**Appendix for “Will Divestment from Employment-Based Health Insurance Save Employers Money? The Case of State and Local Governments”**

by

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**1. Study Population**

We consider two groups in our analysis, whose size we estimated using the CPS. The first group is current employees of State and Local Governments. The second group is made up of retirees from State and Local Governments. Additionally, we estimate the size of households of these individuals. The table below shows the estimated size of these groups.

**Appendix Table 1. Estimates of the Number of Current Workers and Retirees from State and Local Governments under 65 Years of Age**

|  |  |  |
| --- | --- | --- |
|  | **Current Workers** | **Retirees below Age 65** |
| **State** | **#** | **Average** **Household** **Size** | **#** | **Average** **Household** **Size** |
| **Alabama** | 217,000 | 3.4 | 30,000 | 3.0 |
| **Alaska** | 53,000 | 3.6 | 6,000 | 2.9 |
| **Arizona** | 222,000 | 3.8 | 31,000 | 2.4 |
| **Arkansas** | 95,000 | 3.2 | 8,000 | 2.1 |
| **California** | 1,397,000 | 3.8 | 134,000 | 2.5 |
| **Colorado** | 199,000 | 3.4 | 26,000 | 2.3 |
| **Connecticut** | 148,000 | 3.6 | 17,000 | 2.7 |
| **Delaware** | 30,000 | 3.3 | 5,000 | 2.1 |
| **District Of Columbia** | 16,000 | 2.6 | 1,000 | 1.5 |
| **Florida** | 636,000 | 3.2 | 74,000 | 2.6 |
| **Georgia** | 375,000 | 3.5 | 49,000 | 2.4 |
| **Hawaii** | 53,000 | 4.5 | 10,000 | 4.7 |
| **Idaho** | 80,000 | 3.4 | 7,000 | 2.9 |
| **Illinois** | 426,000 | 3.3 | 53,000 | 2.3 |
| **Indiana** | 197,000 | 3.2 | 22,000 | 2.3 |
| **Iowa** | 150,000 | 3.2 | 15,000 | 2.2 |
| **Kansas** | 153,000 | 3.6 | 14,000 | 2.2 |
| **Kentucky** | 172,000 | 3.1 | 34,000 | 2.4 |
| **Louisiana** | 161,000 | 3.5 | 21,000 | 2.7 |
| **Maine** | 53,000 | 3.2 | 9,000 | 2.6 |
| **Maryland** | 236,000 | 3.6 | 29,000 | 3.1 |
| **Massachusetts** | 266,000 | 3.4 | 30,000 | 2.2 |
| **Michigan** | 299,000 | 3.6 | 48,000 | 2.6 |
| **Minnesota** | 190,000 | 3.5 | 24,000 | 2.2 |
| **Mississippi** | 157,000 | 3.4 | 23,000 | 2.2 |
| **Missouri** | 213,000 | 3.6 | 24,000 | 2.5 |
| **Montana** | 44,000 | 3.2 | 5,000 | 2.0 |
| **Nebraska** | 86,000 | 3.4 | 7,000 | 3.0 |
| **Nevada** | 95,000 | 3.8 | 15,000 | 2.5 |
| **New Hampshire** | 48,000 | 3.3 | 7,000 | 2.6 |
| **New Jersey** | 341,000 | 3.6 | 30,000 | 3.0 |
| **New Mexico** | 90,000 | 3.5 | 15,000 | 2.5 |
| **New York** | 921,000 | 3.6 | 108,000 | 2.7 |
| **North Carolina** | 474,000 | 3.3 | 54,000 | 2.3 |
| **North Dakota** | 34,000 | 3.3 | 3,000 | 2.2 |
| **Ohio** | 397,000 | 3.5 | 56,000 | 2.6 |
| **Oklahoma** | 161,000 | 3.5 | 10,000 | 2.8 |
| **Oregon** | 173,000 | 3.3 | 32,000 | 2.2 |
| **Pennsylvania** | 418,000 | 3.4 | 77,000 | 2.8 |
| **Rhode Island** | 37,000 | 3.5 | 8,000 | 2.5 |
| **South Carolina** | 195,000 | 3.3 | 41,000 | 2.4 |
| **South Dakota** | 33,000 | 3.5 | 3,000 | 2.2 |
| **Tennessee** | 209,000 | 3.2 | 15,000 | 2.2 |
| **Texas** | 999,000 | 3.6 | 108,000 | 2.6 |
| **Utah** | 91,000 | 4.1 | 9,000 | 2.6 |
| **Vermont** | 27,000 | 3.3 | 3,000 | 2.7 |
| **Virginia** | 266,000 | 3.3 | 28,000 | 2.2 |
| **Washington** | 316,000 | 3.4 | 29,000 | 2.5 |
| **West Virginia** | 93,000 | 3.1 | 10,000 | 1.9 |
| **Wisconsin** | 228,000 | 3.6 | 31,000 | 2.2 |
| **Wyoming** | 40,000 | 3.3 | 3,000 | 2.8 |
| **NATIONAL** | **12,008,000** | **3.5** | **1,455,000** | **2.5** |

**2. Average Annual Healthcare Expenditures**

An individual’s healthcare expenditures and those of his or her household act as reasonably close proxy for health insurance premium payments. We used data from MEPS to estimate average annual medical expenditures for individuals conditional on their age, sex, and region of the country in which they reside (see description further below). With these estimates we predicted the average annual healthcare costs of current State and Local Government Employees, Retirees from these jobs under age 65 years, and the households of these individuals. As a face validity check, we compared these predictions to the price of Silver Plans on ACA Exchanges with the knowledge that State and Local Government benefits are typically more generous than for comparable jobs in the private sector. Appendix Table 2 shows a comparison of our predictions to the premiums for a Silver Plan confirming that predicted average healthcare spending (our proxy for premiums) in our group was higher than the Silver Plan premium amounts, closer to the Gold or Platinum Plans.

**Appendix Table 2. How Much Do Estimated Average Annual Healthcare Expenditures Exceed Silver Plans on ACA Exchanges for Comparable Household Sizes**

|  |  |
| --- | --- |
|  | **Household Size** |
|  | **1 person** | **4 people** |
| **Alabama** | $1,947  | $1,599  |
| **Alaska** | $2,284  | $1,974  |
| **Arizona** | $1,268  | $842  |
| **Arkansas** | $1,507  | $3,452  |
| **California** | $1,906  | $2,066  |
| **Colorado** | $1,776  | $734  |
| **Connecticut** | $1,774  | $5,491  |
| **Delaware** | $2,841  | $2,307  |
| **District Of Columbia** | $1,245  | $2,446  |
| **Florida** | $2,037  | $2,089  |
| **Georgia** | $2,055  | $1,979  |
| **Hawaii** | $2,233  | $3,693  |
| **Idaho** | $2,045  | $632  |
| **Illinois** | $2,698  | $3,290  |
| **Indiana** | $2,296  | $2,952  |
| **Iowa** | $2,339  | $2,287  |
| **Kansas** | $2,367  | $2,549  |
| **Kentucky** | $648  | $1,668  |
| **Louisiana** | $1,201  | $1,952  |
| **Maine** | $3,554  | $4,729  |
| **Maryland** | $2,082  | $2,460  |
| **Massachusetts** | $2,129  | $4,504  |
| **Michigan** | $2,118  | $3,159  |
| **Minnesota** | $2,646  | $3,422  |
| **Mississippi** | $1,758  | $2,254  |
| **Missouri** | $1,863  | $2,533  |
| **Montana** | $2,026  | $1,043  |
| **Nebraska** | $2,275  | $2,354  |
| **Nevada** | $2,243  | $1,576  |
| **New Hampshire** | $2,891  | $4,442  |
| **New Jersey** | $2,131  | $5,471  |
| **New Mexico** | $2,072  | $802  |
| **New York** | $2,446  | $4,867  |
| **North Carolina** | $2,087  | $1,418  |
| **North Dakota** | $1,835  | $2,426  |
| **Ohio** | $1,541  | $2,656  |
| **Oklahoma** | $2,554  | $803  |
| **Oregon** | $1,436  | $608  |
| **Pennsylvania** | $2,235  | $4,460  |
| **Rhode Island** | $2,773  | $5,354  |
| **South Carolina** | $2,890  | $2,544  |
| **South Dakota** | $2,512  | $1,740  |
| **Tennessee** | $2,178  | $2,494  |
| **Texas** | $1,957  | $2,031  |
| **Utah** | $1,462  | $1,092  |
| **Vermont** | $2,772  | $4,373  |
| **Virginia** | $2,339  | $2,397  |
| **Washington** | $1,976  | $957  |
| **West Virginia** | $2,108  | $1,859  |
| **Wisconsin** | $2,678  | $2,123  |
| **Wyoming** | $2,008  | $1,178 |

