

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

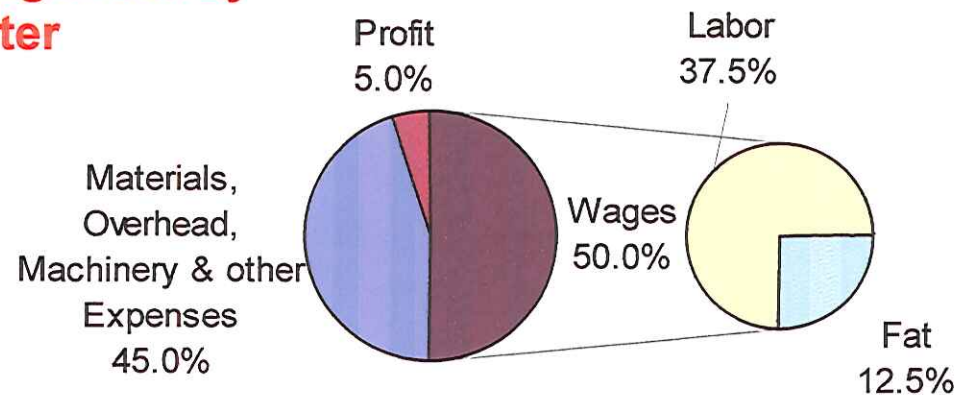
# ARITHMETIC

# 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

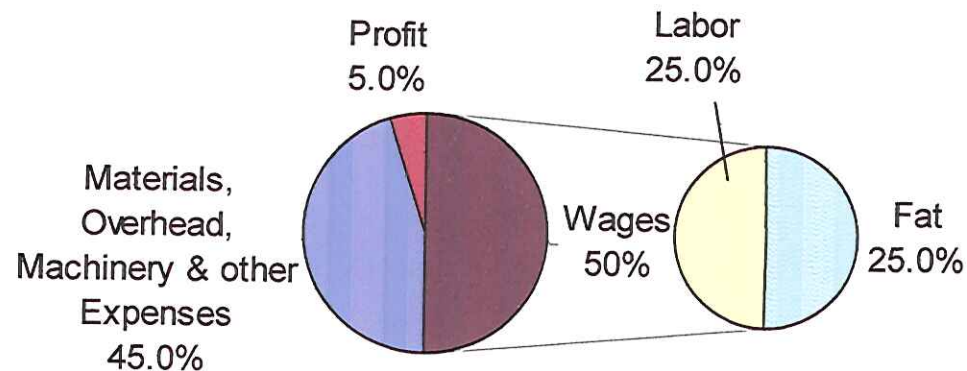


# BACK OF THE ENVELOPE CALCULATION 1:

WAGES FALL BY 50% = 25% "SAVINGS"

## Total Costs

Here wages are  
50% of total costs  
and wages fall by half

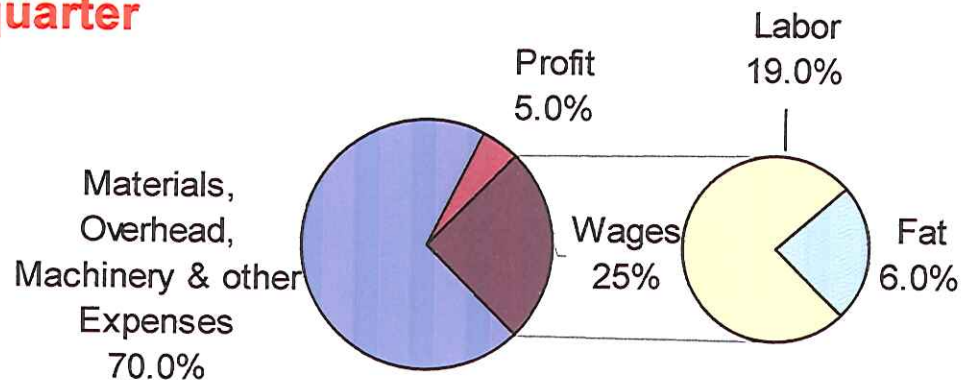


# BACK OF THE ENVELOPE CALCULATION 3:

WAGES FALL BY 25% = 6.0% TOTAL "SAVINGS"

