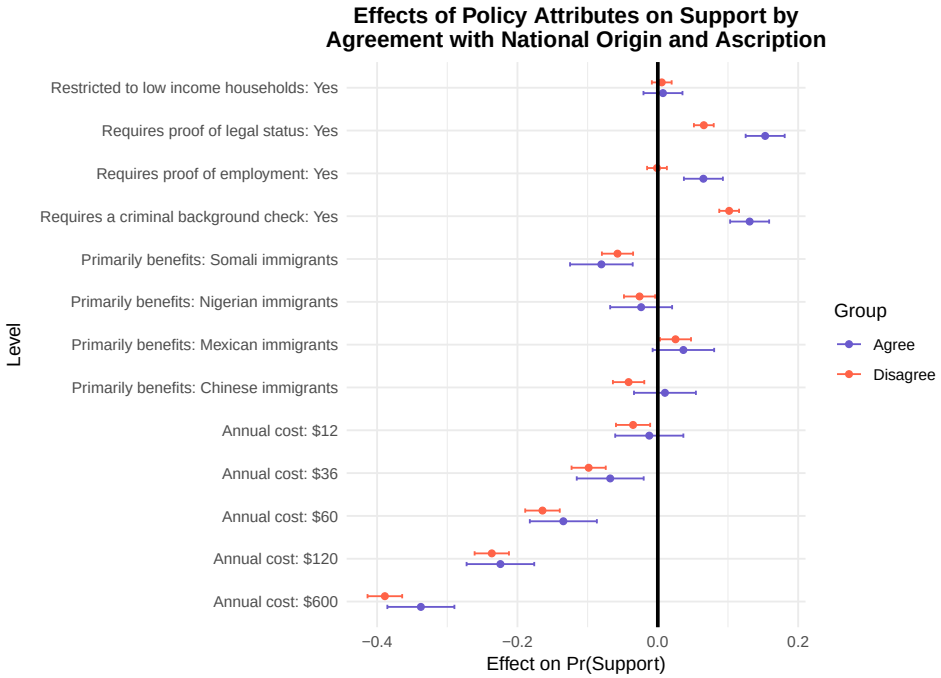



Figure C.48: Respondents who agreed that national origin restrictions align with an ascriptive-based view of fairness indicate similar results as those who disagreed. Two exceptions are on proof of legal status, where the effect size is significantly larger for agreers than disagreers. The second difference is on proof of employment where there is a statistically significant larger positive effect on probability of policy support among agreers.

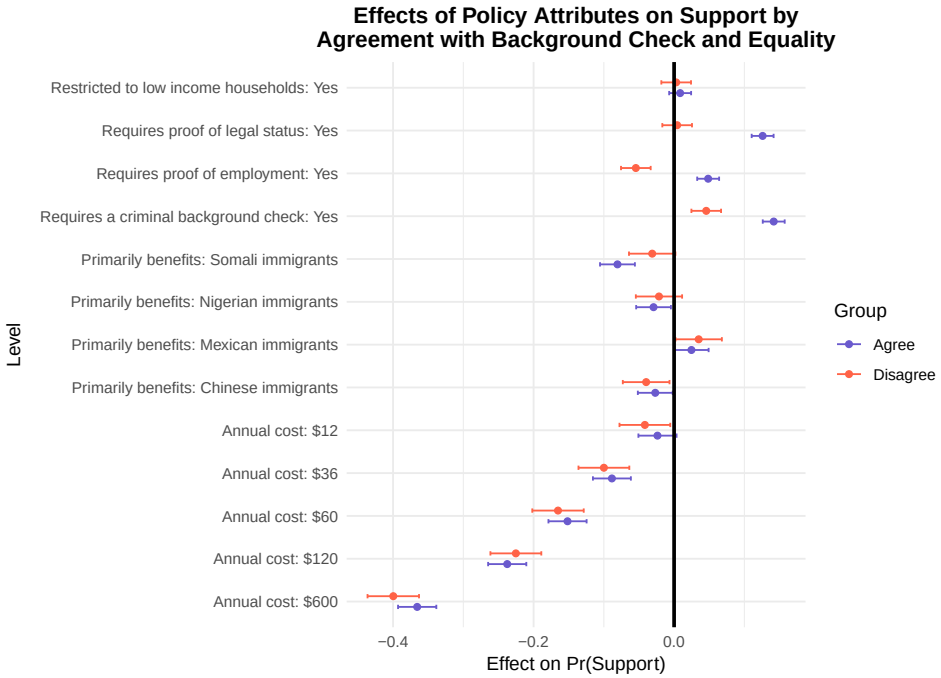



Figure C.49: Respondents who agreed that background checks align with an equality-based view of fairness indicate many similarities to disagreers, but there are four statistically significant exceptions on Somali immigrants, requiring background checks, requiring proof of employment, and requiring proof of legal status.

