Brazier Constr. Co. v. Reich, No. 93-2318 WBB (D.D.C.)

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Section 1: Overview of Report.

History of Prevailing Wage Laws (Section 2).

The Davis-Bacon Act stands at the culmination of a long line of legislation designed to promote wage and hour labor standards in the construction industry and by extension to the labor market, in general. Its purpose was to protect local labor standards from the effects of employing cheap labor on public works.

The first federal prevailing wage law was established by proclamation by Ulysses S. Grant in 1869. In implementing the 1868 federal eight-hour-day law on public works, Grant proclaimed that as hours were shortened for construction workers, their per diem wage should remain the same. This federal law was followed by a set of state laws prior to the Davis-Bacon Act which also proclaimed eight hours to be a day's work on public construction. Seven of these state laws also declared that the current or prevailing wage must be paid. Three other states and one territory set a minimum wage for public construction. The purposes of these state laws was recognized by U.S. Supreme Court Justice Harlan in evaluating the constitutionality of the first state prevailing wage law (Kansas 1891). "The leading idea clearly was to limit the hours of toil of laborers, workmen and mechanics and other persons in like employment to eight hours, without reduction in compensation for the day's service."[1] I am aware of no record of racial animus motivating the passage of these state laws. Indeed,

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[1] Quoted in Oklahoma, Department of Labor, Second Annual Report, Oklahoma City, 1901, p.327.

in the case of New York where there were immigration issues associated with the development of that state's prevailing wage law, the cheap foreign labor generating concern was labor from Canada, England, Scandinavia and western states and not black labor from the south.

There is little evidence to support the hypothesis that the Davis-Bacon Act was motivated by racial animus. The single congressional opponent of the Act was a Texas Democratic Congressman who objected to the Act's infringement on the freedom of contract and saw the Act as a surrender to organized labor. I am aware of no voice on the historical record opposing the Act because it infringed on the activity of arbitraging cheap black labor from the south to the north. Professor Morse explains this silence by pointing out that southern blacks had no representatives in Congress who would voice their interests. This is true. But surely if white contractors had been profiting from the arbitrage of cheap black labor into northern construction, these white contractors would have had their interest made plain to their representatives in Congress.

The Myth of Cheap, Black Labor Arbitrage (Section 3).

The plaintiffs' story that in the 1920s cheap, black, southern labor was being brought north by contractors engaged in a widespread and profitable arbitrage is a myth. In 1929, 57 percent of all construction services was done by local contractors. An additional twenty-five percent of all construction services was done by out-of-city but within state contractors. Another seven

percent of all construction work was done by out-of-state but within region contractors. Only eleven percent of all construction services was provided long-distance by out-of-region contractors. Most of this long-distance trade did not involve southern contractors. Comparing the eight southern states, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana to the seven West-North-Central states, Nebraska, Minnesota, North Dakota, South Dakota, Iowa, Kansas and Missouri, we find that in 1929 both were low-wage regions of the country, but the West-North-Central region exported five-times more construction services to the high wage states of the Midwest and Northeast as did the South. The South formed a very small portion of overall long-distance trade into high-wage states.

Even when southern contractors brought cheap labor north, they most probably brought integrated work crews that were majority white. Occupations within the construction crew might well be segregated, but the general contractor bringing black laborers would bring white carpenters. In 1929, black labor was cheap primarily because it was southern labor, and southern labor was cheap. Based on wage data for Virginia, white, southern laborers, hod carriers, lathers, and plasterers earned only slightly higher wages than their southern black counterparts. The Virginia data also show that at least in this state, southern contractors often employed both black and white workers in these occupations together on a job. Thus, contrary to plaintiffs' story, if the southern contractor came north, that contractor would have brought cheap

white labor along with cheap black labor. In southern occupations such as carpenter, plumber and electrician where blacks earned much lower wage rates than did whites, the southern contractor would have brought white carpenters and plumbers north simply because there were not enough black labor in these occupations to fill a crew.

An analysis of construction wages within the four high-wage states of Massachusetts, Connecticut, New York and New Jersey in 1929 finds construction income differentials which match the variation in construction incomes observed by Professor Morse between the north and the south. Given that the transportation and information costs of labor arbitrage in construction rise with distance, the major effect of the Davis-Bacon Act was to discourage short-distance labor arbitrage between cities such as Buffalo and Worcester, on the one hand, and New York and Boston on the other. There is no credible evidence showing that the arbitrage of cheap, black, southern labor to the north was the primary motivation behind the Davis-Bacon Act.

