UC Office of the President
Student Policy Research Papers

Title
The Vicious Cycle of Unaffordable Housing

Permalink
https://escholarship.org/uc/item/4gh0w4mm

Author
Dhayagude, Ruhi

Publication Date
2023-05-09

eScholarship.org Powered by the California Digital Library
University of California

UC Center Sacramento

The Vicious Cycle of Unaffordable Housing

Ruhi Dhayagude

POL 195

Professor Butters

24 March 2023

Introduction

Houses constitute the most fundamental aspect of social capital whereby owning a home signifies settlement and a milestone in the American Dream. Since houses are also considered one of the simplest measure of wealth, homebuying allows for families to develop savings and establish a sense of security to be passed down generationally. The topic of housing continues to gain prevalence in public policy across the nation due to decreased housing affordability and increased housing cost burden in recent years. According to the US Census Bureau, over 19 million households in California were burdened by rent prices in 2021, whereas homeowners rarely faced this burden.

Housing cost burden is characterized by households spending greater than 30 percent of their income on housing needs, namely rent or mortgage (US Census Bureau). Cost burden parallels housing affordability because individuals cannot sustain their lifestyle reasonably with the funds they must allocate towards housing. Uplifting individuals from the rental to ownership market can help new homebuyers begin to accumulate wealth and create room for additional renters (Wagle & Grayson). Socioeconomic mobility in this way is crucial to reducing inequality and improving long-term financial stability. As such I pose the question, what is the impact of decreased housing affordability for renters versus homeowners on the accumulation of wealth? Furthermore, what might this convey about the prospects for social mobility?

The forthcoming paper will begin by discussing the relevance of housing affordability to California's political and socioeconomic landscape and explaining patterns in wealth concentration. Following a brief background capturing the drivers of this study, I hypothesize a divergent relationship for homeowners versus renters regarding the affordability of housing related costs and each group's ability to accumulate wealth. Next, I operationalize my outcomes

of interest through the median housing cost ratio and Small Area Income Poverty Estimate (SAIPE), both of which are published by the US Census Bureau. Using observational data and an averaged cross-sectional time period, I then test this hypothesis through a correlation test for the independent variables individually and through a regression model for them together. Finally, I relay my findings through the use of graphs and tables, and conclude with the potential implications of my study.

Significance to California

In recent years, California has become less affordable to live in despite already being one of the most expensive regions in the nation. In their latest quarterly report, the California Association of Realtors affirmed this notion by citing a 17 percent housing affordability index. Put differently, only 17 percent of Californian households demonstrated the ability to purchase a median-priced home in the fourth quarter of 2022 (California Association of Realtors). While the state's economy is the largest in the nation, the consequent growth in incomes has not kept up with the rise in house prices (Kimberlin). This has resulted in greater inequalities whereby individuals participating in the rental market are more likely than those who own homes to spend an unsustainably large percent of their income on housing. Housing cost burden further disproportionately affects poorer individuals and people of color (Kimberlin).

Understanding how housing policy might affect the accumulation of wealth proves significant on an individual level because wealth can help uplift families out of poverty or lesser socioeconomic means (Pfeffer). It can expand access to opportunities and increase civic engagement through representation. Increased wealth also proves beneficial for the aggregate market economy because individuals can now purchase and invest in more expensive assets (Pfeffer). As a consequence of limited initiatives to break the cycle of low social mobility, less-

wealthy households predetermine the economic outcomes of their future families. Socioeconomic mobility occurs most prominently through education and the attainment of higher paying jobs because of changes in demand from the job market. It relates to inequality because social mobility across generations allows individuals to interrupt the cyclical nature of poverty and generate savings. Although most people would consider inequality intrinsically negative, instrumental concerns such as stifled economic growth or unmaximized potentials may convince others of its significance. If there is a connection between housing affordability and wealth accumulation, then alongside other economic motives, individuals should work towards homeownership in order to reduce the percent of their income spent on housing in the long run and pass down savings generationally.

Background

This project aims to compare recent trends in the affordability of housing to the accumulation of wealth in households. As such, understanding the rent trends and burden on households, changes to property rights and rezoning laws, as well as wealth concentration patterns at large are crucial to the backdrop of this study.

