Are Wealthier States More Successful Than Poorer States?: The Impact of Income Packaging on States' Child Poverty Rates

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INTRODUCTION

In 2011, the U.S. Census Bureau reported a child poverty rate of 20%, one of the highest among all the industrialized nations. Does the high poverty rate stem from an inadequate income packaging system for our workers? Are the complex demographics of the U.S.to blame? Or is the country's shrinking public and private sector in light of the recent economic downturns partly at fault? I explore the impact of different components of income packaging upon child poverty rates by comparing poverty rates using both pre and post-tax-and-transfer incomes across all states. By studying states that exhibit the greatest reduction in their child poverty rates I can focus on identifying the assistance programs and income transfer policies that may be a high probability factor in these quantifiable discrepancies. Analyzing the impacts of the major tax policies and transfer programs may allow an assessment of any differences in child wellbeing in wealthier vs. poorer states. Are the existing tax and transfer policies adequate in reducing large differences in pre-market income among states? Are wealthier states more successful in lifting children out of poverty than poorer states? I use both percentage reduction and percentage-point reduction in the population of children in poverty to compare relative and absolute success rates for states. I find that the current structure of the federal income tax and FICA tax, in addition to some transfers such as SNAP and school lunches, are not sufficiently addressing the problems faced by poorer states.

DATA & DEFINITIONS

For this analysis we drew a variety of data from the March 2011 Supplement of the Census Population Survey using Data Ferret, such as:

- **Market Income for families**: Also known as pre-tax-and-transfer income. I obtained this by summing components of income received before any taxes and transfers.
- **Earned Income Tax Credit (EITC)** – Refundable tax credit that lowers the federal and state tax liability of low-income working taxpayers.
- **Supplement Nutrition Assistance Program (SNAP)** –Formerly known as food stamps. The amount received depends upon the size, income and expenses of the household.
- **Poverty Threshold**– An person is in poverty if his/her family income (or individual income if no family) is below a certain threshold that varies upon family size and number of children.
- **Medical-Out-of-Pocket Expenses (MOOP)** - Non-reimbursable expenses paid by patent which include any medical benefits that one's health plan does not cover.

REFERENCES

1. DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith, U.S. Census Bureau, Current Population Reports, P60-239, *Income, Poverty, and Health Insurance Coverage in the United States: 2010,* U.S. Government Printing Office, Washington, DC, 2011.
2. Smeeding, Timothy, and Lee Rainwater. *Poor Kids in a Rich Country*. New York: Russell Sage Foundation, 2003.
3. Waldfogel, Jane. *Social Mobility, Life Chances, and the Early Years.* London: Centre for Analysis of Social Exclusion, 2004.

RESULTS

All States by Highest (Pre-Tax-and-Transfer) Median Income and Corresponding Success Rate of Child Poverty Reduction

