

# Economic Analysis Results

## Contents

|                                   |          |
|-----------------------------------|----------|
| <b>State-Level Analysis</b>       | <b>1</b> |
| Summary Statistics . . . . .      | 1        |
| COVID Impact by State . . . . .   | 2        |
| Wage Inequality Changes . . . . . | 4        |
| <b>Regression Analysis</b>        | <b>6</b> |
| Model Specifications . . . . .    | 6        |

## State-Level Analysis

### Summary Statistics

Table 1: State Summary Statistics

| State          | Avg Employment | Avg Wage | N Industries | Wage Inequality |
|----------------|----------------|----------|--------------|-----------------|
| California     | 7668.04        | 57175.89 | 22           | 6.89            |
| Texas          | 5236.86        | 51473.31 | 22           | 7.14            |
| New York       | 4127.09        | 56180.00 | 22           | 10.94           |
| Florida        | 3856.16        | 49961.29 | 22           | 6.50            |
| Pennsylvania   | 2750.83        | 48151.59 | 22           | 7.41            |
| Illinois       | 2749.72        | 52662.52 | 22           | 6.41            |
| Ohio           | 2489.80        | 45752.85 | 22           | 7.83            |
| North Carolina | 2016.18        | 47139.16 | 22           | 6.98            |
| Michigan       | 2003.73        | 45524.29 | 22           | 7.74            |
| Georgia        | 1970.59        | 49887.27 | 22           | 6.49            |
| New Jersey     | 1944.26        | 63127.32 | 22           | 7.19            |
| Virginia       | 1842.35        | 56735.86 | 22           | 6.76            |
| Massachusetts  | 1576.84        | 59204.80 | 22           | 8.39            |
| Washington     | 1529.82        | 56146.79 | 22           | 10.46           |
| Indiana        | 1404.92        | 43787.28 | 22           | 8.25            |
| Maryland       | 1348.49        | 59782.41 | 22           | 8.74            |
| Wisconsin      | 1343.74        | 43631.13 | 22           | 7.90            |
| Tennessee      | 1326.04        | 44991.17 | 22           | 8.44            |
| Missouri       | 1289.97        | 44573.92 | 22           | 8.06            |
| Arizona        | 1286.39        | 48093.62 | 22           | 5.62            |
| Minnesota      | 1277.77        | 48584.11 | 22           | 8.46            |
| Colorado       | 1221.92        | 54220.22 | 22           | 7.36            |

|                      |        |          |    |       |
|----------------------|--------|----------|----|-------|
| South Carolina       | 959.02 | 43406.21 | 22 | 7.86  |
| Alabama              | 912.06 | 44807.04 | 22 | 8.62  |
| Kentucky             | 878.79 | 43459.22 | 22 | 13.09 |
| Louisiana            | 850.09 | 45991.25 | 22 | 8.56  |
| Oregon               | 827.41 | 47465.65 | 22 | 7.80  |
| Connecticut          | 805.65 | 64486.36 | 22 | 12.28 |
| Oklahoma             | 740.63 | 41714.74 | 22 | 11.75 |
| Iowa                 | 725.96 | 41313.01 | 22 | 13.41 |
| Kansas               | 640.82 | 43661.49 | 22 | 10.66 |
| Utah                 | 632.65 | 46362.48 | 22 | 7.13  |
| Nevada               | 571.84 | 50973.65 | 22 | 7.21  |
| Arkansas             | 558.45 | 41523.67 | 22 | 9.82  |
| Mississippi          | 528.29 | 41355.05 | 22 | 11.19 |
| Nebraska             | 442.18 | 41983.83 | 22 | 7.07  |
| New Mexico           | 363.88 | 41993.05 | 22 | 66.37 |
| Idaho                | 329.57 | 41310.17 | 22 | 15.09 |
| West Virginia        | 329.07 | 41168.94 | 22 | 9.30  |
| Hawaii               | 321.86 | 47535.00 | 22 | 41.04 |
| New Hampshire        | 321.24 | 51718.14 | 22 | 14.41 |
| Maine                | 280.85 | 43236.03 | 22 | 16.24 |
| Rhode Island         | 238.08 | 50333.57 | 22 | 20.11 |
| Montana              | 215.75 | 39864.67 | 22 | 12.50 |
| South Dakota         | 199.50 | 37919.99 | 22 | 14.66 |
| Delaware             | 189.16 | 51617.12 | 22 | 15.68 |
| North Dakota         | 177.84 | 42521.57 | 22 | 8.29  |
| District of Columbia | 162.64 | 75300.17 | 22 | 33.00 |
| Vermont              | 152.13 | 41557.21 | 22 | Inf   |
| Alaska               | 137.75 | 48098.43 | 22 | 10.54 |
| Wyoming              | 133.17 | 42006.56 | 22 | 8.29  |