According to studies done by the California Budget and Policy Center (CBPC), most of the state's population spends more on housing than they can truly afford. In other words, most Californians are cost burdened by the high and ever-rising housing costs because they are paying more than 30 percent of their income towards the rent or mortgage. While their incomes are also increasing due to job market changes and other economic factors, the relationship between the rise in incomes is not nearly proportional to the rise in housing costs (Kimberlin). Within this, low-income households and renters are overrepresented in the population of cost burdened families, which further affects their ability to save.

In isolating for the asking rent prices alone, the California Housing Partnership puts forth ***Figure 1*** to illustrate the upsurge over the last ten years. The black trendline represents the actual price changes and the bar graphs signal the percentage change per quarter (California Housing Partnership). The absolute value of rent has steadily increased in the last decade with the most recent percent growths per year in a higher range than previous times. This implies that rent prices have grown dramatically and faster than ever before in the last couple of years. Moreover, the rise in incomes has not correlated with a substantial upsurge in wealth accumulation, suggesting that the supplementary income received is being immediately consumed and not saved or invested (Horowitz et al). Safety nets and housing programs attempt to counter this issue, but without tight and comprehensive policies, improvement may be deterred (Kimberlin).

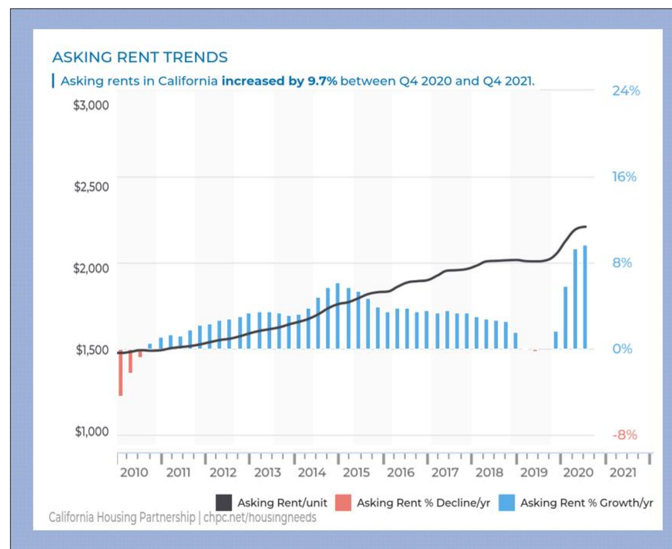

Figure 1: Asking Rent Trends (2010-2021)

Senate Bills 8, 9, and 10 from the 2021-2022 legislative session are vital to the housing narrative as they expanded the creation of affordable housing in California by eliminating barriers to rezoning as well as allowing for multiple home projects in certain specified cases (C. A. Legis). SB 8 extends the 2019 deadline for the Housing Crisis Act to 2030, which allows for the continuation of building extra housing units in pre-zoned areas. Specifically, it reviews

previously categorized single-unit projects to determine whether they can be accommodated into multiple units (Lai, et al). SB 9 allows local municipalities to assess whether certain properties can be rezoned into more units and for those properties to bypass a CEQA review. Similarly, SB 10 permits local authorities to divide qualifying lots into 14 units and also bypasses the CEQA review in such cases (Lai, et al). The full-scale effects of these 3 Senate Bills however have yet to be determined due to their recent enactment.

Another component to the study concerns pockets of wealth in California. The California Legislative Analyst's Office (LAO) discusses the unequal distribution of wealth across the state despite its overall wealth per capita ranking highest in the nation. They reveal the presence of high wealth areas grouped together, contrasted by lower wealth areas grouped in other places (Uhler). In other words, wealth is highly concentrated in less populous areas rather than proving proportional to the number of individuals residing in those regions.

Broadly, there has been an increase in the number of homes being built across California, which is projected to help mitigate the housing crisis and improve the prospect of savings. However, in practice, most Californians continue to experience housing cost burden and pay unreasonably high percentages of their income towards housing. There are also notable disparities in wealth across the state, whereby a few key concentrated areas carry a disproportional majority of the state's wealth. This study attempts to determine the strength and direction of a relationship between the percent of household income spent on rent or mortgage, and their ability to retain wealth.