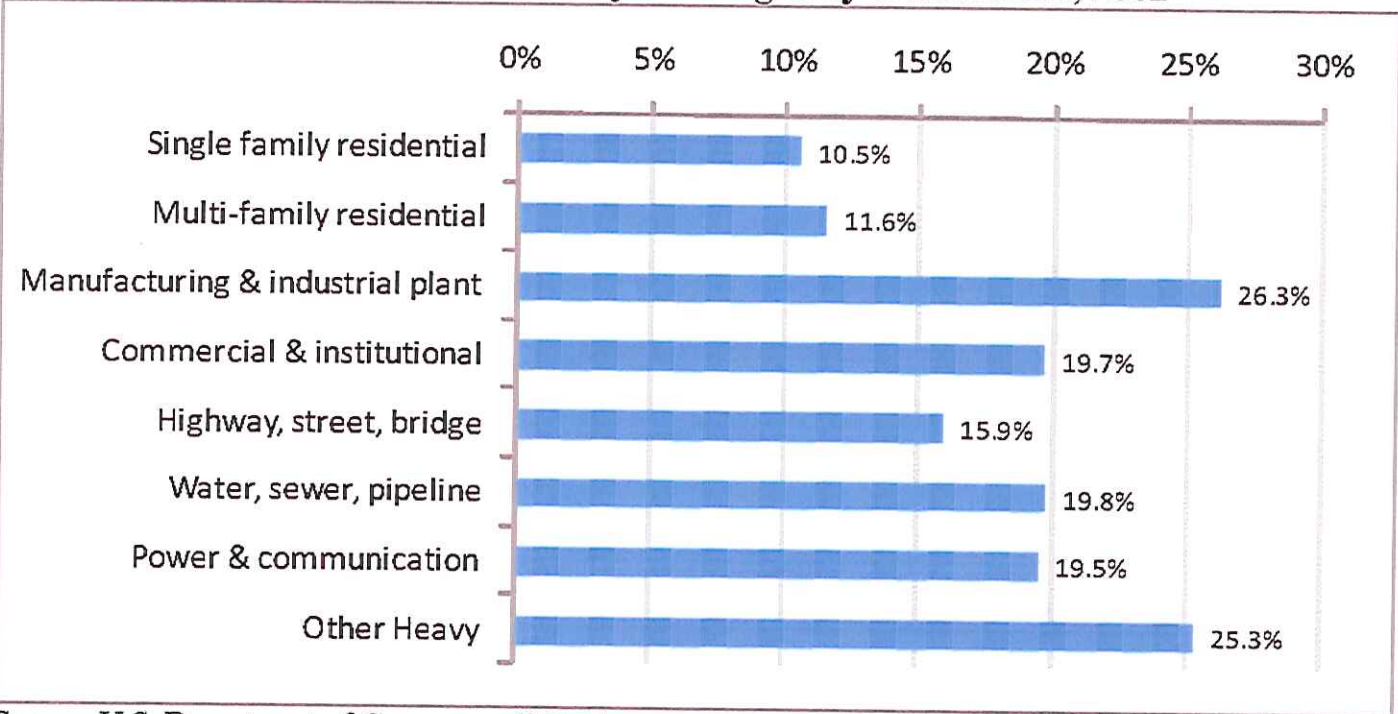
## Total Costs

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**



Source: U.S. Department of Commerce (2005a).