## COVID Impact by State

Table 2: COVID Impact Estimates by State

| State         | Pre-COVID Emp | Post-COVID Emp | Emp Change (%) |
|---------------|---------------|----------------|----------------|
| Louisiana     | 910.429       | 787.937        | -13.454        |
| Georgia       | 2228.190      | 1938.556       | -12.999        |
| Texas         | 6060.238      | 5287.238       | -12.755        |
| Florida       | 4418.381      | 3859.143       | -12.657        |
| Mississippi   | 568.571       | 497.524        | -12.496        |
| Rhode Island  | 257.000       | 225.921        | -12.093        |
| West Virginia | 347.714       | 309.825        | -10.897        |

|                      |          |          |        |
|----------------------|----------|----------|--------|
| North Carolina       | 2276.952 | 2055.937 | -9.707 |
| New York             | 4569.857 | 4138.381 | -9.442 |
| Nevada               | 656.286  | 596.349  | -9.133 |
| South Carolina       | 1085.048 | 986.270  | -9.104 |
| California           | 8678.048 | 7929.190 | -8.629 |
| District of Columbia | 196.200  | 179.328  | -8.599 |
| Massachusetts        | 1773.000 | 1621.873 | -8.524 |
| Arkansas             | 608.429  | 558.190  | -8.257 |
| Tennessee            | 1490.762 | 1374.857 | -7.775 |
| Arizona              | 1474.667 | 1361.095 | -7.701 |
| Oregon               | 937.857  | 866.063  | -7.655 |
| Connecticut          | 861.143  | 796.984  | -7.450 |
| New Jersey           | 2132.333 | 1973.540 | -7.447 |
| Ohio                 | 2706.524 | 2510.286 | -7.251 |
| New Mexico           | 388.048  | 360.403  | -7.124 |
| Virginia             | 2017.810 | 1874.730 | -7.091 |
| Washington           | 1772.667 | 1654.698 | -6.655 |
| Alabama              | 993.333  | 927.889  | -6.588 |
| Delaware             | 207.048  | 193.889  | -6.355 |
| Indiana              | 1530.429 | 1433.317 | -6.345 |
| Maryland             | 1452.000 | 1361.778 | -6.214 |
| New Hampshire        | 344.000  | 323.111  | -6.072 |
| Colorado             | 1413.286 | 1334.111 | -5.602 |
| Kentucky             | 949.857  | 896.730  | -5.593 |
| Wyoming              | 141.000  | 133.533  | -5.296 |
| North Dakota         | 192.810  | 184.794  | -4.157 |
| Missouri             | 1380.095 | 1323.000 | -4.137 |
| Illinois             | 2904.095 | 2787.810 | -4.004 |
| Michigan             | 2180.667 | 2093.714 | -3.987 |
| Kansas               | 688.143  | 660.905  | -3.958 |
| South Dakota         | 214.952  | 207.460  | -3.485 |
| Vermont              | 159.905  | 154.730  | -3.236 |
| Pennsylvania         | 2950.571 | 2866.095 | -2.863 |
| Maine                | 302.905  | 294.444  | -2.793 |
| Wisconsin            | 1414.714 | 1380.889 | -2.391 |
| Minnesota            | 1366.238 | 1336.365 | -2.187 |
| Iowa                 | 766.905  | 756.889  | -1.306 |
| Alaska               | 140.667  | 138.968  | -1.207 |
| Oklahoma             | 773.571  | 765.095  | -1.096 |
| Nebraska             | 471.667  | 466.762  | -1.040 |
| Montana              | 233.667  | 232.524  | -0.489 |
| Idaho                | 368.286  | 372.571  | 1.164  |

|        |         |         |       |
|--------|---------|---------|-------|
| Utah   | 735.476 | 756.857 | 2.907 |
| Hawaii | 337.238 | 350.393 | 3.901 |