Theory and Argument

Conceptually, I propose that a decrease in the affordability of housing will make it more difficult to accumulate wealth across Californian counties and further hinder the prospect of

intergenerational social mobility. This is predicted to impact renters slightly more than those who pay mortgages, whereby renters who spend a disproportional amount of their income on housing will be unable to generate wealth savings for the future. The independent variable *x* to be measured is a households' ability to afford the respective types of housing costs. I separated the rental and ownership housing costs by using measuring median rent and median mortgage rates per county in California, as a percent of their income spent. Comparing the amount spent on rent or mortgages to one's income better depicts housing affordability than the costs of housing alone and is titled the housing cost ratio by the US Census Bureau (US Census Bureau). The dependent variable *y* then is wealth in the respective California counties. Typically, adding together income producing assets and home values, and then subtracting household debt constitutes wealth (Uhler). However, since these data are not available for disaggregation, my study will focus on an absence of wealth or poverty in the counties of California. As such, the relationship between housing affordability and wealth absence will contrast that of accumulation.

Further in operation, an increase in the median housing cost ratio across counties will decrease poverty rates for mortgage payers and increase poverty rates for renters. Although households in the ownership market are spending a large percent of their income at present on the mortgage payments, they will eventually pay off their mortgage. Their children would then inherit the house, which translates to inheriting wealth and security. These savings also provide leverage for households to borrow more funds and engage with other aspects of the market economy such as intangible investments, or stocks and bonds. Overall, an increased level of stability would reduce the prospect of poverty and the shortfall of wealth. On the other hand, renters who spend a large percent of their income on housing needs are unable to save money or contribute to future wealth savings. This serves as an obstacle for homebuying as they cannot

assemble the funds for a down payment or other upfront ownership costs. Consequently, little to no stable savings, such as a house, are passed down generationally and the cycle of instability continues. With this hindered stability, households who rent are more likely to face poverty and an absence of wealth. This is especially in the cases of severely rent burdened households—or those who spend more than 50 percent of their income on rent (US Census Bureau). These families can barely afford to pay their housing costs, let alone save money to invest in a home or other long-term assets. This diminished sense of security might not directly cause poverty but rather serves as a potential motivator of absent wealth.

A list of possible confounding variables *z* that may affect the causal mechanism of housing affordability on wealth accumulation include taxes, education level, proximity to urban cities, racial or ethnic demographics, and social safety nets. Not accounting for these variables could alter the perceived effect of housing affordability and poverty rates by changing the strength and direction of the relationship.

Research Design/ Data

In order to test my hypothesis, I analyzed each independent variable separately as well as together through a regression model to determine the presence of a relationship between housing cost ratios and poverty rates. The scope of my study extended to all 58 counties in California over the 5-year period of 2017 to 2021. In order to acknowledge for the variation of county sizes, I decided to use percentage measurements for both variables. I assessed the effect of a higher median housing cost ratio to each count's poverty rate estimates in an attempt to capture the greater relationship between housing affordability and wealth accumulation. As such, my unit of analysis was the county level and the number of observations totaled to 58.

Broadly, the independent variable to be evaluated was housing affordability through cost

burden on households. It involves increased costs of living, due to competition and sparsely available affordable housing. Using the definition of housing burden to determine affordability is the best way to measure whether the household is stable in expending on a necessity. Namely, the housing cost ratio ranges from 0 to 100 percent and measures the portion of household income spent on rent or mortgage in California counties (US Census Bureau). Higher percentages indicate a greater rate of household income spent on either rent or mortgage. The comparison of percent of income spent on housing to wealth at the county level serves as a purposeful measure of how housing affordability affects the accumulation of wealth because households spending a larger amounts of their income on housing will have a more difficult time saving for the future, whether they use those savings for buying property, investing, or anything else. The data is sourced from the US Census Bureau's interactive graphic tool, which then I extracted and reorganized into a spreadsheet to analyze. It represents a 5-year average over 2017 to 2021.

The dependent outcome of interest is wealth accumulation measured through the proxy of an absence of wealth in counties. As such, the relationship would be an inverse of what it would be for wealth buildup. I am interested in the patterns of poverty, such as concentration or gaps, within Californian counties. These patterns could translate to wealth inequality or a lack of social mobility due to the theory of intergenerational transmission, which states that children are significantly more likely to end up in the same economic class as their parents as compared to a different one—at every earning level (Pffefer). While this connection is part of the narrative as compared to the analysis, it important to consider the implications of this study. The physical measure for poverty and absent wealth will be the Small Area Income Poverty Estimate (SAIPE). Provided by the US Census Bureau, the SAIPE relays the percent of individuals in

each county living in poverty for the all-age population (US Census Bureau). Utilizing the absence of wealth through the SAIPE as an outcome of welfare proves useful in understanding how secure a household is after spending on housing. The unit of measurement will be percentages from 0 to 100, with each additional percent representing a proportional change in poverty. From the original data, I took an average of the 5-year period 2017-2021 in order to uniformly compare to the 5-year average of the independent variables.