We used the MEPS annual individual healthcare expenditure data including pharmaceuticals inflated to 2013 US dollars using the medical component of the Consumer Price Index along with data on the age, sex, and region (Northeast, South, Midwest, or West) to form our predictions of annual individual expenditure for our two study populations. To allow for a flexible non-linear relationship between age and medical expenditures, the regression used restricted cubic splines for age in years with knots placed at 15 year intervals from age 0 through age 75 and an additional knot at age 85. Region entered the regression as a set of dummy variables (reference category is Northeast) as did sex (reference category is Female). The dummy variables were interacted with each other, age splines, and the combination of the three. The regression model results are shown below and for greater clarity and ease of interpretation, the predicted expenditure patterns by age, sex, and region are shown in Appendix Figure 1 below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Coefficient** | **Beta** | **Robust****Standard Error** | **p-value** | **95% CI** |  |
|  |  |  |  |  |  |
| **Age Spline 0-15** | 46.16392 | 74.24043 | 0.534 | -99.34571 | 191.6735 |
| **Age Spline 15-30** | 747.1422 | 821.656 | 0.363 | -863.2856 | 2357.57 |
| **Age Spline 30-45** | -2039.398 | 2538.524 | 0.422 | -7014.85 | 2936.054 |
| **Age Spline 45-60** | 2075.241 | 3814.94 | 0.586 | -5401.959 | 9552.44 |
| **Age Spline 60-75** | 2507.586 | 5293.612 | 0.636 | -7867.778 | 12882.95 |
| **Age Spline 75-85** | -12117.14 | 8306.755 | 0.145 | -28398.2 | 4163.916 |
|  |  |  |  |  |  |
| **Region** |  |  |  |  |  |
|  **Midwest** | 387.8233 | 757.9995 | 0.609 | -1097.839 | 1873.486 |
|  **South** | 707.2436 | 1058.636 | 0.504 | -1367.659 | 2782.146 |
|  **West** | 37.06308 | 695.6172 | 0.958 | -1326.331 | 1400.458 |
|  |  |  |  |  |  |
| **Region \* Age Spline (0-15)** |  |  |  |  |  |
|  **Midwest** | -124.7626 | 93.26517 | 0.181 | -307.5603 | 58.03508 |
|  **South** | -157.4415 | 116.3443 | 0.176 | -385.4737 | 70.59075 |
|  **West** | -124.8688 | 85.01932 | 0.142 | -291.5048 | 41.76718 |
|  |  |  |  |  |  |
| **Region \* Age Spline (15-30)** |  |  |  |  |  |
|  **Midwest** | 1958.662 | 1035.768 | 0.059 | -71.4205 | 3988.745 |
|  **South** | 1914.719 | 1151.082 | 0.096 | -341.377 | 4170.816 |
|  **West** | 1709.492 | 978.8776 | 0.081 | -209.0866 | 3628.071 |
|  |  |  |  |  |  |
| **Region \* Age Spline (30-45)** |  |  |  |  |  |
|  **Midwest** | -6791.2 | 3249.654 | 0.037 | -13160.45 | -421.9495 |
|  **South** | -6318.288 | 3425.557 | 0.065 | -13032.3 | 395.7286 |
|  **West** | -5643.78 | 3158.736 | 0.074 | -11834.83 | 547.274 |
|  |  |  |  |  |  |
| **Region \* Age Spline (45-60)** |  |  |  |  |  |
|  **Midwest** | 11469.48 | 5059.383 | 0.023 | 1553.198 | 21385.76 |
|  **South** | 10160.73 | 4931.651 | 0.039 | 494.7989 | 19826.66 |
|  **West** | 9013.434 | 5245.722 | 0.086 | -1268.067 | 19294.93 |
|  |  |  |  |  |  |
| **Region \* Age Spline (60-75)** |  |  |  |  |  |
|  **Midwest** | -14347.83 | 7113.113 | 0.044 | -28289.38 | -406.2869 |
|  **South** | -12538.86 | 6569.928 | 0.056 | -25415.78 | 338.0518 |
|  **West** | -10717.47 | 7838.721 | 0.172 | -26081.19 | 4646.257 |
|  |  |  |  |  |  |
| **Region \* Age Spline (75-85)** |  |  |  |  |  |
|  **Midwest** | 13836.75 | 10950.82 | 0.206 | -7626.616 | 35300.12 |
|  **South** | 12656.03 | 10005.44 | 0.206 | -6954.408 | 32266.48 |
|  **West** | 10625.74 | 12637.5 | 0.4 | -14143.5 | 35394.97 |
|  |  |  |  |  |  |
| **Male** | 509.9058 | 765.2606 | 0.505 | -989.9883 | 2009.8 |
|  |  |  |  |  |  |
| **Male \* Age Spline (0-15)** |  |  |  |  |  |
|  **Male** | -39.09946 | 98.33704 | 0.691 | -231.8379 | 153.639 |
|  |  |  |  |  |  |
| **Male \* Age Spline (15-30)** |  |  |  |  |  |
|  **Male** | -1441.292 | 1150.058 | 0.21 | -3695.382 | 812.7974 |
|  |  |  |  |  |  |
| **Male \* Age Spline (30-45)** |  |  |  |  |  |
|  **Male** | 6334.444 | 3810.186 | 0.096 | -1133.437 | 13802.32 |
|  |  |  |  |  |  |
| **Male \* Age Spline (45-60)** |  |  |  |  |  |
|  **Male** | -10208.86 | 6793.23 | 0.133 | -23523.44 | 3105.723 |
|  |  |  |  |  |  |
| **Male \* Age Spline (60-75)** |  |  |  |  |  |
|  **Male** | 7314.355 | 10892.11 | 0.502 | -14033.94 | 28662.65 |
|  |  |  |  |  |  |
| **Male \* Age Spline (75-85)** |  |  |  |  |  |
|  **Male** | -3210.858 | 16638.77 | 0.847 | -35822.48 | 29400.76 |
|  |  |  |  |  |  |
| **Region \* Male** |  |  |  |  |  |
|  **Midwest, Male** | -378.9305 | 968.414 | 0.696 | -2277.001 | 1519.14 |
|  **South, Male** | -873.5618 | 1190.575 | 0.463 | -3207.063 | 1459.939 |
|  **West, Male** | -507.1493 | 1028.38 | 0.622 | -2522.752 | 1508.454 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (0-15)** |  |  |  |  |  |
|  **Midwest, Male** | 65.12622 | 123.7642 | 0.599 | -177.4489 | 307.7013 |
|  **South, Male** | 96.7906 | 138.5451 | 0.485 | -174.7548 | 368.336 |
|  **West, Male** | 114.1545 | 138.2099 | 0.409 | -156.7339 | 385.0428 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (15-30)** |  |  |  |  |  |
|  **Midwest, Male** | -952.4504 | 1438.329 | 0.508 | -3771.544 | 1866.644 |
|  **South, Male** | -1026.397 | 1477.878 | 0.487 | -3923.005 | 1870.21 |
|  **West, Male** | -1090.467 | 1546.795 | 0.481 | -4122.152 | 1941.218 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (30-45)** |  |  |  |  |  |
|  **Midwest, Male** | 2560.406 | 4753.16 | 0.59 | -6755.684 | 11876.5 |
|  **South, Male** | 2977.662 | 4707.748 | 0.527 | -6249.421 | 12204.74 |
|  **West, Male** | 2009.953 | 4971.515 | 0.686 | -7734.109 | 11754.01 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (45-60)** |  |  |  |  |  |
|  **Midwest, Male** | -2951.193 | 8324.652 | 0.723 | -19267.33 | 13364.94 |
|  **South, Male** | -4472.105 | 7969.002 | 0.575 | -20091.17 | 11146.96 |
|  **West, Male** | -82.698 | 8576.863 | 0.992 | -16893.16 | 16727.77 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (60-75)** |  |  |  |  |  |
|  **Midwest, Male** | 4449.379 | 13006.17 | 0.732 | -21042.43 | 29941.19 |
|  **South, Male** | 8078.473 | 12541.92 | 0.52 | -16503.42 | 32660.37 |
|  **West, Male** | -1126.016 | 13641.33 | 0.934 | -27862.72 | 25610.69 |
|  |  |  |  |  |  |
| **Region \* Male \* Age Spline (75-85)** |  |  |  |  |  |
|  **Midwest, Male** | -6257.706 | 20108.21 | 0.756 | -45669.36 | 33153.95 |
|  **South, Male** | -11847.3 | 19629.13 | 0.546 | -50319.97 | 26625.37 |
|  **West, Male** | 1877.599 | 21675.4 | 0.931 | -40605.71 | 44360.91 |
|  |  |  |  |  |  |
| **Constant** | 2133.172 | 607.905 | 0 | 941.6918 | 3324.653 |