# 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**

Project cost (A)	Labor cost (B)	Other cost (C)	Impact of Moratorium			
			Decline in labor cost <sup>1</sup> (D)	Labor cost <sup>2</sup> (E)	Total Cost <sup>3</sup> (F)	Total Cost savings <sup>4</sup> (G)
\$10	\$3	\$7	95%	\$0.15	\$7.15	28.5%
\$10	\$3	\$7	90%	\$0.30	\$7.30	27.0%
\$10	\$3	\$7	75%	\$0.75	\$7.75	22.5%
\$10	\$3	\$7	50%	\$1.50	\$8.50	15.0%
\$10	\$3	\$7	25%	\$2.25	\$9.25	7.5%
\$10	\$3	\$7	10%	\$2.70	\$9.70	3.0%
\$10	\$3	\$7	5%	\$2.85	\$9.85	1.5%

Notes: These calculations assume that labor productivity is constant.

<sup>1</sup>Hypothetical decline in total labor cost following the moratorium on prevailing wage law.

<sup>2</sup>B\*(D-C).

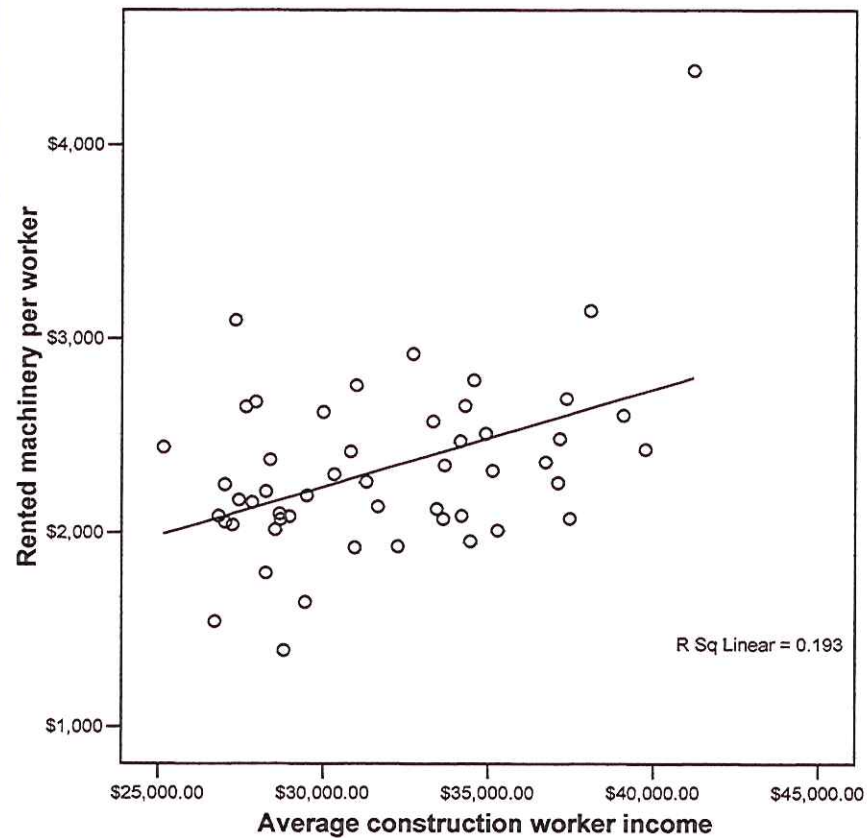
<sup>3</sup>C + E.

<sup>4</sup>100\*(F/A-1).