The Loss of Minority Construction Jobs Is Unproven (Section 4).

Dr. Thieblot and Dr. Bloch attempt to demonstrate that prevailing wage laws in general and the Davis-Bacon Act in particular currently limit minority and black access to construction employment. Both tell the same story: Prevailing wage laws encourage unions and higher wage rates. Unions are disproportionately white while minorities and blacks are disproportionately unskilled. Higher unionization rates discourage

minority and black employment because minorities and blacks are not in construction unions. Higher wage rates induce contractors to shift to a skilled work force and this reduces the number of job openings for minorities and blacks because they are disproportionately unskilled. In short, prevailing wage laws promote unions and higher wages. Unions chase out blacks and higher wages chase out blacks. This story is not supported by the data presented by Dr. Thieblot and Dr. Bloch.

Dr. Thieblot attempts to support this story by showing an inverse correlation between prevailing wage laws of increasing strength and the relative absence of blacks employed in construction. After correcting Dr. Thieblot's table in his original report for a variety of arithmetical errors, the omission of Michigan and the use of 1980 data for Hawaii and Ohio, I demonstrate that his supposed inverse correlation between prevailing wage laws and the relative employment of blacks in construction disappears when one excludes from his analysis eight southern states with a long history of black involvement in construction. Comparing the ten remaining states free from prevailing wage laws with either all 42 states with prevailing wage laws or only those 16 states with limited black populations, Dr. Thieblot's hypothesized connection between legal regimes and demographic employment patterns disappears. Dr. Thieblot's correlation is spurious.

Dr. Bloch's correlation between higher wage rates or higher unionization rates on the one hand, and lower relative employment

of minorities and blacks on the other, also fails under close scrutiny. Dr. Bloch tells two stories. Unions chase out blacks and high wages chase out blacks. His data do not support either story. In the aggregate, Dr. Bloch reports that white and minority unionization rates are very close, 24 percent versus 22 percent. White and black unionization rates are also close, 24 percent versus 20 percent. When Dr. Bloch disaggregates his unionization rates by occupation, it turns out that the unionization rate for minority and black laborers is higher than the unionization rate for whites. Dr. Bloch does not tell us what other occupational unionization rates are broken down by race. However, looking at unionization rates by race for specific unions and construction occupations may well show that racial unionization rates are not only close, they are the same. Dr. Bloch's first story, that unions chase out minorities and blacks is not supported by the data he presents.

But Dr. Bloch tells a second story which has two parts to it. First, higher wages induce a shift from unskilled to skilled construction workers. Second, more skilled construction workers means fewer minorities and blacks. Dr. Bloch's data do not support the notion that higher wages mean contractors hire significantly fewer unskilled laborers and significantly more skilled craft workers. In fact, Dr. Bloch's data are consistent with Dr. Thieblot's data which show that the proportion of unskilled laborers among construction workers is constant across prevailing wage law regimes, and low-wage and high-wage states. Therefore, to

the extent there is a shift in skill mixes with changing wage rates, it must generally occur within construction occupations rather than across them. But Dr. Bloch has no evidence to support the proposition that within specific construction occupations blacks are any less skilled than whites. Indeed, why should black bricklayers (given the long history of blacks within this occupation) be any less skilled than white bricklayers or licensed black electricians any less skilled than white licensed electricians (given they both must pass licensing exams). The age of black construction workers in general, and broken down by prevailing wage law regimes is the same as the age of white construction workers. This suggests that in general, black and white construction workers have the same on-the-job experience. Black formal educational attainment is less than whites, suggesting they might be less skilled in construction. But in the ten non-southern states without prevailing wage laws, the educational attainment of blacks is slightly higher than that of whites. This casts doubt on the story that freedom from prevailing wage laws opens the door for the less educated and therefore less skilled among blacks. In short, Dr. Bloch fails to show that within specific occupations blacks are any less skilled than whites. He fails to prove that higher wages induce a shift to skilled workers that then leads to the elimination of minority and black workers.

Blacks and Minorities Enjoy the Wage Benefits of Prevailing Wage Laws (Section 4).

