

The Evolution of Income Inequality in the U.S.
Dakota Storm Peterson

I. Introduction

Scholars have understood, for some time, that growth and prosperity are not equally shared among all members of society. In fact, rarely have the rich and the poor shared the economic pie in an equal fashion. History suggests that the poor, the feudal, the less well-off typically serve the elite and their interests. Kuznets was one of the first economists to capture and study this phenomenon. Grappling with national accounts and the relationship between economic growth and inequality, Kuznets found that economic growth was not necessarily shared equally among society. Kuznets hypothesized that income inequality resembled an inverted “U” shape, growing with industrialization and then declining as industrialization reached its peak and policies of redistribution spread wealth throughout society. More recent data, however, suggests that income inequality resembles a “U” shape as it has risen in the late 20th and early 21st century.

This paper seeks to examine the rise of income inequality in the late 20th and early 21st century at the U.S. national, regional, and state level. Furthermore, it seeks to explain the growth in income inequality by analyzing the composition of income at both the national level and among a sample of states in the U.S. This paper uses the Gini coefficient, the total income share of the top 1%, and the total incomes across different quintiles to analyze income inequality.

II. Brief Literature Review

There is an extensive amount of literature on the distribution of income and income inequality in the U.S. Scholars’ focus over the last few decades has focused on the general growth in income inequality found at the national level while others have shifted focus towards understanding the distribution of income at the regional and state level within the U.S. Kuznets (1941) was the first to theorize on inequality over time. Since, major contributions from Piketty

and Saez (2003), and others have examined the national distribution of income and wealth in the U.S. across the 20th century. Stiglitz (2016) has commented on the negative growth effects of excessive inequality. Piketty, Saez, and Zucman (2018) provided a new account of the pretax and post-tax distribution of national income in the U.S. Lastly, Manduca (2019) and Gaubert et al. (2021) analyze income inequality at the regional level in the U.S.

- Kuznets' (1955) work on economic growth and income inequality hypothesized that income inequality grew during periods of industrialization characterized by rapid growth and subsequently declined once states reached a certain level of industrialization. This infamous inverted "U" shape of income inequality was implied by the growing welfare state that allowed for greater distribution of wealth among industrialized states.
- Stiglitz (2016) examines the notion of "a rising tide lifts all boats." The author critiques contemporary thought on economic growth and income inequality and implies that excessive inequality suppresses economic growth, eventually suggesting policies to promote more equality and increase growth.
- Piketty and Saez (2003) provide a new series of US income and wage inequality from 1913 to 1998 based tax return statistics. Building off Kuznets' work, they use pretax income from IRS data to capture the long run income inequality over the 20th century. Their findings contradict Kuznets' inverted "U" shape hypothesis and instead show a U-shaped curve. Specifically, they find that economic shocks from World War I and the Great Depression contributed to declines in top share's income decline and has increased since the 1970s due to gains in capital income compared to wage income.
- Piketty, Saez, and Zucman (2018) estimate the distribution of national income in the United States since 1913 and growth rates for each quintile of the income distribution.

Furthermore, they compute the distribution of pretax and post-tax income to analyze the inequality effects of redistribution. While pretax real per capita national income has stagnated for the bottom 50%, their findings suggest that real national income has increased significantly for the top 1%. The increase in inequality was originally due to labor income differences across the distribution but has been attributed to capital income increases since 2000 with the government only offsetting a small fraction of the increase in income inequality.

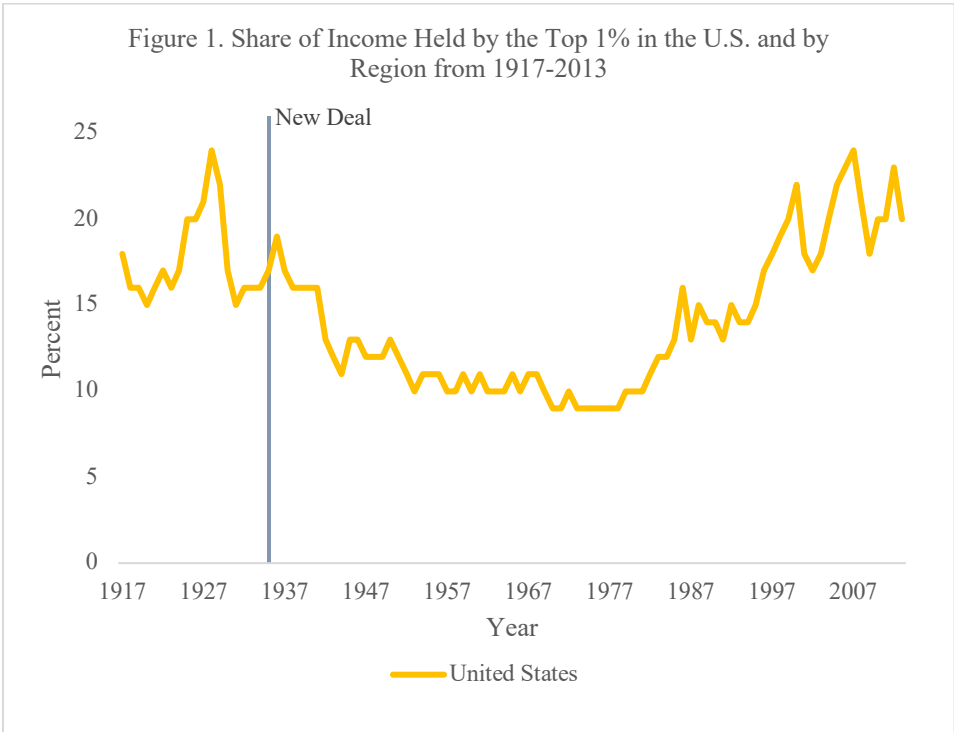
- Manduca (2019) focuses on regional economic divergence, documenting the existence and estimating the causes of divergence. The author finds that the increase in U.S. income inequality has accounted for a significant increase in the spatial inequalities within different states and regions. Income sorting, where individuals' movement impacted the distribution and level of income in a given region, was a less significant factor in observed regional economic divergences.
- Gaubert et al. (2021) examine income inequality across U.S. states and counties from 1960 to 2019. The authors document a divergence in pretax incomes at the local level since 1990. The authors show that transfers have lessened divergence to an extent, but there has been a trend of increasing income inequality at the local level.