**N = 167,279; F(55,167223) = 80.10; Prob > F < 0.0001; R-squared = 0.0519; Root MSE = 21,878**

**Appendix Figure 1. Average Annual Medical Expenditures Including Pharmaceuticals (USD 2013) By Age, Sex, and US Geographic Region**



**3. Workforces Sizes of State and Local Governments in Relationship to ACA Employer Penalties**

We used 2011 APES data to provide an independent estimate of the size of our study population as a face validation check and more importantly to characterize the percentage of state and local government workers working for governments of different sizes. The latter was particularly relevant because employer penalties are determined by the number of full-time workers above 30. Since the CPS does not allow linking individual workers to specific State or Local Government entities, it was important to establish that the overwhelming majority of workers work for governments whose total number of employees exceeds several hundred. This would mean that the likelihood of at least one employee receiving subsidies or cost-sharing for purchasing insurance on ACA exchanges is high and that the average per-capita penalty for that government entity would be very close to $2,000 should it choose to cancel its provision of insurance entirely. Appendix Table 3 shows both of these assumptions to be highly credible.

**Appendix Table 3. Distribution of Sizes of State and Local Government Workforces According to the 2011 APES and the Implied size of the Employer Penalty for Firms of Corresponding Sizes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Size of Government Workforce (Number of Full-time Employees)** | **Average Per-Capita Penalty****($)** | **Total Number of State and Local Governments** | **Total Number of Full-Time Employees** |
| **30 and below** | 0 | 3,290 | 41,914 |
| **31** | 65 | 1 | 31 |
| **32-33** | 163 | 6 | 196 |
| **34-35** | 264 | 7 | 242 |
| **36-37** | 356 | 6 | 219 |
| **38-39** | 451 | 11 | 426 |
| **40-42** | 533 | 23 | 941 |
| **43-46** | 658 | 47 | 2,102 |
| **47-49** | 749 | 40 | 1,919 |
| **50-54** | 846 | 122 | 6,344 |
| **55-59** | 944 | 125 | 7,103 |
| **60-66** | 1,050 | 162 | 10,229 |
| **67-74** | 1,148 | 156 | 10,989 |
| **75-85** | 1,252 | 243 | 19,489 |
| **86-99** | 1,352 | 281 | 26,034 |
| **100-119** | 1,452 | 315 | 34,508 |
| **120-149** | 1,552 | 450 | 60,252 |
| **150-199** | 1,654 | 642 | 111,263 |
| **200-299** | 1,757 | 834 | 206,306 |
| **300-599** | 1,861 | 1,229 | 532,079 |
| **600+** | 1,985 | 2,522 | 10,400,000 |
| **TOTAL** |  | **10,512** | **11,472,568** |

**4. Medicaid Expansions**

State Medicaid expansions are important given that under the ACA the federal government supports these expansions. However, such expansions are a moving target – as some states have not implemented them without any current intention of doing so and others have not implemented but are contemplating expansions more actively. We used data reported by the Kaiser Family Foundation monitoring current implementations of Medicaid expansions as of January 28, 2014 as shown in the table below.

**Appendix Table 4. Medicaid Expansions for Implementation in 2014 According to the Kaiser Family Foundation**

|  |  |
| --- | --- |
| **State** | **Implementing Expansion** **in 2014** |
| **Alabama** | No |
| **Alaska** | No |
| **Arizona** | Yes |
| **Arkansas** | Yes |
| **California** | Yes |
| **Colorado** | Yes |
| **Connecticut** | Yes |
| **Delaware** | Yes |
| **District of Columbia** | Yes |
| **Florida** | No |
| **Georgia** | No |
| **Hawaii** | Yes |
| **Idaho** | No |
| **Illinois** | Yes |
| **Indiana** | No |
| **Iowa** | Yes |
| **Kansas** | No |
| **Kentucky** | Yes |
| **Louisiana** | No |
| **Maine** | No |
| **Maryland** | Yes |
| **Massachusetts** | Yes |
| **Michigan** | Yes |
| **Minnesota** | Yes |
| **Mississippi** | No |
| **Missouri** | No |
| **Montana** | No |
| **Nebraska** | No |
| **Nevada** | Yes |
| **New Hampshire** | No |
| **New Jersey** | Yes |
| **New Mexico** | Yes |
| **New York** | Yes |
| **North Carolina** | No |
| **North Dakota** | Yes |
| **Ohio** | Yes |
| **Oklahoma** | No |
| **Oregon** | Yes |
| **Pennsylvania** | No |
| **Rhode Island** | Yes |
| **South Carolina** | No |
| **South Dakota** | No |
| **Tennessee** | No |
| **Texas** | No |
| **Utah** | No |
| **Vermont** | Yes |
| **Virginia** | No |
| **Washington** | Yes |
| **West Virginia** | Yes |
| **Wisconsin** | No |
| **Wyoming** | No |

**5. Federal Subsidy and Cost-Sharing for ACA Exchange-Purchased Health Insurance Plans**

For individuals purchasing health insurance on the ACA exchanges, federal subsidies and cost sharing may be available depending on their household income and their expected medical expenditures relative to the Silver Plan premium payments for households of equivalent size. Subsidies are computed based on tiers of household income as a percentage of the Federal Poverty Level: 138-149, 150-199, 200-249, 250-299, and 300-400 percent of the Federal Poverty Level respectively. To determine the subsidy amount, the subsidy percentage is multiplied by the total household income, and this amount is then subtracted from the price of a Silver Plan for a household of size 1, 2, or 3+ individuals according to the size of each household in the affected population. The price of the Silver Plan for a household of one individual is $4,914 and $13,591 for a household of 4 in in 2013 dollars. Likewise, cost-sharing percentages are based on tiers from 138-149, 150-199, 200-249, and 250-400 percent of the Federal Poverty Level. To determine the cost-sharing amount, the cost-sharing percentage is multiplied by the total expected annual household medical expenditure.

**6. Tax Effects of Income Supplements from State and Local Governments Whose Workers Move to Purchase Insurance on ACA Exchanges**

For federal income taxes, we classified each CPS household as being a single filer, married joint filer, or head of household filer. Then, based on their Adjusted Gross Income (AGI), we computed their total tax burden based on 2013 AGI cutoffs for marginal tax rates of 10%, 15%, 25%, 28%, 33%, 35%, and 39.6%. Assuming State and Local Governments wanted to make their current workers as well off as they currently are after divesting from health care coverage, we computed the amount of additional compensation that would need to be paid by SLGs to their employees to offset both the cost of health insurance premium payments (net federal subsidies and cost-sharing which also depend on the amount of the additional compensation) as well as to cover increases in tax liabilities, using a two-step fixed point method (detailed below).

**7. State and Local Government Income Supplements, Federal Subsidies and Cost-Sharing, and Tax Consequences: Two-Stage Fixed Point Method Technical Details**

To make our estimates of State and Local Government savings by divesting from the provision of health insurance, we needed to compute the amount State and Local Government income supplements net of federal subsidies and cost-sharing and compensating for their impact on an individual’s federal tax bill. As federal subsidies and cost-sharing depended on total household income relative to the Federal Poverty Level and the tax bill depended on Adjusted Gross Income, simultaneously computing these quantities implied dealing with their interdependency. To do so, we used an iterative, two-step, fixed point method.

First, we define three functions of Household Income (*I*) and Household Size and Demographic Structure (*F*).

1. Subsidies (Federal Subsidy and Cost-Sharing) Function: $θ\_{S}:\left(I,F\right)\rightarrow S$
2. Health Insurance Premium Payment Function: $θ\_{P}:\left(I,F\right)\rightarrow P$
3. Federal Tax Bill Function: $θ\_{τ}:\left(I,F\right)\rightarrow τ$

We compute initial values for Premium Payments (*P0*), Subsidies (*S0*) and Taxes (*T0*) independent of one another:

$$P\_{0}=θ\_{P}\left(I,F\right)$$

$$S\_{0}=θ\_{S}\left(I,F\right)$$

$$τ\_{0}=θ\_{τ}\left(I,F\right)$$

We notice that Premium Payments are determined entirely by the Household Size and Demographic Structure so *P0* will remain fixed at *P* which we use unsubscripted for the subsequent description below.