Surprisingly, Dr. Thieblot and Dr. Bloch do not examine whether blacks enjoy the higher wages that both analysts say prevailing wage laws generate. Asking that question for them, I find that prevailing wage laws raise the incomes of blacks and nonwhites by 10 to 20 percent over what they would have been in the absent of these state laws. This result holds controlling for a variety of factors including regional differences in construction wages. Because over half of all blacks live in states with prevailing wage laws, this effect is a significant factor in analyzing how prevailing wage laws have affected minorities and blacks in general.

Prevailing Wage Laws and Access to the Skilled Trades (Section 5).

Black unionization rates have risen dramatically in the last twenty years. This is largely due to affirmative action regulations that have compelled union apprenticeship programs to open their doors to women and minorities. Affirmative action rules do not apply to apprenticeship programs with fewer than five apprentices. Because many nonunion programs are single employer programs with one or two apprentices, the nonunion sector has been less affected by affirmative action. The repeal of state prevailing wage laws has led to a decline in the union share of apprenticeship training. With this decline, there has been an even faster decline in black apprenticeship training simply because the union sector trains more blacks. Thus, while the passage of the Davis-Bacon Act was not meant to enhance the job opportunities for

blacks in construction, the annulment of this Act would lessen the chances of blacks entering into the skilled trades.

Section 2: The History of Prevailing Wage Laws.

Introduction.

The Davis-Bacon Act comes at the end of a long chain of labor market regulations designed to limit the hours of work and sustain wage standards. The goal of these laws was to improve labor standards not only on public works but in construction generally and through construction to other areas where laborers and mechanics were employed. The first federal prevailing wage regulation (1869) was a Presidential declaration on how to implement the 1868 federal eight-hour day law on government works. This was followed by similar legislation in Kansas in 1891 and New York in 1894. Eight states passed prevailing wage laws tied to eight-hour laws on state construction prior to the Davis-Bacon Act.[2] I am aware of no record of racial animus associated with either the first federal proclamation or the subsequent eight state laws. The Davis-Bacon Act can be viewed as an effort to legislate and enforce President Grant's prevailing wage proclamation during a Depression-era crisis when labor standards were crumbling.

It has been argued that the reason the legislative record does not entail opposition to the Davis-Bacon Act based on a defense of the arbitrage of cheap black southern labor is because southern blacks had no representatives in Congress in the late 1920s and

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[2] These include Kansas, New York, Oklahoma, New Jersey, Idaho, Massachusetts, Arizona and Nebraska. In addition, Maryland had a prevailing wage law which applied only to Baltimore. California, Nevada, Indiana and Hawaii had minimum wage laws for construction workers. U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 148, 1914, pp. 197, 289, 501, 634, 943, 1008, 1282, 1327, 1476, 1718, 1719.

early 1930s. But why were the employers of this labor not heard from? There are no voices on the record representing the hypothetical southern contractors arbitraging cheap black labor north. Evidence presented in Section 3 suggests that these hypothetical southern contractors did not exist in any significant number. The only opposition that was posed against the Davis-Bacon Act was based on the principles of freedom of contract and resistance to union political influence. This is a traditional opposing viewpoint to the one that government ought to regulate labor markets in order to preserve and develop labor standards. This history suggests that the Davis-Bacon Act was what it purported to be--an effort to regulate labor markets in the interest of sustaining labor standards.

The First Federal Prevailing Wage Law--1869.

The first federal eight-hour day law in the case of public employment was enacted on June 25, 1868. This law created the problem of earnings falling in proportion with the decline in hours. Consequently, on May 19, 1869, President Grant issued the following proclamation.

> that, from and after this date no reduction shall be made in the wages paid by the Government by the day to such laborers, workmen and mechanics on account of any such reduction of hours of labor.[3]

Because enforcement of this proclamation was lacking, on May 11, 1872 Grant reiterated with greater detail and emphasis in a second proclamation that per diem wages should not be cut with the

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[3] The Statutes at Large and Proclamations of the United States of America, from December 1869 to March 1871, Vol. XVI, Boston, 1871, p. 1127.

required shorter hours.[4]

Thus, the principle of a prevailing wage law at the federal level predates the Davis-Bacon Act by fifty years. The purpose of the federal law was to set labor standards regarding hours and wage rates in the public sector presumably with the hope that these standards might spread to the private sector. That the purpose was thwarted in enforcement is indicated by Grant's need to make the same proclamation twice. The American Federation of Labor, in its first convention in 1881 stated what it thought the purpose of the law was and complained that it was not being enforced:

> Resolved...that the National Eight Hour law is one intended to benefit labor and to relieve it partly of its heavy burdens, that the evasion of its true spirit and intent is contrary to the best interest of the Nation; we therefore demand the enforcement of said law in the spirit of its designers.[5]

But there is nothing in the historical record to indicate that the purpose of this original federal wage and hour law on public works had at its core any racial animus. And, indeed, in the enactment of the first state prevailing wage law there is a complete lack of

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[4] In this declaration Grant made it more clear he was not only talking about government employees but also the employees of contractors on public works:

> ...I, Ulysses S. Grant, President of the United States, do hereby again call attention to the act of Congress aforesaid, and direct all officers of the executive department of the government having charge of the employment and payment of laborers, workmen and mechanics employed by or on behalf of the government of the United States to make no reduction in the labor wages paid by the day to such laborers, workmen and mechanics on account of the reduction of the hours of labor.

The Statutes at Large and Proclamations of the United States of America from March 1871 to March 1873, Vol XVII, Boston, 1873, pp. 955-56.

[5] Federation of the Organized Trades and Labor Unions of the United States and Canada, 1881, "Declaration of Principles" in Proceedings of the American Federation of Labor, 1881 to 1888, Reprinted 1905, Pantagraph Printing, Bloomington, Illinois, p. 3.

any record of racial animus.

The AFL and the First State Prevailing Wage Law--1891.

In February 1891, Samuel Gompers, president of the American Federation of Labor, visited Topeka, Kansas, to speak on what the local newspaper called "the great topic of labor." Ten years earlier, the AFL — at its own creation — had laid out legislative aims that included the eight-hour work day, the elimination of child labor, free public schooling, compulsory schooling laws, the elimination of convict labor, and prevailing wages on public works.[6] These proposals were based on a belief that the American labor market should consist of highly skilled workers earning decent wages, with time for family, and with children free to earn an education. In pursuit of these aims, Gompers' political strategy in Kansas allied him with the Republican Party.

Gompers was in Kansas to focus on the eight-hour day. Like other Americans, Kansans in 1891 typically worked six days per week, ten to twelve hours per day. In the older trades and crafts, such as carriage making and saddle making, where the work pace was slow and under the workers' direction, the long work day was

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[6] While supporting the National Eight Hour law in 1882, the AFL stated:

> We declare that the system of letting out Government work by contract tends to intensify the competition between workmen, and we demand the speedy abolishment of the same.

This concept merges with the eight-hour concept in the development of the Kansas and New York laws.

The above quote and all the labor law proposals of the AFL are found in Federation of Organized Trades and Labor Unions of the United States and Canada, 1882, "Report of Proceedings", in Proceedings of the American Federation of Labor, 1881-1888, Reprinted in 1905, Pantagraph Printing, Bloomington, Illinois, pp. 3-4.

tolerable. In the newer factories producing shoes, textiles, and the like; in the mines; and in the urban putting-out systems in needlework, six-day weeks and twelve-hour days were grueling. The AFL had made its prime objective a shortened work day and work week with as little cut in pay as possible.[7]

At that time, when there were no income supplement programs for the poor, low-income parents worked *and* had to send their children to work to make ends meet. This practice was later referred to by a North Carolina newspaper editor as "eating the seed corn." Each generation of poor condemned its offspring to poverty because the children grew up as illiterate as their parents. The prevalence of cheap child labor, which accounted for 5 percent of the manufacturing labor force in 1890[8] and a larger proportion of service sector workers, kept wages down and forced adult workers to put in the long hours to make ends meet. Gompers wanted regulation to force employers and the poor to adopt a strategy, however painful in the short run, of a high-wage, high-skilled growth path where children were in school and workers had the skills to justify wages that would allow for a family life.[9]

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[7] In his Topeka speech, Gompers declared:

> Our banner floats high to the breeze and on that banner float is inscribed, "Eight hours work, eight hours rest and eight hours for mental and moral improvement."

Topeka Daily Capital, February 25, 1891, p.1.

[8] U.S. Census of Manufactures, 1890.