III. Examination

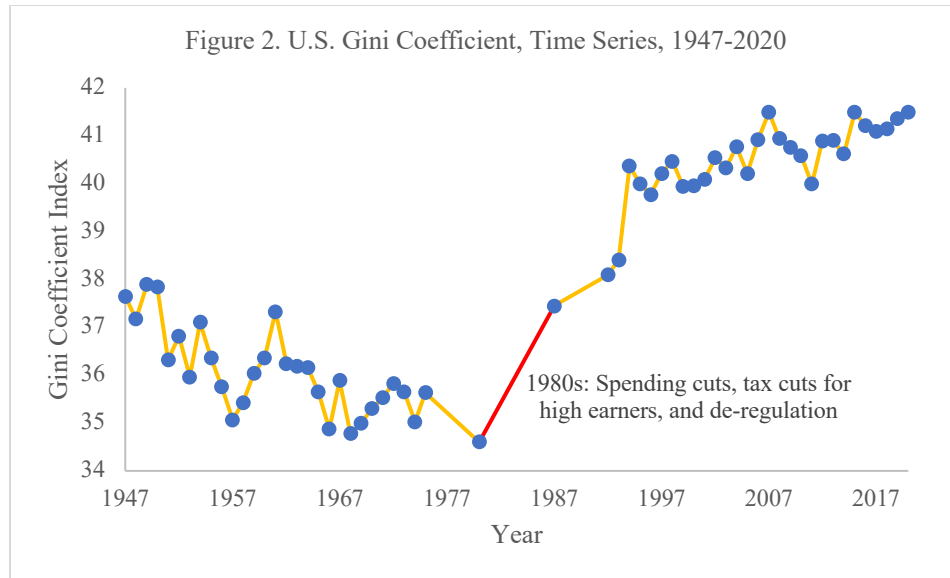
III.1 U.S. Evolution of Income Inequality

The evolution of U.S. income inequality over the last century resembles a “U” shape, decreasing over most of the 20th century before rising substantially at the end of the 20th century and into the 21st century. Specifically, the income share of the top 1% in the U.S. at the start of

the 20th century made up about one quarter of total income. In the late 1970s, however, the income share of the top 1% in the U.S. reached its lowest point, around 9% of total U.S. income, and the U.S.’s Gini coefficient was 35. Then, from 1980 through the early 2000s, the share of income held by the top 1% nearly tripled to pre-Depression levels in 2004, with the Gini coefficient at 41. Figure 1 shows the time path of the share of all income held by the top 1% and Figure 2 shows the time path of the Gini coefficients for the U.S.



Source: Estelle Sommeiller, Mark Price, and Ellis Wazeter, “Income inequality in the U.S. by state, metropolitan area, and county,” Graph accessed June 2, 2023.

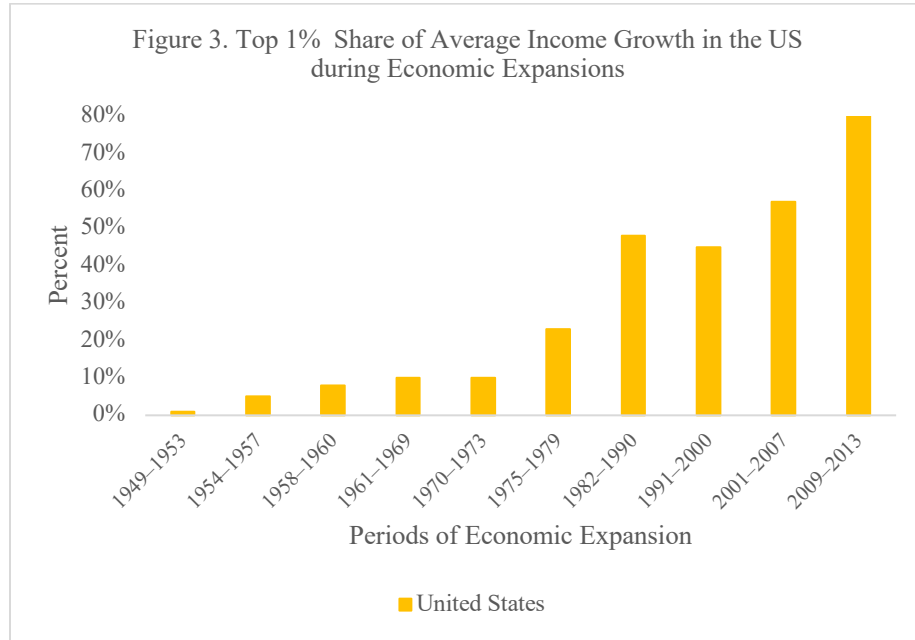


Source: World Income Inequality Database (WIID), version 4.0, accessed June 2, 2023.

