Gentrification Background

Context and Background

Gentrification is a highly contested issue that can manifest both positively and negatively. Gentrification can be defined as the following : a process of neighborhood change that includes economic change in a historically disinvested neighborhood —by means of real estate investment and new higher-income residents moving in - as well as demographic change - not only in terms of income level, but also in terms of changes in the education level or racial make-up of residents (urbandisplacement.org). This research will focus on analyzing gentrification at the census tract level in the city of Chicago to infer which communities are being gentrified. The research will analyze the relationship between citizenship and displacement in gentrifying neighborhoods across the city of Chicago to understand whether there is relationship between nativity and the likelihood of gentrification

Purpose

For the purpose of this research citizenship status is taken into consideration as non-citizens are significantly disadvantaged in their communities and vulnerable to displacement associated with gentrification. Non-citizens have many obstacles preventing them from being able to accumulate wealth and generational wealth which can prevent them from having the ability to remain situated in gentrifying neighborhoods as they become more expensive. Non-citizens are unable to qualify for mortgages that would otherwise allow them to buy a home and create generational wealth in their communities. For the purposes of inability to buy homes, non-citizens may be more likely to be renters which will make them more vulnerable to affordability concerns due to rent increases. Considering that renters may be more vulnerable than homeowners to increasing rent values, they may no longer be able to live in the gentrifying community; thus, being displaced and forced to move into a more affordable home.

Methods and Approach

Using the Vorhees Index created in 2013 to measure neighborhood Change will allow me to plot how neighborhoods across Chicago have change over time in terms of socioeconomic status. The purpose of using the Vorhees index will help us analyze the rate of neighborhood change in neighborhoods throughout Chicago, specifically in neighborhoods that have a high rate of non-citizens. Using the Vorhees Index and adding the nativity and citizenship status as a measure will allow this research to determine whether Neighborhood change occurs in neighborhoods of low citizenship rates.

Independent variable: (based on Vorhees Index of Neighborhood change) population, percent white, percent Black, percent Latino, percent elderly, percent children, percent college educated, percent median family income, percent owner occupied, percent families below poverty, percent manager occupations, percent female households with children, percent private school attendance, *citizenship status*, *Nativity*

Dependent Variables: Chicago Census Tracts

Data Sources

Data for this study comes from the 2000 Decennial Census and the 2019 five Year American Community Survey.

Data Description

Using the index developed by Natalie Vorhees to measure neighborhood change I need to pull 13 different variables in addition to the nativity and citizenship from the 2000 decennial census and the 2019 five year American community survey. The variables identified by Vorhees are associated with gentrification and neighborhood change.

Once the Vorhees data is pulled I will have to calculate composite index scores assigned to each census tracts. First I will calculate the city average for each variable in the data set and converted into a percentage. Once I have calculated these measures at the city level I will calculate the average for these variables at the census tract level and then convert them into percentages.

Once these variables are converted, I will assign composite score. A positive score (+1) is assigned if the variables is associated with gentrifying characteristics such as a higher percentage of college educated individuals than the city average. A negative composite score (-1) is assigned if the variable is associated with declining neighborhood characteristics such as a high percentage of families living below poverty. These composite scores are then calculated at the census tract level. Once composite scores are calculated they will be converted and visualized into a map showing the gentrifying neighborhoods are those with composite scores of 4 points or higher, declining neighborhoods are -4 points of lower, and neighborhoods experiencing no change are those between -4 and 4 points.

For my own research analysis I will be looking at the variables of Nativity and Citizenship as an addition to determine if they are underlying factors associated with gentrification or decline. Separate maps from the community typologies will be created to visualize the census tracts with a low percentage of citizens, and the different nativity distribution across the the city of Chicago. This will only serve as a visual representation. To determine if there is a correlation between nativity,citizenship and gentrifying neighborhoods I will use a line regression function. If there a correlation there will be a strong positive line regression.

Preliminary Analsyis

The initial data pulling process is quite simple. However, there are some aspects I may change.The following code chunk is an example of the way I am pulling data through R studio.

```
library(censusapi)
library(tidycensus)
library(tidyverse)
Racedata2018 <- get_acs(geography = "tract", state = "IL", table = "B02001", year = 2018, survey
= "acs5", output = "wide")%>%
  mutate(pop_other = B02001_001E-(B02001_002E + B02001_003E)) %>%
  rename(pop_tot = B02001_001E, pop_white = B02001_002E, pop_black = B02001_003E) %>%
  select(NAME, pop_tot, pop_white, pop_black, pop_other)
```

For the remainder of my research I would like to use the 2019 ACS instead of the 2018 ACS. Using the 2019 ACS is the farthest and most recent data available. This will help represent a longer and more recent time period. Additionally, I may want to also view the 2010 decennial census to have a better sense of the change over time, meaning that three sets of data will be pulled instead of two.

Through my initial data pulling process and research I have noticed the changes in census boundaries from the year 2000 and the most recent period. For the remainder of the research I may look at community areas rather than census tracts as community tracts are more stable.

Future// Remainding Research

Figuring out how to pull data for the community area level rather than the census tract level is my initial next step.From there I will continue pulling data for the 2000, 2010 decennial census and the 2019 ACS. Cleaning the data is the next step with converting data in percentages, calculating composite scores and finally visualizing them in a map representing community typologies.From there I will visualize Nativity and Citizenship by community area. Finally I will run a regression between the gentrifying and declining neighborhoods and citizenship and nativity.