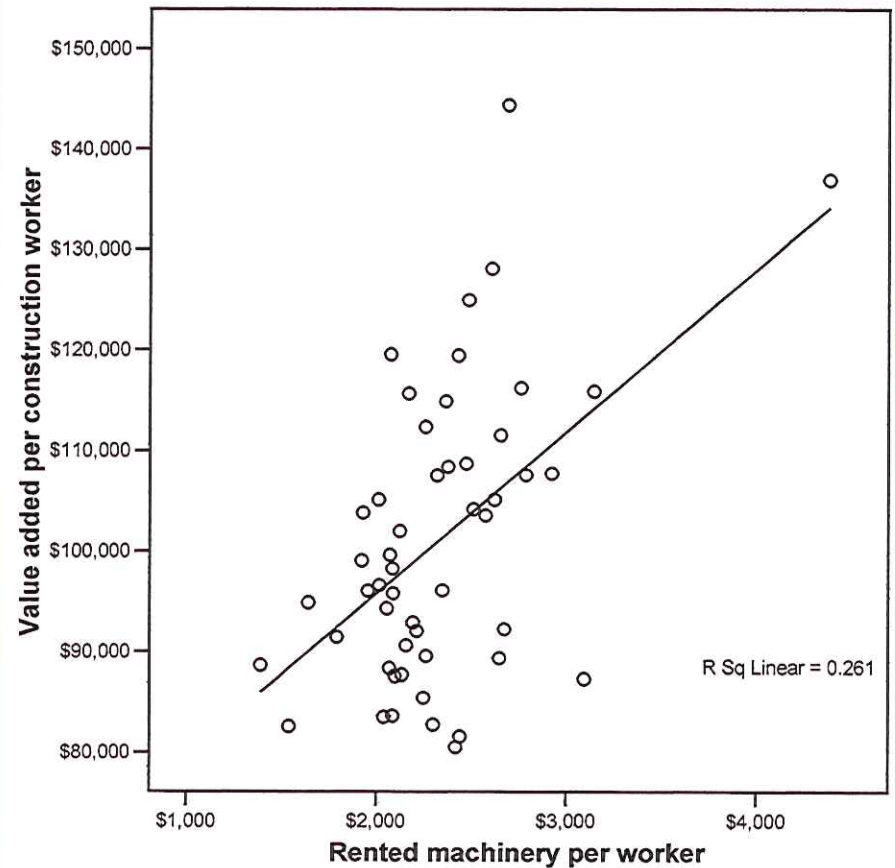


# BUT AS WAGES RISE, CONTRACTORS DO SUBSTITUTE CAPITAL FOR LABOR

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

# STATISTICS

# RECENT RESEARCH (2000 ON)

---

- ✘ **Duncan: An Analysis of Davis-Bacon Prevailing Wage Requirements: Evidence from Highway Resurfacing Projects in Colorado.**
- ✘ **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**
- ✘ **Azari-Rad Philips and Prus: 2003 State Prevailing Wage Laws and School Construction Costs**
- ✘ **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.

Effect	Number of Studies
No Effect/Negative Effect	4
Positive Effect:	2

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



Alison Dickson Quesada, MUPP  
Frank Manzo IV, MPP  
Dale Belman, PhD  
Robert Bruno, PhD



## 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**

Impact Type	Change in Jobs	Change in Worker Earnings	Total Value Added*	Effect on Illinois' GDP
Direct Effect	332	-\$364.9 million	-\$393.0 million	-\$541.4 million
Indirect Effect	-1,070	-\$61.2 million	-\$94.5 million	-\$174.4 million
Induced Effect	-2,539	-\$120.0 million	-\$213.3 million	-\$357.1 million
Total Effect	-3,277	-\$546.0 million	-\$700.8 million	-\$1,072.9 million

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**

Combination (Earnings, Jobs)	Direct Change in Jobs	Indirect & Induced Change in Jobs	Total Change in Jobs	Effect on Illinois' GDP
(-3.40%, 0.68%)	-2,879	-3,606	-6,475	-\$1,070.6 million
(-3.40%, 1.09%)	-2,001	-3,587	-5,589	-\$1,069.3 million
(-3.40%, 1.50%)	-1,124	-3,579	-4,702	-\$1,067.9 million
(-5.46%, 1.36%)	-1,423	-3,626	-5,049	-\$1,075.6 million
(-5.46%, 2.18%)	332	-3,610	-3,277	-\$1,072.9 million
(-5.46%, 3.00%)	1,550	-3,593	-2,043	-\$1,070.2 million
(-7.51%, 2.04%)	33	-3,657	-3,624	-\$1,080.6 million
(-7.51%, 3.27%)	2,666	-3,633	-966	-\$1,076.7 million
(-7.51%, 4.51%)	5,321	-3,608	1,713	-\$1,072.7 million

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.

