Chapter XX

Prevailing Wage Laws, Unions and Minority Employment in Construction:
A Historical and Empirical Analysis

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and

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The Davis-Bacon Act, which requires that federal construction contractors pay their workers "prevailing wages" was passed by Congress in 1931 with the intent of favoring white workers who belonged to white-only unions over non-unionized black workers. The act continues to have discriminatory effects today.

David Bernstein, "The Davis-Bacon Act: Let's Bring Jim Crow to an End"¹

Introduction.

Until the mid-1970's debate over prevailing wage laws in construction was limited to its effect on project costs and taxpayer expenses. In 1975 Armond Thieblot introduced a new argument, that the Davis Bacon Act was, at least in part, motivated by racial bigotry. Thieblot noted that the issue of race was mentioned explicitly only once during the House debate on Davis Bacon by a Southern Congressman, but asserted that thinly veiled allusions to race could be found in other speeches including those of Congressman Bacon.²

In recent years, Thieblot's initial assertion has been refined and advanced by several conservative think tanks, notably the CATO foundation and the Institute for Justice.³ They argue that prevailing wage statutes acted to exclude African-American workers because the higher wages on public projects inclined contractors to pass over lesser skilled workers, such as African-Americans. They also allege that such exclusion was not an unintended by product of the law, but reflected the purpose of the supporters of the Davis-Bacon
Act. This interpretation of prevailing wage laws in general and the Davis Bacon Act in particular has received favorable attention from the media and in Congress. This paper provides examines the first of these issues and provides new empirical work estimating the effect of state prevailing wages on minority employment. Consistent with the claims of Thiebolt and others, we find a simple negative correlation between state prevailing wage legislation and minority employment. This disappears once we control for the racial composition of state's non-construction labor force. More complete models of the racial composition of the construction work force also do not support the exclusion hypothesis. We conclude that the evidence typically cited in support of current prevailing wage laws negatively affecting African-American employment is derived from naive models which do not adequately account for factors beyond prevailing wage laws which may impact the racial composition of the construction labor force.

Theoretic Views: Can Prevailing Wage Laws Act to Exclude African Americans

Critics of prevailing wage laws suggest that African-American workers are disadvantaged both by the higher wage required by prevailing wage laws and by the lack of low wage entry occupations other than apprentice. The higher wage makes less skilled and less productive employees unattractive to contractors because the wage level cannot be adjusted to conform to the productivity of such employees. Contractors will prefer higher skilled workers, workers who are overwhelmingly white due to hiring and training practices, and will avoid hiring the lower skilled African-American workers. In addition the only type of employee who can be paid at less than the journeyman rates under current administrative practice is an apprentice. The lack of alternative lower wage positions, such as 'helper' or 'trainee', precludes less skilled workers from being hired onto jobs where they could develop the skills needed to qualify as a journeyman. This restriction on the ports of entry for lower skilled workers acts to exclude African-Americans in particular. Both arguments premise that African-Americans in the building trades and related fields have lesser skills than other workers in construction occupations. This might be due to discrimination in entry to apprenticeship programs, in hiring into jobs for which there is union representation, or a lack of family background in the building trades.

Prevailing wage laws may also act to exclude African-Americans from construction by facilitating the discriminatory preferences of construction employers (Richard Vedder and David Gallaway (1995)). In a theoretic model of a competitive market, employer tastes for discrimination cannot be exercised in a without deleterious consequences for employers who choose to discriminate. Suppose that wage discrimination exists in a competitive market, a group of workers with skills and abilities comparable to those of other workers are paid less because of traits unrelated to economic performance. The lesser wage of discriminated group provides an opportunity for employers who are unconcerned with discrimination to hire the disadvantaged group at its lower wage. This
becomes a competitive advantage for those employers who, in the extreme, can drive those who refuse to use disadvantaged groups from the market. The operations of the market are beneficial to the disadvantaged group because rising demand for their services raises their wage toward that of the majority group. A prevailing wage law acts to arrest such market dynamics. The high wage established by prevailing wage laws causes construction workers to queue for such jobs. Employers who wish to discriminate can pick those workers, in this view non-African-American workers, from the queue. Prevailing wage laws prevent competitors who are willing to hire minority employees from under-cutting discriminatory employers and so such employers from the economic consequences of their practices.