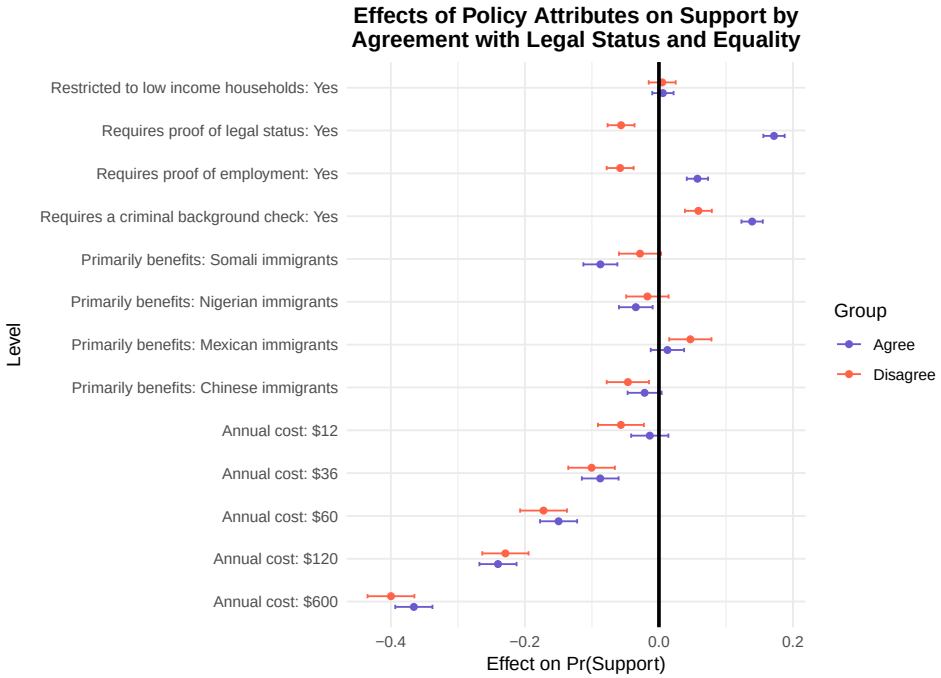



Figure C.50: Respondents who agreed that legal status requirements align with an equality-based view of fairness indicate many similarities to disagreers, but there are four statistically significant exceptions on Somali immigrants, requiring background checks, requiring proof of employment, and requiring proof of legal status. The gap in effect size between agreers and disagreers on the legal status feature is larger than the other tested dimensions to the point where there are even directionally opposite effects at a significant level.

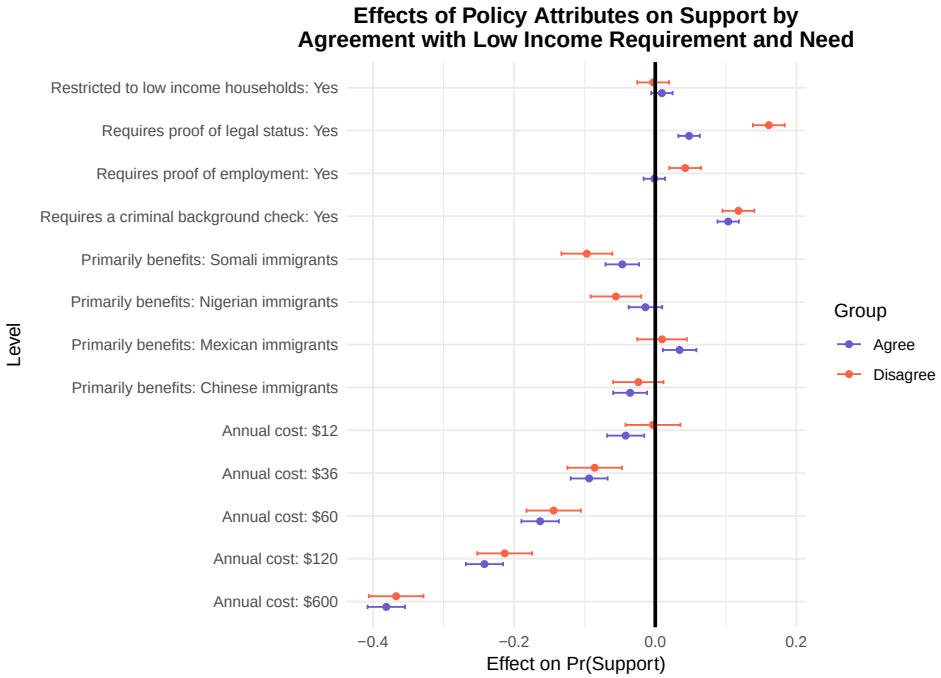



Figure C.51: Respondents who agreed that a low-income requirement aligns with an need-based views of fairness indicate many similarities to disagreers, but there are three statistically significant exceptions on Somali immigrants, requiring proof of employment, and requiring proof of legal status. Notably there is no observed effect for either group on the low-income household requirement.