In our first step of our two-step approach, we update the Subsidies to account for premium support that increases income provided by the State and Local government and likewise recomputed Taxes based on this increase to income:

$$S\_{1}=θ\_{S}\left(I+P-S\_{0},F\right)$$

$$τ\_{1}=θ\_{τ}\left(I+P-S\_{0},F\right)$$

In our second step of our two-step approach, to ensure that the individual receives enough additional income so that increases to the tax bill are compensated for, we update the Taxes based on the following:

$$Δτ=τ\_{1}-τ\_{0}$$

$$S\_{2}=θ\_{S}\left(I+P-S\_{2}+Δτ,F\right)$$

$$τ\_{2}=θ\_{τ}\left(I+P-S\_{2}+Δτ,F\right)$$

The system of equations has a fixed point. First, the Health Insurance Premium Payments (P) for a fixed value of F and do not depend on income. Second, the Subsidies (*S*) are a declining function of income for a fixed value of *F*. Third, Taxes is an increasing function of income for a fixed value of *F*, but stabilizes to a function of elements that do not depend on subsidies once income exceeds 400% of the Federal Poverty Level and hence subsidies are 0.

We rely on a numerical approximation of this fixed point by iteratively repeating this two-step computation 50 times *S2* in a given iteration replaces *S0* for the start of the next iteration. After the 50 iterations, we examine the values of subsidies and taxes after each iteration to ensure that they have reached stable values by end whose changes from iteration 49 to 50 are approaching $0 on average for all U.S. states (i.e., examining patterns of changes for each sequential pair of iterations) and are very small in the last pair of iterations (i.e., <$1 on average for each state between iteration 49 and 50).

Finally, with the values of the federal subsidies and cost-sharing estimated along with the change in taxes for each household at the 50th iteration, we can compute the State and Local Government income supplement to offset the difference between health insurance premium payments as:

$$SLG\_{supplement}=P-S\_{2}+Δτ$$

**8. Additional Results and Supplemental Analyses**

**8a. Status Quo Estimates**

Appendix Table 5 shows the estimates of the total healthcare costs for households of SLGs workers and retirees below the age 65 as a proxy for their premium costs. These estimates represent the status quo costs against which potential savings and additional costs against which various divestment strategies are benchmarked. Likewise, Appendix Table 6 shows the % households of SLG current workers and retirees below the age of 65 that fall below important Federal Poverty Level thresholds (i.e., those for which ACA federal subsidies and cost-sharing would apply; those for which federal support of Medicaid expansions would apply if the state implements such an expansion). Of note, under various divestment strategies that involve transfers to workers or retirees from SLGs in the form of income supplements in lieu of providing health insurance directly, these percentages can change in ways that shift eligibility and sizes of subsidies and of cost-sharing (see Appendix Section 7 above on the dynamic calculation of these levels).

**Appendix Table 5. Estimated Total Premium Costs (in $1,000,000s) for Households of State and Local Government Current Workers and Retirees under Age 65**

|  |  |  |
| --- | --- | --- |
| **State** | **Current Workers** | **Retirees** |
| **Alabama** | 3,007 | 532 |
| **Alaska** | 643 | 110 |
| **Arizona** | 2,874 | 476 |
| **Arkansas** | 1,230 | 148 |
| **California** | 18,293 | 2,333 |
| **Colorado** | 2,340 | 446 |
| **Connecticut** | 2,212 | 337 |
| **Delaware** | 428 | 74 |
| **District Of Columbia** | 158 | 19 |
| **Florida** | 7,799 | 1,201 |
| **Georgia** | 4,881 | 892 |
| **Hawaii** | 746 | 194 |
| **Idaho** | 950 | 132 |
| **Illinois** | 5,810 | 1,003 |
| **Indiana** | 2,855 | 357 |
| **Iowa** | 2,067 | 320 |
| **Kansas** | 2,065 | 274 |
| **Kentucky** | 2,141 | 578 |
| **Louisiana** | 2,085 | 438 |
| **Maine** | 790 | 165 |
| **Maryland** | 3,107 | 479 |
| **Massachusetts** | 3,961 | 530 |
| **Michigan** | 4,247 | 865 |
| **Minnesota** | 2,747 | 447 |
| **Mississippi** | 1,898 | 389 |
| **Missouri** | 2,901 | 435 |
| **Montana** | 545 | 87 |
| **Nebraska** | 1,200 | 154 |
| **Nevada** | 1,216 | 263 |
| **New Hampshire** | 764 | 119 |
| **New Jersey** | 5,428 | 565 |
| **New Mexico** | 1,076 | 253 |
| **New York** | 13,337 | 1,855 |
| **North Carolina** | 5,598 | 948 |
| **North Dakota** | 450 | 55 |
| **Ohio** | 5,401 | 912 |
| **Oklahoma** | 1,933 | 238 |
| **Oregon** | 2,062 | 565 |
| **Pennsylvania** | 5,804 | 1,352 |
| **Rhode Island** | 575 | 124 |
| **South Carolina** | 2,487 | 677 |
| **South Dakota** | 428 | 64 |
| **Tennessee** | 2,764 | 265 |
| **Texas** | 12,324 | 1,709 |
| **Utah** | 1,183 | 166 |
| **Vermont** | 406 | 68 |
| **Virginia** | 3,442 | 444 |
| **Washington** | 3,840 | 546 |
| **West Virginia** | 1,241 | 184 |
| **Wisconsin** | 3,167 | 639 |
| **Wyoming** | 490 | 65 |
| **NATIONAL** | 159,395 | 25,489 |
| **10 YEARS** | 1,593,952 | 254,894 |

**Appendix Table 6. Household Incomes Relative to the 2013 Federal Poverty Line (FPL) for Current Workers and Retirees from State and Local Governments under 65 Years of Age**

|  |  |  |
| --- | --- | --- |
|  | **Current Workers** | **Retirees** |
| **State** | **% between****138-400%****of FPL** | **% below****138%****of FPL** | **% between****138-400%****of FPL** | **% below****138%****of FPL** |
| **Alabama** | 47% | 3% | 28% | 4% |
| **Alaska** | 47% | 3% | 44% | 9% |
| **Arizona** | 51% | 5% | 27% | 10% |
| **Arkansas** | 47% | 3% | 54% | 2% |
| **California** | 35% | 4% | 29% | 1% |
| **Colorado** | 36% | 1% | 31% | 0% |
| **Connecticut** | 31% | 3% | 17% | 5% |
| **Delaware** | 36% | 2% | 32% | 4% |
| **District Of Columbia** | 33% | 3% | 47% | 3% |
| **Florida** | 43% | 7% | 34% | 2% |
| **Georgia** | 50% | 4% | 31% | 4% |
| **Hawaii** | 50% | 3% | 30% | 0% |
| **Idaho** | 50% | 1% | 40% | 0% |
| **Illinois** | 34% | 2% | 23% | 4% |
| **Indiana** | 45% | 2% | 51% | 3% |
| **Iowa** | 38% | 7% | 29% | 4% |
| **Kansas** | 46% | 6% | 28% | 0% |
| **Kentucky** | 46% | 7% | 36% | 14% |
| **Louisiana** | 47% | 1% | 33% | 1% |
| **Maine** | 40% | 3% | 42% | 2% |
| **Maryland** | 29% | 2% | 36% | 11% |
| **Massachusetts** | 26% | 2% | 17% | 0% |
| **Michigan** | 34% | 1% | 34% | 2% |
| **Minnesota** | 34% | 10% | 30% | 4% |
| **Mississippi** | 48% | 2% | 45% | 7% |
| **Missouri** | 46% | 4% | 39% | 11% |
| **Montana** | 43% | 2% | 29% | 2% |
| **Nebraska** | 42% | 1% | 36% | 0% |
| **Nevada** | 39% | 1% | 27% | 5% |
| **New Hampshire** | 29% | 1% | 21% | 1% |
| **New Jersey** | 24% | 8% | 32% | 5% |
| **New Mexico** | 40% | 4% | 45% | 5% |
| **New York** | 36% | 3% | 33% | 1% |
| **North Carolina** | 44% | 2% | 31% | 0% |
| **North Dakota** | 35% | 2% | 22% | 10% |
| **Ohio** | 43% | 5% | 35% | 10% |
| **Oklahoma** | 48% | 3% | 35% | 0% |
| **Oregon** | 39% | 1% | 29% | 2% |
| **Pennsylvania** | 32% | 1% | 31% | 3% |
| **Rhode Island** | 25% | 4% | 20% | 3% |
| **South Carolina** | 40% | 2% | 48% | 0% |
| **South Dakota** | 49% | 5% | 34% | 10% |
| **Tennessee** | 46% | 5% | 35% | 1% |
| **Texas** | 48% | 3% | 33% | 0% |
| **Utah** | 47% | 1% | 17% | 1% |
| **Vermont** | 34% | 3% | 41% | 11% |
| **Virginia** | 38% | 1% | 35% | 3% |
| **Washington** | 38% | 4% | 47% | 2% |
| **West Virginia** | 47% | 4% | 34% | 2% |
| **Wisconsin** | 42% | 2% | 29% | 6% |
| **Wyoming** | 41% | 0% | 41% | 0% |
| **NATIONAL** | **40%** | **3%** | **33%** | **3%** |

**8b. Full Divestment Strategy**

We consider the Full Divestment Strategy in the context of current state Medicaid expansions which would be federally supported under the ACA. Columns in the tables generally show individual components of savings (costs) that the strategies induce. They are shown in green if they result in saving from the SLGs perspective and in red if they result in a cost. For the current Medicaid expansion scenarios in states that have not expanded Medicaid, we make two assumptions: 1) no savings from federal support for Medicaid expansions; 2) SLGs in states without Medicaid expansions increase compensation to households below 138% of the FPL so that their household falls at 138% of the FPL and hence they qualify for maximal exchange subsidies and cost-sharing. For current workers, assumption #2 induces some increases in federal taxes that the SLGs must also offset because of increased incomes. The component costs and savings are shown in Appendix Tables 7-8.