Using averages for the median housing cost ratio and poverty estimates help mitigate the variation of year-to-year fluctuations, however there are potential drawbacks of using data that spans across the pandemic period. When the pandemic hit in 2020, volatility in the housing market increased due to the unpredictability of the situation. According to the California Association of Realtors, reduced in person work led to the delay of a number of new construction projects, which further pressured supply in the housing market. There was also an increase in unemployment and layoffs (California Association of Realtors). The rate of poverty pre- and post-pandemic might have also been altered due to higher levels of unemployment as well as increased supplemental cash aid. As reported by the US Census Bureau, poverty decreased in more counties nationwide than it increased in, but this data is not categorized by state (US Census Bureau). Since the effect of the pandemic on individual counties is indeterminate, there may be uncaptured influences on poverty. As a result, using pandemic spanning data could potentially skew my results for income levels, housing prices, and poverty estimates; however, I found it important to use recent data as it is the most influential of today's social compass and market economy.

Nevertheless, there lies room for alternative ways to measure my observed variables. Housing affordability could be captured by the percent of households in a given region who are

cost burdened and pay greater than 30 percent of their income towards housing. While this measure might better capture housing burden directly, it has not been updated for the last decade. Similarly, the ratio between home prices and median income could also relay affordability, but this data is only available at the national level. Another measure for wealth could be simple home values, however this measure would overlook other important factors such as intangible investments or debt.

To evaluate the presence of a relationship between housing affordability and absent wealth, I conducted simple correlation comparing each independent variable to the dependent outcome of poverty. The use of averages over the 5-year timeframe translates to a cross-sectional analysis of the variables as there are not time fluctuations captured by the data. A strong correlation would be conveyed by r values near – 1 or 1, while a weak correlation would fall close to 0. I further performed a linear regression test to determine the strength and direction of a relationship between both variables—the percent of income spent on rent and on housing—to each county's poverty levels. With a full set of data available for Californian counties, the number of observations in my sample is 58. This sample is large enough to draw a conclusion from because it is greater than the standard minimum of 30 observations. Although there is not a control for county size or household size, comparing percent measures will help reduce the bias of difference between counties because the percent value accounts for the county's total population. I used a 0.05 threshold for alpha for determining statistical significance of the results, whereby p-values greater than this are regarded as insufficient evidence.

A scatterplot will most effectively illustrate the potential correlation between the individual independent variables and the dependent outcome because each point of comparison will be visible among the others. An added line of best fit will demonstrate visually what

direction, if any, the correlation exists. To display the results of my regression analysis, I created a table to clearly convey the coefficients, standard errors, and p-values associated with my independent variables.

To support my proposed theory, I expect to find a negative correlation between the housing cost ratios for homeowners and percent in poverty. For renters, this correlation would be positive. If I find evidence that housing cost ratios affect poverty rates, then there is potential for a number of policy implications regarding the preferred type of housing to increase social welfare. Looking at the recent averages for median housing cost ratios and comparing them to county poverty rates will serve to evidence the proposition that areas exhibiting an absence of wealth are resulting from housing unaffordability. The biggest limitation is being unable to control for every factor. There are likely confounders impacting the relationship between affordability of housing and wealth accumulation. Variables listed as z in the previous section, including education levels or race may need to be accounted for.

Findings and Analysis

In testing for the presence of a relationship between housing cost ratios and poverty rates, I did not find evidence to support my hypothesis. For the individual correlations, I found a weak relationship for homeowners and no relationship for renters. The regression analysis controlling for both factors did not obtain statistically significant results. Failing to find a relationship between housing cost ratios and poverty might indicate that the variables are affected by other mechanisms, or that they are not favorable measurements of affordability or wealth.

