

MONEY TALKS:
THE ROLE OF INCOME & FINANCIAL SECURITY
IN DETERMINING IMMIGRATION ATTITUDES

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Abstract

Existing research on public attitudes toward immigration policy in the United States is divided. Lack of contact with immigrants and threat perception are two popular determinants that allegedly explain restrictionist attitudes; in contrast, individual financial standing is often overlooked. This paper challenges the claim that financial considerations play no role in the formation of public opinion toward immigration. Using 2020 Amazon Mechanical Turk survey data, an ordered logistical regression model reveals a robust link between financial security and immigration preferences, with those better off being more likely to favor greater restrictions. Although findings on income are less certain, they suggest that middle earners may be more preferential toward establishing greater restrictions than low or high earners. Surprisingly, proponents of immigration restrictions are found less likely to feel threatened by COVID-19 or election fraud. This contradicts threat theory and bolsters the argument that, in the context of competing influences on immigration attitudes, money talks.

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1 Introduction

"Xenophobia" is a term used with increasing frequency today by mainstream media sources. Coming from the Greek words *xenos* (either "stranger" or "guest") and *phobos* ("fear" or "flight"), the word is broadly applied to mean the fear and hatred of strangers or foreigners. Today, due in part to the prevalence of migration crises such as the Syrian civil war, increased flows of migrants from the Northern Triangle (Guatemala, Honduras, and El Salvador) to the United States, and the Venezuelan migrant crisis, xenophobia is experiencing a moment of global escalation and, thus, merits further study by political researchers.

Understanding what factors lead people to adopt restrictive attitudes toward immigration is increasingly important today. With conflict or severe economic and political instability on the rise globally, the number of immigrants correspondingly has increased over time to a current total of 272 million.¹ This constitutes 3.5% of the world's population. Given this increase, it is important to better understand what factors shape public perception on immigration in order for governments to invest in policies that ensure social order and proactively reduce xenophobic tensions or violence.

Social scientists have worked extensively to develop theories on the root causes of xenophobia. Two notable ones are Gordon Allport's contact theory that supposes that those with more contact with immigrants will be less prejudiced than those with less contact and Blalock's group threat theory which asserts people who are predisposed to feel more threatened in general are more likely to favor more restrictionist policies. In contrast to these popular theories, other speculations that financial incentives influence

¹ International Organization for Migration, *World Migration Report 2020*, 21.

immigration attitudes are often overlooked. Nevertheless, although the field is rich in theory, much of what is assumed about public opinion on immigration remains untested.

This study uses 2020 survey data to test the relationship between individual financial circumstances and immigration, using an ordered logistic regression model.² At the same time, it probes Blalock's threat theory by comparing immigration attitudes to other measures of threat. The findings on the financial indicators demonstrate that those who view themselves as better off financially this year as opposed to last year are more likely to favor greater restrictions. Additional evidence indicates that middle earners may be more preferential toward establishing greater restrictions than low or high earners. Further investigation into immigration attitudes and other measures of threat finds that those who feel threatened in other aspects of their life are actually less restrictive in their immigration attitudes, in contrast to threat theory.

These findings leave the social science research community with several important implications. Firstly, individual financial factors are important in defining public opinion on immigration attitudes and deserve consideration among other theories. Secondly, other prevalent theories that surround immigration attitudes need to be probed more deeply through statistical analysis, given that evidence here was found to contradict them. And finally, a more comprehensive assessment of determinants must be undertaken in order to best inform policymakers and the larger research community of how underlying factors shape public opinion and should, in turn, inform future policies.

The sections that follow lay out in greater detail the literature review and theoretic framework for the paper, define the data and methods included in the study, present the key findings, and provide concluding thoughts to guide further research on the topic.

² Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

2 Literature Review and Theoretical Framework

Xenophobia is a human condition that U.S. social science researchers have explored in detail over the past century. It has been most often assessed through opinion toward anti-migrant or restrictionist immigration policies. Such policies, while much contested today in the United States, were first introduced as far back as the early 1880s, when an increase in the immigrant population, notably of groups from southern and eastern Europe, and economic recession took place.³ What caused disapproval of immigrants then and what factors contribute to people's favor of restrictionist policies today?

A number of theories have been developed; none is perhaps more widely acknowledged than Gordon Allport's contribution of a cognitive perspective toward ethnic prejudice, which proposes that ethnic categorization and stereotyping is part of ordinary information processing based on faulty and inflexible generalizations which can later lead to prejudice and discrimination.⁴ Among the supporting evidence for this theory is a sociology experiment in Princeton University that asked students to select five traits from a list of 84 adjectives to describe 10 different groups.⁵ This study found that attitudes were shaped by stereotypes of cultural pattern and not based upon animosity toward a member of the group because of any inherent qualities they possess.

This early research led Allport to propose contact theory as a principal determinant of prejudice. According to contact theory, under appropriate conditions interpersonal contact could be an effective way to reduce prejudice between majority and

³ Espenshade and Hempstead, "Contemporary American attitudes", 537.

⁴ Allport, *The Nature of Prejudice*.

⁵ Katz and Braly "Racial stereotypes", 280.

minority group members.⁶ Other studies have challenged this theory as simple and optimistic, claiming “changes in ethnic relations occur following intergroup contact, but the nature of this change is not necessarily in the anticipated direction; ‘favorable’ conditions do tend to reduce prejudice, but ‘unfavorable’ conditions may increase intergroup tension and prejudice”.⁷

Whether contact between majority and minority groups has led to more positive or negative results has been much contested. Some studies propose a negative contact hypothesis, whereby intergroup contact may have more negative than positive effects on prejudice because it brings visibility to the minority group; however, these negative effects may be significantly reduced among individuals that have positive or extensive past contact with the minority group.⁸ The rejection-identification model and rejection-disidentification model, which associate negative contact experiences with disidentification with the majority group and identification with the minority group lend further support to contact theory.⁹

Critics of contact theory have argued that there is a lack of evidence for Allport’s assumption that prejudice causes discrimination and do not think that his theory fully explains the long-term movement in racial sentiment. Instead of being merely descriptive, they urge researchers to further investigate “societal and institutional determinants of ethnic tensions and conflicts.”¹⁰ These include contextual factors such as the larger environment of class structure, political environments, economic forces, and population distributions.

⁶ Allport, *The Nature of Prejudice*.

⁷ Amir, “Contact hypothesis”, 319.

⁸ Paolini et al., “Positive intergroup contact”, 548.

⁹ Sixtus et al., “Positive and negative contact”, 904.

¹⁰ Katz, “Nature of Prejudice”, 131.

