DiD-regression

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We first examine the effect of medicaid expansion on uninsured rate. Table 2 presents the primary findings of the DD analysis, employing sample weights and adjusting for covariates. he first 7 columns show estimates from the fixed effect Linear probability model, while the second seven columns show results from fixed effect logit model. Each specification controls for state and year fixed effects. Column 2 controls for the variables state political ideology and state unemployment rate which were the minimal adjustment set based on the resul of the DAG causal discovery. Column 3 additionally controls for region-by-year fixed effects while column 4 control for state-specific linear time trends. The full model with all the control variables added are presented in columns 5-7, the difference is in column 6 region-by-year fixed effects is added whereas in column 7 state-specific linear time trend is added.

Columns numbers reveal a positive and statistically significant association between Medicaid expansion and hospital Medicaid revenue. For hospitals in Medicaid-expansion states, Medicaid net revenue increased, on average, by 2.67% after Medicaid expansion (column 3). Meanwhile, columns 4 - 6 shows Medicaid expansion decreased hospital uncompensated care cost by approximately 2%, which is statistically and economically significant.

For both populations, the "Post X Expansion" term was positive and statistically significant for "any insurance" (p<.01) and "Medicaid" (p<.001), suggesting that Medicaid expansion resulted in a significant increase in the probability of having any insurance and having Medicaid for urban and rural low-income populations pooled.

Put differently, our estimates and standard errors from column 2

Table 1: The Effect of Medicaid Expansion on Uninsured Rate (Difference-in-Differences Estimation)

| | | | | FE OLS | | | | | | | FE LOGIT | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------------|---------------|---------------|---------------------|---------------|---------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| Medicaid Expansion | -0.075*** | -0.071*** | -0.085*** | -0.044*** | -0.081*** | -0.092*** | -0.053*** | -0.568*** | -0.549*** | -0.572*** | -0.333*** | -0.612*** | -0.629*** | -0.384*** |
| | (0.002) | (0.002) | (0.002) | (0.003) | (0.002) | (0.002) | (0.003) | (0.009) | (0.009) | (0.012) | (0.015) | (0.009) | (0.012) | (0.015) |
| Foreign-Born | 0.244*** | 0.243*** | 0.243*** | 0.244*** | -0.229*** | 2.27 | -0.064*** | 1.03*** | 1.02*** | 1.02*** | 1.03*** | -0.389*** | -0.406*** | 9.60*** |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.008) | (2.17) | (0.015) | (0.006) | (0.006) | (0.006) | (0.006) | (0.083) | (0.083) | (0.228) |
| Medicaid Expansion \times For eign-Born | -0.031*** | -0.029*** | -0.028*** | -0.031*** | 0.0004 | 0.004* | 0.0009 | 0.170*** | 0.186*** | 0.199*** | 0.180*** | 0.222*** | 0.253*** | 0.240*** |
| | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.011) | (0.011) | (0.011) | (0.011) | (0.011) | (0.012) | (0.012) |
| State Unemployment Rate | | 0.004*** | 0.005*** | 0.002** | | | | | 0.021*** | 0.023*** | 0.010** | | | |
| | | (0.0006) | (0.0007) | (0.0010) | | | | | (0.003) | (0.003) | (0.005) | | | |
| State Political Ideology | | -0.011 | 0.015* | -0.044*** | | | | | -0.162*** | -0.026 | -0.271*** | | | |
| | | (0.008) | (0.009) | (0.012) | | | | | (0.044) | (0.047) | (0.062) | | | |
| Controls | | | | | yes | yes | yes | | | | | yes | yes | yes |
| State FE | yes | yes | yes | yes | yes | yes | yes |
| Year FE | yes | yes | yes | yes | yes | yes | yes |
| Region-Year FE | | | yes | | | yes | | | | yes | | | yes | |
| State-Specific Linear Time Trends | | | | yes | | | yes | | | | yes | | | yes |
| Observations | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 |
| Squared Correlation | 0.08869 | 0.08874 | 0.08915 | 0.08977 | 0.16009 | 0.15835 | 0.16112 | 0.08897 | 0.08904 | 0.08948 | 0.09016 | 0.16532 | 0.16580 | 0.16655 |
| Pseudo \mathbb{R}^2 | 0.99202 | 0.99202 | 0.99203 | 0.99203 | 0.99257 | 0.99256 | 0.99258 | 0.08279 | -105.71 | -105.66 | 0.08385 | -97.947 | -97.888 | 0.15066 |
| BIC | 2,371,638.2 | 2,371,581.6 | 2,371,233.5 | 2,370,014.1 | 2,208,630.5 | 2,213,214.6 | 2,206,836.9 | 260,177,373.2 | $260,\!157,\!750.0$ | 260,035,778.6 | 259,875,687.9 | $241,\!236,\!546.0$ | 241,092,958.8 | 240,927,239.1 |