Figure 1 provides evidence of a “U” shaped evolution of income inequality. Inequality declined beginning in the 1930s after the New Deal raised minimum wages, increased employment, and improved collective bargaining in the private sector. In contrast, tax cuts, reduced spending, and de-regulation in the 1980s coincided with the sharp rise in income inequality, as indicated by a nearly 3 point jump in the Gini coefficient in a single decade. A steady rise in the Gini coefficient throughout the 2000s suggests that while income inequality may be plateauing, the share of income continues to favor more wealthy individuals.

The growth in income inequality over the last century has been the product of the top 1% appropriating a greater share of overall economic and income growth. For example, the top 1%’s average income growth made up about 10% of the total income growth experienced during the 1960s US economic expansion. In comparison, the top 1%’s average income growth made up about 85% of the total income growth experienced in the economic expansion following the recession, indicating the top 1% increasingly claims a greater share of the economic pie during

periods of economic growth. Figure 3 shows the share of the average income for each economic expansion that the top 1% has claimed.



Source: Estelle Sommeiller, Mark Price, and Ellis Wazeter, “Income inequality in the U.S. by state, metropolitan area, and county,” Graph accessed June 2, 2023.

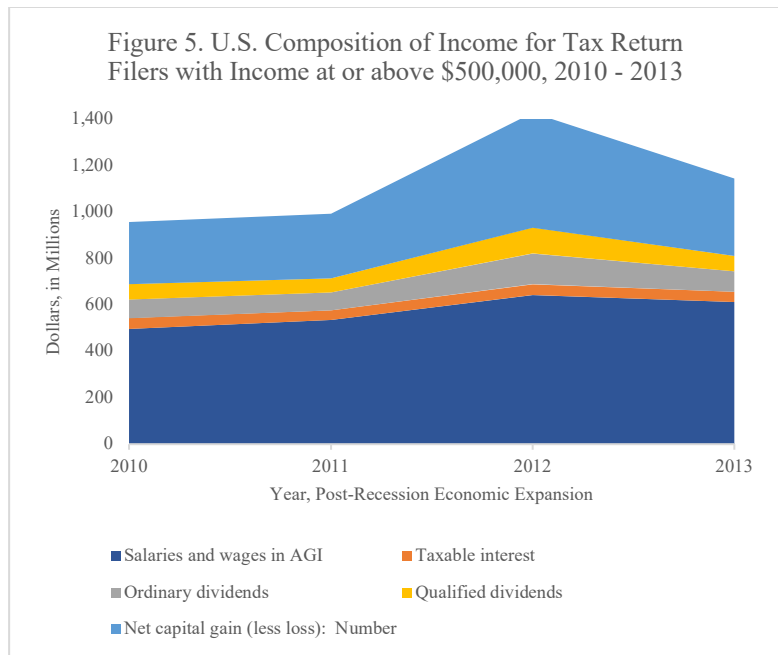
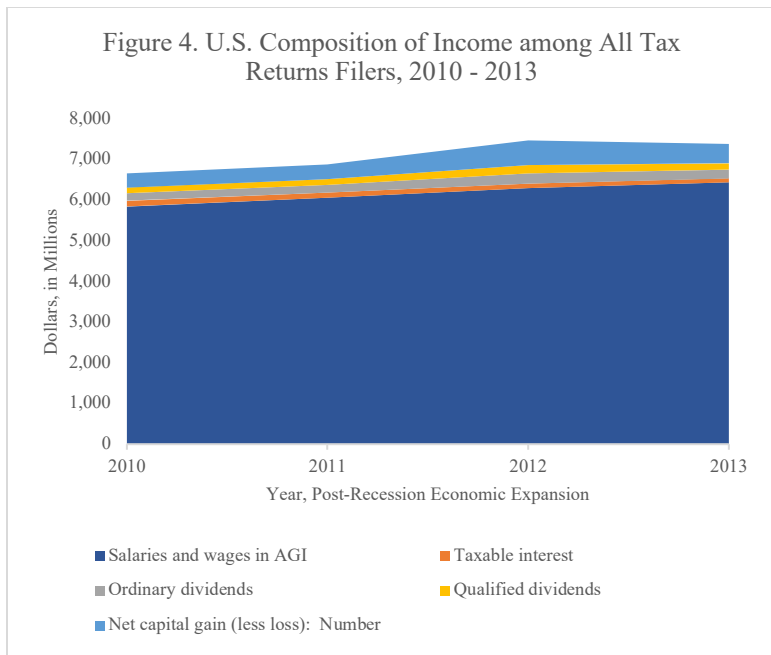
Figure 3 shows the benefits of economic growth have largely been captured by the elite top 1%. This phenomena particularly occurred beginning towards the end of the 1970s when the share of income held by the elite top 1% began to increase in Figure 1. Additionally, the large leap in the Gini coefficient in the 1980s, shown in Figure 2, occurred over the same time period that the top 1%’s share of average income growth more than doubled during the 1980s economic expansion.