While contact theory stresses the importance of individual perceptions of certain races, others stress that the relative position of the majority group and minority group (often referred to as in-group and out-group dynamics) are what gives rise to prejudice and discrimination. This is commonly called group threat theory or racial threat theory, which shifted the study of xenophobia away from “preoccupation with feelings as lodging in individuals to a concern with relationship of racial groups.”¹¹ The theory highlights several feelings that are associated with racial prejudice in the majority group with respect to its relative position, including superiority over the minority group, difference from the minority group, proprietary claim to privilege and advantage over the minority group, and fear and suspicion of the minority group’s designs on the prerogative of the majority group.¹²

Hubert Blalock further defines this relational prejudice in terms of threat, arguing that the relations between majority and minority groups vary according to the degree of threat that the minority group poses to the majority group’s position of power and social control.¹³ These threats can be economic (including the loss of jobs or opportunities), political (involving fear of ceding political control to minority groups), or symbolic (perceiving that the beliefs or values of the majority group are at risk). This study is particularly concerned with the first of these types of threats and how it affects public attitudes toward immigration policy.

Research on how economic factors affect public opinion has given rise to four principal hypotheses: job threat, resources, tax burden, and pessimism. Perhaps one of the most common arguments made against immigrants is that they take jobs away and

¹¹ Blumer, “Racial Prejudice Group Position”, 3.

¹² Ibid., 4.

¹³ Blalock, *Minority-group relations*.

depress wages in selected occupations. According to the job threat hypothesis, those that are in particularly vulnerable labor market situations, based on such factors as occupation, unemployment, or job security concerns, are more likely to oppose immigration.¹⁴ Generally, such competition is most significant for those in low-skill, low-wage occupations. A related resources hypothesis asserts that people who are experiencing financial stress will be more likely than those in a superior financial position to fear the implications of immigration.

Several research efforts have come out in support of the job threat and resources hypotheses. A multivariate analysis of the 1992 through 2000 National Election Study (NES) surveys revealed a robust link between an individual's position in the labor market and immigration policy.¹⁵ Respondents of low skill levels were found to support more restrictive policies, while respondents of higher skill levels tended to favor more liberal ones. Skill here refers collectively to occupation, income, and education level. Another study on NES data from 1992 to 1996 confirms these findings, suggesting that individuals who are less skilled are more concerned about immigration adversely affecting their wages.¹⁶ This study also found no evidence that this relationship was stronger in high-immigration communities than those with fewer immigrants. Such a finding challenges threat theory, which postulates that the size and growth rate of the minority group is positively associated with the amount of threat the majority group feels with respect to their social control.¹⁷

Further support for the job threat and resources hypotheses comes from a 1993

¹⁴ Citrin, et al., "Public opinion toward immigration", 861.

¹⁵ Kessler, "Immigration, economic insecurity", 17-18.

¹⁶ Scheve and Slaughter, "Labor market completion", 133.

¹⁷ Blalock, *Minority-group relations*.

CBS/New York Times that asked respondents whether they would like to see the level of immigration increased, decreased, or kept the same.¹⁸ Again, respondents of low education and low income expressed greater reservations about increasing immigration, suggesting that economic insecurity is significant in determining policy preferences. Some may argue, however, that rather than economic insecurity, these are signs of a cultural effect—that by increasing education majority group members become more open and tolerant of minorities so they are less likely to be antagonistic toward them and favor restrictionism.¹⁹ 2001 analysis data from the General Social Survey found effects of race, income, and fear of crime to be significant; education is among the independent variables that most affect cultural opinion, along with political ideology, age, and sex.²⁰ Critics of this hypothesis argue that highly educated people are not less xenophobic; they are simply better at giving socially desirable answers in questionnaires.²¹ A randomized-response investigation found that while there is a social desirability bias in effect, that degree of bias remains consistent across different education levels. Further efforts are needed to discern the extent to which cultural effect or resource scarcity explains why people with lower education or income oppose immigration.

Job security and wages may not be the only economic factor to consider. A separate study also looked into whether concerns over the fiscal burden of immigrants may also affect individual's policy preferences.²² These include such ramifications as crowding in access to existing government services and the costs of goods or services. This study illustrates a third hypothesis beyond economic threat—that of tax burden. The

¹⁸ Espenshade, "Contemporary American Attitudes", 535.

¹⁹ Clark, "Cash, schools, and immigrants", 27.

²⁰ Chandler and Tsai, "Social factors", 177.

²¹ Ostapczuk, Musch, and Moshagen, "A randomized-response investigation", 920.

²² Gerber et al., "Self-interest, beliefs, and policy", 155.

tax burden hypothesis asserts that those that feel that immigration will negatively increase the cost of or limit access to government benefits will strengthen support for restrictionist policies.²³ Beyond income, this implies a new causal explanation; people who resent their level of taxes or life in states with relatively high taxes or large concentrations of immigrants are more likely to exhibit anti-immigrant policy preferences than those who have lower levels of anxiety about taxes. This relationship may be inelastic to differences in income or education level.

A final hypothesis of pessimism stresses the influence of the individual's perceptions of economic change. Here, regardless of their level of financial resources, the logic that if one is "on a downward economic trajectory," they will believe immigration has a more tangible cost to them and will, therefore, have greater restrictionist sentiment.²⁴ Again using NES data, in this case from 1992 through 1996, multiple studies found that "personal economic circumstances play little role in opinion formation, but beliefs about the state of the national economy, anxiety over taxes, and generalized feelings about ... immigrant groups are significant determinants of restrictionist sentiment."²⁵ Overall, these studies find cultural norms or values to be stronger determinants of immigration policy preferences than economic ones.

Diverging results in recent studies signify that scientific inquiry into economic effects on immigration attitudes is far from over. Proponents of pessimism are at odds with those that argue that income influences immigration attitudes. Furthermore, recent study on the micro and macro effects of economic, cultural and security contexts on

²³ Citrin, et al., "Public opinion toward immigration", 861.

²⁴ Ibid, 860-861.

²⁵ Citrin, et al., "Public opinion toward immigration", 858; Burns and Gimpel, "Economic insecurity, prejudicial stereotypes", 222-223.

immigration attitudes hints at a more complex relationship altogether that challenges classic economic threat conceptualizations. Instead of finding that either poor socioeconomic status is associated with greater support for immigration restriction or that there is no relationship between the two variables, a 2018 analysis of the World Values Survey suggests that “middle income individuals express slightly more restrictionist attitudes than low income individuals and considerably more restrictionist attitudes than high income individuals.”²⁶ One possible explanation is that middle earners are in a position where they feel they have more to lose from high levels of immigration than low earners do but not in such a high position that they feel their job and finances are secure.

This finding opens the door for further investigation into the link between economic conditions at the individual level and immigration attitudes. Researchers disagree as to whether personal economic circumstances matter or whether perceptions of economic change may play a greater role in shaping public opinion. Prior findings that established a robust link between an individual’s position in the labor market and their immigration policy preferences are being challenged not only by those that endorse a null relationship but also by new findings that reveal a more dynamic relationship. Further research is needed to determine the nature of the relationship between individual financial circumstances and immigration policy attitudes and assess whether economic self-interest is competitive with effects of contact and cultural marginality.

²⁶ Young, Loebach, and Korinek, “Global immigration policy attitudes”, 93.

3 Data and Methods

To pursue this relationship further, this study capitalizes on a recent cross-sectional survey carried out by graduate students of Johns Hopkins University's Survey Methodology course through the Amazon Mechanical Turks online platform. This survey consists of 25 questions on a wide variety of topics, from more conventional demographics to opinions on recent events such as the COVID-19 pandemic and the Black Lives Matter movement.²⁷ A summary of the survey statistics for all the variables can be found in Appendix A.