In the Full Divestment Strategy, we sum the component savings and costs for current worker and retiree subgroups. Then, for each state, we subtract employer penalties (approximately $2,000 per worker times the number of workers in Appendix Table 1) to compute the net savings (or cost) (Appendix Table 9). We repeat this step examining a set of hypotheticals in which the employer penalty per worker is lowered or even $0. The relevance of these hypotheticals is that some smaller to mid-size SLGs may face a lower per-worker employer penalty than $2,000 given that the penalty is levied for workers above the first 30. Additionally, the $0 penalty may be relevant if SLGs were to successfully challenge the applicability of the penalty to them.

We also consider the Full Divestment Strategy under a hypothetical scenario in which all states implement Medicaid expansions. These results are shown in Appendix Tables 10-12. Note that in the full Medicaid expansion scenario, SLGs do not increase the household incomes of those below 138% of FPL up to 138% since those falling below 138% of FPL qualify for federal support under Medicaid which produces larger savings for the SLGs.

**Appendix Table 7. Component Savings and Costs from Divestment for Current Employees Assuming Current Medicaid Expansions Only ($1,000,000s)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Savings from Federal Government Subsidies and Cost-Sharing** | **Savings from Federal Support of Medicaid Expansions\*** | **Additional Federal Taxes Compensated by State and Local Governments** | **Additional Compensation to bring Household below 138% of the Federal Poverty Level up to That Level\*** |
| **Alabama** | 547 | 0 | 457 | 17 |
| **Alaska** | 67 | 0 | 121 | 1 |
| **Arizona** | 552 | 88 | 431 | 0 |
| **Arkansas** | 239 | 64 | 163 | 0 |
| **California** | 1,961 | 510 | 3,453 | 0 |
| **Colorado** | 251 | 78 | 448 | 0 |
| **Connecticut** | 178 | 24 | 405 | 0 |
| **Delaware** | 42 | 10 | 72 | 0 |
| **District of Columbia** | 18 | 2 | 35 | 0 |
| **Florida** | 1,160 | 0 | 1,246 | 43 |
| **Georgia** | 928 | 0 | 721 | 76 |
| **Hawaii** | 93 | 32 | 121 | 0 |
| **Idaho** | 162 | 0 | 131 | 3 |
| **Illinois** | 576 | 67 | 1,047 | 0 |
| **Indiana** | 458 | 0 | 394 | 14 |
| **Iowa** | 208 | 37 | 322 | 0 |
| **Kansas** | 275 | 0 | 286 | 27 |
| **Kentucky** | 376 | 101 | 303 | 0 |
| **Louisiana** | 455 | 0 | 317 | 21 |
| **Maine** | 77 | 0 | 124 | 2 |
| **Maryland** | 278 | 89 | 609 | 0 |
| **Massachusetts** | 258 | 56 | 731 | 0 |
| **Michigan** | 409 | 67 | 753 | 0 |
| **Minnesota** | 207 | 15 | 476 | 0 |
| **Mississippi** | 418 | 0 | 245 | 23 |
| **Missouri** | 410 | 0 | 433 | 4 |
| **Montana** | 85 | 0 | 85 | 3 |
| **Nebraska** | 141 | 0 | 186 | 3 |
| **Nevada** | 113 | 6 | 213 | 0 |
| **New Hampshire** | 48 | 0 | 131 | 4 |
| **New Jersey** | 374 | 38 | 1,058 | 0 |
| **New Mexico** | 172 | 87 | 156 | 0 |
| **New York** | 1,242 | 463 | 2,260 | 0 |
| **North Carolina** | 990 | 0 | 837 | 34 |
| **North Dakota** | 35 | 10 | 74 | 0 |
| **Ohio** | 768 | 95 | 852 | 0 |
| **Oklahoma** | 326 | 0 | 268 | 22 |
| **Oregon** | 267 | 56 | 334 | 0 |
| **Pennsylvania** | 429 | 0 | 995 | 14 |
| **Rhode Island** | 32 | 8 | 108 | 0 |
| **South Carolina** | 334 | 0 | 379 | 4 |
| **South Dakota** | 58 | 0 | 63 | 3 |
| **Tennessee** | 466 | 0 | 384 | 34 |
| **Texas** | 1,978 | 0 | 1,816 | 130 |
| **Utah** | 199 | 0 | 196 | 4 |
| **Vermont** | 29 | 3 | 63 | 0 |
| **Virginia** | 386 | 0 | 579 | 5 |
| **Washington** | 430 | 32 | 678 | 0 |
| **West Virginia** | 187 | 47 | 166 | 0 |
| **Wisconsin** | 390 | 0 | 502 | 12 |
| **Wyoming** | 60 | 0 | 80 | 1 |

\* For states without Medicaid expansions, savings from federal support of Medicaid is $0 but additional savings are captured by increasing the household incomes of workers falling below 138% of the federal poverty lines up to 138% such that these households qualify for federal subsidies and cost-sharing for exchange-purchased plans.

**Appendix Table 8. Component Savings and Costs from Divestment for Retirees under Age 65 Assuming Current Medicaid Expansions Only ($1,000,000s)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Savings from Federal Government Subsidies and Cost-Sharing** | **Savings from Federal Support of Medicaid Expansions\*** | **Additional Compensation to bring Household below 138% of the Federal Poverty Level up to That Level\*** |
| **Alabama** | 38 | 0 | 5 |
| **Alaska** | 9 | 0 | 0 |
| **Arizona** | 36 | 37 | 0 |
| **Arkansas** | 21 | 18 | 0 |
| **California** | 142 | 33 | 0 |
| **Colorado** | 26 | 6 | 0 |
| **Connecticut** | 11 | 0 | 0 |
| **Delaware** | 3 | 4 | 0 |
| **District of Columbia** | 2 | 2 | 0 |
| **Florida** | 122 | 0 | 0 |
| **Georgia** | 61 | 0 | 1 |
| **Hawaii** | 15 | 19 | 0 |
| **Idaho** | 10 | 0 | 0 |
| **Illinois** | 18 | 0 | 0 |
| **Indiana** | 35 | 0 | 2 |
| **Iowa** | 7 | 5 | 0 |
| **Kansas** | 12 | 0 | 0 |
| **Kentucky** | 23 | 0 | 0 |
| **Louisiana** | 55 | 0 | 7 |
| **Maine** | 9 | 0 | 1 |
| **Maryland** | 26 | 7 | 0 |
| **Massachusetts** | 11 | 18 | 0 |
| **Michigan** | 43 | 0 | 0 |
| **Minnesota** | 12 | 7 | 0 |
| **Mississippi** | 24 | 0 | 3 |
| **Missouri** | 27 | 0 | 10 |
| **Montana** | 11 | 0 | 0 |
| **Nebraska** | 6 | 0 | 0 |
| **Nevada** | 10 | 0 | 0 |
| **New Hampshire** | 6 | 0 | 2 |
| **New Jersey** | 34 | 9 | 0 |
| **New Mexico** | 19 | 15 | 0 |
| **New York** | 102 | 92 | 0 |
| **North Carolina** | 67 | 0 | 0 |
| **North Dakota** | 1 | 0 | 0 |
| **Ohio** | 50 | 48 | 0 |
| **Oklahoma** | 22 | 0 | 4 |
| **Oregon** | 14 | 0 | 0 |
| **Pennsylvania** | 90 | 0 | 9 |
| **Rhode Island** | 4 | 3 | 0 |
| **South Carolina** | 76 | 0 | 0 |
| **South Dakota** | 4 | 0 | 0 |
| **Tennessee** | 27 | 0 | 11 |
| **Texas** | 120 | 0 | 3 |
| **Utah** | 7 | 0 | 0 |
| **Vermont** | 4 | 3 | 0 |
| **Virginia** | 61 | 0 | 6 |
| **Washington** | 16 | 9 | 0 |
| **West Virginia** | 12 | 10 | 0 |
| **Wisconsin** | 9 | 0 | 0 |
| **Wyoming** | 8 | 0 | 0 |

\* For states without Medicaid expansions, savings from federal support of Medicaid is $0 but additional savings are captured by increasing the household incomes of workers falling below 138% of the federal poverty lines up to 138% such that these households qualify for federal subsidies and cost-sharing for exchange-purchased plans.