III.2 Post-Recession Economic Expansion and the Composition of Income

Analyzing the post-recessionary economic expansion period from 2009 to 2013 suggests that the top 1% not only benefit significantly more from economic growth, but that income growth is driven by non-salary and non-wage income. For example, based on real personal

income data from the Bureau of Economic Analysis and Statistics of Income data from the IRS, real personal income increased by about \$1.2 trillion from 2009 to 2013. Of those that filed income tax returns with the IRS with adjusted gross income (AGI) above \$500,000 (roughly the top 1%), their per capita increase in income was about \$770,000. In comparison, those that filed returns with AGI below \$500,000 experienced a per capita increase in income of about \$2,400, suggesting that for every dollar of income earned by the 99%, the top 1% earned \$320 in income during the post-recession period of US economic expansion.

The composition, however, of the income earned by the top 1% and the 99% is significantly different. Based on IRS Statistics of Income data, the majority of personal income is composed of salaries and wage income. For example, 83% tax returns with income below \$500,000 that filed with the IRS reported some amount of salary or wage income in 2013, making up about 77% of the total income reported by the bottom 99%. In contrast, about 85% of those with income above \$500,000 reported salary or wage earnings in 2013, but those earnings only made up 39% of their total income. Figure 4 shows the composition of income for all returns filed during the post-recession economic expansion, and Figure 5 shows the composition of income for the top 1% in the post-recession economic expansion period.

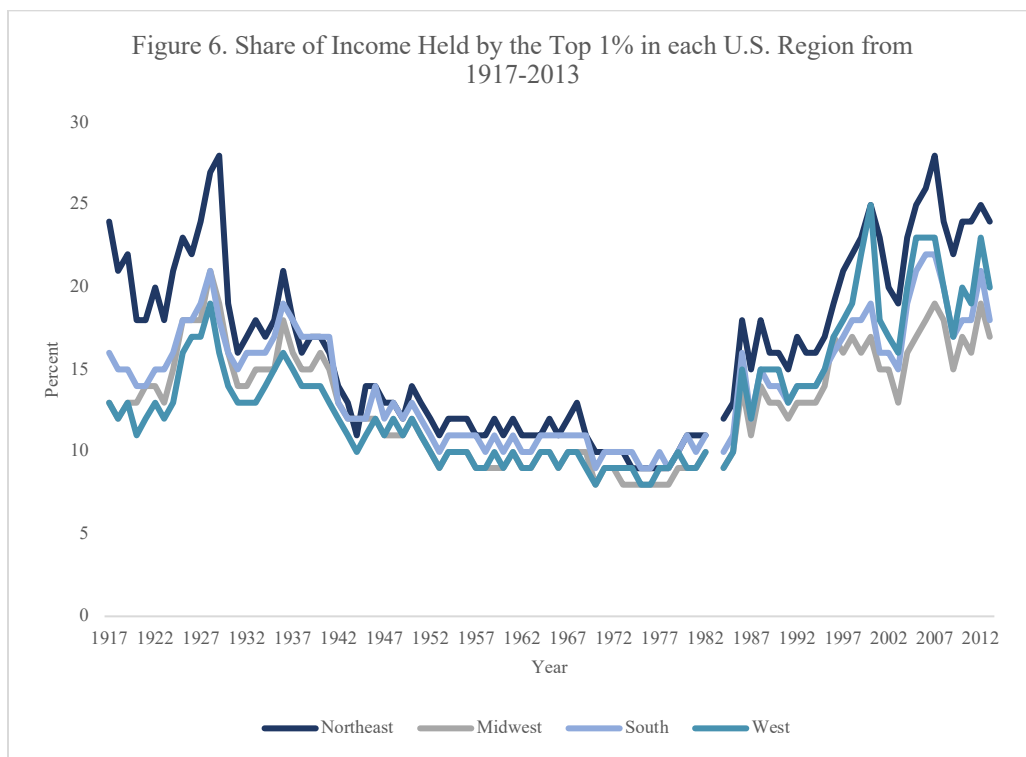


Source: Internal Revenue Service, Statistics of Income 2010, 2011, 2012 and 2013

Figure 5 shows that nearly half of the income of the top 1%, with income at or above \$500,000, comes from non-salary and wage earnings. This is in stark contrast to the composition of income for all returns, shown in Figure 4, indicating that extreme wealth concentrated in the top 1% comes from coupon clipping rentiers benefitting primarily from capital gains and dividends. A closer examination of reported income over the post-recession economic expansion suggests that while wages for all filers grew at a steady rate, capital gains and dividends grew at a more significant rate for the top 1%, particularly from 2011 to 2012. This suggests that declining prosperity shared across the income distribution, suggested in Figure 3, may be attributable to growth in non-salary income, such as net capital gains and dividends. This is consistent with Piketty and Saez (2003) hypothesis that while wage and salary income contributes to income inequality, non-salary income has been increasingly driving a wedge between the income share of the 99% and the 1%.