To observe the individual relationship for homeowner housing affordability and poverty ***Figure 2*** plots the values of the median housing cost ratio for homeowners against the average percent in poverty across California counties from 2017 to 2021. The points ***Figure 2*** are

centrally concentrated between 21% and 28% for the housing cost ratio, with a few visual outliers near 18% and 34%. Lesser variation on this scale could signal that Californian households who pay mortgage spend a similar portion of their income on this housing need. With a correlation coefficient r = – 0.179, there is a slight negative correlation between the median housing cost ratios and the poverty rates. Put differently, as the housing cost ratio for homeowners rises, the average percent in poverty declines. Finding a negative correlation between these variables could lead policymakers to promote ownership of homes and reduced mortgage payments in hopes of lowering a county's poverty levels. This output however represents a weak relationship, so it is unlikely that the median housing cost ratios for homeowners is directing changes in the average percent in poverty.

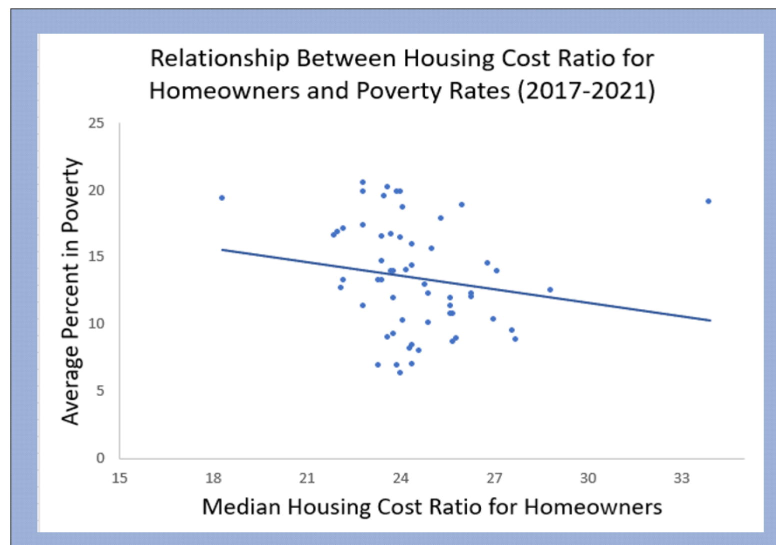

Figure 2: Housing Cost Ratio for Homeowners and Percent in Poverty

In evaluating the presence of a relationship for renters' income spent on housing and poverty rates, ***Figure 3*** maps out the median housing cost ratio for renters to the average percent in poverty for Californian counties from 2017-2021. The points on the graph below display greater variation than that of ***Figure 2*** as well as a more rightward skew. This conveys that overall, renters are likely paying a greater percentage of their income on housing needs as

compared to homeowners. However, the most prominent visual outlier, around 16%, is also the lowest housing cost ratio among *both* groups. The correlation coefficient of .06 indicated no relationship for renters' housing cost ratios and poverty rates. If there is not a relationship between rental housing affordability and percent in poverty, then policymakers may need to examine ways other than wealth savings through homeownership to reduce a county's poverty levels. Still, it will be crucial to explore whether the independent variables of ownership and rental housing affordability play a role together in affecting poverty rates.

