## Voter Turnout Data Analysis

Elizabeth Adeoye Dalton Schmidt Viviana Yamell Mejia

Voter turnout in the United States is influenced by several factors, including individual income, household type, age, race, and ethnicity. To determine if these factors affect voter turnout, we compared income data for the previous two general presidential elections based on various demographics. Analyzing this data would allow us to determine whether a person's income and personal traits are related to their choice to cast a ballot. The data we collected came from the US Census Bureau's reports for 2016 & 2020, which also provide age, household income, and voting behavior statistics.

We have four research questions we tend to answer given the data. The first question is, How has median income changed from 2016 to 2020 when compared across age? The second question is, How has median income changed from 2016 to 2020 when compared across ethnicity? The third question is, how has median income changed for differing household demographics from 2016 to 2020? Lastly, we will answer the question, how does the voter turnout compare from 2016 to 2020, and is there any correlation with the median income data from those 2 years?

Based on our data, no demographic had a decrease in median income from 2016 to 2020. Every demographic had an increase in income from 2016 to 2020. This could be due to a combination of factors, including a strong economy with low unemployment, steady job growth, and rising wages across demographics. Although the COVID-19 pandemic significantly impacted economic stability towards the end of 2020, there was an increase in income per year. We also noticed voter participation increases with family income.

Looking at the age range, we can see that younger individuals aged 18-24 earn far less than any other age range and vote significantly less than any other age group. We can say that traditionally, younger people do not come out to vote as older ones due to a lack of understanding of political discussion, not being encouraged to participate in political elections, or simply not believing in the political system. We can see the opposite with the older generation, 65 years and older. According to the data from the 2016 and 2020 elections, they are more likely to vote in large numbers while still earning a similar income as the younger generation. This could mean that since they are no longer in the workforce due to retirement, hence the reason for lower income, they have more availability to vote. Compared to middle-aged individuals from 25 to 54, there is an increase in the median incomes from 2016 to 2020. While there is an increase in median income, there is an average number of reported votes. This could mean that they represent the average number of votes reported based on many factors such as income, education, availability, etc.

When looking at the household data, we noticed that voter participation increases with family income. Married couples are more likely to vote compared to single male and female households. Based on our household type vs median income & voting reported graph, single households earn far less compared to married couples. Married couples do not take into account that some married couples live on one-person income. From 2016 to 2020 each family household increased their median income. When median income increased, so did the number of reported votes. This could mean that individuals can take off to vote since their wages have progressively increased.

When comparing ethnicity, each demographic has increased their income and increased their voting turnout in their respective category. Looking at the data, minorities are earning far less than their white counterparts. This can be due to the racial inequality of income across the board. One question to consider is why minorities earn less than their white counterparts and why their white counterparts vote more than minorities. This could be assumed based on a number of factors, such as whether jobs are allowing individuals to take off work and still receive their hourly income. If minorities do not have the option to call off and take time to vote, then they are most likely not going to vote.

The fact that higher income is associated with greater turnout does not necessarily mean that having a higher income causes people to be more likely to vote. In theory, there are many reasons why higher income may make people vote more. However, based on our previous data, we can conclude that there is an association between higher income and voter turnout for 2016 and 2020.