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Restructuring Your Wallet: Bridging the Gap Between California's Polarized Economy

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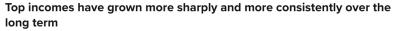
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Jade Morales Professor Pellaton POL 195 9 Dec 2024

Restructuring Your Wallet: Bridging the Gap Between California's Polarized Economy

Over the past four decades, the income inequality gap has continued to widen both on a national level and in California. In America, income disparities have remarkably grown with the richest 0.01%, which accounts for only 12,000 households, earning nearly 27 times more income compared to the bottom 20% of earners (Inequality.org 2024). In California, the 90th percentile—the top-income earners—had a 59% income growth, whereas the 10th percentile—the lowest-income earners—had a mere income growth of 13% over the last four decades (Figure 1) (Thorman 2024). In 2022 alone, the most recent data shows that Californians in the 90th percentile earned 10 times more than the 10th percentile (Thorman 2024). Time-serial data demonstrates that top incomes have grown more sharply and consistently throughout the years, reflecting the perpetual polarization of income inequality on a state-wide and nationwide scale.



Change in family incomes since 1980

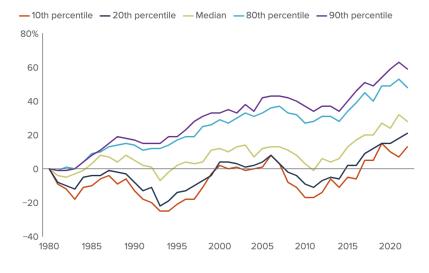


Figure 1. Source: PPIC

Broadly, how effective are redistributive tax policies in addressing economic inequality and their ability to foster upward mobility? Specifically, do differences in state income tax rates between the highest and lowest earners affect social mobility and equitably redistribute income in California? To answer this question, I observe the difference in 2022 state income tax rates of the highest and lowest earners across all 50 states. Then, I compare the difference in income tax rates to each state's corresponding income inequality and social mobility, as measured by the 2023 Gini coefficients and social mobility indexes. I find that differences in state income tax rates between the highest and lowest earners did not have a substantial impact on income redistribution and social mobility, and I conclude with a discussion of what this means for future research in redistributive tax policy in California.

Context and Significance

Income inequality refers to the uneven distribution of income between the rich and poor within a population. The Gini coefficient measures income inequality by analyzing the distribution of incomes within a population. It then uses this data to create a perfectly equal distribution to compare it to. A Gini coefficient of 0 represents perfect equality, whereas a coefficient of 1 represents absolute inequality; in this case, income is extremely unequal, and one group receives all the income. In California, this income inequality has persisted for decades, with roots tracing back to the 1980s. Over the past 40 years, income inequality in the state has steadily worsened, leading to a widening gap between income groups. Economic recessions exacerbate these disparities, disproportionately affecting those at the bottom of the income distribution. During the Great Recession of 2008, income inequality and unemployment in California reached a record high gap, exceeding the rest of the U.S., with families at the 90th percentile-top income earners-earning 11.9 times more than those at the 10th percentile-lowest income earners-and a 12.3% unemployment rate (Bohn & Schiff, 2011). While income losses occurred across the distribution, they were more severe for families at the bottom of the distribution as their income fell by over 21%, compared to a 5% decline for families at the top (2011). Incomes above the median remained significantly higher than the national average and were able to recover quickly and smoothly from the economic crisis, highlighting the uneven impact of the recession and its significance in California (2011).

Following the Great Recession, California's economy was slowly recovering from the high unemployment and stagnant wages. However, deep income disparities persisted, and the economic progress was short-lived, as another recession emerged in 2020 with the onset of the COVID-19 pandemic. It reversed many years of effort to narrow income inequality, leading to an economic decline and causing widespread unemployment, business closures, and devastatingly

high mortality rates. While most Americans faced economic hardship and high exposure to COVID-19—some more severely than others—billionaire wealth skyrocketed. Between 2020 and 2021, American billionaires received unprecedented gains, from approximately \$2.95 trillion to \$5.02 trillion, marking a 70.3% growth (Institute of Policy Studies). Fortunately, pandemic relief and safety net programs mitigated the economic and health impacts of the pandemic, preventing a significant surge in poverty and income inequality. By 2022, income gaps began to narrow again due to the small decline in billionaire capital earnings, slightly bridging the extreme polarization in income (Thorman & Montoya 2024).

