Tax Rate Adequacy

- Understanding significant measures of State UI tax systems
- How to calculate an Adequate Financing Rate
Why is Tax “Adequacy” Important

- Forward Funding for Recessionary Periods
Unemployment Insurance Program Forward Funding

Aggregate State Benefits and Contributions

Trust Funds as % of Total Wages

State Contributions

State Benefits

Year

U.S. Department of Labor
Office of Unemployment Insurance
Division of Fiscal and Actuarial Services
February 2018

Significant Measures of State Unemployment Insurance Tax Systems

2017

- Highlights
- Report User Guide
- State Summary Tables
  - State Contribution Levels (Table 1)
  - State Contribution Levels (Table 2)
  - Summary of Employer Benefit Assignment
  - New Employer Tax Rates

- Individual State Data Sheets
- Definitions

View this report online at:
Significant Measures of State UI Tax Systems Report


- Significant Measures of State UI Tax Systems

  Report Years with Actual Data Available:
  - CY 2018
  - CY 2017
  - CY 2016
  - CY 2015
  - CY 2014
  - CY 2013
  - CY 2012
  - CY 2011
  - CY 2010
  - CY 2009
  - CY 2008
## State Tax Structure Description

**Maryland**  
**2017**

1. **Type of Experience Rating Method:** Benefit Ratio
2. **Type of Employer Ranking:** Fixed
3. **Type of Charging Method:** Proportionally
4. **Taxable Wage Base ($):** $8,500
5. **Avg. Tax Rate (Total / Taxable Wages) %:** 0.40 / 2.41
6. **New Employer Tax Rate (%):** 2.6
7. **Statutory Tax Rate (Min. / Max.)%:** 0.30 / 7.50
8. **Average High Cost Multiple (1/1/2017):** .80
### State Tax Levels

<table>
<thead>
<tr>
<th>Description</th>
<th>Avg. Per Covered Employee</th>
<th>Avg. For Every $100 of Wages Pd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) Est. Employer Contributions:</td>
<td>$230</td>
<td>$.40</td>
</tr>
<tr>
<td>10) Contributions Per Employee at the Tax Base:</td>
<td>$26</td>
<td>$638</td>
</tr>
</tbody>
</table>

**Definitions**

9. Total UI Contributions / Covered Employment

10. a) Tax Base * Min. Tax Rate  
    b) Tax Base * Max. Tax Rate
### Significance Measures of State Tax Systems Report

#### Contribution Levels

11) For every one dollar of contributions the amount going:
- To pay benefits in Previous Computation Year: $1.03
- Into the Trust fund: $-0.03

12) Average Tax Rate Compared to Adequate Financing Rate:

<table>
<thead>
<tr>
<th>Current Avg. Tax Rate</th>
<th>Adequate Financing Tax Rate</th>
<th>% Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.67%</td>
<td>3.84%</td>
<td>-37%</td>
</tr>
</tbody>
</table>

#### Definitions

11a) Total Benefits Paid Previous Year / Current Year Est. Total Contributions
b) $(1 - a)$
Adequate Tax Rate

- How much money should a state bring in each year in revenues in order to reach an adequate Trust Fund.

Depends on two Items:

1) Amount of benefits state is paying
2) Amount of benefits the state wants to forward fund
Significant Measures of State Tax Systems Report

Definitions

12) The Adequate Financing Rate is the flat tax rate necessary to fund the State’s average historical level of UI benefits and adequately forward fund the UI Trust Fund.

Adequate Financing Rate = Long Term Avg. Benefit Cost Rate + Solvency Amount

Long Term
Benefit Cost Rate = 10 Year Avg. of (Benefits / Taxable Wages)

Solvency Amount = Difference Between Current Trust Fund and Amount needed to Reach AHCM 1.0 in 5 years.

13) Percentage Difference Between the AFR and the State Avg. Tax Rate:
(Avg. Tax Rate - AFR) / AFR
Michigan Yearly Benefit Cost Ratio (1977-2013)

10 Year Average Benefit Cost Rate: 1.4%

20 Year Avg. Benefit Cost Rate: 1.1%
Maryland Benefit Cost Rates 1990 - 2017
(Benefits / Total Wages)

Average 3 Year High Benefit Cost Rate: 1.20
Calculation of Solvency Amount

Difference Between Current Trust Fund and Amount needed to Reach AHCM 1.0 in 5 years:

Current Trust Fund Amount - AHCM 1.0 = Difference Amount

Solvency Amt = Difference / 5

Trust Fund Balance Needed to Have a 1.0 Average High Cost Multiple:

Reserve Ratio = \frac{\text{Avg. High Cost Multiple}}{\text{Average High Cost Rate}}

\frac{(\text{Trust Fund Balance / Total Wages})}{\text{Avg. of 3 Highest Ben. Cost Ratios}} = 1

\text{Avg. Ben. Cost Rate} \times \text{Total Wages} = \text{Trust Fund needed for 1.0 AHCM}
Calculation of Adequate Financing Rate

Step 1: Divide Yearly Total Benefits by yearly Taxable Wages for each of the last ten years.

Step 2: Take the average of those Benefit Cost Rates.

Step 3: Calculate the Trust Fund Needed for a AHCM of 1.0 (Multiply the total wages in the past year by the Average High Cost Rate).

Step 4: Subtract the Trust Fund from the 1.0 AHCM Trust Fund and divide by five.

Step 5: Divide that amount by taxable wages and add to the Avg. Benefit Cost Rate to get the Adequate Financing Rate.
**INPUTS:**

| **STATE:** | ALASKA |
| **YEAR OF AFR CALCULATION:** | 2015 |
| **NUMBER OF YEARS OF BENEFITS TO USE FOR AFR:** | 10 |
| **DESIRED LEVEL OF TRUST FUND SOLVENCY:** | 1.00 **(0.5 to 3.0 AHCM)** |
| **MAXIMUM LEVEL OF TRUST FUND SOLVENCY:** | 1.50 **(1 to 3.0 AHCM)** |

**ADEQUATE FINANCING RATE:** 1.92% of Taxable Wages for 2015
Distribution of Total Benefits
Maryland - 2017

- 14) Total Benefits Paid: 79% of Total Benefits
- 15) Benefits Assigned to Active Employers: 10% of Total Benefits
- 16) Benefits Assigned to Inactive Employers: 4% of Total Benefits
- 17) Reimbursable Benefits: 0% of Total Benefits
- 18) Benefits in Excess of Taxes from Max. Rated Employers: 0% of Total Benefits

Bar chart showing the distribution of total benefits paid, with the majority (79%) being paid to active employers.
### Distribution of Wages, Accounts, Benefits and Contributions

#### Maryland - 2017

<table>
<thead>
<tr>
<th>DISTRIBUTION OF WAGES, BENEFITS, AND CONTRIBUTIONS BY EFFECTIVE TAX RATES</th>
<th>&lt; = .5%</th>
<th>.5% - 1.0%</th>
<th>1.0% - 1.5%</th>
<th>1.5% - 2.0%</th>
<th>&gt;2.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>19) Proportion of Total Wages:</td>
<td>70%</td>
<td>22%</td>
<td>7%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>20) Proportion of Employers:</td>
<td>85%</td>
<td>8%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>21) Proportion of Total Benefits Charged:</td>
<td>45%</td>
<td>28%</td>
<td>23%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>22) Proportion of Total Estimated Contributions:</td>
<td>39%</td>
<td>36%</td>
<td>20%</td>
<td>4%</td>
<td>0%</td>
</tr>
</tbody>
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