



# DOES HEALTH INSURANCE REDUCE CONSUMPTION RISK?

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## **The Effects of Health Insurance Expansion on Consumption Risk**

*Many SSA beneficiaries are low income with little savings, generating vulnerability to shocks such as uninsured health needs. We find that health insurance expansion does not exert a protective consumption effect for individuals even at the left tail of the consumption distribution. Our estimate of the risk premium implies a low consumption insurance value to Medicaid, though certainly the program offers large insurance benefits on health, financial shocks, and other dimensions of wellness.*

## **Medicaid expansion does not have a protective effect over consumption**

Having or lacking health insurance significantly impacts how individuals manage financial impacts of health crises on their spending habits. When someone faces a health crisis without insurance, it can lead to various challenges like mounting medical bills, debt, and income loss from missed work. The extent of these challenges can worsen due to delays in accessing required medical treatment. In the United States, the healthcare system is intricate, featuring widespread charity care and notable levels of unpaid medical debt. This complexity underscores how health-related financial shocks can translate into consumption challenges. The closest paper to ours, Levy, Buchmueller, and Nikpay (2019), found no impact but only looked at mean effects and not differences across the consumption distribution. This study investigates the question: What was the effect of the 2014 Medicaid expansions on the consumption, when looking at groups of people across the consumption distribution separately?

The state decisions about whether to expand Medicaid went into effect on January 1, 2014, generating a partition of our data into pre- and post-treatment periods. Our analysis contains 39 states, of which 22 are in the treated group and 17 are in the control group. The remaining 11 states, including Massachusetts, New York, and Pennsylvania, are excluded from our analysis as they expanded Medicaid at a point either earlier or later than January 1, 2014.

Table 1 shows the DID and CIC results for well-measured consumption from the CE data. Here, we find that Medicaid expansions do not exert a protective effect over consumption even at the left tail of the distribution. In column (1), the mean DID estimate is \$50, though the estimate is noisy. We observe that the CIC estimates are



not statistically significant at all points of the consumption distribution. The same is true for the logged specification in column 2.

We also examined subsample results for those reporting to be White non-Hispanic, Black non-Hispanic, and Hispanic. We hypothesized that there might be differences in the main effect on this dimension tied to baseline economic vulnerability. We do not observe any such differences, however. This result is not surprising in the context of there being no detectable protective effect of Medicaid on overall consumption as shown in the main result.

	(1)	(2)
A. Difference-in-Differences		
	Well-measured Consumption	Log
$\beta$	50.37 (84.50)	0.01 (0.03)
B. Changes-in-Changes		
	Well-measured Consumption	Log
mean	45.00 [-181.07, 272.27]	0.01 [-0.05, 0.08]
p5	109.65 [-25.69, 248.98]	0.06 [-0.02, 0.16]
p10	81.65 [-85.00, 222.36]	0.04 [-0.05, 0.12]
p25	55.28 [-159.98, 230.42]	0.02 [-0.06, 0.09]
p50	80.97 [-149.90, 285.56]	0.02 [-0.04, 0.08]
p75	98.74 [-164.85, 331.10]	0.02 [-0.03, 0.07]

*Notes:* State-clustered standard errors (95 percent) in parentheses; these are only provided for the DID model. Bootstrapped and state-clustered confidence intervals (95 percent) in brackets are provided for the CIC models.

*Table 1: DID and CIC: Well-measured Consumption*



## The implied consumption insurance value of Medicaid is low

To place our results in better context of the literature, we discuss and show the implied consumption risk premium for Medicaid expansion. The risk premium is a measure of insurance or risk-reducing value of Medicaid expansion. We estimate the risk premium to be \$3.43; the 95 percent confidence interval is [-\$119.50, \$48.66]. To obtain this estimate, we estimate a risk aversion parameter of 3. The risk premium we estimate is below the lower end of the range of estimated consumption welfare benefit from Medicaid as estimated in Finkelstein, Hendren, and Luttmer (2019). That paper uses the 2008 Oregon Health Insurance Experiment to estimate an insurance value ranging from \$112 to \$883 per recipient-year (Table 2 in that paper). The \$3.43 benefit is also small relative to the per-capita cost of Medicaid, which is several thousand dollars for most states.

## Implications

- Charity care, unpaid medical debt, and other safety nets likely play a large role in protecting individuals from health-induced consumption shocks in the absence of health insurance.
- The consumption insurance value of Medicaid is low relative to its many other benefits in the areas of improving health and financial security.

## References

- Athey, S. and G. W. Imbens (2006). Identification and inference in nonlinear difference-in-differences models. *Econometrica* 74 (2), 431–497.
- Bee, A., B. D. Meyer, and J. X. Sullivan (2015). The validity of consumption data. Improving the Measurement of Consumer Expenditures 74, 204.
- Finkelstein, A., N. Hendren, and E. F. Luttmer (2019). The value of Medicaid: Interpreting results from the Oregon health insurance experiment. *Journal of Political Economy* 127 (6), 2836–2874.
- Kaestner, R., B. Garrett, J. Chen, A. Gangopadhyaya, and C. Fleming (2017). Effects of ACA Medicaid expansions on health insurance coverage and labor supply. *Journal of Policy Analysis and Management* 36 (3), 608–642.
- Levy, H., T. Buchmueller, and S. Nikpay (2019). The impact of Medicaid expansion on household consumption. *Eastern Economic Journal* 45, 34–57.
- Meyer, B. D. and J. X. Sullivan (2023). Consumption and income inequality in the united states since the 1960s. *Journal of Political Economy* 131 (2), 247–284.