The survey data consists of 1,100 responses from Amazon Mechanical Turks (Turks). Turks are individuals that are hired remotely to perform discrete on-demand tasks. All members of the population are located in the United States and 18 years or older. While the respondents are all part of the U.S. adult population and vary in age, race, political affiliation, and other characteristics, this is not necessarily a representative sample of the U.S. adult population. A 2012 study found that, relative to other convenience samples, Turks are cheaper to recruit and often more representative of the general population; however, they are younger and more liberal than the public.²⁸ This limits the validity of the statistical inference that can be drawn from the analysis. In addition to this selection bias, one must also consider possible biases associated with the delivery method. While an online survey is increasingly becoming a method of choice for its cost-effectiveness and speed, it may suffer from some minor biases due to primacy effects and lack of interviewer presence to clarify questions.

²⁷ Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final".

²⁸ Berinsky, Huber, and Lenz, "Evaluating Online Labor Markets", 366.

Of the 25 variables in the survey (shown in Appendix A), the first eleven are incorporated into an ordered logistic regression model to better determine relationship between individual economic circumstances and immigration policy attitudes.

Immigration, the dependent variable, is drawn from a survey question in which the Turks are to rate their level of agreement from strongly disagree to strongly agree to the following statement “Please rate how much you agree or disagree with the following statement: ‘There should be greater restrictions on immigration to the United States.’” Thus, higher values of the Immigration variable denote more support for greater immigration restrictions than lower values.

Two dependent variables are considered as economic determinants of the Immigration variable value: Income and Financial Security. Income, another ordinal variable, is defined as the personal annual income earned in the last year, after taxes and is grouped into buckets (e.g. less than \$20,000, \$20,000 to \$59,999, etc.). This variable provides the necessary measure to test the aforementioned job threat and resources hypotheses, which would anticipate a negative relationship between Income and Immigration. In general, one would expect on average that a Turk with a lower income to be more supportive of establishing greater immigration restrictions than a Turk with a higher income.

As opposed to the Income variable, the Financial Security variable focuses more upon pessimism hypothesis that prescribes that, regardless of income, those that feel their economic health is decreasing will be more likely to favor restrictions on immigration. Financial Security is an effective measure of relative perceptions of economic health since it is a dichotomous variable that measures whether Turks feel they are better or

worse off financially than they were a year ago. Given this hypothesis, one would expect that on average a Turk who feels worse off financially this year as opposed to last would be more in favor of increasing immigration restrictions than a Turk who feels better off.

In addition to the independent variable and the two economic variables, an alternative group threat theory is explored further through the COVID-19 Concern and Election Trust variables. Pursuant to Blalock's Group Threat theory, one would expect people who are more concerned about COVID-19 or less confident in the government's ability to ensure the following of proper election procedures to feel more threatened in general and, therefore, to also be more restrictionist in their immigration attitudes. Thus, a positive relationship between the COVID-19 Concern variable and the Immigration variable or a negative relationship between the Election Trust and Immigration variable would support Blalock's threat hypothesis as opposed to the aforementioned economic hypotheses.

Six final variables are considered as control variables: Age, Gender, Race, Education, Ideology, and Party. While the relationship between these variables and Immigration is not the focus of the analysis, it is expected that Turks that self-identify as more conservative and Republican more strongly support greater immigration restrictions than Turks that self-identify as more liberal and Democratic.

One important consideration with respect to the above variables is item-missing data. As one can see in Appendix A, questions vary in number of unanswered responses from 0 to 12, or 0% to 3% of the dataset. The lack of responses does not seem to follow any logical rationale. Accordingly, in order to optimize the handling of missing data and prevent bias, multiple imputation is used to fill in the gaps. The statistical analysis is run

with four variations of the dataset with imputed values and the variation between the different outputs and results was found to be negligible. The results below are an average taken between the four datasets.

In terms of statistical methods, ordered logistic regression is used in this analysis since Immigration is ordinal and the dependent variable of interest. P-values are used to evaluate whether relationships are statistically significant at 5% significance level. The Brant test is also employed to assess the parallel regression assumption (i.e. verify if the coefficients that describe the odds of being in the lowest category vs. all higher categories of the response variable are the same as those that describe the odds between the second lowest category and all higher categories, and so on). Odds ratios are calculated from coefficients to help put in perspective the relationship between the dependent and independent variables. Finally, cross-tabulations are used to dive deeper into the relationships between the independent variables and the dependent variables of interest.

4 Results

Using ordered logistic regression analysis, the August 2020 Amazon Mechanical Turk Survey data is analyzed to examine the effects of respondents' personal economic characteristics on their opinion toward imposing greater immigration restrictions in the United States. The complete list of the variables used in this analysis, corresponding questions, response options, and coding can be found in Appendix B.

Table 1. Effects of Individual Characteristics on Respondent Attitudes Toward Immigration Restrictions: Ordered Logistic Regression Analysis

<i>Variable</i>	<i>Immigration</i>
Financial Security	0.370** (0.122)
Income	-0.058 (0.057)
Election Trust	0.230** (0.050)
COVID-19 Concern	-0.067 (0.059)
Age	0.004 (0.005)
Gender	0.274* (0.111)
Race	0.416** (0.115)
Education	0.096 (0.068)
Ideology	0.272** (0.033)
Party (0 = Democrat)	
Republican	1.159** (0.136)
Independent/Unaffiliated	0.011 (0.153)
Other	-0.012 (0.611)

Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

Note: Cell entries are ordered logistic coefficients, with standard errors reported in parentheses.

Immigration is the dependent variable, defined such that higher values indicate a preference for greater immigration restrictions.