Redistributive tax policies are widely recognized as effective tools for addressing poverty and income disparities. While federal redistributive tax policies play a critical role at the national level, state tax policies are much more tailored to address unique local conditions and priorities, given the specific economic, political, and social conditions of each state. States employ a variety of tax mechanisms to generate revenue, including income, sales, and property taxes. In California, personal income taxes are the primary source, generating \$123 billion during the 2022-23 fiscal year (California Department of Finance).

As of 2023, 43 states levy individual income taxes, and 41 of those tax wage and salary income. The exceptions are Washington, which taxes income only on capital gains, and New Hampshire, which taxes income solely on interest and dividends. Among these 43 states, 30 use a progressive income tax structure, while 11 impose a flat income tax. Additionally, 7 states, including Alaska, Florida, Nevada, South Dakota, Tennessee, Texas, and Wyoming, do not levy any individual income tax (Figure 2) (Tax Foundation, 2024). A progressive income tax levies higher tax rates as income increases and a lower tax rate as income decreases. Whereas a flat tax

rate is a standard tax that applies to all levels of income, regardless of how much an individual earns.

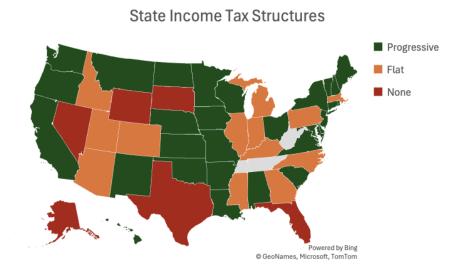


Figure 2. Data Source: Tax Foundation

California operates under a progressive income tax structure, with a rate of 13.3%—the highest in the nation (Tax Foundation, 2024). Despite these redistributive tax efforts, California remains one of the states with the highest levels of income inequality. According to the U.S. Census Bureau, Bureau of Labor Statistics (2022), and the Archbridge Institute (2023), California has a Gini coefficient of 0.49, an unemployment rate of 4.2, and a low social mobility index of 4.21. For context, a high level of income inequality is approximately 0.50.

Income inequality is a pressing issue that must be addressed, and implementing effective redistributive tax policies is a critical step in addressing this challenge. Despite being a diverse and affluent state, California fails to serve its constituents equitably, as resources are often monopolized. It is time to take accountability and prioritize investments in California—not just during times of economic crises, but consistently. California can foster upward mobility by reducing the tax burden on low and middle-income families in order to provide them the

resources they need to pursue education, entrepreneurship, and investment opportunities. This approach not only empowers residents but also strengthens the state's economic foundation and long-term prosperity.

Literature Review

Income inequality has long been a central issue in discussions of economic policy. With disparities in income continuing to widen, researchers and policymakers have increasingly looked to various forms of public policy as a tool to reduce inequality and foster upward mobility. In California, the Legislative Analyst's Office identifies economic mobility and inequality as critical fiscal and policy challenges. The state recognizes that social immobility perpetuates economic inequality, with certain groups facing disproportionate barriers to upward mobility. In response, California has implemented a variety of programs, including investments in education, rehabilitation initiatives, financial assistance, labor regulations, housing policies, and anti-discrimination laws, to address these systemic barriers and foster greater social mobility (Legislative Analyst's Office).

Government interventions aimed at addressing structural inequalities are crucial for enabling economic growth and fostering upward mobility. Providing access to resources that drive economic advancement plays a key role in overcoming these barriers. To measure social mobility, the Archbridge Institute developed a comprehensive Social Mobility Index that evaluates all U.S. states based on four pillars: entrepreneurship, institutions, education, and social capital. This index offers a valuable framework for operationalizing social mobility and allows for comparative analyses across states. By linking social mobility rankings to income inequality, the index provides a robust measure for assessing the relationship between economic inequality and mobility and helping to guide effective policy interventions.

Tax policy is also a form of government intervention that generates revenues to fund a variety of essential services and resources while addressing pressing issues like income inequality. Bakija's research examines progressive income taxation at the federal level and its major contribution in generating 10.2% of GDP revenue in the fiscal year 2022 (Bakija, 2024). Such studies underscore the potential of progressive tax policies, such as individual income taxes, to create the necessary funding to combat inequality. However, the key lies in strategically allocating those funds to programs that foster upward mobility, mitigate poverty, and provide tax relief for lower-income households.

