Research Based Evidence

THE EFFECT OF PREVAILING WAGES ON CONSTRUCTION COSTS:
SOME VIEWS ON SAVINGS ASSOCIATED WITH REPEAL OF PREVAILING WAGE

◉ Repeal Saves 25% to 33% on Schools
  + New Mexico Governor Jerry Johnson:
    ◆ “...without the constraint of the Little Davis-Bacon Act, we could build four schools instead of three for the same amount of money.” (state of the state address 1/16/96)

◉ Save 6% to 12% on Schools and Higher Ed
  + Tonight, I am proposing ... a series of steps to make us more competitive globally and with our southern neighbors. I want to give public universities and schools across our state effectively 6 to 12 percent more for each dollar they spend in construction... by repealing prevailing wage.”
    ◆ Kentucky Governor Ernie Fletcher, 1/26/2006
ARITHMETIC
Total Costs

Here wages are 50% of total costs and wages fall by half.
BACK OF THE ENVELOPE CALCULATION 2:
WAGES FALL BY 25% = 12.5% "SAVINGS"

Total Costs

Here wages are 50% of total costs and wages fall by a quarter

Profit 5.0%
Labor 37.5%
Wages 50.0%
Materials, Overhead, Machinery & other Expenses 45.0%
Fat 12.5%
BACK OF THE ENVELOPE CALCULATION 3:
WAGES FALL BY 25% = 6.0% TOTAL “SAVINGS”

Total Costs

Here wages are
25% of total costs
and wages fall by
a quarter
CONNECTICUT LABOR COSTS ARE NOT LARGE

Figure 5.2: Wage Costs as a Percent of Total Costs for Connecticut General Contractors, and Heavy and Highway Contractors, 2002

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family residential</td>
<td>10.5%</td>
</tr>
<tr>
<td>Multi-family residential</td>
<td>11.6%</td>
</tr>
<tr>
<td>Manufacturing &amp; industrial plant</td>
<td>26.3%</td>
</tr>
<tr>
<td>Commercial &amp; institutional</td>
<td>19.7%</td>
</tr>
<tr>
<td>Highway, street, bridge</td>
<td>15.9%</td>
</tr>
<tr>
<td>Water, sewer, pipeline</td>
<td>19.8%</td>
</tr>
<tr>
<td>Power &amp; communication</td>
<td>19.5%</td>
</tr>
<tr>
<td>Other Heavy</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

EVEN UNDER FAVORABLE SCENARIOS, THE GAINS FROM A MORATORIUM ARE SMALL

Table 5.1: Hypothetical Effects of Prevailing Wage Law Moratorium on Labor and Total Construction Cost in Connecticut

<table>
<thead>
<tr>
<th>Project cost</th>
<th>Labor cost</th>
<th>Other cost</th>
<th>Decline in labor cost</th>
<th>Labor cost</th>
<th>Total Cost</th>
<th>Total Cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
<td>(G)</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>95%</td>
<td>$0.15</td>
<td>$7.15</td>
<td>28.5%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>90%</td>
<td>$0.30</td>
<td>$7.30</td>
<td>27.0%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>75%</td>
<td>$0.75</td>
<td>$7.75</td>
<td>22.5%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>50%</td>
<td>$1.50</td>
<td>$8.50</td>
<td>15.0%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>25%</td>
<td>$2.25</td>
<td>$9.25</td>
<td>7.5%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>10%</td>
<td>$2.70</td>
<td>$9.70</td>
<td>3.0%</td>
</tr>
<tr>
<td>$10</td>
<td>$3</td>
<td>$7</td>
<td>5%</td>
<td>$2.85</td>
<td>$9.85</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Notes: These calculations assume that labor productivity is constant.

1 Hypothetical decline in total labor cost following the moratorium on prevailing wage law.
2 B*(D-C).
3 C + E.
4 100*(F/A-1).
BUT AS WAGES RISE, CONTRACTORS DO SUBSTITUTE CAPITAL FOR LABOR

Source: US Census of Construction, 2002

Higher wages lead to more machinery per worker in construction

More machinery per worker leads to higher value added per worker
RECENT RESEARCH (2000 ON)

- Kim, Chao-Lang, Philips: The Effect of Prevailing Wage Regulations on Contractor Bid Participation and Behavior.
- Duncan, Philips, Prus: Using stochastic frontier regression to estimate the construction cost inefficiency of prevailing wage laws
- Duncan, Philips, Prus: The Effects of Prevailing Wage Regulations on Construction Efficiency in British Columbia
- Dunn Quigley Rosenthal: The Effects of Prevailing Wage Requirements on the Cost of Low-Income Housing
- Vincent and Monkkonen: Impact of State Regulations on Costs of School Construction
WHAT DOES CURRENT RESEARCH FIND

1. Evidence on Prevailing Wage effects is, at best, mixed.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Number of Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Effect/Negative Effect</td>
<td>4</td>
</tr>
<tr>
<td>Positive Effect:</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Rework of Vincent Monkkonen finds:
   1. With data corrections & appropriate specifications there is no longer a significant effect

2. Dunn, Quigley and Rosenthal:
   1. A number of statistical and estimation issues
   2. Extreme results do not hold up:
   3. There is evidence of that California’s state prevailing wage law raises the costs of construction of subsidized low rise residential by 3 to 5%
      1. Imposition of Prevailing Wage is really imposing a whole set of labor standards on the construction project.
EFFECT ON JOBS, INCOME AND GOVERNMENT REVENUE
A WEAKENED STATE:
THE ECONOMIC AND SOCIAL IMPACTS
OF REPEAL OF THE PREVAILING WAGE LAW
IN ILLINOIS