**p<0.01, *p<0.05

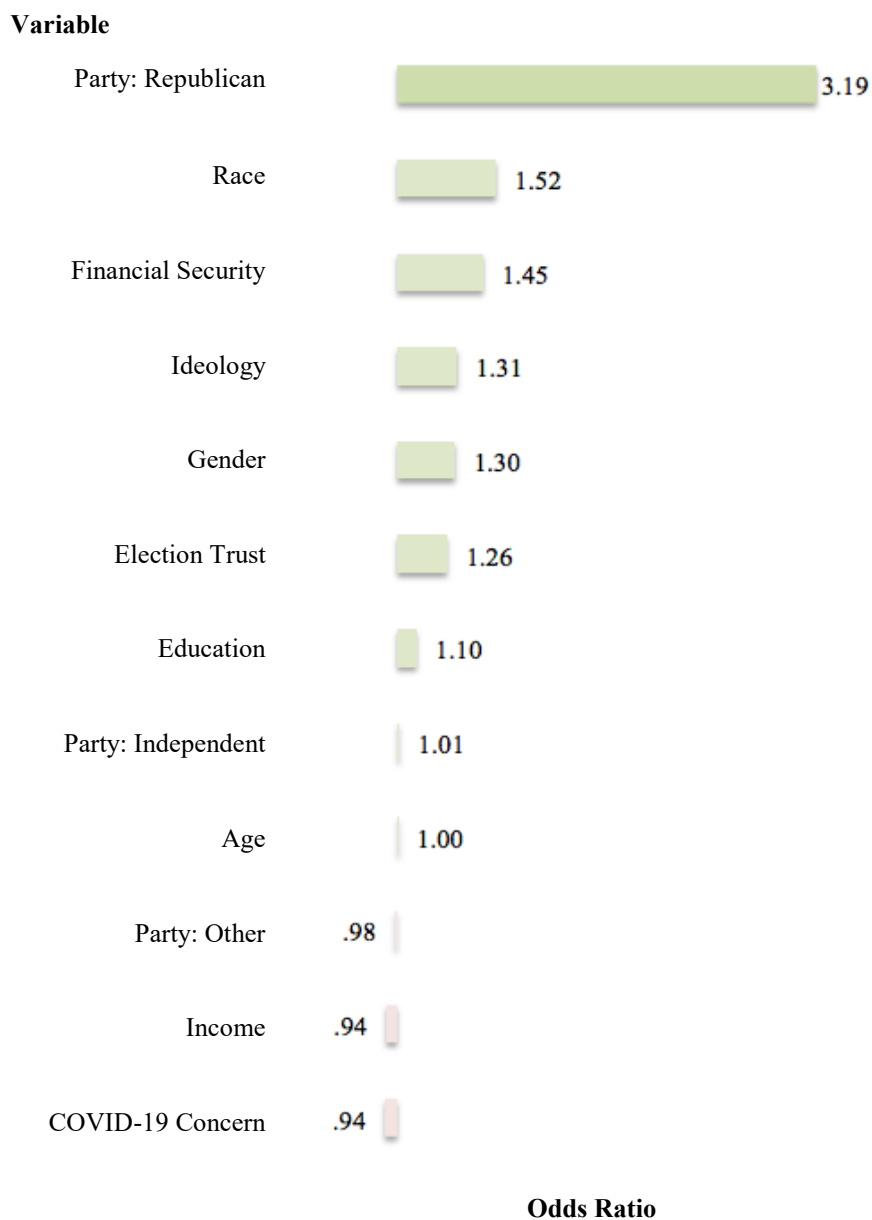
The regression results in Table 1 indicate that age, education, income, concern over COVID-19 and some party measures do not to have a statistically significant effect on immigration preferences; however, whether the respondent identified Republican as opposed to Democrat, their gender, race, ideology, level of trust in election procedures and whether they report themselves being better or worse off financially this year than last year are statistically significant. While these coefficients have no direct interpretation in terms of magnitude, the direction of the relationship can be confirmed. For example, more conservative Turks are more likely to favor greater immigration restrictions than more liberal Turks and, perhaps more surprising, Turks that identified as white are more likely to oppose immigration restrictions than Turks who did not identify as white.

However, while these coefficients are useful, it is important to incorporate the brant test to evaluate whether the coefficients are in the same direction across ordinal categories for ordinal variables. This is referred to as the parallel regression assumption. The results indicate that the model as a whole confirms that the assumption holds. However, the Election Trust variable did not hold; therefore, it does not demonstrate a consistent, positive relationship across all values of the variable.

By examining in greater detail the odds ratios in Figure 1 below, one can infer more information regarding the magnitude of the relationships between the immigration variable and other variables. The odds ratio reflects the change in odds of a Turk being more likely to favor greater immigration restrictions, for each one-unit change in the dependent variable. For example, the odds ratio for the Republican party, 3.19, indicates that for Republicans, the odds of being more likely to agree with a statement supporting greater immigration restrictions is 3.19 times higher than it is for Democrats, holding

constant all other variables. An even more understandable estimate, the percent change in odds for each unit change in the independent variable, can be calculated by subtracting 1 from the odds ratio and multiplying by 100. Continuing with the interpretation of the Republican variable, this signifies that Republicans are 219% more likely to support greater immigration restrictions than Democrats.

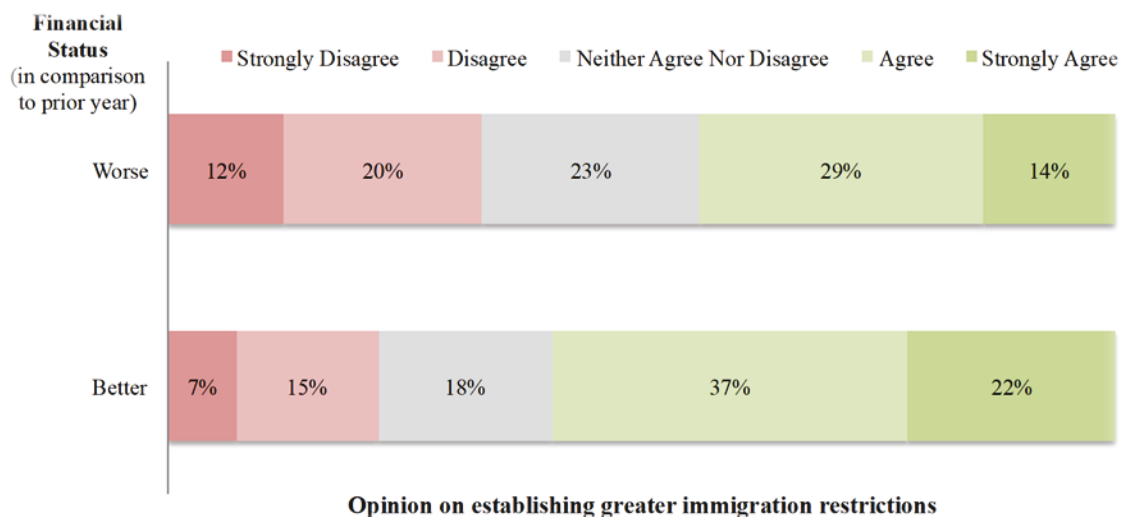
Figure 1. Odds Ratios for Variables of Interest



Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

One of the two economic variables that are worth exploring in greater detail is Financial Security, which was proven statistically significant in the regression model results in Table 1. These findings indicate that Turks that report that they are worse off financially this year than last year are more likely to strongly disagree or disagree with imposing greater immigration restrictions than Turks that report they are better off. Put another way, those better off are more likely to agree or strongly agree with increasing immigration restrictions than those worse off. As we can see in Figure 1, the odds ratio for the Financial Security variable is 1.45, indicating that Turks that are better off financially are 45% more likely to support greater immigration restrictions than Turks that are worse off.

Figure 2. People Better Off Financially More Likely to Support Greater Restrictions



Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"
 Note: Respondents were asked to respond with their level of agreement to the following statement regarding immigration: "There should be greater restrictions on immigration to the United States."

Figure 2 provides a closer look at the breakdown of responses to the immigration question for the better off and worse off group. 59% of Turks that reported they were better off financially agreed or strongly agreed with establishing greater immigration

restrictions, whereas only 43% of Turks that reported they were worse off agreed or strongly agreed. Alternatively, only 22% of better off Turks disagreed or strongly disagreed with restrictions, in contrast to 32% of worse off Turks.