**Appendix Table 9. Savings from Divestment for Current Employees and Retirees under Age 65 Assuming Current Medicaid Expansions Only and Depending on Employer Penalty Level ($1,000,000s)\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Savings****with****Employer****Penalty** **of****$2,000\*** | **Savings****with****Employer****Penalty of****$1,750** | **Savings****with****Employer****Penalty of****$1,500** | **Savings****with****Employer****Penalty of****$1,000** | **Savings****with****Employer****Penalty of****$0** |
| **Alabama** | **-329** | -274 | -220 | -112 | 105 |
| **Alaska** | **-153** | -140 | -127 | -100 | -47 |
| **Arizona** | **-162** | -106 | -51 | 60 | 282 |
| **Arkansas** | **-10** | 13 | 37 | 85 | 180 |
| **California** | **-3,600** | -3,250 | -2,901 | -2,203 | -806 |
| **Colorado** | **-484** | -435 | -385 | -285 | -86 |
| **Connecticut** | **-488** | -451 | -414 | -340 | -192 |
| **Delaware** | **-73** | -66 | -58 | -43 | -13 |
| **District of Columbia** | **-44** | -40 | -36 | -28 | -12 |
| **Florida** | **-1,279** | -1,120 | -961 | -643 | -7 |
| **Georgia** | **-559** | -465 | -372 | -184 | 191 |
| **Hawaii** | **-68** | -55 | -42 | -15 | 38 |
| **Idaho** | **-123** | -103 | -83 | -43 | 37 |
| **Illinois** | **-1,238** | -1,132 | -1,025 | -812 | -386 |
| **Indiana** | **-311** | -262 | -213 | -114 | 83 |
| **Iowa** | **-365** | -328 | -290 | -215 | -65 |
| **Kansas** | **-332** | -293 | -255 | -179 | -26 |
| **Kentucky** | **-146** | -103 | -60 | 26 | 198 |
| **Louisiana** | **-158** | -118 | -78 | 3 | 164 |
| **Maine** | **-147** | -134 | -121 | -94 | -41 |
| **Maryland** | **-680** | -621 | -562 | -444 | -208 |
| **Massachusetts** | **-919** | -853 | -786 | -653 | -387 |
| **Michigan** | **-832** | -758 | -683 | -533 | -234 |
| **Minnesota** | **-616** | -568 | -521 | -426 | -236 |
| **Mississippi** | **-144** | -104 | -65 | 13 | 170 |
| **Missouri** | **-437** | -383 | -330 | -224 | -11 |
| **Montana** | **-80** | -69 | -58 | -36 | 8 |
| **Nebraska** | **-215** | -193 | -172 | -129 | -43 |
| **Nevada** | **-274** | -250 | -226 | -179 | -84 |
| **New Hampshire** | **-179** | -167 | -155 | -131 | -83 |
| **New Jersey** | **-1,286** | -1,200 | -1,115 | -945 | -604 |
| **New Mexico** | **-43** | -21 | 2 | 47 | 137 |
| **New York** | **-2,203** | -1,973 | -1,743 | -1,282 | -361 |
| **North Carolina** | **-762** | -643 | -525 | -288 | 186 |
| **North Dakota** | **-96** | -88 | -79 | -62 | -28 |
| **Ohio** | **-685** | -585 | -486 | -288 | 109 |
| **Oklahoma** | **-268** | -228 | -188 | -107 | 54 |
| **Oregon** | **-343** | -300 | -257 | -170 | 3 |
| **Pennsylvania** | **-1,334** | -1,230 | -1,125 | -916 | -498 |
| **Rhode Island** | **-134** | -125 | -116 | -97 | -60 |
| **South Carolina** | **-363** | -314 | -265 | -168 | 27 |
| **South Dakota** | **-70** | -62 | -54 | -37 | -4 |
| **Tennessee** | **-353** | -301 | -249 | -144 | 65 |
| **Texas** | **-1,849** | -1,599 | -1,350 | -850 | 149 |
| **Utah** | **-177** | -154 | -131 | -86 | 5 |
| **Vermont** | **-78** | -71 | -64 | -51 | -24 |
| **Virginia** | **-675** | -608 | -542 | -409 | -143 |
| **Washington** | **-823** | -744 | -665 | -507 | -191 |
| **West Virginia** | **-96** | -73 | -49 | -3 | 90 |
| **Wisconsin** | **-571** | -514 | -457 | -343 | -115 |
| **Wyoming** | **-93** | -83 | -73 | -53 | -13 |
| **NATIONAL\*** | **0** | **13** | **39** | **234** | **2,281** |
| **10 YEARS\*** | **0** | **130** | **390** | **2,340** | **22,810** |

\* The first column of estimates ($2,000 employer penalty per worker) is shown in bold as it is the assumption made in the main analyses as shown in the manuscript.

**Appendix Table 10. Component Savings and Costs from Divestment for Current Employees Assuming Medicaid Expansions in All States ($1,000,000s)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Savings from Federal Government Subsidies and Cost-Sharing** | **Savings from Federal Support of Medicaid Expansions** | **Additional Federal Taxes Compensated by State and Local Governments** |
| **Alabama** | 502 | 163 | 453 |
| **Alaska** | 64 | 19 | 121 |
| **Arizona** | 552 | 88 | 431 |
| **Arkansas** | 239 | 64 | 163 |
| **California** | 1,961 | 510 | 3,453 |
| **Colorado** | 251 | 78 | 448 |
| **Connecticut** | 178 | 24 | 405 |
| **Delaware** | 42 | 10 | 72 |
| **District of Columbia** | 18 | 2 | 35 |
| **Florida** | 1,092 | 250 | 1,241 |
| **Georgia** | 872 | 301 | 710 |
| **Hawaii** | 93 | 32 | 121 |
| **Idaho** | 162 | 26 | 130 |
| **Illinois** | 576 | 67 | 1,047 |
| **Indiana** | 441 | 75 | 392 |
| **Iowa** | 208 | 37 | 322 |
| **Kansas** | 275 | 115 | 282 |
| **Kentucky** | 376 | 101 | 303 |
| **Louisiana** | 443 | 139 | 315 |
| **Maine** | 75 | 8 | 124 |
| **Maryland** | 278 | 89 | 609 |
| **Massachusetts** | 258 | 56 | 731 |
| **Michigan** | 409 | 67 | 753 |
| **Minnesota** | 207 | 15 | 476 |
| **Mississippi** | 371 | 168 | 240 |
| **Missouri** | 410 | 37 | 433 |
| **Montana** | 82 | 15 | 84 |
| **Nebraska** | 140 | 16 | 186 |
| **Nevada** | 113 | 6 | 213 |
| **New Hampshire** | 48 | 7 | 130 |
| **New Jersey** | 374 | 38 | 1,058 |
| **New Mexico** | 172 | 87 | 156 |
| **New York** | 1,242 | 463 | 2,260 |
| **North Carolina** | 961 | 168 | 831 |
| **North Dakota** | 35 | 10 | 74 |
| **Ohio** | 768 | 95 | 852 |
| **Oklahoma** | 312 | 95 | 265 |
| **Oregon** | 267 | 56 | 334 |
| **Pennsylvania** | 423 | 58 | 995 |
| **Rhode Island** | 32 | 8 | 108 |
| **South Carolina** | 334 | 102 | 378 |
| **South Dakota** | 54 | 12 | 63 |
| **Tennessee** | 439 | 150 | 378 |
| **Texas** | 1,904 | 602 | 1,794 |
| **Utah** | 191 | 41 | 196 |
| **Vermont** | 29 | 3 | 63 |
| **Virginia** | 374 | 99 | 578 |
| **Washington** | 430 | 32 | 678 |
| **West Virginia** | 187 | 47 | 166 |
| **Wisconsin** | 359 | 132 | 499 |
| **Wyoming** | 55 | 11 | 80 |