October 7, 2013
PW EFFECTS ON STATE INCOME AND REVENUE

- Input-output analysis using IMPLAN model
  - Calculates the effect of policy changes through linkages between industries and sectors.
  - **Direct Impact**: the effect of spending on the affected industry
  - **Indirect Impact**: The effects of inter-industry purchases by firms which receive direct expenditures from the construction industry
  - **Induced Impacts**: the effects of consumer spending by those employed by the directly and indirectly affected industries
Table 2: Direct, Indirect, and Induced Effects on Employment, Earnings, Total Value Added, and GDP for Illinois if PWL is Repealed, Middle-of-the-Road Estimates, 2013

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Change in Jobs</th>
<th>Change in Worker Earnings</th>
<th>Total Value Added*</th>
<th>Effect on Illinois’ GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>332</td>
<td>-$364.9 million</td>
<td>-$393.0 million</td>
<td>-$541.4 million</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>-1,070</td>
<td>-$61.2 million</td>
<td>-$94.5 million</td>
<td>-$174.4 million</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>-2,539</td>
<td>-$120.0 million</td>
<td>-$213.3 million</td>
<td>-$357.1 million</td>
</tr>
<tr>
<td>Total Effect</td>
<td>-3,277</td>
<td>-$546.0 million</td>
<td>-$700.8 million</td>
<td>-$1,072.9 million</td>
</tr>
</tbody>
</table>

Source: Result of authors’ insertion of middle-of-the-road employment and earnings estimates (Table 1) into IMPLAN’s industry change feature, which estimates industry spending patterns through Type SAM multipliers. The Labor Education Program utilizes IMPLAN (IMPacts for PLANning) Version 3.0.17.2, Minnesota IMPLAN Group, Inc., © 2011.
Table 4: A Comparison of Employment and GDP Effects in Illinois if PWL is Repealed for All Nine Combinations of Earnings and Elasticity Estimates, 2013

<table>
<thead>
<tr>
<th>Combination (Earnings, Jobs)</th>
<th>Direct Change in Jobs</th>
<th>Indirect &amp; Induced Change in Jobs</th>
<th>Total Change in Jobs</th>
<th>Effect on Illinois' GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-3.40%, 0.68%)</td>
<td>-2,879</td>
<td>-3,606</td>
<td>-6,475</td>
<td>-$1,070.6 million</td>
</tr>
<tr>
<td>(-3.40%, 1.09%)</td>
<td>-2,001</td>
<td>-3,587</td>
<td>-5,589</td>
<td>-$1,069.3 million</td>
</tr>
<tr>
<td>(-3.40%, 1.50%)</td>
<td>-1,124</td>
<td>-3,579</td>
<td>-4,702</td>
<td>-$1,067.9 million</td>
</tr>
<tr>
<td>(-5.46%, 1.36%)</td>
<td>-1,423</td>
<td>-3,626</td>
<td>-5,049</td>
<td>-$1,075.6 million</td>
</tr>
<tr>
<td>(-5.46%, 2.18%)</td>
<td>332</td>
<td>-3,610</td>
<td>-3,277</td>
<td>-$1,072.9 million</td>
</tr>
<tr>
<td>(-5.46%, 3.00%)</td>
<td>1,550</td>
<td>-3,593</td>
<td>-2,043</td>
<td>-$1,070.2 million</td>
</tr>
<tr>
<td>(-7.51%, 2.04%)</td>
<td>33</td>
<td>-3,657</td>
<td>-3,624</td>
<td>-$1,080.6 million</td>
</tr>
<tr>
<td>(-7.51%, 3.27%)</td>
<td>2,686</td>
<td>-3,633</td>
<td>-966</td>
<td>-$1,076.7 million</td>
</tr>
<tr>
<td>(-7.51%, 4.51%)</td>
<td>5,321</td>
<td>-3,608</td>
<td>1,713</td>
<td>-$1,072.7 million</td>
</tr>
</tbody>
</table>

Source: Result of authors' insertion of all combinations of employment and earnings estimates (Table 1) into IMPLAN's industry change feature, which estimates industry spending patterns through type SAM multipliers. The Labor Education Program utilizes IMPLAN (IM-pacts for PLANning) Version 3.0.17.2, Minnesota IMPLAN Group, Inc., © 2011.
BENEFITS OF PREVAILING WAGE LAWS
WORKERS BENEFIT FROM PREVAILING WAGES

Higher wages

Pension coverage

Personal and family health insurance

Workers comp & unemployment insurance coverage

But there will be fewer jobs in a skill & capital intensive construction industry.
PW ENCOURAGE THE PAYMENT OF BENEFITS

Source: US Census of Construction 2002

How Much Higher Wages & Benefits Are in PW States
CONCLUSION

- PW laws do not significantly raise construction costs
- High-skill, high wage road does
  - Promote training & capital investment
  - Promote local employment and provide middle class jobs for HS graduates
  - Stimulate local economy
  - Support local competitiveness through first-class infrastructure
  - Reduce government expenditures by preventing cost shifting of health, retirement and other costs onto the public
Thank You

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