Empirical research on this issue is scarce. Richard Vedder and David Gallaway (1995) find that federal and state prevailing wage laws increased African-American unemployment and that the proportion of African-Americans employed in construction occupations declined relative to the proportion of white workers in such occupations between 1930 and 1980. The supporting evidence is fundamentally descriptive. As such, its persuasiveness is lessened by the possibility that intervening factors not incorporated in the analysis might be the source of the declining role of African-Americans in construction.

Thiebolt (1999) takes an additional step in comparing the racial composition of state construction labor force under different prevailing wage law regimes relative to the racial composition of the overall state labor force. Dividing the fifty states into those with no prevailing wage law, a weak prevailing wage law, average prevailing wage laws and strong prevailing wage laws, Thiebolt concludes that the racial composition of the construction labor force is considerably more like the racial composition of the overall workforce in states without prevailing wage laws. The author relies upon simple comparison of the outcomes across the different legal regimes and does not perform statistical tests to validate the conclusions. Using data provided in the article, we find his conclusion is supported for states with weak and strong laws but is not supported in a comparison of states with average laws and those with no laws. Thiebolt’s conclusions are further weakened by the aggregation of data on the fifty states into four broad legal categories. This presumes, rather than tests, whether that the underlying conditions and effects of strong prevailing wage law on racial composition are similar in New York state, which has a large African-American community and ######, which has a very small African American community. Similarly, it assumes that the consequences of not having a prevailing wage law are similar in Mississippi and Louisiana and Wyoming. Finally, the article does not investigate whether factors other than the racial composition of the state labor force affect the racial composition of the construction labor force.
The Current Research
The current research investigates whether such statutes reduce African-American representation in the construction labor force. Our strategy for investigating this issue is to first use descriptive statistics to illustrate the interrelationship between statutes and the racial composition of the labor force. We supplement this with estimates of five progressively more complete multivariate models of the racial composition of the construction labor force. These models include factors such as union membership, individual characteristics, and occupation that may influence employment in construction. The descriptive statistics illuminate the central features of the relationship of interest; the multivariate models assure that the effects of statutes have been isolated from those of correlated factors as well as provide statistical tests of the relationship between statutes and racial composition.

Our research finds no relationship between prevailing wage statutes and the racial composition of the construction labor force. There is a simple negative correlation between prevailing wage laws and the probability of observing an African-American in the blue-collar construction labor force. Although this is consistent with the views of the critics of prevailing wage laws, it neglects the role of the racial composition of labor supply on the characteristics of the construction labor force. Many of the states that lack prevailing wage laws are in the South and have a large proportion of African-Americans in their labor force. Once we allow for differences in the labor supply between states, there is no evidence of a relationship between state prevailing wage laws and the proportion of African-Americans in construction. This pattern is apparent in our descriptive statistics and across all specifications of the multi-variate models.

This analysis focuses on the effect of state prevailing wage laws on the racial composition of the construction labor force. Analysis of the Federal Davis Bacon Act is difficult as there is little cross-sectional or inter-temporal variation in provisions and application of the Act. In contrast, there is considerable variation between states with respect to both the presence and provisions of state prevailing wage statutes. In 1994, thirty-three states (including the District of Columbia) had prevailing wage statutes that applied to construction, eighteen did not. Among the 33 states with laws there were considerable differences in projects subject to the laws and the formula used to determine the prevailing wage. In some states all construction financed by state and local government is subject to prevailing wages, in other states only state financed construction is subject to this legislation, other states exempt specific types of construction such as schools. Laws also vary in the formula used to determine the prevailing wage. In some states the prevailing wage is the wage paid at least 30% of the construction workers in an occupation and type of work, others use a 50% rule and still others used a mean wage rule. The diversity of 'Little Davis-Bacon Acts' suggests that a simple distinction between states that have some law and those that do not is overly restrictive. Further dis-aggregation of the statutes will better capture the effects of prevailing wage laws on minority employment. Thieblot classifies states
according to whether their prevailing wage law is 'strong', 'average' or 'weak' and we adopt this approach.\textsuperscript{7}

If the critics of prevailing wage laws are correct, the presence of prevailing wage laws should be associated with a reduced probability of observing an African-American in the blue-collar labor force of the construction industry. One approach to measuring this proposed relationship is to examine the relationship between legal regimes and the proportion of African Americans in the construction labor force by state. A complimentary approach is to estimate a micro data model for a sample of construction workers in which the dependent variable is whether the individual is African-American and the explanatory variables include the legal regime. Treatment of race as endogenous is unusual, as it has been described as one of the few factors that can dependably be treated as exogenous. Although race is exogenous to the individual, it can be explicit or implicit criteria for being chosen into a particular occupation or industry, as is the case in the current study. Heywood and Peoples (1994) have considered a similar issue, the effect of deregulation in trucking on the racial composition of the driver labor force, and estimated a model in which race is determined by individual characteristics and legal regimes.