State	Median Income	Pre-Tax-and-Transfer Child Poverty Rate	Post-Tax-and-Transfer Child Poverty Rate	Reduction in Child Poverty Rate	State	Median Income	Pre-Tax-and-Transfer Child Poverty Rate	Post-Tax-and-Transfer Child Poverty Rate	Reduction in Child Poverty Rate
Connecticut	73595	15.50	10.57	-4.93	Ohio	45937	26.99	19.90	-7.10
New Hampshire	73575	9.38	4.63	-4.75	Nevada	45657	27.72	17.89	-9.84
New Jersey	69296	17.70	11.81	-5.89	Idaho	45455	25.55	13.48	-12.07
Maryland	68889	16.79	9.83	-6.96	Arizona	44587	30.84	21.79	-9.04
Massachusetts	68233	17.83	11.77	-6.06	Kansas	44360	28.25	16.98	-11.28
Virginia	63459	15.45	10.88	-4.57	Texas	44122	30.59	20.82	-9.77
Alaska	60515	17.84	15.15	-2.70	Indiana	44053	30.79	21.39	-9.40
Minnesota	60275	17.47	12.88	-4.58	Oklahoma	43914	31.46	19.59	-11.87
Colorado	60168	20.12	13.50	-6.62	Georgia	43736	27.50	20.59	-6.91
Hawaii	59275	24.12	16.28	-7.84	North Carolina	42725	33.76	20.02	-13.74
Vermont	57848	18.41	8.98	-9.43	Florida	41674	27.32	19.32	-8.01
North Dakota	57817	19.82	13.29	-6.53	Kentucky	41631	30.40	21.70	-8.70
Utah	56643	18.20	9.33	-8.86	New Mexico	41203	33.12	20.19	-12.94
Rhode Island	55563	23.81	17.23	-6.58	Montana	40617	24.74	17.38	-7.36
Washington	54936	21.68	13.58	-8.10	West Virginia	40415	28.05	20.54	-7.51
Delaware	54489	23.44	15.17	-8.27	Alabama	40162	29.23	18.08	-11.16
Wyoming	53436	17.31	12.16	-5.15	South Carolina	40069	31.05	21.34	-9.71
New York	52630	28.17	19.82	-8.35	Tennessee	39443	28.71	18.08	-10.63
Nebraska	52532	16.97	10.31	-6.66	Louisiana	37992	34.98	24.82	-10.16
Iowa	52079	18.13	10.82	-7.31	Arkansas	36009	27.95	19.48	-8.47
Wisconsin	51283	17.86	9.63	-8.22	Mississippi	35585	39.26	29.88	-9.38
California	50563	28.08	19.02	-9.06					
Illinois	50333	26.25	17.38	-8.88					
Pennsylvania	49079	21.16	13.29	-7.88					
Oregon	47819	25.22	17.89	-7.32					
Missouri	47772	24.26	19.03	-5.23					
Maine	47580	22.80	15.33	-7.47					
South Dakota	47314	20.29	14.53	-5.77					
District of Columbia	47075	38.03	29.38	-8.65					
Michigan	46095	26.62	17.81	-8.80					

Table 1. All 50 states, in addition to District of Columbia, ranked by highest pre-tax-and transfer median income and statistics showing changes between pre and post-tax-and-transfer child poverty rates.