III.3 Inequality at the State Level

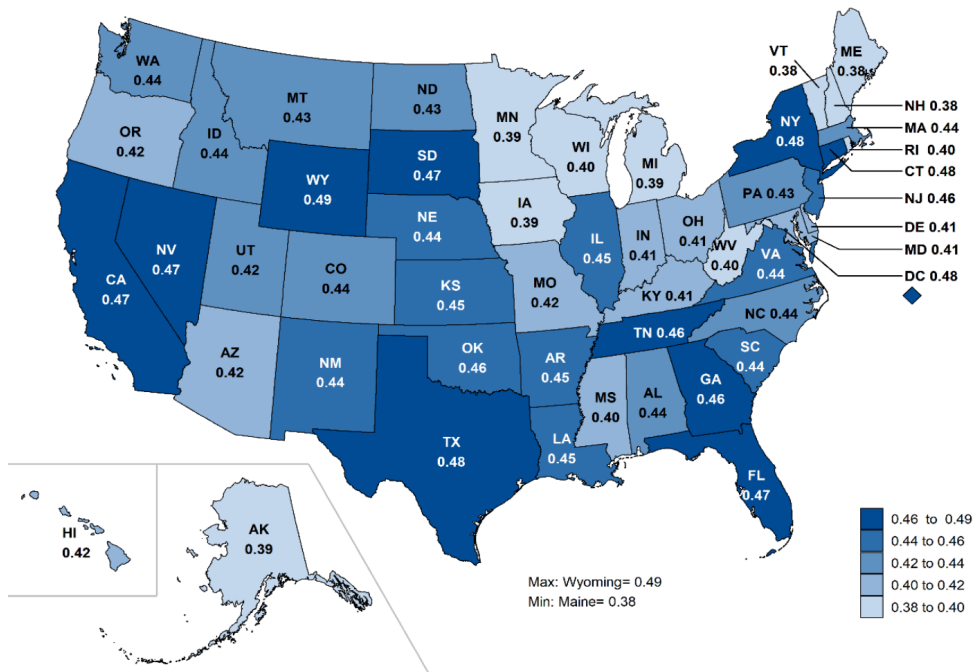
Within the U.S., inequality differs substantially by region and by state. The Northeast tends to have the largest gap in incomes between the rich and the poor, while the South, Midwest, and West tend to have less income inequality. For example, in periods of extreme income inequality across the 20th century and early 21st century, the top 1% in the Northeast held about 27% of total income in the region, around 7 to 10 percentage points more than the other regions. Figure 6 shows the evolution of the share of income held by the top 1% for the Northeast, Midwest, South, and West.



Source: Estelle Sommeiller, Mark Price, and Ellis Wazeter, “Income inequality in the U.S. by state, metropolitan area, and county,” Graph accessed June 2, 2023.

Figure 6 shows a similar trend of income inequality throughout the 20th century. However, inequality in each region differs substantially by state. The states with the most inequality tend to be those with large amounts of wealth and personal income, suggesting that income inequality is not necessarily tied to overall wealth, but the difference between the poorest and the richest quintiles across the income distribution. That is, states with less total personal income may have less income inequality relative to states with more total personal income because the entire population has a lower income per capita, indicating that the difference between the 80th percentile and the 20th percentile is smaller. Figure 7 provides the Gini coefficient by state in 2018 and Figure 8 provides the total personal income and share of income by quintile in each state.

Figure 7. Gini Coefficient by State, 2018



Source: U.S. Bureau of Economic Analysis.

Figure 8. Total Personal Income and Share of Income by Quintile by State, 2018

State	Personal Income (\$ Millions)	0-20th Percentile	20-40th Percentile	40-60th Percentile	60-80th Percentile	80-100th Percentile
Alabama	207,054	5.3	10.0	13.7	20.1	50.9
Alaska	44,103	5.9	11.4	16.2	21.5	44.9
Arizona	315,732	5.7	10.4	14.4	21.0	48.5
Arkansas	130,865	5.5	9.8	13.1	18.8	52.7
California	2,431,822	4.9	9.1	13.9	20.5	51.7
Colorado	331,955	5.5	9.8	14.2	20.4	50.2
Connecticut	264,263	4.6	8.6	13.0	19.1	54.6
Delaware	51,310	6.1	10.3	13.6	20.6	49.4
District of Columbia	56,573	4.2	8.6	13.2	20.5	53.5
Florida	1,087,189	5.2	9.1	12.6	18.8	54.3
Georgia	493,175	5.1	9.5	13.5	20.3	51.7
Hawaii	76,184	5.4	10.0	15.4	21.9	47.3
Idaho	76,681	5.8	10.2	13.4	19.7	50.9
Illinois	728,366	5.1	9.2	13.7	20.5	51.5
Indiana	316,782	6.3	10.2	14.6	20.7	48.3
Iowa	156,072	6.3	10.7	15.1	21.2	46.7
Kansas	148,956	5.2	9.2	13.9	20.4	51.3
Kentucky	188,362	6.1	10.2	14.0	20.3	49.3
Louisiana	215,112	5.4	9.6	13.3	19.9	51.9
Maine	65,122	6.0	10.3	15.1	22.3	46.2
Maryland	372,197	5.5	10.4	14.9	22.0	47.1
Massachusetts	486,204	5.0	9.1	14.1	20.9	51.0
Michigan	476,477	6.1	10.4	14.4	20.8	48.2
Minnesota	319,619	5.9	10.4	15.0	21.1	47.6
Mississippi	112,818	6.0	10.8	14.6	20.5	48.1
Missouri	289,454	5.5	9.8	14.3	20.8	49.6
Montana	50,989	5.8	9.7	13.7	20.7	50.1
Nebraska	101,204	5.4	9.6	14.1	20.8	50.1
Nevada	149,789	5.3	9.5	13.5	19.6	52.1
New Hampshire	83,161	6.2	10.6	15.3	22.1	45.8
New Jersey	597,005	4.8	8.8	13.7	20.6	52.1
New Mexico	86,532	5.9	9.8	13.8	19.8	50.6
New York	1,316,440	5.0	8.8	12.8	19.1	54.3
North Carolina	475,483	5.5	9.6	13.6	20.4	50.8
North Dakota	42,822	5.6	10.1	14.6	21.0	48.6
Ohio	569,766	5.9	10.1	14.3	20.9	48.8
Oklahoma	182,574	5.5	9.4	13.5	20.2	51.3
Oregon	211,415	5.8	10.0	14.3	21.1	48.8
Pennsylvania	716,337	5.6	9.9	14.0	20.8	49.7
Rhode Island	57,372	5.9	10.2	14.5	20.6	48.8
South Carolina	222,565	5.6	10.0	13.7	20.0	50.7
South Dakota	46,032	5.3	9.2	13.4	19.6	52.5
Tennessee	319,949	5.6	9.6	13.4	19.6	51.8
Texas	1,483,122	5.0	9.1	13.1	19.7	53.1
Utah	146,326	5.7	10.4	14.0	19.7	50.2
Vermont	33,437	6.4	10.8	14.6	21.3	46.9
Virginia	484,937	5.1	9.2	14.1	21.5	50.1
Washington	454,257	5.2	9.7	14.5	20.6	49.9
West Virginia	74,778	6.1	10.4	14.9	20.8	47.9
Wisconsin	297,730	6.1	10.2	14.8	20.8	48.1
Wyoming	34,691	4.7	8.7	13.4	19.2	54.0