**Appendix Table 11. Component Savings and Costs from Divestment for Retirees under Age 65 Assuming Medicaid Expansions in All States ($1,000,000s)**

|  |  |  |
| --- | --- | --- |
|  | **Savings from** **Federal Government** **Subsidies and Cost-Sharing** | **Savings from** **Federal Support of** **Medicaid Expansions** |
| **Alabama** | 38 | 9 |
| **Alaska** | 7 | 6 |
| **Arizona** | 36 | 37 |
| **Arkansas** | 21 | 18 |
| **California** | 142 | 33 |
| **Colorado** | 26 | 6 |
| **Connecticut** | 11 | 0 |
| **Delaware** | 3 | 4 |
| **District of Columbia** | 2 | 2 |
| **Florida** | 109 | 33 |
| **Georgia** | 61 | 6 |
| **Hawaii** | 15 | 19 |
| **Idaho** | 10 | 0 |
| **Illinois** | 18 | 0 |
| **Indiana** | 35 | 8 |
| **Iowa** | 7 | 5 |
| **Kansas** | 10 | 4 |
| **Kentucky** | 23 | 0 |
| **Louisiana** | 34 | 78 |
| **Maine** | 7 | 3 |
| **Maryland** | 26 | 7 |
| **Massachusetts** | 11 | 18 |
| **Michigan** | 43 | 0 |
| **Minnesota** | 12 | 7 |
| **Mississippi** | 24 | 7 |
| **Missouri** | 13 | 22 |
| **Montana** | 9 | 6 |
| **Nebraska** | 6 | 5 |
| **Nevada** | 10 | 0 |
| **New Hampshire** | 4 | 7 |
| **New Jersey** | 34 | 9 |
| **New Mexico** | 19 | 15 |
| **New York** | 102 | 92 |
| **North Carolina** | 61 | 21 |
| **North Dakota** | 1 | 0 |
| **Ohio** | 50 | 48 |
| **Oklahoma** | 7 | 30 |
| **Oregon** | 14 | 0 |
| **Pennsylvania** | 81 | 21 |
| **Rhode Island** | 4 | 3 |
| **South Carolina** | 73 | 14 |
| **South Dakota** | 4 | 0 |
| **Tennessee** | 27 | 11 |
| **Texas** | 115 | 23 |
| **Utah** | 7 | 0 |
| **Vermont** | 4 | 3 |
| **Virginia** | 37 | 41 |
| **Washington** | 16 | 9 |
| **West Virginia** | 12 | 10 |
| **Wisconsin** | 4 | 14 |
| **Wyoming** | 6 | 4 |

**Appendix Table 12. Savings from Divestment for Current Employees and Retirees under Age 65 Assuming Medicaid Expansions in All States and Depending on Employer Penalty Level ($1,000,000s)\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Savings****with****Employer****Penalty** **of****$2,000** | **Savings****with****Employer****Penalty** **of****$1,750** | **Savings****with****Employer****Penalty** **of****$1,500** | **Savings****with****Employer****Penalty** **of****$1,000** | **Savings****with****Employer****Penalty** **of****$0** |
| **Alabama** | **-177** | -122 | -68 | 40 | 257 |
| **Alaska** | **-131** | -118 | -105 | -78 | -25 |
| **Arizona** | **-162** | -106 | -51 | 60 | 282 |
| **Arkansas** | **-10** | 13 | 37 | 85 | 180 |
| **California** | **-3,600** | -3,250 | -2,901 | -2,203 | -806 |
| **Colorado** | **-484** | -435 | -385 | -285 | -86 |
| **Connecticut** | **-488** | -451 | -414 | -340 | -192 |
| **Delaware** | **-73** | -66 | -58 | -43 | -13 |
| **District of Columbia** | **-44** | -40 | -36 | -28 | -12 |
| **Florida** | **-1,030** | -871 | -712 | -394 | 242 |
| **Georgia** | **-220** | -126 | -32 | 155 | 530 |
| **Hawaii** | **-68** | -55 | -42 | -15 | 38 |
| **Idaho** | **-92** | -72 | -52 | -12 | 68 |
| **Illinois** | **-1,238** | -1,132 | -1,025 | -812 | -386 |
| **Indiana** | **-227** | -178 | -129 | -30 | 167 |
| **Iowa** | **-365** | -328 | -290 | -215 | -65 |
| **Kansas** | **-184** | -146 | -108 | -31 | 122 |
| **Kentucky** | **-146** | -103 | -60 | 26 | 198 |
| **Louisiana** | **56** | 96 | 137 | 217 | 378 |
| **Maine** | **-137** | -123 | -110 | -84 | -31 |
| **Maryland** | **-680** | -621 | -562 | -444 | -208 |
| **Massachusetts** | **-919** | -853 | -786 | -653 | -387 |
| **Michigan** | **-832** | -758 | -683 | -533 | -234 |
| **Minnesota** | **-616** | -568 | -521 | -426 | -236 |
| **Mississippi** | **16** | 55 | 94 | 173 | 330 |
| **Missouri** | **-376** | -323 | -270 | -163 | 50 |
| **Montana** | **-60** | -49 | -38 | -16 | 28 |
| **Nebraska** | **-192** | -170 | -149 | -106 | -20 |
| **Nevada** | **-274** | -250 | -226 | -179 | -84 |
| **New Hampshire** | **-160** | -148 | -136 | -112 | -64 |
| **New Jersey** | **-1,286** | -1,200 | -1,115 | -945 | -604 |
| **New Mexico** | **-43** | -21 | 2 | 47 | 137 |
| **New York** | **-2,203** | -1,973 | -1,743 | -1,282 | -361 |
| **North Carolina** | **-568** | -450 | -331 | -94 | 380 |
| **North Dakota** | **-96** | -88 | -79 | -62 | -28 |
| **Ohio** | **-685** | -585 | -486 | -288 | 109 |
| **Oklahoma** | **-143** | -102 | -62 | 18 | 179 |
| **Oregon** | **-343** | -300 | -257 | -170 | 3 |
| **Pennsylvania** | **-1,246** | -1,142 | -1,037 | -828 | -410 |
| **Rhode Island** | **-134** | -125 | -116 | -97 | -60 |
| **South Carolina** | **-245** | -197 | -148 | -50 | 145 |
| **South Dakota** | **-59** | -51 | -43 | -26 | 7 |
| **Tennessee** | **-169** | -116 | -64 | 40 | 249 |
| **Texas** | **-1,147** | -898 | -648 | -148 | 851 |
| **Utah** | **-139** | -116 | -93 | -48 | 43 |
| **Vermont** | **-78** | -71 | -64 | -51 | -24 |
| **Virginia** | **-559** | -493 | -426 | -293 | -27 |
| **Washington** | **-823** | -744 | -665 | -507 | -191 |
| **West Virginia** | **-96** | -73 | -49 | -3 | 90 |
| **Wisconsin** | **-445** | -388 | -331 | -217 | 11 |
| **Wyoming** | **-83** | -73 | -63 | -43 | -3 |
| **NATIONAL\*** | **72** | **164** | **270** | **861** | **5,074** |
| **10 YEARS\*** | **720** | **1,640** | **2,700** | **8,610** | **50,740** |

\* The first column of estimates ($2,000 employer penalty per worker) is shown in bold as it is the assumption made in the main analyses as shown in the manuscript.

**8c. Selective Divestment Strategy**

We consider the Selective Divestment Strategy in the context of current state Medicaid expansions which would be federally supported under the ACA. Columns in the tables generally show individual components of savings (costs) that the strategies induce. They are shown in green if they result in saving from the SLGs perspective and in red if they result in a cost. For the current Medicaid expansion scenarios in states that have not expanded Medicaid, we make two assumptions: 1) no savings from federal support for Medicaid expansions; 2) SLGs in states without Medicaid expansions increase compensation to households below 138% of the FPL so that their household falls at 138% of the FPL and hence they qualify for maximal exchange subsidies and cost-sharing. For current workers, assumption #2 induces some increases in federal taxes that the SLGs must also offset because of increased incomes. The component costs and savings for current workers are shown in Appendix Tables 13. Of note, since full divestment for retirees under age 65 is cost saving and no employer penalties are relevant to this subgroup, we use the data presented in Appendix Table 8 for the retiree portion of this strategy as well.

In the Selective Divestment Strategy, we sum the component savings and costs for current worker and retiree subgroups. Unlike the Full Divestment Strategy, penalties are assessed for workers who qualify for federal subsidies or cost-sharing, so these penalty estimates are reported in the tables directly. Of note, like the Full Divestment Strategy, a $0 penalty may be relevant if SLGs were to successfully challenge the applicability of the penalty to them – if so, the component costs and savings could be summed omitting the employer penalty column.