[9] Gompers said in his Topeka speech:

> The Federation endorses the total abolition of child labor under 14 years of age; an eight hour law for all laborers and mechanics employed by the government directly through contractors engaged on

Although it was not clear at the time whether government could require private sector employers to honor the eight-hour day, government could set an example, Gompers believed. In state after state, he pleaded for the eight-hour day for government workers and private sector workers employed on public works. Gompers also pleaded for workers to be paid the "current" daily wage so they could afford the reduced work time. Government was being asked to set a good example for the private sector, to show that a refreshed labor force could produce in eight hours what a fatigued and bedraggled labor force turned out in ten or twelve hours. The prevailing wage law in its infancy was an attempt to obtain shorter working hours for *all* labor. The AFL paid attention to public works, however, because government at all levels was a major purchaser of construction. The AFL said government should not try to save money by eroding the wages of its citizens.[10]

Thus, prevailing wage law legislation, at its birth, was embedded in an over-arching intent to shorten the grueling working day for all labor, to compel the working poor to make ends meet in

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public work, and its rigid enforcement; protection of life and limb of workmen employed in factories, shops and mines; ...the extension of suffrage as well as equal work for equal pay to women....

Topeka State Journal, February 25, 1891, col. 3-4, p.1.

[9] It is interesting that throughout the 1890s, Carroll D. Wright, the U.S. Commissioner of Labor published at the end of most Department of Labor Bulletins a list of current federal construction projects around the country, who the contractor was and what was the value of the project. Wright was an outspoken proponent of labor market regulation. The bulletin went to state legislators, union officials and others interested in labor market regulation. The listing of federal contracts was an open invitation to consider using federal public works as a tool for labor market regulation. See for instance, U.S. Department of Labor Bulletin No. 7, November 1896 where the listing of federal projects comes just after an article on court decisions affecting labor, pp. 774-811.

some fashion other than by sending their children into the factories, to compel children into schools so that they might become better workers and better citizens, to compel employers to adopt techniques that profited on the employment of skilled adult workers rather than unskilled child labor, to present government as an exemplar of good management by establishing the eight-hour day in government employment and on public works, and to abolish the practice of government saving tax dollars by grinding down wages on public works or through convict labor.[11]

The Intent of the Kansas Eight-Hour Law.

Kansas established the first prevailing wage law in 1891. In January 1890, the Kansas Bureau of Labor and Industrial Statistics, in preparation for its Sixth Annual Report, distributed a questionnaire to each trade union and the Knights of Labor Assembly. In response to a question about needed legislation, the Molder's Union of Parsons, Kansas, replied that they wanted "a law...against the letting of contracts for State work to unfair employers."[12] This plea for the state to contract out work fairly appears to be one of the first reports leading up to the enactment of a prevailing wage law.

In February 1891, the Second Annual Convention of the Kansas State Federation of Labor, in Topeka, approved a bill concerning

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[11] Martin Brown, Jens Christiansen and Peter Philips, "The Decline of Child Labor in the U.S. Fruit and Vegetable Industry: Law or Economics?", Business History Review, Harvard University, Vol. 66 Winter 1992, pp. 723-770.

[12] *Sixth Annual Report of the Bureau of Labor and Industrial Statistics,* 126.

state-paid wages. That month, the bill, which included the prevailing wage section, called "for an Eight Hour Law" and was brought forth by Mr. Avery of the Typographical Union No.121, Topeka. The bill stated,

> That in no case shall any officer, board, or commission, doing or performing any service or furnishing any supplies to the State of Kansas under the provisions of the act be allowed to reduce the daily wages paid to employees engaged with him (or them) in performing such service or furnishing such supplies, on account of the reduction of hours provided for in the act. That in all cases such daily wages shall remain at the minimum rate which was in such cases paid and received prior to the passage of the act.[13]

The eight-hour bill was one of four labor-related bills pending in the legislature: the weekly pay bill, the child-labor bill, and the bill to make the first Monday in September a holiday, which would become known as Labor Day. In addition, that year the Kansas State Federation of Labor approved a resolution calling "for the abolition of convict labor when in competition with free labor."[14]

Senate Bill 151, the eight-hour bill, failed in the Kansas senate March 6, 1891, with the prevailing wage section removed. But by March 10, when the prevailing wage section was put back in, the bill became law.[15]

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[13] *Sixth Annual*, 215.

[14] *Sixth Annual*, 124.