Source: U.S. Bureau of Economic Analysis.

As shown in Figure 7 and 8, California, New York, Florida, and Texas have the largest income inequality and the largest total personal income, with the 80-100th percentile holding

more than half of all of the income in the state. Additionally, states such as Vermont, Maine, New Hampshire, and West Virginia with lower total personal income have less inequality.

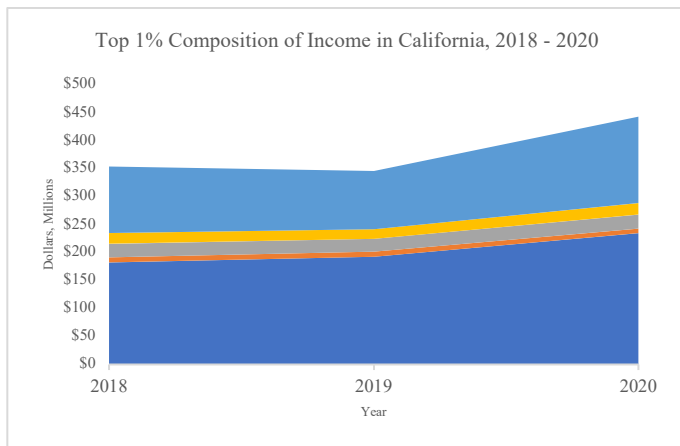
A closer examination of the composition of income from 2018 to 2020 for a few selected states – California, Texas, Colorado, and Vermont, and Wyoming – provides insight into salary versus non-salary income, the difference between states with similar incomes but different demographics, and the effects of the beginning of COVID lockdowns on the wealthy compared to the poor. Figure 9 shows the composition of income for the top 1% and the those with income from 0 – 30th percentile.

Figures 9. The Composition of Income for the Wealthy and Lower/Lower Middle Class in California, Texas, Colorado, Wyoming and Vermont, 2018 – 2020.

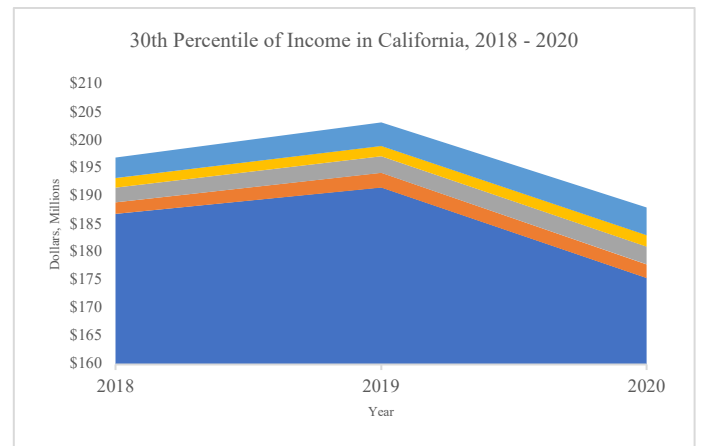
Legend:

- Net capital gains
- Qualified dividends
- Ordinary dividends
- Taxable interest
- Salaries and wages in AGI

