# Comparing Union and Open Shop Wages Using the CPS

Cihan Bilginsoy April 16, 2009

#### Objectives

- Examine the changes in the construction sector wage structure since the 1980s.
- By how much do unions raise wages on average, and how did this effect change over time?
- How do unions affect wage dispersion, and how did this effect change over time?

#### Methodology

- Comparison two time points.
- Pooled CPS-ORG samples from 1983-88 and 2000-05.
- Union effect on mean wage: Wage gap estimation and decomposition
- Union effect on wage dispersion: Variance decomposition and kernel density estimation

Figure 1: Union Density and Raw Union Wage Premium

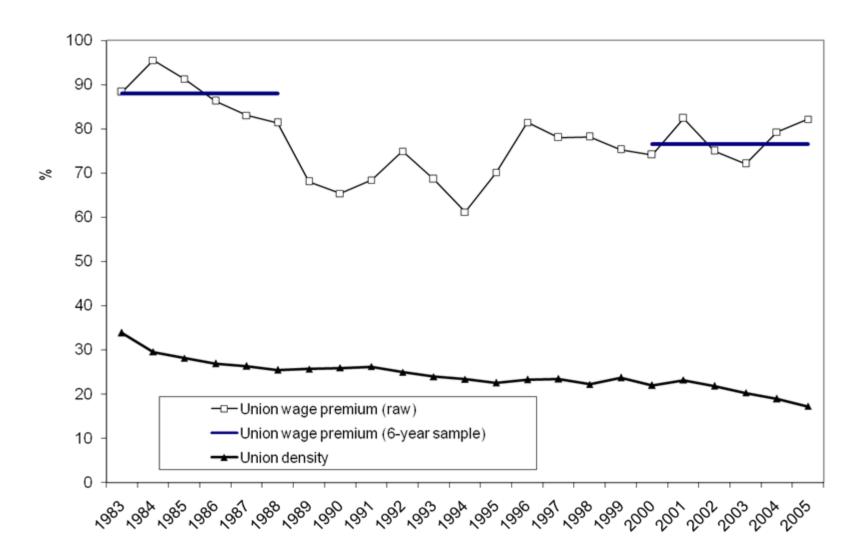


Table 3: Oaxaca-Blinder Decomposition of the Wage Gap (Results on selected variables are reported.)

	1983-88	2000-05	Δ
Decomposition			
Raw wage gap	0.631	0.568	-0.063
Union effect	0.534	0.269	-0.265
Price effect	-0.075	0.108	0.183
Quantity effect	0.172	0.192	0.020
Individual price effects			
Age	0.003	0.019	0.016
>High school education	0.000	0.014	0.014
High school graduate	-0.004	0.007	0.011
Married	-0.012	-0.024	-0.012
Hispanic	0.004	0.013	0.009
Part time	0.010	0.003	-0.007
Metropolitan	-0.038	-0.008	0.030
Unemployment	-0.015	-0.003	0.012
Individual quantity effects			
Age	0.070	0.037	-0.033
College	0.002	0.016	0.014
Married	0.017	0.010	-0.007
Hispanic	0.006	0.037	0.031
Metropolitan	0.009	0.004	-0.005
Union Density	0.003	0.012	0.009

### Why the decline in union effect?

- Rising competition between union and nonunion sectors?
- Rising elasticity of demand in union sector?
- Diminishing union-nonunion skill differentials?
- Substitution of benefit demands for wage demand by unions?

#### Findings:

- Overall a relatively small decline in wage gap;
- Sharp drop in union effect;
- Sharp increase in price effect (age, education, metropolitan status...);
- Modest increase in quantity effect.

#### Caveat on "union effect"

What does the union effect measure in construction?

- The ability of unions negotiate wages higher than the competitive market wage for similarly skilled workers;
- The ability of trade unions to create and maintain a homogenous and high-skilled workforce through their active involvement in training programs.

Figure 2: Union Density and Union Impact on Wage Dispersion

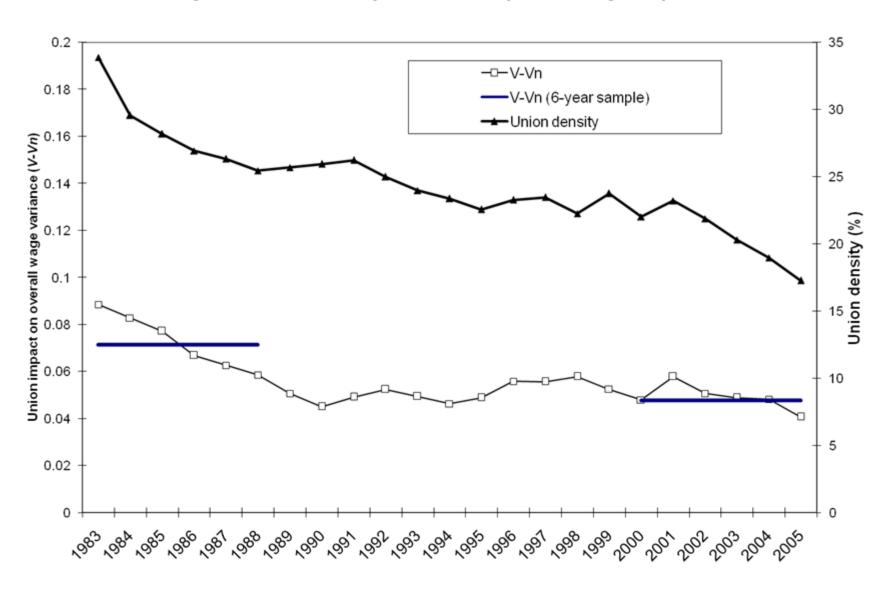


Table 5: Variance Decompositions

	1983-88	2000-05	Δ
Wage variances			
Overall	0.231	0.196	-0.035
Nonunion wage variance	0.160	0.148	-0.012
Union wage variance	0.133	0.133	0.000
Variance decompositions			
Two-sector model:			
Total union effect	0.071	0.048	-0.023
within-sector	-0.007	-0.003	0.004
between-sector	0.079	0.051	-0.028
Characteristics-controlled model			
Total union effect	0.064	0.040	-0.024
within-sector	-0.005	-0.002	0.003
between-sector	0.036	0.021	-0.015
across-group	0.033	0.021	-0.012
wage gap variation	0.004	0.002	-0.002
wage gap-nonunion wage cov.	0.029	0.019	-0.010
Kernel estimates			
Actual variance	0.230	0.196	-0.034
Unionization adjusted variance	0.230	0.209	-0.021

## Findings:

Unions increase wage dispersion by:

- 1. Creating a wage gap between union and nonunion workers;
- Creating a greater positive effect on the wages of more skilled workers

#### Union Impact on Wage Density