These findings contradict the popular pessimism hypothesis that states that if one is “on a downward economic trajectory,” they will believe immigration has a more tangible cost to them and will, therefore, have greater restrictionist sentiment.²⁹ Perhaps other factors such as empathy and kinship with immigrants who may be in similar financial circumstances should be considered in future research to further explain these findings. Another possible consideration is the Allport’s contact theory. Proponents of this theory would speculate that Turks that identified themselves as worse off financially may live in closer proximity or come into contact with immigrants more frequently than those who are better off, leading them to have less restrictive opinions of immigration.

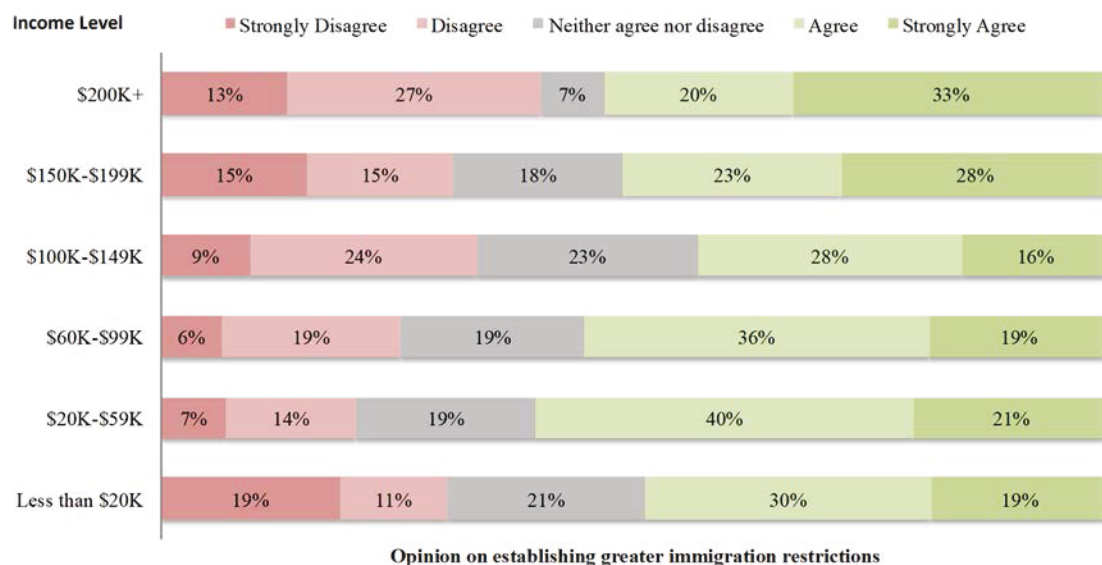
Although the regression results in Table 1 do not find income to have a statistically significant influence on immigration preferences, it is still worth exploring further through a cross-tabulation analysis what the nature of the relationship looks like between the Income and Immigration variables and how it compares with existing literature. While the majority of researchers either have either found a null relationship between income and immigration or found lower income individuals to be more in support of immigration restrictions than higher income ones, a 2018 analysis of the World Values Survey suggests that “middle income individuals express slightly more restrictionist attitudes than low income individuals and considerably more restrictionist attitudes than high income individuals.”³⁰

²⁹ Ibid, 860-861.

³⁰ Young, Loebach, and Korinek “Global immigration policy attitudes”, 93.

The results shown in Figure 3 give some support to this latter finding. Only 49% of Turks making \$20,000 or less in annual income agree or strongly agree with imposing greater immigration restrictions. In contrast 61% and 55% of those making between \$20,000 and \$59,999 and those making between \$50,000 and \$99,999, respectively, agree or strongly agree. The percentage of Turks supporting greater immigration restrictions is smaller for the three wealthiest classes, at 44%, 51% and 53% (from third-highest to highest).

Figure 3. Middle Earners Most Likely to Support Restrictions on Immigration



Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

One possible explanation for this sinuous trend is that middle earners (those in the \$20,000 to \$99,999 range) may be in a position where they feel they have more to lose from high levels of immigration than low earners do but not in such a high position that they feel their job and finances are secure. However, these results must be approached with some degree of scrutiny, as the relationship was not found to be statistically significant.

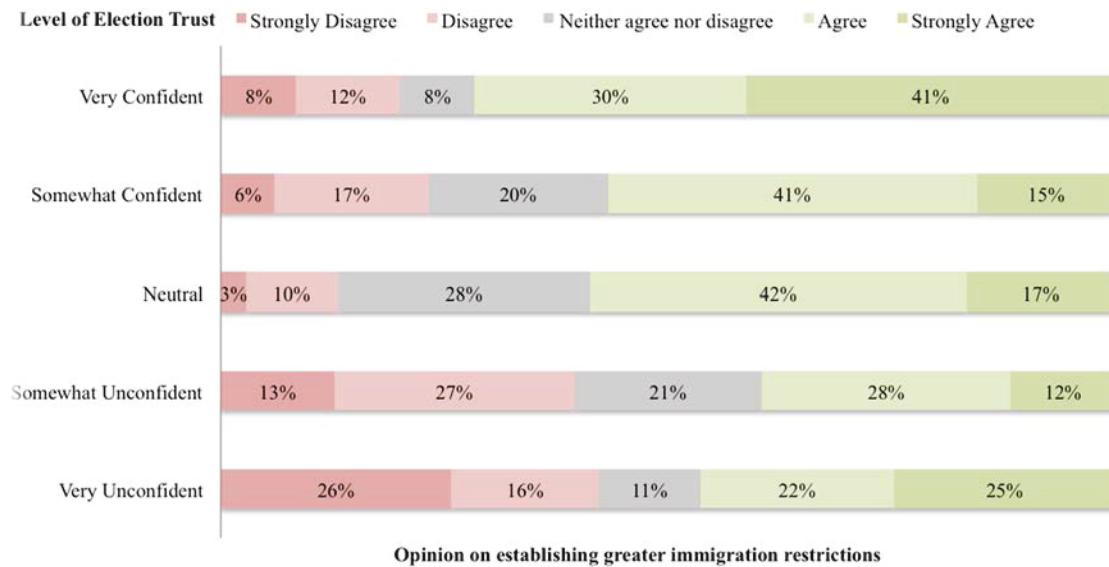
This analysis provides support for the hypothesis that personal economic circumstances determine immigration policy attitudes. While perception of relative financial security is found to be statistically significant, with those better off being more likely to agree or strongly agree with imposing greater restrictions, income is not statistically significant. However, some of the cross-tabulation results may give limited support to new evidence conveying that middle earners may favor more restrictive policies than low or high earners. Taking both economic variables together, the fact that Financial Security, which measures at change in financial security from last year to this year, was found significant whereas Income was not suggests that recent (and possibly temporary) perceived changes in financial circumstances have more of an impact on shifting immigration attitudes than more stable and less subjective financial measures.