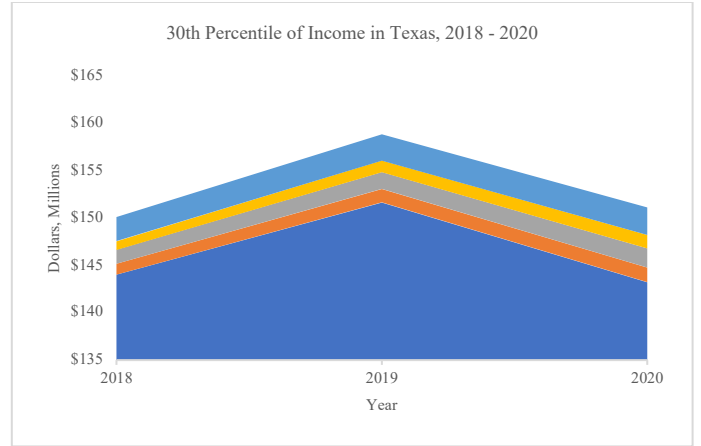
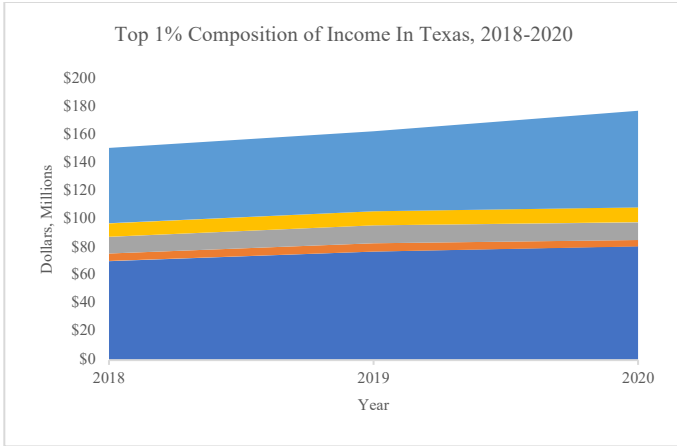
Composition of Income for the Top 1%



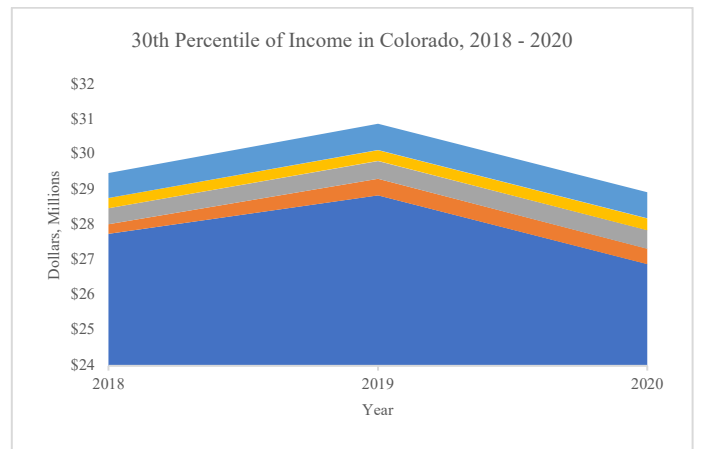
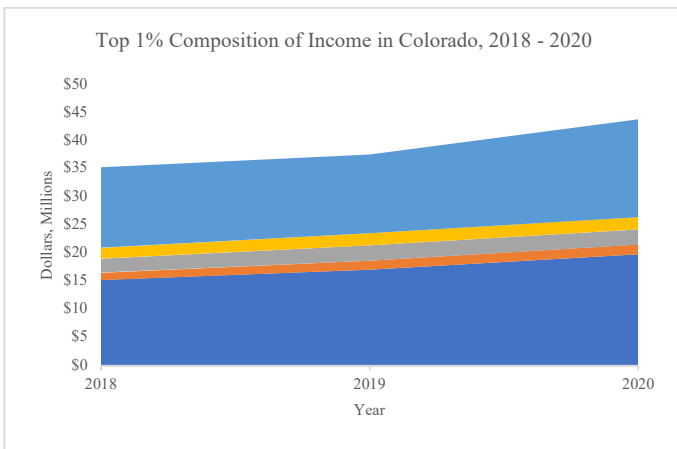
Composition of Income for the 30th Percentile and Below



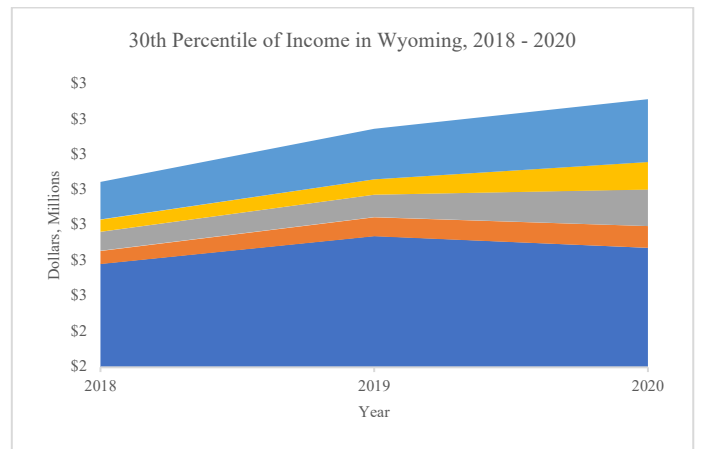
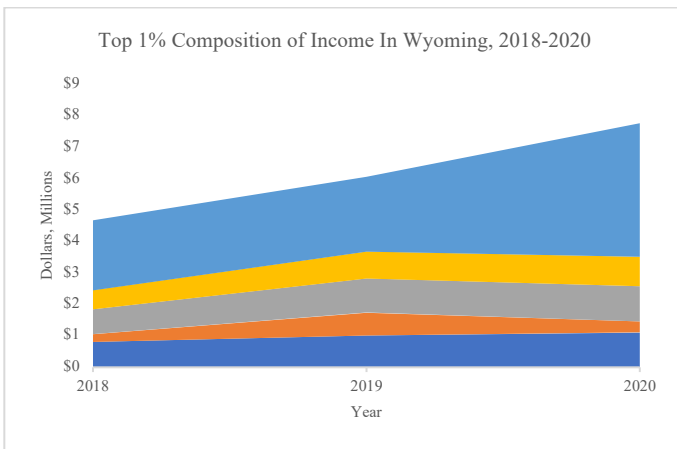
Texas