Data for this analysis is taken from the 1994 Outgoing Rotation File (ORG) provided by the BLS. These files include individuals who are in the last month of their CPS rotation and who are asked questions about their wages, hours of work, and union membership. We include all individuals who report being employed as a 'precision production' (craft), operative, transportation operative or laborer in the construction industry from the 1994 OR0 files of the BLS. There are 5,886 observations in the data set, 5.96% of the employees self report as African-American.

Turning first to our descriptive statistics, we calculate the proportion of African-Americans in the blue collar construction labor force for 50 states and the District of Columbia, group this data according to the strength of the prevailing wage law, and rank the states from those with the fewest African Americans in the labor force to those with the greatest proportion. The relationship between the strength of prevailing wage statute and the proportion of African-Americans in the construction labor force is summarized in the left hand box plot in Figure I and the data in the upper panel of Table III. The box and whiskers plot is defined so that the center line in the box is the median of the distribution (the proportion of African-Americans in the middle state of the particular legal regime), the lower boundary of the box is the proportion African American for the state at the 25\textsuperscript{th} percentile, the upper line is the proportion at the 75\textsuperscript{th} percentile. The upper and lower ends of the whiskers show the proportion African American for the state that is closest to 1.5 times the inter-quartile range from the 25\textsuperscript{th} and 75\textsuperscript{th} percentiles.\textsuperscript{8}

The left hand box plots depict the proportion of African-Americans in the
But states vary greatly in the proportion of African-Americans in their population and labor force and we do not expect to observe as many African-Americans in construction in Maine, where only 3% of the labor force is minority, as in Mississippi. All else equal, we would expect the proportion of African-Americans in construction to mirror the proportion of African-Americans in the state labor force. The second panel of Table III depicts the proportion of African-Americans in states non-construction labor force by strength of prevailing wage law. Again, although the proportion of African-Americans in the labor force for the median state is similar across statutory regimes, the proportion of African-Americans in the state labor force is substantially higher for the state at the 75th and 90th percentile for the no law regime states than for the average or strong law regime states. Southern states, states which have a large proportion of African-Americans in both their non-construction and construction labor forces, are particularly unlikely to have prevailing wage laws. And it is these states that compose the 75th and 90th percentiles for the no law regime states in the first panel of the table and the box plot.

We can examine this issue more carefully by taking the ratio of the percent African-Americans in the construction labor force to the percent of African-Americans in the non-construction labor force by state. If the proportion of African-Americans in construction mirrors the proportion in the non-construction labor force, the ratio will be one. If African-Americans are ‘over represented’ in construction the ratio will be greater than one, less if they are “under represented”. If state prevailing wage laws reduce African-American representation in construction, this ratio should be systematically lower in states.
with laws than in states without prevailing wage laws (see the right hand graph in Figure I). What is most striking about Figure I (and the lower panel of Table III) is, first, the larger variance of the ratio for the no law states relative to the other three regimes and second, the similarity of the ratio at 50th, 75th and 90th percentiles for no law, average law and strong law states. The no law states not only include states with the highest ratio of African Americans in construction to African Americans in the non-construction labor force, they also include the states with the lowest ratios. More apropos to the present question, the ratio for the median strong law state (.70) lies slightly above that for states without laws (.64), while the strong law state at the 75th percentile has a ratio (.92) only slightly below that of its counterpart among the no law states (1.0). Comparison of the average and no law box plots also indicates little systematic difference in the relative representation of African-Americans between these two legal regimes. There is also only a small difference in the ratio between the no law, average and strong law regimes at the 90th percentile.