While the economic variables shed light on the nature of the relationship between personal finances and immigration preferences, it is important to consider other theories such as Blalock's group threat theory. Supporters of this theory would expect a Turk who is more in favor of immigration restrictions to display other characteristics of feeling threatened. The Election Trust and COVID-19 Concern variables offer insight into this theory.

Given the positive coefficient for the Election Trust variable in Table 1, Turks who are more in favor of immigration restrictions are actually more trusting in the federal and local government's ability to ensure proper electoral procedures and accurate results. However, this result must be considered with some scrutiny, since the parallel regression assumption did not hold. Figure 4 shows this relationship in greater detail, dividing out

the Turks by level of confidence in electoral procedures and providing the percentage breakdown of immigration preferences for each.

Figure 4. More Trust in Election, More Restrictionist Toward Immigration



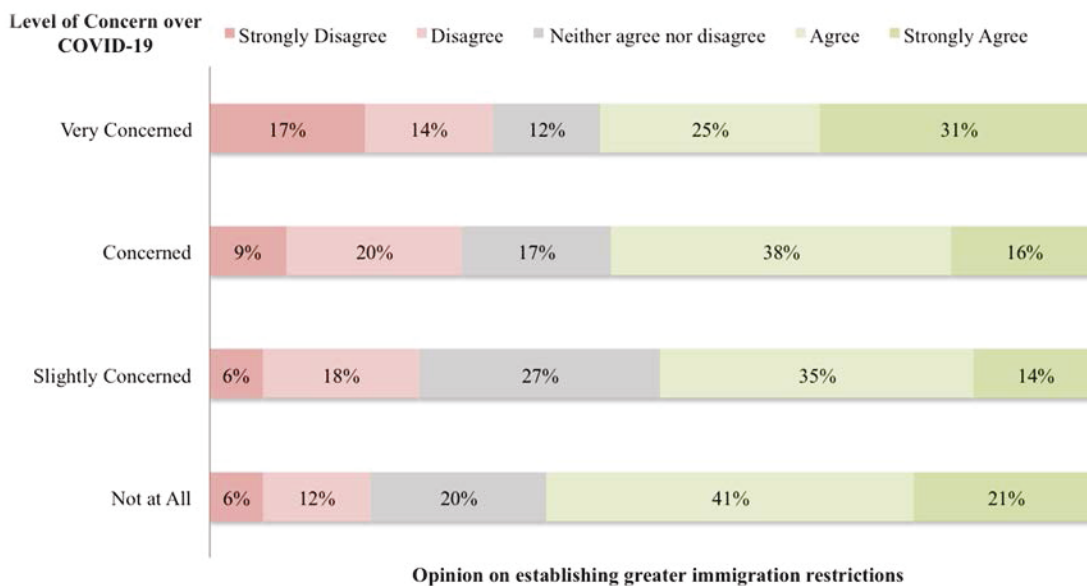
Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

Only 47% of Turks that were very unconfident in the government's management of the election agreed or strongly agreed with establishing greater immigration restrictions, while over 70% of Turks that were very confident in government management of the election were in favor of restrictions. This contradicts Blalock's threat theory that those that feel threatened by immigration are more in favor of restrictions would similarly feel less confident in proper election procedures.

Findings on the COVID-19 concern variable also oppose Blalock's threat theory. As shown in Table 1, there is not a statistically significant relationship between the Turks' level of concern about contracting COVID-19 and their attitudes toward immigration. Figure 5 similarly shows relatively little fluctuation in the breakdown of immigration attitudes by level of COVID-19 concern. One small trend that can be seen across the responses is that those that Turks that are very concerned about contracting

COVID-19 are less likely to favor immigration restrictions than those that are not at all concerned with contracting COVID-19. This is the reverse of what proponents of Blalock's theory would expect. Those that feel more at risk of contracting COVID-19 do not also feel more threatened by immigration; rather, they are less restrictive in their immigration preferences.

Figure 5. Turks More Concerned about COVID-19 Less In Favor of Establishing Greater Immigration Restrictions



Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

While one may argue that Election Trust and COVID-19 Concern are not the best proxy variables to assess Blalock's theory, the findings overall indicate that individual finances play a significant role in determining immigration attitudes. One's perception of whether they are better or worse off financially influences their opinion on immigration. Some evidence also suggests that one's income may also play a role in their decision-making with respect to immigration preferences, with middle earners more likely to favor restrictions than low or high earners.

5 Conclusion

Existing research on determining factors of immigration attitudes has largely revolved around Allport's contact theory and Blalock's group threat theory; in contrast, personal financial circumstances have been largely discounted by social researchers as playing a role in shaping opinions on immigration. By applying ordered logistic regression to recent data from an Amazon Mechanical Turk survey, this study provides evidence that finances are significant influences upon immigration preferences. On average, Turks who view themselves as better off financially this year as opposed to last year are more likely to favor the establishment of greater immigration restrictions than those who view themselves as worse off. The findings also complement other research that indicates that middle earners are more likely to favor restrictions than low or high earners.³¹

Furthermore, the results from this study challenge Blalock theory, illustrating that other characteristics of threat (concerns over COVID-19 or free and fair elections) do not correspond to being restrictive of immigration. In fact, they actually indicate the opposite. Turks who are more concerned about contracting COVID-19 or are less confident about election procedures being followed are actually found more likely to oppose the establishment of greater immigration restrictions. These findings open the door for theories around financial incentives to emerge to shed more light on public opinion toward immigration.

Understanding what factors drive anti-immigration opinions and xenophobic attitudes is increasingly important today. According to the World Migration Report 2020 from the International Organization for Migration, "there have been major migration and

³¹ Young, Loebach, and Korinek "Global immigration policy attitudes", 93.

displacement events during the last two years," primarily due to conflict or severe economic and political instability.³² The number of international migrants has steadily increased over time to a total of 272 million international migrants today, 3.5% of the world's population.³³ Given this increase, it is important to better understand what factors shape public perception on immigration in order for governments to anticipate and counteract outlashes of xenophobic violence and ensure that its immigration policies set up their citizens, immigrants, and the larger community for success.

The implications of this study are far-reaching; nevertheless, the findings are limited by certain aspects of the data. Perhaps most importantly, the survey population for this study was collected through the Amazon Mechanical Turk platform. As such, the ability to generalize these findings to the U.S. adult population is limited since the respondents are not representative of that population. As mentioned above, Amazon Mechanical Turk surveys, while superior to convenience samples, are noted for capturing a younger and more liberal population than the U.S. adult population.³⁴ Therefore, the external validity may be an issue when generalizing these findings to a larger scale. In addition, while the findings on income are of great interest, an ordered regression analysis did not map well the relationship between income and immigration preferences, given that the relationship appears to be nonlinear and U-shaped. Finally, it is important to seek out measures to evaluate Allport's contact theory and incorporate this into a more comprehensive analysis.

These results provoke a clear need for a deeper investigation into the determinants of immigration attitudes. Further examination of the role of income and other financial

³² International Organization for Migration, *World Migration Report 2020*, 2.

³³ International Organization for Migration, *World Migration Report 2020*, 21.