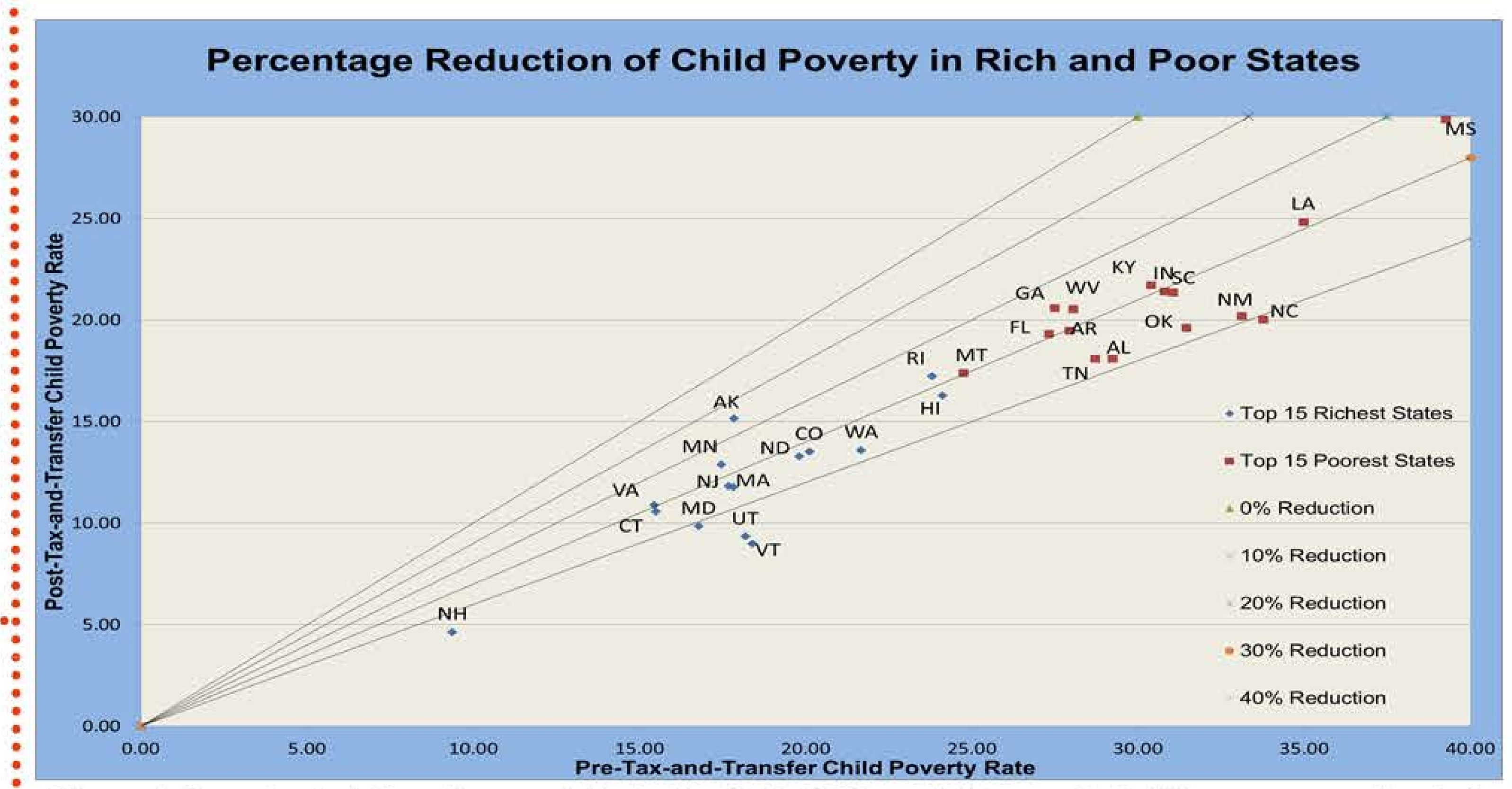

Figure 1. From top to bottom the rays indicate that 0,10,20,30, and 40 percent of children are moved out of poverty by post-tax-and transfer sources.