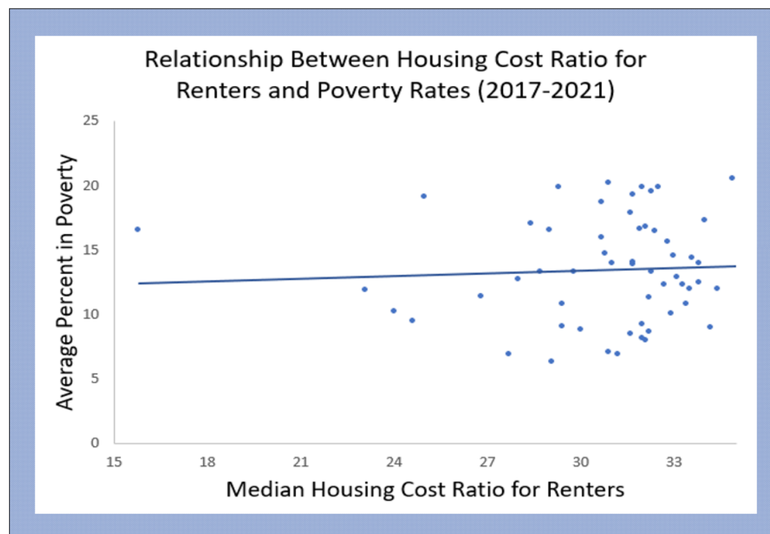

Figure 3: Housing Cost Ratio for Renters and Percent in Poverty

When accounting for both the homeowner and rental markets' housing affordability, I did not find statistically significant results to uphold my proposed theory. The summary output data evidenced in ***Table 1*** organizes the results of my regression test. The regression coefficient comparing the housing cost ratio for homeowners to county poverty rates was – 0.35. These results would indicate a negative relationship between the variables; however, since the p-value is 0.17 and greater than my threshold significance value of 0.05, this result is not statistically significant. Moreover, the results for rental housing cost ratios affecting poverty output a coefficient of 0.082, but these results carry little statistical significance due to the obtained p-

value of 0.60. Overall, this regression test revealed no presence of a relationship between housing cost ratios and percent in poverty. This contrasts my preliminary proposal in which I anticipated a significant negative coefficient for homeowners and a significant positive coefficient for renters.

	Coefficient	Standard Error	p-value
Median Housing Cost Ratio for Homeowners (2017-2021)	-0.352	0.254	0.171
Median Housing Cost Ratio for Renters (2017-2021)	0.082	0.154	0.596

Table 1: Regression Table for Housing Cost Ratio to Percent in Poverty[1]

My findings comprehensively suggest that housing affordability measured through the housing cost ratio and separated into renters versus homeowners does not affect wealth accumulation captured by a reduction in poverty. Although my hypothesis was not supported by my research, housing affordability could still have an impact on wealth accumulation or poverty. An improvement to this study could focus on alternate ways to measure housing affordability or wealth. Housing affordability could instead be measured by housing cost burden data which would relay the percent of renters or homeowners in each county who spend greater than 30 percent of their income on housing. To obtain this measure, future researchers would need to wait until the next set of data is published. Similarly, poverty or absent wealth may not have been the most analogous proxy for hindered wealth accumulation. The most direct measurement

[1] Notes for ***Table 1***:

- Dependent Variable: Average Percent in Poverty
- Independent Variables: Median Housing Cost Ratio for Homeowners, Median Housing Cost Ratio for Renters
- n=58

of wealth would account for home values, intangible investments, other assets, and debt. This data however is only published through special reports and does not reflect updated estimations.

Implications

Public policy is crucial to the housing narrative because government intervention through safety nets and other mechanisms can help the poorest households reach a sustainable level to further progress from. In addition to a number of implications for the virtue of this study, arriving at the result of no relationship between housing affordability and poverty rates relays crucial information for lawmakers across the state. Not finding a relationship between my outcomes of interest could signal that diminished housing affordability might not be the primary driver of poverty, or that homeownership may not be the primary factor uplifting households out of poverty. If this were the case, then policymakers would need to investigate the direct motivators of poverty by isolating all possible variables to understand which ones have the greatest impact. From there, they could initiate policy in favor of uplifting households out of poverty, further allowing them to improve social welfare.

Nevertheless, homeownership may still play some role in reducing poverty by allowing for the establishment of generational wealth. Apart from changing the way that housing affordability and wealth are operationalized, the lack of a relationship could be in part due to the presence of confounding variables. As such, controlling for variables such as race or education could induce a more robust result. To obtain an even more representative sample of Californian housing, future studies could also look into utilizing the zip code level of analysis. This would increase the number of observations and serve to better account for variation within counties.

Conclusion

California's housing crisis can be characterized by both a lack in rental housing units as

well as a lack of affordable housing overall. The 2022 induction of Senate Bills 8, 9, and 10 aimed to mitigate this trend by expanding the opportunities for affordable housing across the State. With a focus on how high housing costs may affect future wealth accumulation, stability, and inherited security, I questioned whether there may be a difference for homeowners versus renters on the outcome of poverty. After testing for this through linear correlations and a regression model, the primary conclusion drawn from my results indicated no relationship between housing affordability and an absence of wealth, as measured through housing cost ratios and poverty rates, respectively. If I had uncovered findings such that an increase in the median housing cost ratio across counties will decrease poverty rates for mortgage payers and increase poverty rates for renters, then policymakers would strive to promote homeownership rather than staying in the rental market. I did not however find evidence to support my hypothesis, likely due to the limitations of my study such as measurement validity and the presence of confounders.