This analysis suggests that although African-American employees are more prevalent in construction in states without prevailing wage laws, this reflects the larger proportion of African-Americans in those states labor force rather than any favorable influence of legal regime. States in the deep South do not have prevailing wage laws and this resulted in a simple if spurious correlation between the proportion of African-Americans in construction and the lack of prevailing wage laws. Why might these states lack such laws? In the era when social regulatory laws such as prevailing wage laws were being considered by state legislatures, 1880 to 1960, African-Americans were disenfranchised throughout the South. The denial of the voting rights to such a large proportion of the working class of these states may have been an insuperable barrier to the passage of prevailing wage laws as well as other progressive labor legislation.

Descriptive statistics are, in the end, not decisive because we do not believe that prevailing wage laws and the racial make up of the labor force are the only factors affecting African-American representation in construction. Other factors may influence employment in construction and may, if not controlled for, mask the true effect of prevailing wage statutes. We address this estimating five multi-variate models, working from a simple model that allows only for the influence of prevailing wage statutes, to models that better reflect the complexity of the employment decision. Parallel to our descriptive statistics, the initial model includes only the three prevailing wage indicators: strong law, average law, and weak law, as explanatory variables (Model I). Individuals are assigned values for the prevailing wage variables according to their reported state of residence. Again paralleling our descriptive statistics, the next model adds a control for the percent of African-Americans in the non-construction labor force of the state. (Model II)

The third model includes two variables related to unionization, union membership and union density by state, for the construction industry (Model III). Some construction unions have historically acted to exclude African-Americans from membership and from their trade. Although such practices have been
determined to be illegal by the courts, unions may still engage in practices that *de facto* serve to exclude African-Americans from employment in construction. These two measures of unionization control for and measure the effect of construction unionization on African-Americans employment independent of the effects of state prevailing wage laws. Individual characteristics, such as age, education, place of residence and gender may influence the suitability of individuals for employment in construction. The fourth model follows the work of Heywood and Peoples (op. cit.e.) in adding controls for demographic characteristics and educational attainment (Model IV).

The final estimate, Model V, provides controls for three-digit occupation. The argument for racial hiring consequences of prevailing wage laws suggests that such laws systematically favor more skilled, and hence more productive, workers. African-American workers are on the lower end of the skill distribution, so prevailing wage laws act to exclude them from the industry. But skills in construction are, for the most part, specific to occupations. Those excluded by prevailing laws are excluded because they are on the lower end of the skill
### Table XX.IV  The Effect of Prevailing Wage Laws on Minority Employment

<table>
<thead>
<tr>
<th>Model</th>
<th>I</th>
<th>Ia</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak Law</td>
<td>-.033</td>
<td>-.0377</td>
<td>-.0032</td>
<td>-.0029</td>
<td>-.0065</td>
<td>-.0058</td>
</tr>
<tr>
<td></td>
<td>(-1.75)</td>
<td>(-4.44)</td>
<td>(-0.308)</td>
<td>(-0.277)</td>
<td>(.659)</td>
<td>(-0.643)</td>
</tr>
<tr>
<td>Average Law</td>
<td>-.034</td>
<td>-.0296</td>
<td>-.0030</td>
<td>-.0021</td>
<td>-.0023</td>
<td>-.0019</td>
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<td></td>
<td>(-1.38)</td>
<td>(-2.90)</td>
<td>(-0.315)</td>
<td>(-0.197)</td>
<td>(-0.225)</td>
<td>(-0.209)</td>
</tr>
<tr>
<td>Strong Law</td>
<td>-.038</td>
<td>-.0090</td>
<td>.0094</td>
<td>.011</td>
<td>.0050</td>
<td>.0066</td>
</tr>
<tr>
<td></td>
<td>(-2.32)</td>
<td>(-1.27)</td>
<td>(1.112)</td>
<td>(0.799)</td>
<td>(0.381)</td>
<td>(0.562)</td>
</tr>
<tr>
<td>Pet African American</td>
<td>.5002</td>
<td>.5003</td>
<td>.4471</td>
<td>.3946</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(13.94)</td>
<td>(13.92)</td>
<td>(13.110)</td>
<td>(12.913)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>.0045</td>
<td>-.0011</td>
<td>.0007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.468)</td>
<td>(-0.175)</td>
<td>(0.128)</td>
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<td></td>
</tr>
<tr>
<td>% Union</td>
<td>-.0096</td>
<td>-.0089</td>
<td>-.0147</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.264)</td>
<td>(-0.262)</td>
<td>(-0.479)</td>
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<tr>
<td>Demographic Controls</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Education Controls</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation controls</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Percent black is the proportion of African Americans in the non-construction labor force by state. Demographic controls include age and its square, gender, marital status and urban residence. Education variables are qualitative measures of educational attainment indicating some high school high school degree, associate of arts, B.A., M.A., professional degree or PhD. Occupation is controlled for with dummies for three digit blue-collar occupations.

