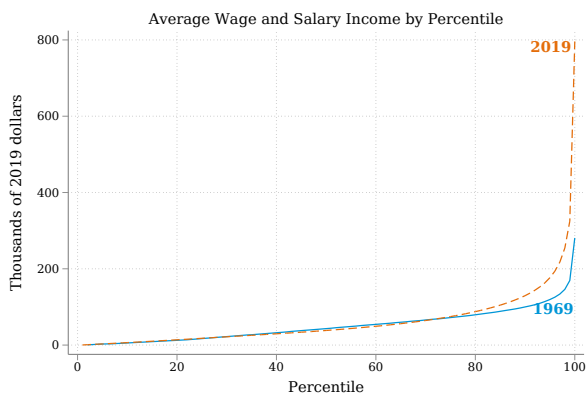


Research Brief: Top Incomes Have Driven Divergence Across States Since the 1970s*

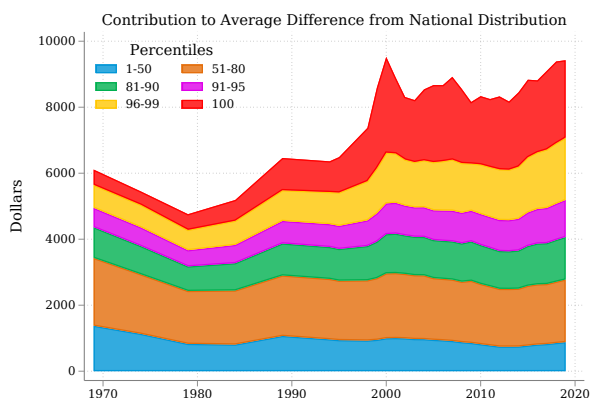
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Since at least the late 19th century, average incomes across U.S. states have tended to converge, or become more similar, though the rate of this convergence has slowed in recent decades (Barro and Sala-i Martin, 1991). Focusing on average incomes, however, may obscure important differences which may arise across states' income distributions. This is especially true given the high and rising income inequality seen in the last few decades. The average wage and salary income of the top one percent of tax units increased from an inflation-adjusted \$281,000 in 1969 to \$796,000 in 2019, while the bottom 70 percent of the distribution saw little change.



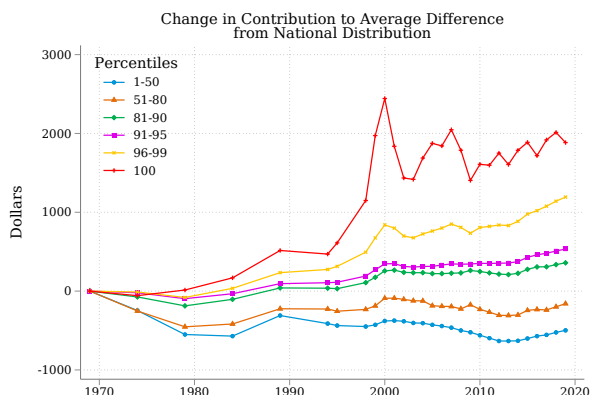
We use data from the universe of tax returns

*This brief summarizes “Re-examining Regional Income Convergence: A Distributional Approach.” For more details, including full methodology and references, see the full paper [here](#). Any opinions and conclusions expressed herein are those of the authors and do not reflect the views of the U.S. Census Bureau, the Federal Reserve Bank of Minneapolis, or the Federal Reserve System. The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release. Disclosure Review Board release authorization numbers CBDRB-FY23-051 and CBDRB-FY23-0136. This version was published February 2, 2023; any subsequent updates are available [here](#).



to more directly assess differences across states in the full distribution of wage and salary income. Rather than focusing on summary measures like the variance of mean income or comparisons of growth in mean income to initial income level, we measure the difference between income within each percentile of each state distribution and the corresponding percentile of the national distribution.

Our approach reveals two important facts. First, state income distributions have become less similar since roughly 1980. This stands in contrast to prior work focused on average incomes, which suggested that states continued to



become more similar over this period, but at a slower rate than they had previously been converging. Second, the divergence we find is driven by the top of the income distribution. The top percentile alone accounts for more than half of the average divergence across states by this measure since 1969.

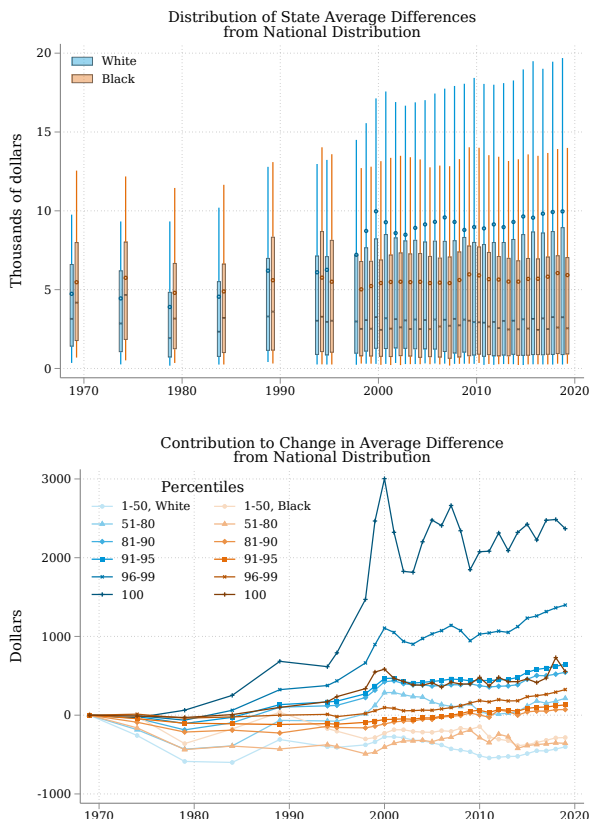
We also consider whether white and Black income distributions have experienced similar patterns of divergence across states over this period. We find that white income distributions have diverged across states in a way that is similar to the pattern seen for overall state income distributions, including the substantial role played by the top percentile. The average Black income distribution across states, however, was about as similar to the national income distribution in 2019 as it was in 1969. Moreover, the top percentiles of Black income distributions are much less dissimilar across states than are the top percentiles of white income distributions.

Our results may have implications for how re-

searchers think about causes of changes in state income distributions relative to one another. If land use restrictions are slowing regional convergence by reducing migration among low-earning workers (Ganong and Shoag, 2017), for example, is that consistent with divergence at the top of state income distributions and slow convergence/stasis further down the distribution? Where in the distribution might changes in the return to college, capital mobility, or agglomeration effects be important for explaining observed patterns of convergence or divergence? Future research should explore these questions further.

Our analysis also highlights the importance of studying questions of convergence by directly comparing state income distributions rather than focusing on average income or indirect measures of convergence like the relationship between income levels and income growth. Considering the relationship between levels and growth at moments other than the mean does reveal that patterns of convergence have differed across the distribution. It does not, however, fully reveal the importance of the top percentile to convergence trends over several decades.

Alongside this paper, we are also releasing detailed data on state income distributions and how they differ from the national distribution of income, including data for groups defined by gender, race and ethnicity. The analysis presented here serves in part as one example of how data like this can be used. We encourage new and creative uses of these data, which can be downloaded [here](#).



References

- Barro, R. J. and Sala-i Martin, X. (1991). Convergence. *Brookings Papers on Economic Activity*, 1991(1):107–182.
- Ganong, P. and Shoag, D. (2017). Why has regional income convergence in the us declined? *Journal of Urban Economics*, 102:76–90.