 $Heterosked a sticity \hbox{-} robust\ standard \hbox{-} errors\ in\ parentheses$

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Table 2: The Effect of Medicaid Expansion on Medicaid Covergare Rate (Difference-in-Differences Estimation)

| | | | | FE OLS | | | | | | | FE LOGIT | | | |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| Medicaid Expansion | 0.136*** | 0.134*** | 0.144*** | 0.085*** | 0.140*** | 0.148*** | 0.092*** | 0.498*** | 0.493*** | 0.554*** | 0.305*** | 0.591*** | 0.660*** | 0.390*** |
| | (0.002) | (0.002) | (0.002) | (0.003) | (0.002) | (0.002) | (0.003) | (0.008) | (0.009) | (0.011) | (0.013) | (0.009) | (0.011) | (0.013) |
| Foreign-Born | -0.158*** | -0.158*** | -0.157*** | -0.159*** | 0.086*** | -0.634 | -0.002 | -0.862*** | -0.863*** | -0.859*** | -0.869*** | -0.034 | -0.021 | -0.035 |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.007) | (2.47) | (0.015) | (0.007) | (0.007) | (0.007) | (0.007) | (0.082) | (0.082) | (0.082) |
| Medicaid Expansion × Foreign-Born | 0.007*** | 0.007*** | 0.005** | 0.009*** | -0.012*** | -0.016*** | -0.012*** | 0.239*** | 0.241*** | 0.233*** | 0.256*** | 0.151*** | 0.136*** | 0.163*** |
| | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.010) | (0.011) | (0.011) | (0.011) | (0.011) | (0.011) | (0.012) |
| State Unemployment Rate | | -0.003*** | -0.003*** | -0.003*** | | | | | -0.011*** | -0.014*** | -0.015*** | | | |
| | | (0.0006) | (0.0007) | (0.0010) | | | | | (0.003) | (0.003) | (0.005) | | | |
| State Political Ideology | | -0.035*** | -0.074*** | 0.025** | | | | | -0.201*** | -0.368*** | 0.082 | | | |
| | | (0.009) | (0.009) | (0.012) | | | | | (0.040) | (0.043) | (0.056) | | | |
| Controls | | | | | yes | yes | yes | | | | | yes | yes | yes |
| State FE | yes | yes | yes | yes | yes | yes | yes |
| Year FE | yes | yes | yes | yes | yes | yes | yes |
| Region-Year FE | | | yes | | | yes | | | | yes | | | yes | |
| State-Specific Linear Time Trends | | | | yes | | | yes | | | | yes | | | yes |
| Observations | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 | 1,975,594 |
| Squared Correlation | 0.07469 | 0.07472 | 0.07521 | 0.07612 | 0.18391 | 0.18433 | 0.18530 | 0.07447 | 0.07451 | 0.07495 | 0.07579 | 0.18712 | 0.18757 | 0.18851 |
| Pseudo \mathbb{R}^2 | 0.99160 | 0.99160 | 0.99161 | 0.99161 | 0.99240 | 0.99240 | 0.99241 | 0.06642 | -104.05 | -104.00 | 0.06752 | -93.720 | -93.669 | 0.15944 |
| BIC | 2,626,427.5 | 2,626,407.3 | 2,625,879.1 | 2,624,067.8 | 2,378,984.1 | 2,378,539.9 | 2,376,264.9 | 278,455,133.8 | 278,449,483.9 | 278,320,051.2 | 278,127,049.6 | 251,078,904.8 | 250,942,679.5 | 250,710,650.8 |

 $Heterosked a sticity-robust\ standard-errors\ in\ parentheses$

Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

| Table number reports empirical among low income adult. | finding rega | arding the | effect of m | nedicaid ex | pansion on | medicaid | coverage |
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