Similarly, other studies emphasize preliminary measures to reduce poverty by reducing regressive tax burdens that drive low-income households into impoverishment in the first place (Kleiman 2020). Both studies stress the importance of reforming our current fiscal system to help avoid or mitigate high levels of poverty by advocating for poverty-relief programs and tax-relief policies targeted at lowering the tax burden for low-income households and offsetting living costs with minimal pay. One example of such a targeted approach is the Earned Income Tax Credit (EITC), a progressive income-based tax credit that incentivizes employment while also helping to reduce poverty and promote income mobility (Hoynes 2019). Hoynes' research demonstrates the effectiveness of primarily tax-relief programs as they offset the negative effects of unemployment on income inequality while also allowing families in need to retain more of the income in their wallets and improve their economic situation.

In addition to federal income taxation and programs, a significant portion of taxation occurs at the state and local levels, where tax policies are tailored to the unique economic, social,

and political circumstances of each state or jurisdiction. Unlike federal tax policies, which are more uniform, state and local income tax structures vary widely across the U.S., with some exacerbating income inequality through regressive taxation systems. These systems disproportionately burden lower-income households, as they bear a larger share of the tax burden relative to their income compared to top earners. For example, research from the Institute on Taxation and Economic Policy (2024) highlights the disparities caused by regressive tax structures, such as flat tax rates, the absence of state income taxes, and reliance on high sales and excise taxes. The study argues that these systems widen income inequality by disproportionately shifting the tax burden onto lower-income households. The research advocates for comprehensive progressive income taxation across all states, evaluating its potential to reduce income inequality more effectively than regressive tax structures. Unlike regressive taxation, progressive tax policies can better address income disparities and promote investments for income mobility.

Policymakers and researchers have also proposed an alternative tax policy approach, progressive wealth taxation, instead of a progressive income tax. Both tax policies aim to address income disparities, but progressive wealth taxation is more aggressive as it centralizes the focus on markedly increasing tax revenue into redistributing incomes by targeting top earners with extreme wealth, also known as billionaires at the top 0.01%. State income tax structures are not as penal on the most wealthy billionaires. While progressive wealth taxation has the potential to yield significant benefits, it remains controversial and could lead to capital flight and reduced investments. Critics argue that such policies are unfair and may harm economic growth. However, studies exploring millionaire migration patterns in response to progressive income taxes suggest that millionaires who have already established their wealth and networks within a

state are less likely to leave, given the economic opportunities for incremental growth that remain (Young et al., 2016).

Theory and Hypotheses

I hypothesize that as state income tax differences between the highest and lowest earners increase, income inequality will decrease and social mobility will increase. The causal mechanism involves examining income taxation differences across states in 2022 to assess the effectiveness of progressive income tax structures in redistributing income. Greater tax rate differences indicate higher progressivity, and reducing state income tax rates for low- and middle-income households provides tax relief, increasing their disposable income. This additional income can be invested in opportunities that enhance upward mobility and drive economic growth, such as education, retirement savings, investments, and entrepreneurship.

Research Design Section

My independent variable measures the difference between the highest and lowest income tax within a state. It is measured by calculating the difference between the income tax rate applied to the highest earners and the income tax rate applied to the lowest earners. The Tax Foundation, a nonpartisan tax policy nonprofit, has relevant data on state income tax rates and brackets from 2015-2024, but in this case, I only examine 2022. Personal income taxes vary by state and include graduated tax rates, flat tax rates, or no income tax altogether. I chose this operationalization because tax policies play a major role in income inequality, and personal income taxes are a significant source of revenue for many U.S. states, particularly California. Levying a progressive income tax structure where households are equitably taxed based on their

income and the wealthy are held accountable for their fair share can relieve the tax burden imposed on most low- and middle-income households. By comparing each state's varying income tax structures, we can analyze their relationship with income inequality and assess the effectiveness of redistributive tax policies—specifically graduated income tax structures—in promoting income redistribution and creating opportunities for social mobility.

My dependent variables are income inequality and social mobility. The U.S. Census Bureau provides data on the Gini coefficient, a statistical tool that measures the distribution of income in a given area and quantifies its deviation from a perfectly equal income distribution to determine a measurement of inequality. The Archbridge Institute published data on the social mobility ranking of all 50 U.S. states. The raw variables such as entrepreneurship, education, institutions, and social capital are converted into indices ranging from 0-10 to assess levels of social mobility. These variables allow me to operationalize the levels of income inequality and social mobility within each state in order to test my hypothesis and analyze if my dependent variables have any relationship to state income tax rates.