³⁴ Berinsky, Huber, and Lenz, "Evaluating Online Labor Markets", 366.

measures in influencing immigration policy attitudes is needed to groundtruth the finding that middle earners are more restrictive in their immigration opinions than low or high earners. Additionally, more robust measures to assess competing theories are needed. These include data that more directly captures conceptions of threat and the nature of respondents' contact with immigrants, including frequency and depth. Capturing whether respondents reside in rural or urban areas could also prove enlightening.

Finally, these factors need to be captured together comprehensively in a dataset that has more observations and is more representative of the U.S. adult population in order to ensure the external validity of its results. On the whole, the field of immigration policy remains theory-rich; for this reason, there is much opportunity for social researchers to dive deeper into statistical analysis and harness evidence to inform future policy making in this area.

6 References

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7 Appendices

7.1 Appendix A. Survey Summary Statistics

<i>Variable</i>	<i>Survey Questions and Results</i>		
Immigration	Please rate how much you agree or disagree with the following statement: “There should be greater restrictions on immigration to the United States.”	N	% N
	Strongly Disagree	179	16%
	Disagree	92	8%
	Neither agree nor disagree	211	19%
	Agree	385	35%
	Strongly Agree	213	19%
	No Response	20	2%
Financial Security	We are interested in how people are getting along financially these days. Would you say that you (and your family living here) are BETTER off or WORSE off financially than you were a year ago?	N	% N
	Worse off financially	332	30%
	Better off financially	736	67%
	No Response	32	3%
Income	What was your personal annual earned income this past year before taxes?	N	% N
	less than \$20,000	99	9%
	\$20,000-\$59,999	481	44%
	\$60,000-\$99,999	322	29%
	\$100,000-\$149,999	129	12%
	\$150,000-\$199,999	39	4%
	\$200,000 or more	15	1%
	No Response	15	1%
COVID-19 Concern	Based on COVID-19’s reported potential impacts to one’s health, to what extent are you concerned about personally contracting COVID-19?	N	% N
	No Opinion	34	3%
	Not at All	117	11%
	Slightly Concerned	358	33%
	Concerned	403	37%
	Very Concerned	167	15%
	No Response	21	2%
Election Trust	How confident are you in the federal and local government’s ability to ensure proper electoral procedures and accurate results for the November 2020 general election?	N	% N
	Very Unconfident	98	9%
	Somewhat Unconfident	207	19%
	Neutral	257	23%

Appendix A. (continued)

Election Trust (Continued)	Somewhat Confident	357	32%
	Very Confident	158	14%
	No Response	23	2%
Age	What is your age (in years)?		
	Median	Mean	Std Dev
	35	39	60.7
Gender	What is your gender?	N	% N
	Male	473	43%
	Female	622	57%
	Other, please specify	5	<1%
Race	What racial/ethnic group, if any, do you belong? (Check all that apply)	N	% N
	White, Caucasian	651	59%
	Not White, Caucasian	440	40%
	No Response	9	1%
Education	What is your level of education?	N	% N
	Some High School	6	1%
	High School Diploma	61	6%
	Some College/AA	188	17%
	College Degree/BA/BS	536	49%
	Graduate Degree	295	27%
	No Response	14	1%
Ideology	When it comes to politics do you usually think of yourself as	N	% N
	very liberal	146	13%
	liberal	299	27%
	slightly liberal	135	12%
	moderate or middle of the road	169	15%
	slightly conservative	112	10%
	conservative	161	15%
	very conservative	69	6%
	No Response	9	1%
Party	What political party, if any, are you a member of?	N	% N
	Democrat	427	39%
	Republican	442	40%
	Independent/unaffiliated	211	19%
	Other (please describe)	8	1%
	No Response	12	1%
Vote	Did you intend on voting in the presidential election this November?	N	% N
	Yes	983	89%
	No	82	7%
	No Response	35	3%

Appendix A. (continued)

Political Interest	Some people don't pay much attention to the political campaigns.	N	% N
	How about you, would you say that you have been/were very much interested, somewhat interested, or not much interested in following the political campaigns this past year?		
	Very Much Interested	407	37%
	Somewhat Interested	540	49%
	Not Much Interested	106	10%
	Not At All Interested	28	3%
	No Response	19	2%
Police Funding	What is your opinion on the current government funding levels for the police department(s) in your local jurisdiction?	N	% N
	The police department(s) should no longer receive any government funding.	125	11%
	The police department(s) should receive less government funding than it currently receives.	399	36%
	The police department(s) should continue to receive the same amount of government funding.	358	33%
	The police department(s) should receive more government funding than it currently receives.	137	12%
	I am unsure or have no opinion on the government funding of police department(s).	70	6%
	No Response	11	1%
Gender Inclusion	In order to ensure fair representation in leadership positions, organizations should be legally required to implement gender inclusive placement policies.	N	% N
	Strongly Agree	179	16%
	Agree	442	40%
	Neutral	309	28%
	Disagree	86	8%
	Strongly Disagree	67	6%
	No Response	17	2%
Financial Security (Absolute)	When considering your monthly income as compared to your monthly expenses (utility bills, rent or mortgage, student loans, food, and entertainment, etc.) and ability to save for retirement, how would you rate your financial security?	N	% N
	Very Poor	84	8%
	Poor	201	18%
	Neutral	366	33%
	Good	361	33%
	Very Good	77	7%
	No Response	11	1%

Appendix A. (continued)

Journalism Ethics	On the scale of 1 to 5, how much do you believe traditional or established broadcasting or publishing news outlets (e.g. FOX, CNN, ABC, Washington Post, Wall Street Journal, etc...) adhere to the following journalism principles: - My news source exhibits truth and accuracy, gives all the relevant facts and checks the information it provides me, or tells me when it cannot corroborate information. - My news source is independent and does not act formally or informally, on behalf of special interests whether political, corporate or cultural, and declares any information that might constitute a conflict of interest. - My news source is fair and impartial, stories are balanced and add context. - My news source exhibits humanity and is aware and cares for the impact of words and images on the lives of others. - My news sources is accountable and when it commits an error, it corrects them.	N	% N
	strongly disagree	132	12%
	disagree	193	18%
	don't know	221	20%
	agree	486	44%
	strongly agree	56	5%
	No Response	12	1%
Universal Healthcare	Do you agree or disagree with the following statement: "The federal government should be responsible for ensuring that all Americans have healthcare coverage"	N	% N
	Strongly agree	315	29%
	Agree	432	39%
	Neither agree nor disagree	193	18%
	Disagree	87	8%
	Strongly disagree	52	5%
	No Response	21	2%
COVID-19 Vaccine	The U.S. Food and Drug Administration (FDA) approves vaccines once they demonstrate safety and effectiveness in human clinical trials. If an FDA approved COVID-19 vaccine becomes available at no cost to you, would you receive the vaccine?	N	% N
	Definitely not	82	7%
	Probably not	130	12%
	Unsure	228	21%

Appendix A. (continued)