## C.13 Willingness to Pay Subgroups

In this section, we describe the results of the researcher-chosen pairings with fairness dimensions. All three plots in this section primarily fail to detect significant results between those who agree or disagree with the linkages. Only the background check and equality perception linkage and the legal status and equality perception linkage results in significant differences, which are reported in the main paper.

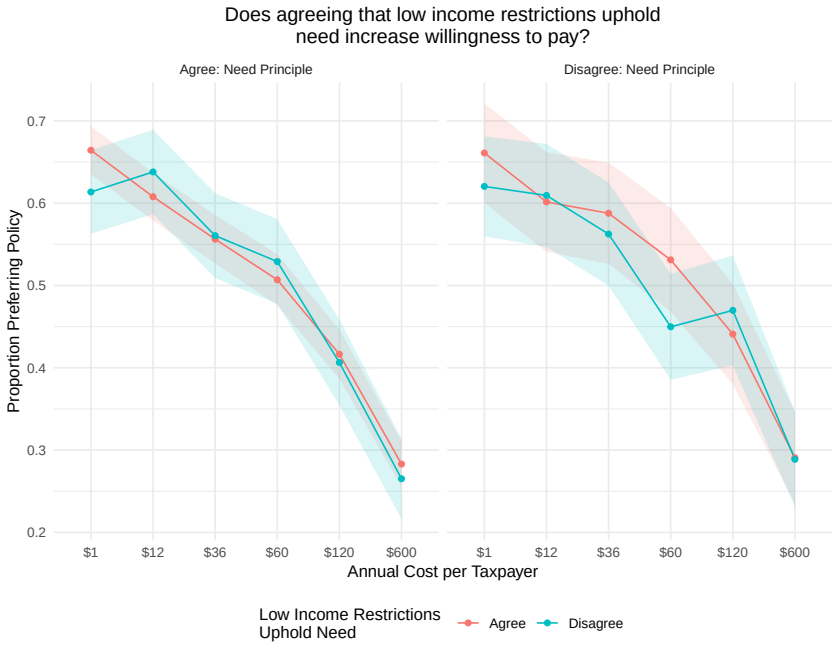



Figure C.52: Predicted proportion selecting a policy profile by annual cost, need principle endorsement, and agreement that low-income restrictions uphold need. Lines represent respondents who agree and disagree that low-income restrictions are consistent with need-based fairness, sorted by baseline endorsement of the need principle in each panel; shaded bands indicate 95% confidence intervals.

Among respondents who agree with the need principle and those who do not, whether someone believes low income restrictions uphold need has little effect on their willingness to pay when the policy includes a low income restriction (Figure C.52). Confidence intervals overlap at every cost level. Like those found throughout the paper, the dominant pattern in the plot is cost sensitivity. There are no detectable effects to provide evidence that one's general orientation about need-based fairness and their position that a low-income requirement endorses need-based fairness affects willingness to pay when the policy includes this component, suggesting that cost is a stronger driver of preference than fairness considerations in this case.