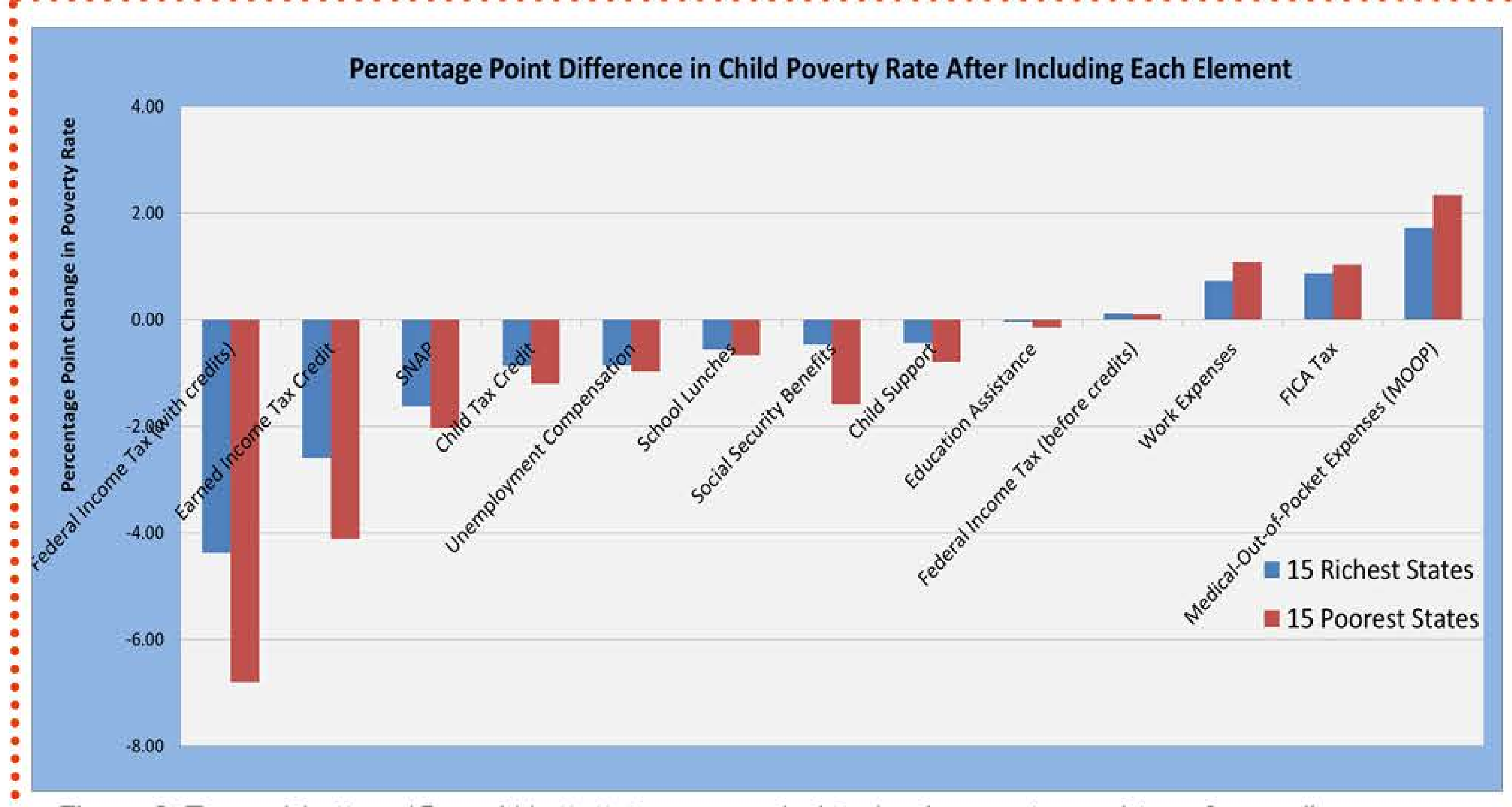

Figure 2. Top and bottom 15 wealthiest states were calculated using pre-tax-and-transfer median income.