[15] This first prevailing wage law stated,

> That not less than the current rate of per diem wages in the locality where the work is performed shall be paid to laborers, workmen, mechanics and other persons so employed by or on behalf of the state of Kansas....

In summarizing the purpose of the Kansas Act, in Atkin v. Kansas, the court case which found the act constitutional, Justice Harlan, of the U.S. Supreme Court wrote:

> When the eight hour law was passed the legislature had under consideration the general subject of the length of a day's labor, without specific reference to the purpose or occasion of their employment. The leading idea clearly was to limit the hours of toil of laborers, workmen, mechanics and other persons in like employment to eight hours, without reduction in compensation for the day's service.[16]

The Oklahoma Law.

The Oklahoma law which was patterned after the Kansas act and passed in 1908 was reported to have the intended effect of setting wage and hour standards not only on public works but in related labor markets. The Oklahoma Commissioner of Labor stated in 1910:

> The eight hour law has been of inestimable value to the laboring men of this state....The common laborer, who was heretofore employed ten and twelve hours per day, is now, under the provisions of this bill, allowed to work but eight hours....The law has not only affected the laborers and those who are dependent upon this class of work for a living, but it has gone further, and in many localities has gradually forced railroad companies, private contractors [i.e. private construction] and people of that class to pay a high rate of wages for unskilled labor.[17]

Like Kansas, the historical record for the Oklahoma law has no mention of issues of race. The primary concern in both states was to use public works wage and hours policies to set and improve local labor standards.

L. 1891 Ch. 114 p.192-193.

[16] Quoted in: Oklahoma, Department of Labor, Second Annual Report, Oklahoma City, OK, 1909, p. 327.

[17] Chas. L Daugherty, Labor Commissioner, Oklahoma Department of Labor, Third Annual Report, Oklahoma City, OK, 1910, p. 327.

The New York Prevailing Wage Law (1894).

The New York prevailing wage law of 1894 has links to issues of citizenship and immigration. When New York amended its 1870 eight-hour day law on public works to include a prevailing wage provision, it also added a citizenship requirement.[18]

Unions opposed cheap itinerant labor from outside New York state and this opposition was not limited to foreign, non-citizens who came and went with the season.[19] Unions also complained of the transient nature of foreign labor and the willingness of foreign labor to undercut local wage standards.[20] Unions argued that the problem was not just foreign labor but out-of-state domestic contractors as well.[21] Cheap local nonunion labor put union

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[18] 18th Annual Report of the Bureau of Labor Statistics of the State of New York for the Year 1900, Albany, 1901, p. 86.

The connection of this legal reform to the issue of immigration and to the attitudes of unions was made clear in the Thirteenth Annual Report of the New York Bureau of Labor Statistics which came out the year after the enactment of New York's prevailing wage law. Thomas J. Dowling, Labor Commissioner, Thirteenth Annual Report of the Bureau of Statistics of Labor, Vol. I, Albany, 1896 p. 383.

[19] See New York, Bureau of Statistics of Labor, Thirteenth Annual Report, p. 387.

[20] George D. Gaillard of New York District Council of the United Brotherhood of Carpenters stated:

> I think there should be something done about foreigners coming here in the spring and working during the summer and then again returning to Europe in the fall. They come over here and work for less money than the native American, thus depriving him of work.

Id. at p. 388.

[21] Mervyn Pratt of the United Tin and Sheet Iron Workers' Association of New York City emphasized that

> There should be some law which would prevent foreign contractors--I mean contractors from other States--from coming here and taking contracts, as it brings on many troubles. The wages in other places than New York city are certain to be lower than here and they only want the wages and work

contractors with contractually high wage rates and an eight-hour limit at a disadvantage.[22]

Thus, the primary concern of New York's prevailing wage law was the deleterious effects of cheap labor on local labor standards. Those who were U.S. citizens were said to have a prior right to jobs. Foreign labor was itinerant, spending little and remitting most earnings back home. And lastly, as we shall see, to the extent race was a consideration, union supporters of New York's prevailing wage law and its citizenship corollary had only one race in mind--whites. Unions complained of cheap, itinerant "birds of passage" from England, Canada, Sweden and Denmark.[23]

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the hours of the places from which they came.

Id. at p. 535.

[22] See Id. at p. 538.