Coefficients Reported as Derivatives of the Likelihood Function at Sample Means t-statistics for coefficients in ( . ); * - significant in a 10% one tailed test; ** - significant in a 5% one tailed test; *** - significant in a 1% one tailed test (all tests against of null of zero or positive coefficient).
Prevailing Wages
distribution for their occupation. To this point coefficients have been estimated without regard to occupation and, as such, combine 'within' occupation and 'between' occupation effects. This might veil the racial effects of prevailing wage laws if such effects occur entirely within occupations. The addition of controls for occupation resolves this as 'between' occupation effects are accounted for by the occupational controls and the non-occupational coefficients capture only 'within' occupation effects. Although most econometric research control for occupation at the level of major occupation (23 categories) or, less frequently, detailed occupational (45 classifications) controls, this research uses three-digit occupational controls to better delineate the craft structure of the industry.

The models are estimated using probit, but as the error term has both individual and state error components, consistent estimation is more complex than the typical probit. The two-component error structure, an implication of inclusion of state level variables in the model, results in an n.i.i.d. error that is correlated across individuals within states. If this were a linear model, OLS estimates would be consistent but inefficient. The implications for estimation of a maximum likelihood model are more serious; coefficient estimates are no longer consistent. This can be corrected with a model that allows for a random state error component. There are several methods of estimating such a model; we utilize Butler & Moffit's (1982) approach. We illustrate the issue of random components by estimating Model I with a conventional probit and the random effects corrected estimator used throughout the balance of the paper. Estimates of the derivatives of the likelihood functions, the non-linear counterpart of regression coefficients, are provided in Table IV.

Estimates of Model I derived from a conventional probit are found in the first column in Table IV, estimates for a model which allows the state error term are in the second column. The derivatives of the coefficients from the conventional probit are similar across the three classifications of prevailing wage laws. The presence of a law reduces the likelihood of observing an African-American employee by approximately 3.5% without regard to the strength of the law. The coefficients are statistically significant at conventional levels, but the level of significance varies widely, from significant in a 1% one tailed test for strong laws, to 5% in a one tailed test for weak laws, to 10% for average laws. Despite such differences -- but parallel with the descriptive statistics -- the conventional probit estimates of Model I may be taken as supporting the racial exclusion theory.

These results are, however, misleading both with regard to coefficient estimates and statistical significance. Correction for random state effects (column two) has little impact on the estimated effect of the coefficients on weak and average laws; African-American employment is reduced between 3% and 3.8% in the presence of such laws. The standard errors for these two variables are substantially smaller than those in the conventional probit, both coefficients are significance at better than a 1% level. The more striking change is the decline in
the estimated effect of strong laws, to one third the level indicated by the
conventional probit, and its consequent loss of statistical significance in any
conventional test.15 The result for the strong law coefficient is at variance with
the racial exclusion theory, as strong laws should have a more marked
exclusionary effect than average or weak laws. The random effects estimates
might be interpreted as providing partial support for the racial exclusion theory,
but it more clearly illustrates the need to use an appropriate estimator.

Model II adds a variable for the proportion of African-American's in the
state's non-construction labor force, a critical determinant of the proportion of
such workers in construction. The derivative of the coefficient on the proportion
of African-American in the non-construction labor force is .5002 with a t-statistic of
13.9; a state with ten percentage points more African-American workers in its
labor force will have a five percentage points higher level of African-American
employment in its construction labor force. As with the descriptive statistics,
inclusion of this variable in the model eliminates the relationship between
prevailing wage laws and African-American employment in construction. The
coefficients on the prevailing wage variables become smaller in magnitude, the
point estimates of the derivatives range between -.003 and +.0094; the decline in
magnitude causes the coefficients to become non-significant. This result also
carries through models III - V, prevailing wage coefficients are never significant in
models that include the proportion of African-Americans.