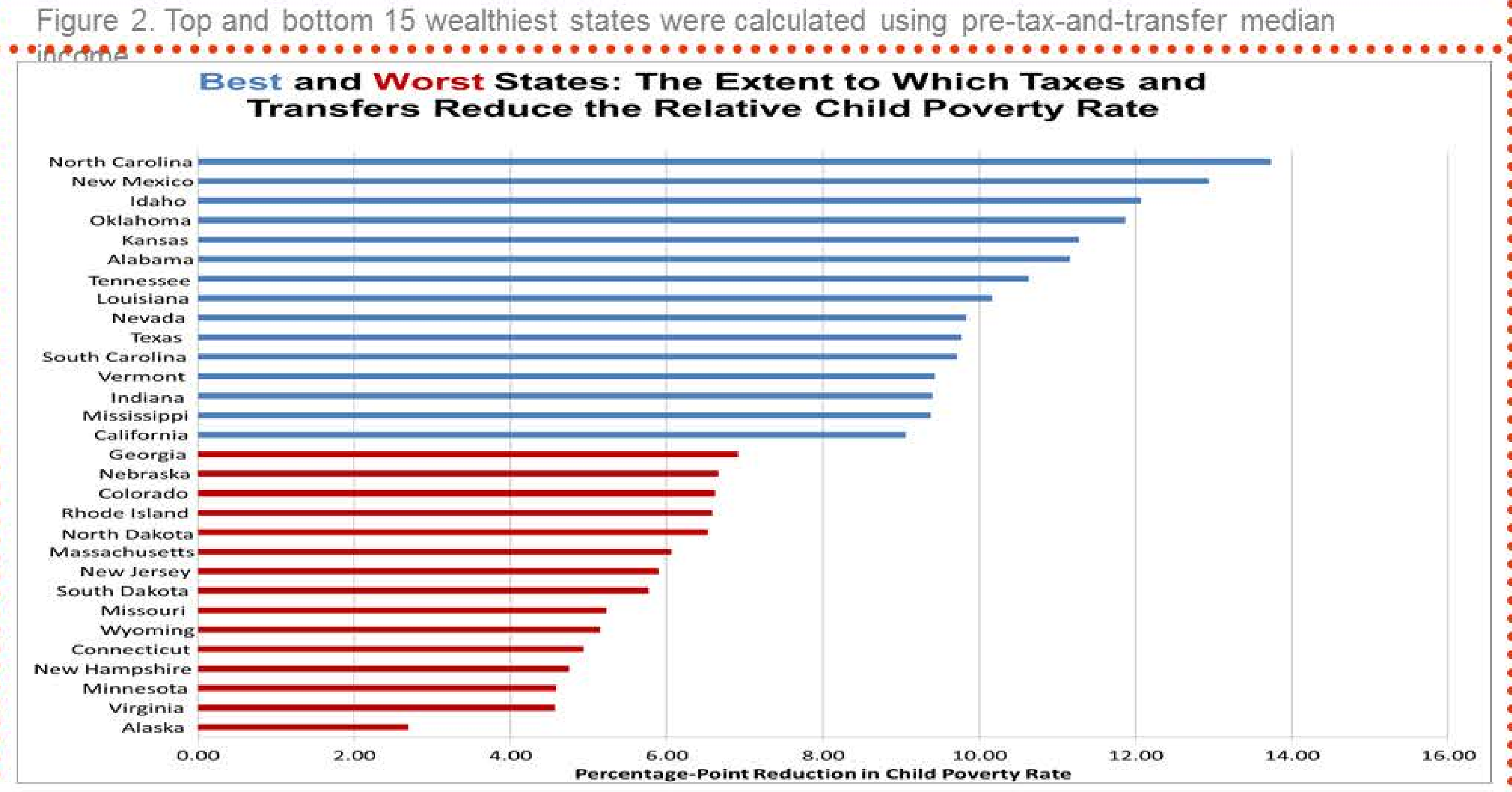

Figure 3. Best states at percentage-point reduction of child poverty rates are indicated in blue. Worst states are indicated in red.

RESULTS (cont.)