[23] For example, Edward F. O'Brien, the Secretary of the Bricklayers and Masons' International Union No. 32 said the state should:

> Restrict Immigration. My reason is, that when business in our trade is brisk, the crowd of masons that come here to work from England is awful. They work during the summer here, live poorly, bank all they get, fill our positions and take all they earn back to England, to come again next summer. (p. 387)

A Brooklyn writer for the Brotherhood of Carpenters and Joiners No. 258 said:

> We recommend restriction of immigration, for our trade suffers greatly from foreigners coming here and undermining the American citizens by working for whatever they can get. At the present time you will find that most of the carpenters out of work are citizens of the United States; while those employed are foreigners, especially Swedes...(pp. 387-88).

The Secretary of the Buffalo Brotherhood of Carpenters and Joiners No. 355 said:

> We expect that you will do something for us here at Buffalo to prevent the importation of foreign labor, such as Canadians and labor from other States, to take all the employment away from us here at Buffalo. (p. 388)

A Brooklyn writer for the Brotherhood of Painters and Decorators No. 110 commented:

Of course, cheap foreign labor was not always truly foreign or non-U.S. citizens. Cheap domestic labor also threatened local labor standards. But that cheap domestic labor (at least in the 1890s in New York state) was white, not persons of color. For instance a writer for the New York City Bricklayers and Masons International Union No. 34 noted in 1899:

> For some years what we term 'birds of passage' came over from Europe in the spring, worked here until fall, and then returned to the old country, but on account of the hard times they haven't been coming over lately. We are now affected by the flood of westerners, and there is an overplus of bricklayers in the city... [24]

I am aware of no evidence whatsoever on the historical record that any of the state prevailing wage laws passed between 1891 and 1923 were motivated by racial animus. Cheap labor was the target, not cheap black labor. If black labor had been an important segment of the flow of cheap construction labor into more expensive areas, prevailing wage laws would have impacted black labor, limiting their ability to undercut local labor standards. But, by the standards of these laws, black construction labor would not have been selected out because they were black. They would have been subject to the laws because they were cheap. States such as Arizona, Idaho, Nebraska, Kansas and Oklahoma were not coastal states and did not face the birds-of-passage phenomenon that New

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Our wages have been brought down to $2.75 per day and less, by the amount of foreign labor in the market, mostly Swedes and Danes. (p. 388)

Thirteenth, Annual Report.

[24] 16th Annual Report of the New York Bureau of Labor Statistics for 1898, Albany 1899, p. 1042.

York did.[25] Consequently, the major targets of state prevailing wage laws were local pools of cheaper construction labor which undercut general labor standards and union wage levels.[26] In New York, citizenship requirements were attached to hours and

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[25] Idaho's eight-hour law (1912) was particularly vague regarding its prevailing wage provision. It simply stated:

> Not more than eight hours actual work shall constitute a lawful day's work on all state, county and municipal works;...all bids...shall expressly declare that all laborers and mechanics are to be employed on the basis of an eight hour day.

Nonetheless, this was interpreted to mean that per diem wages were not to be cut when hours were cut on public works. Idaho, Commissioner of Immigration, Labor and Statistics, Seventh Biennial Report, 1911-12, Caxton Printers, Caldwell, Idaho, pp. 147-48.

In contrast, the Arizona law was more explicit:

> Revised Statutes--1913:...Section 3103. Eight hours, and no more, shall constitute a lawful day's work for all laborers, workmen, mechanics and other persons doing manual or mechanical labor, now employed or who may hereafter be employed by or on the behalf of the State of Arizona or by or on the behalf of any political subdivision of the State....Provided further, That not less than the current rate of per diem wages in the locality where the work is performed shall be paid...

Quoted in U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 148, "Labor Laws of the United States, with Decisions of Courts Relating Thereto", Part 1, April 10, 1914, Washington, GPO, p. 197. By 1933, at least, Arizona required that the union rate in a specific locale be declared the "general rate of per diem wages in the said locality...", Industrial Commission of Arizona (edited by Howard Keener and Emil Wachtel), The Arizona Workmen's Compensation Law with Court Citations, Employers Liability Law and Public Works Wage Scale Law, Phoenix, 1933.