We also consider the Selective Divestment Strategy under a hypothetical scenario in which all states implement Medicaid expansions. These results are shown in Appendix Tables 14, with those relevant to retirees the same as Appendix Table 11. Note that in the full Medicaid expansion scenario, SLGs do not increase the household incomes of those below 138% of FPL up to 138% since those falling below 138% of FPL qualify for federal support under Medicaid which produces larger savings for the SLGs.

**Appendix Table 13. Component Savings and Costs from Selective Divestment for Current Employees below 400% of the Federal Poverty Level Assuming Current Medicaid Expansions Only ($1,000,000s)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Savings from Federal Government Subsidies and Cost-Sharing** | **Savings from Federal Support of Medicaid Expansions\*** | **Additional Federal Taxes Compensated by State and Local Governments** | **Employer Penalties Paid to the Federal Government** | **Additional Compensation to bring Household below 138% of the Federal Poverty Level up to That Level\*** |
| **Alabama** | 537 | 0 | 57 | 222 | 17 |
| **Alaska** | 66 | 0 | 15 | 36 | 1 |
| **Arizona** | 547 | 81 | 65 | 224 | 0 |
| **Arkansas** | 231 | 63 | 14 | 81 | 0 |
| **California** | 1,929 | 492 | 274 | 858 | 0 |
| **Colorado** | 245 | 89 | 32 | 113 | 0 |
| **Connecticut** | 176 | 26 | 25 | 79 | 0 |
| **Delaware** | 41 | 8 | 6 | 20 | 0 |
| **District of Columbia** | 18 | 1 | 2 | 9 | 0 |
| **Florida** | 1,133 | 0 | 110 | 502 | 43 |
| **Georgia** | 916 | 0 | 113 | 402 | 76 |
| **Hawaii** | 87 | 30 | 17 | 43 | 0 |
| **Idaho** | 159 | 0 | 15 | 69 | 3 |
| **Illinois** | 549 | 66 | 75 | 253 | 0 |
| **Indiana** | 457 | 0 | 49 | 188 | 14 |
| **Iowa** | 205 | 37 | 29 | 96 | 0 |
| **Kansas** | 269 | 0 | 39 | 129 | 27 |
| **Kentucky** | 366 | 98 | 33 | 156 | 0 |
| **Louisiana** | 444 | 0 | 42 | 181 | 21 |
| **Maine** | 77 | 0 | 11 | 37 | 2 |
| **Maryland** | 269 | 91 | 35 | 121 | 0 |
| **Massachusetts** | 256 | 56 | 35 | 116 | 0 |
| **Michigan** | 401 | 71 | 55 | 180 | 0 |
| **Minnesota** | 205 | 13 | 33 | 101 | 0 |
| **Mississippi** | 405 | 0 | 43 | 165 | 23 |
| **Missouri** | 398 | 0 | 51 | 174 | 4 |
| **Montana** | 84 | 0 | 7 | 34 | 3 |
| **Nebraska** | 138 | 0 | 21 | 66 | 3 |
| **Nevada** | 105 | 5 | 21 | 55 | 0 |
| **New Hampshire** | 48 | 0 | 7 | 25 | 4 |
| **New Jersey** | 371 | 32 | 50 | 164 | 0 |
| **New Mexico** | 174 | 83 | 17 | 80 | 0 |
| **New York** | 1,227 | 464 | 177 | 579 | 0 |
| **North Carolina** | 982 | 0 | 98 | 415 | 34 |
| **North Dakota** | 33 | 9 | 6 | 18 | 0 |
| **Ohio** | 744 | 94 | 92 | 319 | 0 |
| **Oklahoma** | 319 | 0 | 35 | 134 | 22 |
| **Oregon** | 251 | 56 | 30 | 116 | 0 |
| **Pennsylvania** | 416 | 0 | 63 | 211 | 14 |
| **Rhode Island** | 31 | 9 | 5 | 13 | 0 |
| **South Carolina** | 332 | 0 | 41 | 163 | 4 |
| **South Dakota** | 57 | 0 | 10 | 29 | 3 |
| **Tennessee** | 450 | 0 | 48 | 203 | 34 |
| **Texas** | 1,945 | 0 | 229 | 831 | 130 |
| **Utah** | 199 | 0 | 23 | 78 | 4 |
| **Vermont** | 29 | 3 | 4 | 13 | 0 |
| **Virginia** | 377 | 0 | 59 | 189 | 5 |
| **Washington** | 419 | 31 | 63 | 192 | 0 |
| **West Virginia** | 182 | 44 | 19 | 84 | 0 |
| **Wisconsin** | 385 | 0 | 52 | 168 | 12 |
| **Wyoming** | 58 | 0 | 7 | 26 | 1 |

\* For states without Medicaid expansions, savings from federal support of Medicaid is $0 but additional savings are captured by increasing the household incomes of workers falling below 138% of the federal poverty lines up to 138% such that these households qualify for federal subsidies and cost-sharing for exchange-purchased plans.

**Appendix Table 14. Component Savings and Costs from Selective Divestment for Current Employees below 400% of the Federal Poverty Level Assuming Medicaid Expansions in All States ($1,000,000s)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Savings from Federal Government Subsidies and Cost-Sharing** | **Savings from Federal Support of Medicaid Expansions** | **Additional Federal Taxes Compensated by State and Local Governments** | **Employer Penalties Paid to the Federal Government** |
| **Alabama** | 485 | 164 | 55 | 211 |
| **Alaska** | 63 | 19 | 15 | 35 |
| **Arizona** | 547 | 81 | 65 | 224 |
| **Arkansas** | 231 | 63 | 14 | 81 |
| **California** | 1,929 | 492 | 274 | 858 |
| **Colorado** | 245 | 89 | 32 | 113 |
| **Connecticut** | 176 | 26 | 25 | 79 |
| **Delaware** | 41 | 8 | 6 | 20 |
| **District of Columbia** | 18 | 1 | 2 | 9 |
| **Florida** | 1,056 | 258 | 108 | 480 |
| **Georgia** | 887 | 287 | 110 | 389 |
| **Hawaii** | 87 | 30 | 17 | 43 |
| **Idaho** | 160 | 26 | 15 | 69 |
| **Illinois** | 549 | 66 | 75 | 253 |
| **Indiana** | 442 | 72 | 49 | 186 |
| **Iowa** | 205 | 37 | 29 | 96 |
| **Kansas** | 262 | 115 | 38 | 126 |
| **Kentucky** | 366 | 98 | 33 | 156 |
| **Louisiana** | 412 | 132 | 41 | 174 |
| **Maine** | 74 | 8 | 11 | 36 |
| **Maryland** | 269 | 91 | 35 | 121 |
| **Massachusetts** | 256 | 56 | 35 | 116 |
| **Michigan** | 401 | 71 | 55 | 180 |
| **Minnesota** | 205 | 13 | 33 | 101 |
| **Mississippi** | 340 | 166 | 39 | 149 |
| **Missouri** | 396 | 37 | 51 | 174 |
| **Montana** | 82 | 17 | 7 | 33 |
| **Nebraska** | 137 | 16 | 20 | 66 |
| **Nevada** | 105 | 5 | 21 | 55 |
| **New Hampshire** | 48 | 8 | 7 | 25 |
| **New Jersey** | 371 | 32 | 50 | 164 |
| **New Mexico** | 174 | 83 | 17 | 80 |
| **New York** | 1,227 | 464 | 177 | 579 |
| **North Carolina** | 965 | 172 | 99 | 414 |
| **North Dakota** | 33 | 9 | 6 | 18 |
| **Ohio** | 744 | 94 | 92 | 319 |
| **Oklahoma** | 304 | 105 | 35 | 129 |
| **Oregon** | 251 | 56 | 30 | 116 |
| **Pennsylvania** | 411 | 58 | 62 | 208 |
| **Rhode Island** | 31 | 9 | 5 | 13 |
| **South Carolina** | 321 | 104 | 40 | 156 |
| **South Dakota** | 50 | 10 | 10 | 28 |
| **Tennessee** | 422 | 147 | 49 | 197 |
| **Texas** | 1,860 | 600 | 226 | 817 |
| **Utah** | 191 | 42 | 23 | 77 |
| **Vermont** | 29 | 3 | 4 | 13 |
| **Virginia** | 368 | 91 | 58 | 186 |
| **Washington** | 419 | 31 | 63 | 192 |
| **West Virginia** | 182 | 44 | 19 | 84 |
| **Wisconsin** | 352 | 137 | 52 | 164 |
| **Wyoming** | 54 | 12 | 7 | 25 |