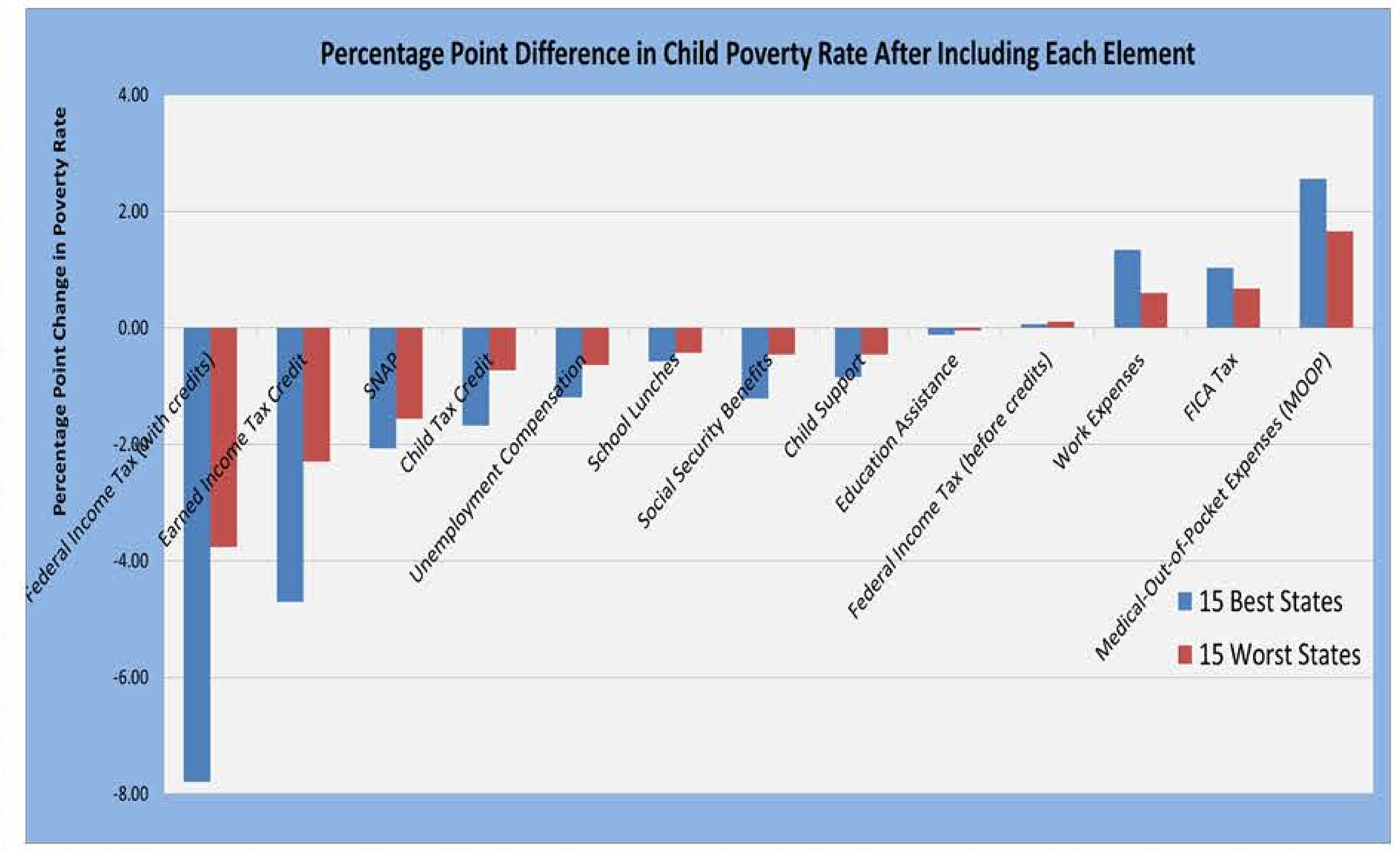

Figure 4. Top and bottom 15 wealthiest states were calculated using pre-tax-and-transfer median income. Averages of percentage-point differences after including each element were calculated for both groups.

SUMMARY & CONCLUSION

- Rich states do not seem to perform any better than poor states in percentage reduction of their child poverty rate.
- Because the FICA Tax is regressive, poor states are being hit harder by it than richer states.
- The Federal Income Tax is supposed to be progressive. Yet, the percentage-point change in poverty rate from the tax is nearly the same in rich states as in poor states.
- The high increase in poverty rate from MOOP may imply that poorer states require more affordable and accessible health and insurance programs.

FUTURE RESEARCH

As we go forward we can begin addressing other sources impacting the poverty rate,

- Were the industrial structures of certain states hit harder than others?
- Since the EITC can only be distributed to people who are working, states suffering from high unemployment may receive much less government aid. We can assess the impact of the labor market by dividing high and low unemployment states and redo this study.
- Are the huge differences in pre-market income across states attributable to different sizes of state labor markets?
- We can run a regression of pre-fisc child poverty rate on industrial structure, single-parent families, and other potential factors to assess their impacts
- Are states with large public sectors being hit harder with taxes? Should the government be expanding or shrinking the public sector?
- How will President Obama's recent healthcare reform affect future child poverty rates?

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