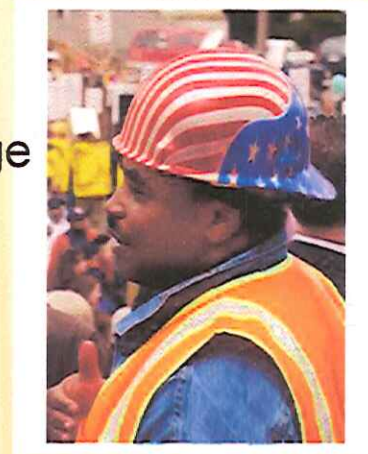
# BENEFITS OF PREVAILING WAGE LAWS

# WORKERS BENEFIT FROM PREVAILING WAGES

Higher wages



Pension coverage



Personal and family health insurance



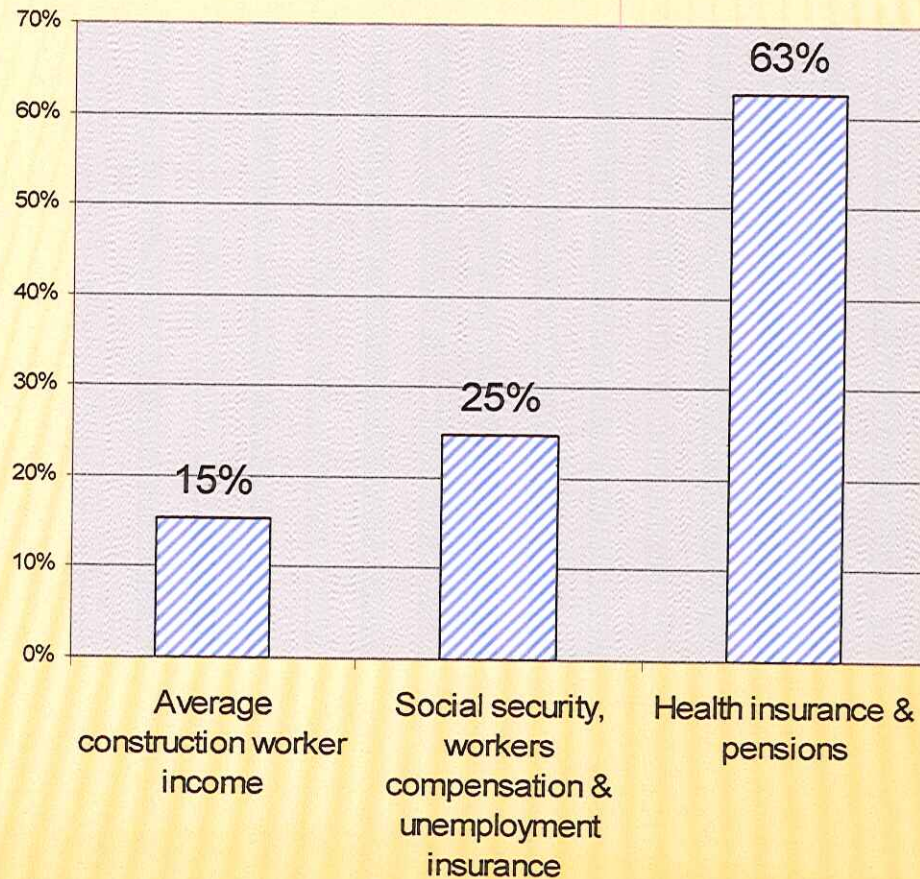
Workers comp & unemployment insurance coverage



But there will be fewer jobs in a skill & capital intensive construction industry<sup>19</sup>

# 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

- ✘ Professor Dale Belman
- ✘ School of Human Resources and Labor Relations & Department of Economics
- ✘ Michigan State University
- ✘ [drdale@msu.edu](mailto:drdale@msu.edu)