## Wage Inequality Changes

Table 3: Changes in Wage Inequality by State

| State                | Pre-COVID Inequality | Post-COVID Inequality | Change (%) |
|----------------------|----------------------|-----------------------|------------|
| Alabama              | 4.959                | 5.340                 | 7.674      |
| Alaska               | 5.557                | 5.009                 | -9.856     |
| Arizona              | 3.580                | 3.813                 | 6.529      |
| Arkansas             | 5.560                | 4.400                 | -20.850    |
| California           | 4.146                | 5.049                 | 21.782     |
| Colorado             | 4.685                | 4.419                 | -5.682     |
| Connecticut          | 6.580                | 7.894                 | 19.966     |
| Delaware             | 5.983                | 4.426                 | -26.022    |
| District of Columbia | 6.316                | 5.338                 | -15.485    |
| Florida              | 3.708                | 3.913                 | 5.508      |
| Georgia              | 4.590                | 3.758                 | -18.128    |
| Hawaii               | 4.755                | 3.818                 | -19.707    |
| Idaho                | 5.293                | 5.985                 | 13.085     |
| Illinois             | 4.751                | 4.321                 | -9.042     |
| Indiana              | 5.170                | 4.880                 | -5.607     |
| Iowa                 | 6.406                | 4.452                 | -30.497    |
| Kansas               | 5.278                | 4.723                 | -10.526    |
| Kentucky             | 4.949                | 5.583                 | 12.815     |
| Louisiana            | 4.366                | 5.125                 | 17.394     |
| Maine                | 7.001                | 5.943                 | -15.116    |
| Maryland             | 4.335                | 4.341                 | 0.123      |
| Massachusetts        | 4.641                | 5.144                 | 10.832     |
| Michigan             | 5.366                | 4.685                 | -12.682    |
| Minnesota            | 5.162                | 5.140                 | -0.425     |
| Mississippi          | 4.972                | 6.429                 | 29.318     |
| Missouri             | 5.064                | 5.102                 | 0.745      |
| Montana              | 5.138                | 4.010                 | -21.963    |
| Nebraska             | 5.026                | 4.373                 | -12.976    |
| Nevada               | 3.859                | 3.328                 | -13.752    |
| New Hampshire        | 5.808                | 4.550                 | -21.666    |
| New Jersey           | 4.857                | 5.368                 | 10.532     |
| New Mexico           | 6.763                | 4.243                 | -37.263    |
| New York             | 5.694                | 5.782                 | 1.531      |
| North Carolina       | 4.546                | 4.704                 | 3.477      |

|                |       |       |         |
|----------------|-------|-------|---------|
| North Dakota   | 5.340 | 4.623 | -13.430 |
| Ohio           | 4.915 | 4.842 | -1.473  |
| Oklahoma       | 4.919 | 5.816 | 18.235  |
| Oregon         | 4.890 | 3.882 | -20.615 |
| Pennsylvania   | 4.760 | 5.283 | 10.970  |
| Rhode Island   | 5.329 | 4.158 | -21.977 |
| South Carolina | 4.165 | 4.306 | 3.370   |
| South Dakota   | 4.885 | 4.101 | -16.042 |
| Tennessee      | 4.795 | 4.043 | -15.680 |
| Texas          | 5.159 | 5.054 | -2.023  |
| Utah           | 4.468 | 4.777 | 6.924   |
| Vermont        | Inf   | Inf   |         |
| Virginia       | 4.756 | 4.987 | 4.855   |
| Washington     | 4.618 | 5.201 | 12.607  |
| West Virginia  | 4.885 | 4.329 | -11.373 |
| Wisconsin      | 4.800 | 4.766 | -0.714  |
| Wyoming        | 4.755 | 4.050 | -14.836 |

---

# Regression Analysis

## Model Specifications

1.  $\log(\text{employment}) = b_0 + b_1 \text{covid\_period} + \text{FE\_state} + \text{FE\_industry}$
2.  $\log(\text{wage}) = b_0 + b_1 \text{covid\_period} + \text{FE\_state} + \text{FE\_industry}$
3.  $\log(\text{wage}) = b_0 + b_1 \text{industry\_share} + \text{FE\_state} + \text{FE\_industry} + \text{FE\_year}$
4.  $\text{wage\_premium} = b_0 + b_1 \text{lag\_premium} + \text{FE\_state} + \text{FE\_industry}$
5.  $\text{pct\_change} = b_0 + b_1 \text{lag\_pct\_change} + b_2 \log(\text{industry\_size}) + \text{FE\_state} + \text{FE\_industry} + \text{FE\_year}$
6.  $\log(\text{wage\_ratio}) = b_0 + b_1 \log(\text{employment\_concentration}) + b_2 \log(\text{total\_employment}) + \text{FE\_state} + \text{FE\_year}$

Table 4: Regression Results

|                       | Employment (COVID)  | Wages (COVID)       | Wages (Concentration) | Wage Premium        | Employment Growth    | Wage Inequality   |
|-----------------------|---------------------|---------------------|-----------------------|---------------------|----------------------|-------------------|
| COVID Period          | 0.071***<br>(0.009) | 0.224***<br>(0.005) |                       |                     |                      |                   |
| Industry Share        |                     |                     | 1.676***<br>(0.245)   |                     |                      |                   |
| Lagged Premium        |                     |                     |                       | -0.034**<br>(0.012) |                      |                   |
| Lagged % Change       |                     |                     |                       |                     | -0.129***<br>(0.011) |                   |
| Industry Size         |                     |                     |                       |                     | -0.148***<br>(0.019) |                   |
| Log Emp Concentration |                     |                     |                       |                     |                      | 0.370*<br>(0.172) |
| Log Total Employment  |                     |                     |                       |                     |                      | 0.043<br>(0.167)  |
| Num.Obs.              | 17643               | 17641               | 17641                 | 16827               | 15399                | 814               |
| R2                    | 0.899               | 0.829               | 0.867                 | 0.729               | 0.147                | 0.253             |

Significance levels: \* p<0.1, \*\* p<0.05, \*\*\* p<0.01  
Standard errors in parentheses

Pooled Regression Results