When creating housing and homeownership promoting policies, lawmakers must be purposeful in enacting legislation such that it is applicable to the individuals who are facing crisis. They may want to further consider encourage saving for the future and access to opportunity in order to promote socioeconomic mobility. With housing and inequality serving as two key concerns in California’s policy space, further working to understand their potential intersection proves significant to our state’s social and economic wellbeing.

Works Cited

Allegretto, Sylvia A. "An Oversight Hearing on the State's Role in Addressing Income and Wealth Inequality." *EScholarship, University of California*, 9 June 2022, https://escholarship.org/uc/item/19f3z2sp.

Benhabib, Jess, et al. "Wealth Distribution and Social Mobility in the US: A Quantitative Approach." *American Economic Review*, Jan. 2015, https://www.aeaweb.org/articles?id=10.1257%2Faer.20151684.

California Association of Realtors. "Coronavirus Impacts on California's Housing Market." https://www.car.org/en/knowledge/pubs/newsletters/Newsline/Coronavirus.

California Association of Realtors. "Housing Affordability Index - Traditional." 2022, https://www.car.org/marketdata/data/haitraditional/. Accessed 20 Jan. 2023.

C. A. Legis. SB-8. Reg. Sess. 2021-2022 (2022). https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB8

C. A. Legis. SB-9. Reg. Sess. 2021-2022 (2022). https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB9

C. A. Legis. SB-10. Reg. Sess. 2021-2022 (2022). https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB10

California Housing Partnership. "Housing Needs Dashboard." *California Housing Partnership*, 27 May 2022, https://chpc.net/housingneeds

Cromwell, Molly. "Renters More Likely than Homeowners to Spend More than 30% of Income on Housing in Almost All Counties." *Census.gov*, 8 Dec. 2022, https://www.census.gov/library/stories/2022/12/housing-costs-burden.html.

Horowitz, Juliana, et al. “1. Trends in Income and Wealth Inequality.” *Pew Research Center's Social & Demographic Trends Project*, Pew Research Center, 17 Aug. 2020, https://www.pewresearch.org/social-trends/2020/01/09/trends-in-income-and-wealth-inequality/.

Kimberlin, Sara. “Throughout the State Californians Pay More than They Can Afford for Housing.” *California Budget and Policy Center*, 21 Jan. 2022, https://calbudgetcenter.org/resources/throughout-the-state-californians-pay-more-than-they-can-afford-for-housing/.

Lai, Clair, et al. “New Housing Laws: Navigating & Implementing SB 8, 9, 10.” *League of California Cities*, 2022, https://www.calcities.org/docs/default-source/city-attorneys/new-housing-laws-navigating-implementing-sb-8-9-10---paper.pdf?sfvrsn=1f19e872_3.

Pfeffer, Fabian T, and Robert F Schoeni. “How Wealth Inequality Shapes Our Future.” *RSF: The Russell Sage Foundation Journal of the Social Sciences*, vol. 2, no. 6, 2016, p. 2., https://doi.org/10.7758/rsf.2016.2.6.01.

Uhler, Brian. “California’s Geography of Wealth.” *Legislative Analyst’s Office*, n.d., https://lao.ca.gov/reports/2019/4093/ca-geography-wealth-090519.pdf.

US Census Bureau. “Mapping Housing Cost Ratios in the United States: 2017-2021.” *Census.gov*, 8 Dec. 2022, https://www.census.gov/library/visualizations/interactive/mapping-housing-cost-ratios-in-united-states-2017-2021.html.

US Census Bureau. “More than 19 Million Renters Burdened by Housing Costs.” *Census.gov*, 8 Dec. 2022, https://www.census.gov/newsroom/press-releases/2022/renters-burdened-by-housing-costs.html.

US Census Bureau. "Small Area Income Poverty Estimates (SAIPE) Program." *Census.gov*, 2022, https://www.census.gov/data-tools/demo/saipe/#/.

Wagle, Sanjay, and Tim Grayson. "Special Edition: Unlocking the State of Homeownership Part 1." *Spotify*, California Association of Realtors, 23 Feb. 2022, https://open.spotify.com/episode/2ib93k5oXvK1fLOXezIPgv?si=67f23fae132a41d8.