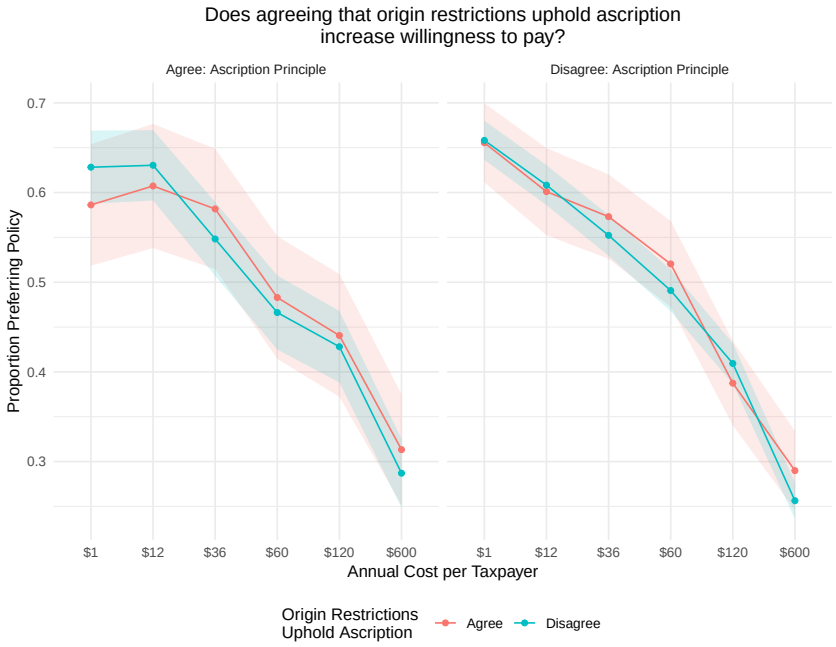



Figure C.53: Predicted proportion selecting a policy profile by annual cost, ascription principle endorsement, and agreement that origin restrictions uphold ascription. Lines represent respondents who agree and disagree that origin restrictions are consistent with ascription-based fairness, sorted by baseline endorsement of the ascription principle in each panel; shaded bands indicate 95% confidence intervals.

We observe a similar story for the ascription-national origin linkage. Among respondents who agree with the ascription principle and those who do not, whether someone believes national origin restrictions uphold ascription has little effect on their willingness to pay when the policy benefits the non-Ukrainian groups included in the study (Figure C.53). Recall that Ukrainian immigrants are the baseline in the conjoint. Figure C.53 shows that among policies that benefit non-Ukrainians immigrants, those who value ascription-based views of fairness and believe that a national origin restriction helps uphold this dimension of fairness, there is no detectable difference from those who disagree with these positions. There are no detectable effects to provide evidence that one's gen-

eral orientation about ascription-based fairness and their position that a national origin restriction endorses ascription-based fairness affects willingness to pay, suggesting that cost is a stronger driver of preference than fairness alignment in this case.

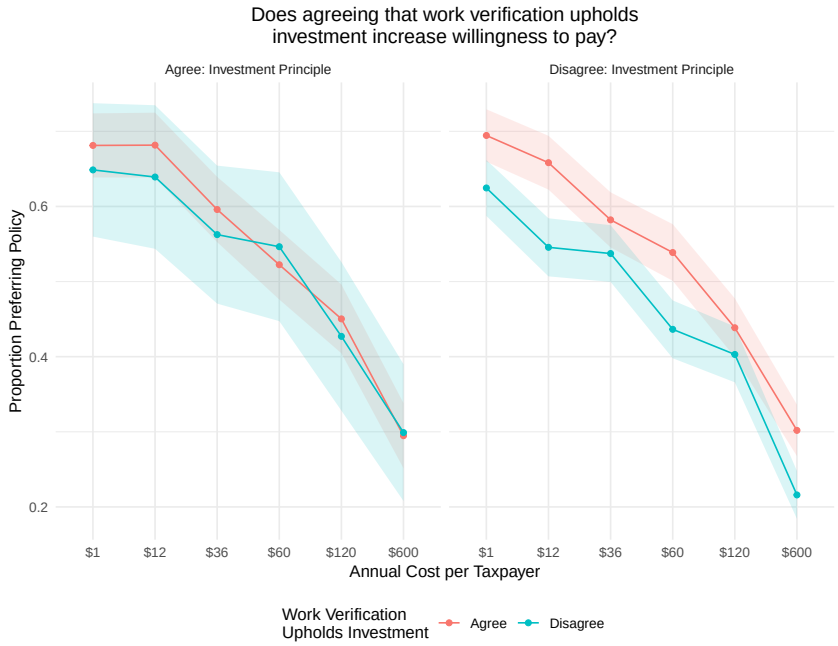



Figure C.54: Predicted proportion selecting a policy profile by annual cost, investment principle endorsement, and agreement that work verification upholds investment. Lines represent respondents who agree and disagree that work verification is consistent with investment-based fairness, sorted by baseline endorsement of the investment principle in each panel; shaded bands indicate 95% confidence intervals.

Finally, Figure C.54 shows the results for the linkage between requiring work verification and investment perceptions of fairness when policies include work verification. When the policy includes a work verification requirement, among those who agree with investment-based views of fairness at baseline there are no statistically significant effects between those who agree that work verification upholds the investment perception of fairness and those who disagree. However, on the right side of the figure we see those who

disagree with investment-based views of fairness at baseline. Here we observe several significant results. People who don't agree with contribution-based fairness still show higher support for work verification policies when they perceive that requirement as fair under an investment logic. The confidence intervals overlap at several points though, so the difference is not uniformly observed.

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