Addition of controls for union membership and union density, Model III,
do not alter any the estimates. The coefficient on the proportion of African-
Americans in the state labor force remains large and statistically significant, those
on the prevailing wage law variables continue to have small, non-significant
coefficients and the coefficients on union membership and union density by state
are also small and non-significant. This outcome, which is maintained in all
further estimates, is unexpected given the historic and legal record of some
building trades unions with regard to employment of African-American workers.
It may reflect the success of legal and institutional efforts to end discriminatory
practices. Whatever the source, this research suggests that construction employees
who are union members are no less likely to be African-American than those who
are not African-American. Further, that the increased bargaining power provided
by greater union organization of construction labor markets is not being used to
exclude African-Americans from employment in construction.

Model IV, which controls for factors such as age, education and
residence, which might influence the suitability of individuals for employment in
construction, does not alter the relationship between prevailing wage laws and
minority employment. The effect of the proportion of African-Americans in the
state labor force remains large; the effects of prevailing wage laws and of union
membership and density remain small in magnitude and non-significant. Other
important determinants of African-American employment are age and its square,
metropolitan residence, marital status and holding a college degree (see Table V).
Older employees are more likely to be African-American, although the
relationship is convex. Considering the effect of age alone, a twenty year old has an 8% probability of being African-American, a thirty year old has a 10.6% probability, a forty the probability is 12.3%, at fifty it is 13.1%. The probability to decline between

Table XX.V: Model IV Estimates of the Effects of Prevailing Wage on African-American Employment

<table>
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<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Number of obs</th>
<th>Model chi2(17)</th>
<th>Prob &gt; chi2</th>
<th>Log Likelihood</th>
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<tr>
<td>Weak Law</td>
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<td></td>
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<td>Average Law</td>
<td>(-0.657)</td>
<td>(-0.225)</td>
<td></td>
<td>Model chi2(17)  = 161.33</td>
<td>Prob &gt; chi2 = 0.0000</td>
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<tr>
<td>Strong Law</td>
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<td>(0.381)</td>
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<tr>
<td>% African-American</td>
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<td>(13.110)</td>
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<td>Union Density</td>
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<td>Union Member</td>
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<td>Age</td>
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<td>Age^2</td>
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<td>Metro Resident</td>
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<td>(-3.844)</td>
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<td>Separated, Widowed</td>
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<tr>
<td>Or Divorced</td>
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<tr>
<td>Some High School</td>
<td>-.000554</td>
<td>(-0.083)</td>
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<table>
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<tr>
<th>Education Level</th>
<th>Coefficient</th>
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<td>Associates Degree</td>
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</tr>
<tr>
<td>College Degree</td>
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<td>(-2.483)</td>
</tr>
<tr>
<td>More than College</td>
<td>.044863</td>
<td>(1.446)</td>
</tr>
</tbody>
</table>

T-statistics for coefficients in ( ); ** significant in a 5% two tailed test; *** significant in a 1% two tailed test; * significant in a 10% two tailed test begins

fifty and sixty and at sixty it is 12.9%. One source of this pattern may be recent shifts in minority employment in construction, with Hispanics increasingly competing with African-American workers over the last twenty years. Older African-American construction workers, who have ties to the industry, would have remained employed at relatively high rates. But fewer young African-Americans would find employment in construction as Hispanics have moved into the industry (Belman and Bilginsoy, 1997). In addition to age, residence in a metropolitan area increases the probability of an employee being African-American by 1.7%. Being married and holding a college degree both decrease the likelihood of observing an African-American, by 2.3% and 4.2% respectively. Educational attainment other than a college degree has little effect on the racial composition of the construction labor force, a result in keeping with the importance of occupation specific rather than general skill training in the industry (Belman and Bilginsoy, op. cite.).

Model V, the final model in this series, differs from prior estimates in controlling for a fixed effect by three-digit occupation. Again, by removing the effects of inter-occupational factors including skill related factors, this model eliminates the masking of the effects of prevailing wage laws by occupational factors. The thrust of prior results remains. The cardinal explanatory variable is the proportion of African-Americans in the state labor force; the effects of prevailing wage laws and unionization are small in magnitude and non-significant. Model V suggests varied patterns of racial employment by trade. There are thirty-four distinct trades in this data set including three grades of mechanic, carpet layers, ironworkers, electricians, apprentices, and bricklayers. There is evidence that African-Americans are significantly less likely to be observed in occupations such as construction supervisor, heating-ventilation-air-conditioning, carpenter, electrician, painter, plumber, ironworker, sheetmetal, welder, operating engineer or material moving operative. Although no simple pattern is apparent in this set of occupations, it appears that African-Americans are less likely to be employed in licensed occupations (such as plumbing and electrical) and occupations which require formal training (such as operating engineer, electrician
and plumber). But, carpenters and welders, occupations that are often self taught or learned on the job, are also less likely to be African-Americans. The estimates also indicate that apprentices are no less likely to be African-American than other construction workers. This cuts against the argument that such positions do not provide ports of entry to construction for African-Americans and is consistent with Bilginsoy's research on apprenticeships. The small number of apprentices in the sample argues against putting too much weight on this result. 13