My control variables are the unemployment rate and the non-white population. The U.S. Bureau of Labor Statistics measures the unemployment rate by taking the number of unemployed individuals and dividing it by the labor force. I measured the non-white population by using the U.S. Census Bureau's demographic data to get the entire state population size and subtracted only the state's White population. While many variables influence income inequality and social mobility, my research focuses on demographic factors and economic conditions, such as unemployment rates and racial disparities, as these significantly skew the data. High unemployment levels often weaken the economy and exacerbate income inequality, creating outliers among those without income. Additionally, racial disparities in income remain highly polarized, with minorities, particularly Black and Latino populations, earning disproportionately less income and less opportunities for social mobility than their White counterparts due to systemic discrimination. I chose these operationalizations to measure all people of color more generally and control for the individuals who receive no income as they both significantly impact my dependent variables.

My unit of analysis examines multiple cases at a single point in time. For instance, it analyzes 50 U.S. states, with a temporal scope spanning 2022-2023. My independent variable focuses on 2022 income tax rate differences between the highest and lowest earners, while my dependent variables are operationalized as 2023 measures of income inequality and social mobility. To test the relationship between the independent variable (income tax differences between the highest and lowest earners) and the dependent variables (income inequality and social mobility), I conducted two statistical analyses: a Pearson's r to measure the strength and direction of the correlation, and a p-value test to determine the statistical significance of these relationships. In the analysis of income tax differences and income inequality, measured by the Gini coefficient, unemployment rates were used as a control variable. For the relationship between income tax differences and social mobility, measured by the social mobility index, the percentage of the non-white population was included as a control variable.

Results

Figure 3 is a box-and-whiskers plot that examines the relationship between varying state income tax structures—progressive, flat, and none—and their corresponding social mobility index scores. The findings in Figure 3 suggest that states with progressive income tax structures have the highest median social mobility index in comparison to flat or none. The box indicates

that states with no income tax structures have more variability within the interquartile range, while the whiskers indicate that states with a progressive income tax structure have more variation in the data altogether.

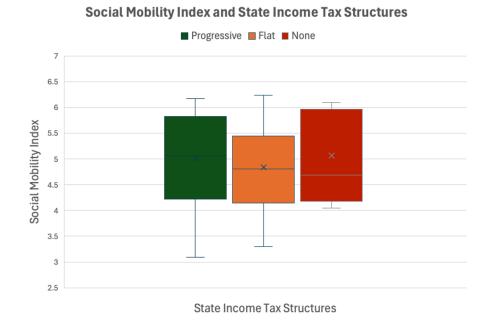
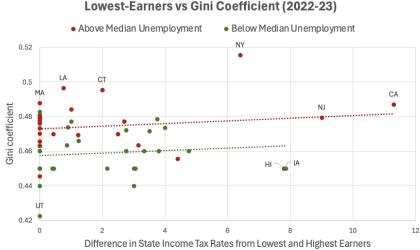


Figure 3. Data Source: Tax Foundation and Archbridge Institute

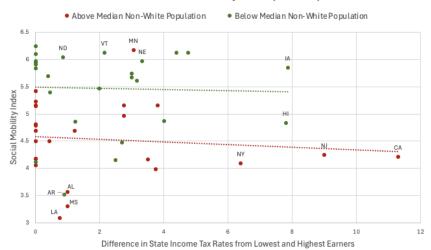
The scatterplot in Figure 4 depicts the relationship between the difference in state income tax rates applied to the highest and lowest earners and the Gini coefficient (a measure of income inequality) for states categorized above or below the median unemployment levels. The findings suggest a weak positive correlation (r=0.12) and no statistical significance (p=0.40) between the difference in state income tax rates of the highest and lowest earners and income inequality. States above median unemployment tend to have higher income inequality compared to states below median unemployment.



Difference in State Income Tax Rates from Highest and Lowest-Earners vs Gini Coefficient (2022-23)

Figure 4. Data Source: Census Bureau, Tax Foundation, and Labor Bureau Statistics

Figure 5 illustrates the relationship between the difference in state income tax rates applied to the highest and lowest earners and the social mobility index for states categorized above and below the median non-white population. The findings suggest a weak negative correlation (r=-0.04) and no statistical significance (p=0.76) between the difference in state income tax rates of the highest and lowest earners and social mobility. States with an above-median non-white population tend to have less social mobility compared to states with below-median non-white populations.



Difference in State Income Tax Rates from Highest and Lowest Earners vs Social Mobility Index (2022-23)

Figure 5. Data Source: Census Bureau, Tax Foundation, Archbridge Institute

Discussion and Research Implications

Do differences in state income tax rates between the highest and lowest earners affect social mobility and contribute to a more equitable redistribution of income in California? Based on the findings, the results do not support my hypothesis that as differences in state income tax rates applied to the highest and lowest earners increase, income inequality decreases, and social mobility increases. The weak correlations and lack of statistical significance suggests that the sample size was likely too small to draw any notable results. In addition, other confounding factors may have a much stronger influence on social mobility and income inequality than state income tax rates alone.