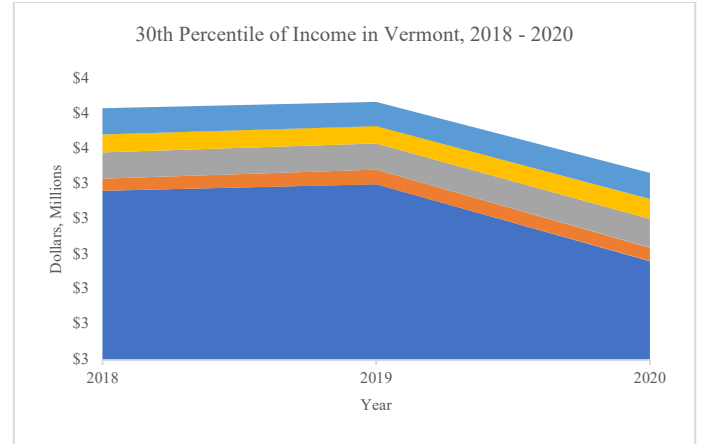
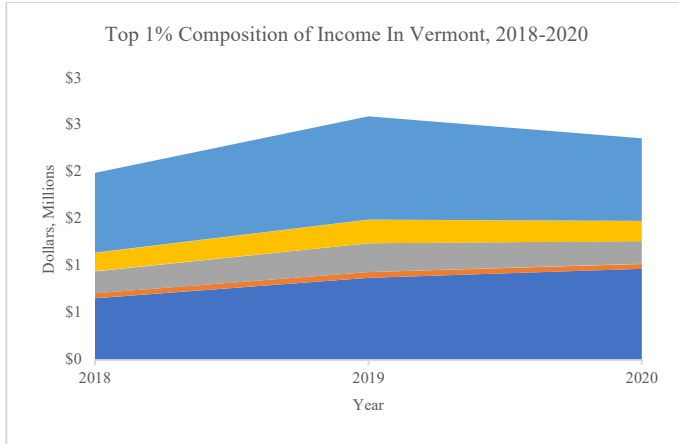


Colorado



Wyoming





Source: Internal Revenue Service, Statistics of Income 2018, 2019, and 2020.

While the composition and amount of income vary substantially between the selected states, some similarities can be seen that provide insight into income inequality. First, with the exception of Vermont, income of the top 1% increased in every state from 2019 to 2020. In contrast, with the exception of Wyoming, the income of those at or below the 30th percentile of income declined from 2019 to 2020. What is more, in each of the selected states, income from capital gains was a significant proportion of the composition of income of the top 1%, and increased from 2018 to 2020 while income from salary and wages for the top 1% stagnated or experienced moderate growth. In contrast, income for the lower and lower-middle class came primarily from wages and salary income, which experienced significant declines from 2019 to 2020. This suggests that lockdowns did in fact disproportionately impact the poor through declines in salary and wage income while the elite, coupon clipping rentiers, experienced economic gains, primarily through capital gains. Finally, income inequality appears to be, in part, driven by the rise in non-salary/non-wage income as the top 1% capture a greater share of the economic pie as their income grows from capital gains and other sources of income.

IV. Conclusion

The evolution of income inequality in the United States demonstrates a clear and significant decline at both the national and regional levels throughout the 20th and 21st centuries. Following the Great Depression and the New Deal, income inequality experienced a decline, only to increase again in the 1970s and 1980s. During the 1980s, there was a notable rise in income inequality at both the national and regional levels, evidenced by the increase in the income share of the top 1% and the rise in the Gini coefficient. This coincided with the implementation of policies promoting trickle-down economics and deregulation. Two features have characterized this rise in U.S. income inequality since the 1970s: first, a disparity in wealth generated from economic growth; and second, the contribution of capital gains income to the wealth disparity.

Furthermore, an analysis of income inequality at the regional and state level suggests that while disparities in income inequality differ by state and region, the top 1% appear to benefit from capital gains income while the poor rely on wage and salary income. One of the most striking observations is that during the onset of the COVID-19 pandemic, the elites saw notable income gains driven by capital gains, while the bottom 30th percentile witnessed declining income due to a decrease in wage and salary earnings.

This paper focused on the evolution of income inequality at the national and regional level. It also compared the composition of income between the elite and the non-elite, and detailed the growth in income inequality across the distribution of income. Future research, however, should seek to demonstrate a causal relationship between capital gains growth and income inequality to inform policy choices about decreasing inequality. Additionally, future research should examine the effects of pandemic related social spending on income inequality in

real terms, including pandemic stimulus payments, American Rescue Plan Act resources, and the child care tax credits. This research would help focus future efforts on the effectiveness of reducing income inequality through social spending.

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