Conclusion

Prevailing wage laws have come under increasing criticism for allegedly reducing the employment of African-Americans in the construction industry. This premise has been supported by evidence from legislative records and theoretic arguments about administered wages role as a bar to the employment of the lesser skilled African-American worker. The argument was further buttressed with evidence on discrimination against African-American employees by building trades unions.

The empirical evidence developed in this research does not support the premise that prevailing wage laws act to exclude African-American's from employment in the construction industry. Utilizing a conventional data source and a procedure incorporating a state and individual error component, we find a moderate negative simple correlation between state prevailing wage laws and minority employment in blue-collar construction. This correlation is, however, the product of the lack of such laws in the South, the region with the largest proportion of African Americans in its labor force. Once adjusted, the association between prevailing wage laws and minority employment disappears.

The debate surrounding the Davis Bacon Act will continue on other grounds. How the Act effects the cost of public construction, the quality of work done, the amount of training that takes place in construction, the extent to which the law promotes labor standards and encourages collective bargaining, all remain open for debate. However, the proposition that the Davis Bacon Act acts to limit African American access to construction employment is not consistent with current racial patterns of employment in the industry.
Bibliography


Brazier Construction Co., Inc., et al., Plaintiffs, v. Robert Reich, Secretary of Labor, et al., Defendants, Civil Action No. 93-2318 WBB.


Will, George, (February 5, 1995), "It Is Time to Repeal the Davis-Bacon Act," syndicated column in many papers.
Box Plots of Participation of African-Americans in Construction

**Figure 1: Percent of African-Americans in the Construction Labor Force (by State)**

*The construction labor force of the District of Columbia is 78% African-American. This observation has been removed from graph “Percent of African-Americans in the Construction Labor Force” to prevent excessive compression of the scaling.*

**Figure 2: Ratio of the Percent of African-Americans in Construction to African-Americans in the Non-Construction Labor Force (by State)**
Prevailing Wages
End Notes

3. Institute for Justice lawyers presented arguments on behalf of plaintiffs in seeking the constitutional overturning of the Davis-Bacon Act as a racially discriminatory law. Brazier Construction Co., Inc., et al., Plaintiffs, v. Robert Reich, Secretary of Labor, et al., Defendants, Civil Action No. 93-2318 WBB.
5. As noted previously in this paper, there is historic evidence of discrimination in acceptance into apprenticeship programs. More recent work by Bilginsoy suggests that such practices have largely been ended (1998). Further, apprenticeship programs provide only half of the trained journeymen in the industry. Other important sources include training in the military, community colleges and on the job training.
8. The box defines the interquartile range of the distribution (IQ). The horizontal lines at the end of the whiskers are the upper and lower observation which is closest to being 1.5 times the interquartile range beyond the 25th and 75th percentile.
9. The standard errors obtained from the OLS routine in a typical software package would, however, be wrong, as they are calculated under the assumption of independence of error terms. The correct OLS errors can be obtained by methods typically referred to as robust or White-Huber corrections.
10. Estimation with this procedure can be sensitive to the procedures used for estimation, such as the number of quadratures used, but estimates with this data were stable across variations on the routine.
11. The complete estimates are available from the authors.
12. The divergence in the effect of strong laws from that of other laws can be tested by comparing this model to one in which the strong, average and weak coefficients are constrained to be the equal. The hypothesis of equality between the coefficients on the three prevailing wage variables can be rejected in a 1% Wald test.
13. The helper classification is of interest as opponents of prevailing wage legislation suggest that the helper category is utilized by African-Americans as a point of entry to the construction labor force. The relationship between employment as a helper and racial
status could not be tested as there were few helpers in the data set and since none were African-American it could not be included in the model.