While my control variables were insightful to the data, it is important to acknowledge that social mobility and income inequality are influenced by a complex array of factors beyond income taxation, including education, inflation, healthcare, and other intersecting public policy issues. These wide-ranging demographic, geographic, and economic factors shape income inequality and social mobility differently and may vary significantly across different states. These factors, along with state income taxation, may help explain why the results observed in California could differ from those in other states, or why the anticipated patterns were not supported in this study. Given the time constraints and scope limitations of this research topic, I prioritized controlling for unemployment and the non-white population, as these variables were foundational in understanding the disparities in social mobility and income inequality.

Although my hypothesis was unsupported, my contribution of policy and data analysis, evaluation, and findings can serve to inform future policy researchers about the effectiveness, efficiency, equality, and equity of redistributive tax policies in addressing income inequality and enabling upward mobility. Inquiring them to think about who is actually benefiting from these tax policies and if they are serving their intended purpose and how we can improve them while also accounting for the multifaceted confounding variables that come into play and adjusting for the constantly changing conditions. My goal is for my findings to encourage future policy researchers to fill in the missing gaps in my research and design pilot programs that collaborate with existing programs to break down systematic barriers to social stratification through policies that promote income equity and upward mobility.

Limitations and Research Extensions

If given the opportunity to extend my research, two key areas I would address are conducting a time-series analysis and examining income taxation at all levels of government—local, state, and federal. A time-series analysis, combined with my current cross-sectional approach, would enhance the study by analyzing data over the past 40 years, a period in which income inequality became especially pronounced in California. This would allow for a deeper exploration of trends, economic recessions, the successes and failures of policy implementations, and the evolving impact of redistributive tax policies across different time periods and states.

Additionally, by examining income taxation at all levels of government, I would acknowledge that state income taxes are only one component of the overall tax burden. While tax rates vary across states, many Americans are subject to federal and local taxes as well. A comprehensive analysis of federal, state, and local tax structures would provide a clearer picture of how regressive taxes truly are and how they affect different income groups. This broader perspective would enrich the understanding of how tax policies impact income inequality and social mobility on a more holistic level.

One challenge I encountered while collecting my data was not initially recognizing that different filer status groups are subject to different tax rates based on their income brackets (this is not the case in states with no income tax or flat tax structures). As a result, I had to focus my analysis on one type of filer status—specifically, single filers. Another challenge was identifying a variable that could accurately capture the progressivity of the tax structures across different states. Initially, I attempted to measure this using a ratio, but that was impractical and eventually, I decided to focus on the difference between the highest and lowest income tax rates. Although this may not have been the most optimal method, measuring the difference proved to be a reasonable and effective alternative for assessing progressivity in the context of my study. I would have liked to include all possible confounding factors, but due to time constraints and the limited scope of this research project, this was not feasible. However, if I were to expand the analysis, I would prioritize adding education and cost of living as key variables. A new yet similar area of research question I would be interested in exploring is the barriers that the poverty

line imposes on lower-middle-income households in accessing tax relief programs. I would also be interested in examining the effectiveness of these programs in reducing income inequality.

Conclusion

In conclusion, my research project has examined the relationship between state income tax structures and their effects on income inequality and social mobility, with a particular focus on the differences in income tax rates between the highest and lowest earners. The analysis revealed that progressive income tax structures were not as effective in reducing income inequality or increasing upward mobility as initially expected. Specifically, no statistical significance or strong correlation was found between state tax differences and income inequality or social mobility. Although my hypothesis was not supported, this could be attributed to several factors, such as a small sample size or the influence of confounding variables that may have a more significant impact on these outcomes. These variables could encompass a wide range of public policy areas, including housing, education, and immigration, among others. Without accounting for these factors, the findings are limited in their scope.

Despite these challenges, this research offers valuable insights for future researchers and policymakers. It encourages a shift in focus toward economic inequalities and opportunities for fostering income mobility through effective, redistributive tax policies. Moreover, it encourages policymakers to fill in the missing gaps in my research and suggests tax policies tailored to fit the unique economic, social, and political conditions of each jurisdiction. This approach could ultimately enhance the effectiveness of tax systems in addressing income inequality and promoting upward mobility.

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