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POLICY BRIEF

The Regressive Effects of Regulations in Michigan

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KEY FINDINGS

Regulations have unintended consequences, and these consequences can disproportionately affect low-income households. For example, more regulations are associated with higher consumer prices,[1] fewer small business start-ups, and fewer new jobs.[2] Recent research also shows that a greater regulatory burden is associated with increased poverty rates and higher levels of income inequality.

Within the state of Michigan, federal regulation growth since 1997 is associated with 232,245 more people living in poverty and a 4.5 percent increase in income inequality.

POVERTY

Given the growth of federal regulations affecting Michigan residents and businesses between 1997 and 2017, we estimate that regulation growth over this period is associated with an additional 232,245 people living in poverty in 2019 (1,264,445 actually in poverty versus 1,032,200 if there had been no regulation growth) and an increase in the poverty rate of 2.37 percentage points (12.9 percent actually living in poverty versus 10.53 percent if there had been no regulation growth).[3]

The Mercatus Center's Federal Regulation and State Enterprise (FRASE) index measures the effective federal regulatory burden upon a state (defined as "the degree of impact federal regulations have on a state's economy relative to federal regulations' impact on the national economy"[4]). Using the FRASE index, researchers have found that states with a higher incidence of federal regulations tend to exhibit higher poverty rates.[5] Specifically, a 10 percent increase in the effective federal regulatory burden upon a state corresponds to about a 2.5 percent increase in the poverty rate.

From 1997 to 2017 (the period for which FRASE estimates are available), the effective federal regulatory burden upon Michigan increased by 90 percent and is associated with an increase in Michigan's poverty rate of 22.5 percent.[6] As of 2019, the overall poverty rate in Michigan stood

at 12.9 percent.[7] If the increase in the regulatory burden had not occurred, our research suggests that the poverty rate could have been as low as 10.53 percent in 2019.[8] Though this may not seem like a large difference in relative terms, it would have amounted to *232,245 fewer people living in poverty in Michigan in 2019*.

INCOME INEQUALITY

We estimate that the accumulation of federal regulation affecting Michigan residents and businesses between 1997 and 2017 is associated with a 4.5 percent increase in income inequality.[9]

Using the FRASE index, researchers have found that states with a higher incidence of federal regulations also have higher levels of income inequality. Specifically, a 10 percent increase in the effective federal regulatory burden upon a state corresponds to an approximate 0.5 percent increase in the state's Gini coefficient (the most commonly used measure of income inequality).[10]

In view of the link between rising poverty and federal regulations, the increase in income inequality in Michigan is not surprising. From 1997 to 2017, the effective federal regulatory burden upon Michigan increased by 90 percent,[11] *and that increase is associated with a 4.5 percent increase in Michigan's level of income inequality*.[12] As of 2018, Michigan was the 20th most unequal state in terms of income inequality (1 = most inequality, 50 = least inequality).[13]

ABOUT THE AUTHORS

Dustin Chambers is a professor of economics in the Perdue School of Business at Salisbury University, a senior affiliated scholar at the Mercatus Center at George Mason University, and a policy adviser at the Heartland Institute. Chambers is an applied econometrician who has published widely on the topics of income inequality, poverty, and economic growth. His most recent research focuses on the regressive effects of government regulations, including their unintended impact on consumer prices, entrepreneurship, and social mobility vis-à-vis income inequality and poverty. He earned his MA in economics from UCLA and his PhD in economics from the University of California at Riverside.

Colin O'Reilly is an associate professor of economics in the Heider College of Business at Creighton University and a scholar at Creighton's Menard Family Institute for Economic Inquiry. Since receiving his PhD in economics from Suffolk University in 2014, he has published more than a dozen articles studying institutions and economic development in such peer-reviewed journals as *World Development*, *Economica*, and *Public Choice*. His current research studies the relationship between regulation, rent-seeking, and income inequality.

NOTES

1. Dustin Chambers, Courtney A. Collins, and Alan Krause, "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation," *Public Choice* 180, no. 1–2 (2019): 57–90.
2. Dustin Chambers, Patrick A. McLaughlin, and Tyler Richards, "Regulation, Entrepreneurship, and Firm Size" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, April 2018).
3. Our estimates, based on data from 1997 to 2017, are applied to the poverty rate in 2019, the most recent year with available data.
4. For more information on the FRASE index, see Patrick A. McLaughlin and Oliver Sherouse, *The Impact of Federal Regulation on the 50 States*, 2016 ed. (Arlington, VA: Mercatus Center at George Mason University, 2016); "Introduction to FRASE Index," QuantGov, https://new-website-files.s3.amazonaws.com/frase/FRASE_Intro_2021.pdf.
5. Dustin Chambers, Patrick A. McLaughlin, and Laura Stanley, "Regulation and Poverty: An Empirical Examination of the Relationship between the Incidence of Federal Regulation and the Occurrence of Poverty across the US States," *Public Choice* 180, no. 1–2 (2019): 131–44.
6. Multiplying the poverty elasticity measure (0.25 percent increase in poverty per 1.00 percent increase in regulation) by the increase in regulations in Michigan as measured by the FRASE index (90 percent) yields the percentage increase in the poverty rate owing to regulation (22.5 percent).
7. For overall poverty rates and numbers of people living in poverty by state, see United States Census Bureau, "SAIPE State and County Estimates for 2019" (dataset), December 8, 2020, https://www.census.gov/data/datasets/2019/demo/saipe/2019-state-and-county.html.
8. The potential poverty rate of 10.53 percent (12.9/1.225) ignores any additional growth in regulation since 2017.
9. Our estimates, based on data from 1997 to 2017, are applied to the Gini coefficient in 2018, the most recent year with available data.
10. Dustin Chambers and Colin O'Reilly, "Regulation and Income Inequality in the United States" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, June 2020).
11. McLaughlin and Sherouse, *The Impact of Federal Regulation on the 50 States*; "FRASE Technical Documentation."
12. Multiplying the inequality elasticity measure (0.05 percent increase in the Gini coefficient per 1.00 percent increase in regulation) by the increase in regulations in Michigan as measured by the FRASE index (90 percent) yields the percentage increase in the Gini coefficient owing to regulation (4.5 percent).
13. For Gini coefficient estimates by state, see Mark W. Frank, "Update on Other Measures of Income Inequality" (dataset), 2018, https://www.shsu.edu/eco_mwf/inequality.html.