COVID-19 Vaccine (Continued)	Probably	386	35%
	Definitely	258	23%
COVID-19 Response	No Response	16	1%
	With 10 representing "completely satisfied," and 1 representing "not at all satisfied," how would you rate your satisfaction with how the United States federal government has handled the COVID-19 situation to this point?	N	% N
	1. Not at all satisfied	190	17%
	2.	93	8%
	3.	121	11%
	4.	99	9%
	5.	106	10%
	6.	112	10%
	7.	140	13%
	8.	131	12%
	9.	47	4%
	10. Completely satisfied	51	5%
	No Response	10	1%
Civic Engagement	I feel that if I communicate my opinion on a political issue I care about to government officials (through phone, radio, email, social media, protest, and/or mail), I make a difference in my community."	N	% N
	strongly agree	94	9%
	agree	423	38%
	neither agree nor disagree	275	25%
	disagree	214	19%
	Strongly disagree	68	6%
	No Response	26	2%
Surrogacy	With the advance of science and technology, people who are unable to have their own biological child can still achieve their desire to have a child. One of the effective ways is surrogacy. Do you strongly favor, favor, oppose or strongly oppose allowing surrogacy legally?	N	% N
	Strongly favor	287	26%
	Favor	620	56%
	Oppose	145	13%
	Strongly oppose	26	2%
	No Response	22	2%
Parent	When it comes to raising children, which best describes you?	N	% N
	I am a parent.	501	46%
	I do not yet have children, but I plan to in the future.	182	17%

Appendix A. (continued)

Parent (Continued)	I would like to have children, but do not anticipate that I will.	208	19%
	I definitely do not want to have any children.	122	11%
	I have not yet decided whether or not I want children.	65	6%
	No Response	22	2%
Type of Worker	Everyone's career has a great influence on his values and politics, so we are very interested in learning about your job. Can you tell me about your current occupation? Please choose one of the following options:	N	% N
	White collar worker	708	64%
	Blue-collar worker	310	28%
	Other (please describe)	66	6%
	No Response	16	1%
Presidential Election	Who would you vote for in the presidential election this November? (Whether you intend to vote or not)	N	% N
	Donald J. Trump	575	52%
	Joseph R. Biden	463	42%
	Other (please specify)	51	5%
	No Response	11	1%

Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

Note: Variables in green were used in the ordered logistic regression model, whereas variables in gray were additional variables that were captured in the survey.

7.2 Appendix B. Variables Used in Ordered Logistic Regression Analysis

<i>Variable</i>	<i>Questionnaire Item and Text</i>	<i>Coding</i>
Immigration	‘There should be greater restrictions on immigration to the United States.’	Ordinal variable recoded 1-5: 1 = ‘Strongly Disagree’ 2 = ‘Disagree’ 3 = ‘Neither agree nor disagree’ 4 = ‘Agree’ 5 = ‘Strongly Agree’
Financial Security	‘We are interested in how people are getting along financially these days. Would you say that you (and your family living here) are BETTER off or WORSE off financially than you were a year ago?’	Recoded as dummy variable: 0 = ‘Worse off financially’ 1 = ‘Better off financially’
Income	‘What was your personal annual earned income this past year before taxes?’	Ordinal variable recoded 1-6: 1 = ‘less than \$20,000’ 2 = ‘\$20,000-\$59,999’ 3 = ‘\$60,000-\$99,999’ 4 = ‘\$100,000-\$149,999’ 5 = ‘\$150,000-\$199,999’ 6 = ‘\$200,000 or more’
COVID-19 Concern	Based on COVID-19’s reported potential impacts to one’s health, to what extent are you concerned about personally contracting COVID-19?	Ordinal variable recoded 1-5: 1 = ‘No Opinion’ 2 = ‘Not at All’ 3 = ‘Slightly Concerned’ 4 = ‘Concerned’ 5 = ‘Very Concerned’
Election Trust	How confident are you in the federal and local government’s ability to ensure proper electoral procedures and accurate results for the November 2020 general election?	Ordinal variable recoded 1-5: 1 = ‘Very Unconfident’ 2 = ‘Somewhat Unconfident’ 3 = ‘Neutral’ 4 = ‘Somewhat Confident’ 5 = ‘Very Confident’
Age	‘What is your age (in years)?’	Continuous variable coded from 18 to 79 years
Gender	‘What is your gender?’	Recoded as dummy variable: 0 = ‘Male’; 1 = ‘Female’
Race	‘What racial/ethnic group, if any, do you belong?’	Recoded as dummy variable: 0 = ‘White, Caucasian’ 1 = ‘Not White, Caucasian’

Appendix B. (continued)

Education	‘What is your level of education?’	Ordinal variable recoded 1-5: 1 = ‘Some High School’ 2 = ‘High School Diploma’ 3 = ‘Some College/AA’ 4 = ‘College Degree/BA/BS’ 5 = ‘Graduate Degree’
Ideology	‘When it comes to politics do you usually think of yourself as’	Ordinal variable recoded 1-7: 1 = ‘very liberal’ 2 = ‘liberal’ 3 = ‘slightly liberal’ 4 = ‘moderate or middle of the road’ 5 = ‘slightly conservative’ 6 = ‘conservative’ 7 = ‘very conservative’
Party	‘What political party are you a member of?’	Recoded as dummy variables comparing each of the other response options - Republican, Independent/Unaffiliated, Other (1) with Democrat (0)

Source: Johns Hopkins University AS.470.764.81.SU20 Survey Methodology Course, "SU20 survey final"

8 Curriculum Vita

PERSONAL INFORMATION

Name: Kaitlin Elizabeth Stastny
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Accomplished bilingual data analyst with more than six years of U.S. government experience implementing and managing projects. Highly successful at database maintenance, systems thinking, and grant administration. Experienced in investigating migration policy issues and impacts on Latin American communities.

EDUCATION

Masters of Science January 2019 to December 2020
Johns Hopkins University Baltimore, Maryland
Data Analytics & Policy

Bachelor of Arts August 2009 to May 2013
University of Wisconsin-Madison Madison, Wisconsin
International Studies, Environmental Studies, and Spanish
Certificates: Global Studies and European Studies

EXPERIENCE

Business Analyst August 2020 to Present
RemedyBiz, Inc. Reston, Virginia
Coordinates with technical contractors, federal staff, and leadership to implement change management processes, ensure federal compliance, and release information technology enhancements to improve data consolidation and financial reporting capabilities of the National Institute of Health Business System.

Program Staff Assistant July 2016 to July 2020
Inter-American Foundation Washington, District of Columbia
Supported a portfolio of innovative community-based grants in Latin America and the Caribbean by regularly corresponding in English and Spanish with staff, grantees, and contractors, collecting and verifying programmatic and financial reporting, and maintaining and linking information across multiple knowledge management systems. Conducted research and performed survey analysis on the Venezuelan migrant crisis.

Community Environmental Conservation Volunteer April 2014 to April 2016
Peace Corps Barranquilla, Comarca Ngäbe-Buglé, Panama
Executed a community assessment, developed discrete projects promoting indigenous leadership and environmental stewardship practices, and selected and reported on qualitative and quantitative indicators to track progress toward agency goal of promoting local capacity and cultural competence.