[26] By 1914, Alaska, Arizona, California, Colorado, the District of Columbia, Hawaii, Idaho, Indiana, Kansas, Kentucky, Maryland (Baltimore only), Massachusetts, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, Utah, Washington, West Virginia, Wisconsin and Wyoming all had eight-hour limitations on public works. Of these 29 states in 1914, eight had prevailing wage laws (Arizona, Idaho, Maryland [Baltimore only] New York, Massachusetts, Oklahoma, Kansas, and New Jersey). Another three states, California, Nevada and Indiana, plus the territory of Hawaii, had minimum wage laws for laborers and mechanics on public works. Nebraska did not have an eight-hour law but did have a prevailing wage law for road construction. All of the above mentioned states eventually adopt prevailing wage laws and most do so in the 1930s. Southern states and states which never adopt prevailing wage laws are notably absent from this list. U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 148, 1914, pp. 187, 197, 197, 261, 274, 275, 334, 451, 463, 496, 507, 529, 530, 639, 770, 832, 833, 970, 971, 1001, 1095, 1096, 1216, 1217, 1227, 1340, 1415, 1429, 1430, 1433, 1476, 1547, 1603, 1718, 1719, 1761, 1773, 1774, 1845, 2101, 2105, 2108, 2191, 2192, 2236, 2237, 2281, 2327, 2350.

prevailing wage requirements to ensure that hiring policies on public works did not undercut local labor standards. The intent of these state laws anticipate, shape and parallel the intent of the Davis-Bacon Act.

The Davis-Bacon Act.

Maximum Wage Bill Is Passed by House
Measure for Highest Scale in the Community
on Any Public Works Goes to Hoover

Washington--Feb 28--The Davis-Bacon maximum wage scale bill, provides that the maximum wage scale prevalent in any community where public works are undertaken under Federal contract, be paid to all laborers and mechanics....

Passage of the bill was by a two-thirds vote, under the suspension of rules.

While the vote against the measure was negligible, the fight on it was bitter during the forty minutes of debate.

Representative Blanton, Democrat, Texas, staged a virtual one-man opposition, declaring that the bill would do away with the right of free contract, and furthermore represented a further surrender to organized labor.

New York Times, Sunday, March 1, 1931, p. 6 col 2

While prevailing wage law propositions had been around Washington, D.C. since the time of President Grant, the success of the Davis-Bacon Act was driven by the falling wage-price spiral of the first years of the Great Depression. The primary target had always been labor standards and the regulation of cheap labor but the issue of labor standards became telling when those standards were falling apart all across the nation.[27]

Professor Morse has rightly stated that the congressional

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[27] The following is not a detailed legislative history of the Davis-Bacon Act. Rather, it simply illustrates that this Act shares with its state predecessors a concern for sustaining and promoting labor standards. This section also responds to a few points raised by Professor Morse's interpretation of the legislative intent of Davis-Bacon.

record is largely absent of any opposition to the Davis-Bacon Act. The one Texas Congressperson who argued against the Act did so on the basis of freedom of contract and was accused by questioners of simply being anti-union. In Professor Morse's quantification of the 64 Congresspersons who spoke in favor of the Davis-Bacon Act at one time or another, 77 percent came from the run of states between Wisconsin to Pennsylvania (including Michigan) and up to New England, 16 percent came from the South and 8 percent from the rest of the country.[28] To me this roughly approximates the distribution of representatives among the states and is no indication that the primary political process at foot was Northerners attempting to keep Southern contractors from arbitraging cheap (black or white) labor from south to north.

Professor Morse argues that southern blacks had no voice in Congress. In the 1920s, the vast majority of southern construction contractors were white.[29] Presumably an even greater proportion of the large contractors were white. Long-distance trade in construction services requires economies associated with size to deal with information and transportation costs. Consequently,

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[28] Morse, Report, fn 12. Professor Morse states that 49 proponents came from the "Northeast/MidAtlantic area, including New York (10), Pennsylvania (6), Illinois (5) and Massachusetts (4). Only 10 Congressmen from the South spoke in favor of the law." This leaves six from elsewhere. Senator LaFollette from Wisconsin and Senator Couzin from Michigan spoke in favor of the law. I am assuming that because Professor Morse includes Illinois in the "Northeast/MidAtlantic" group, she is also including Michigan and Wisconsin in that group.

[29] In 1930, 5 percent of all construction contractors were black in the eight southern states, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana. U.S. Census of Population, 1930, Occupations.

probably ninety-nine percent of inter-regional construction services trade coming out of the South was done by white contractors. But if white southern contractors were arbitraging cheap black labor, surely at least some of the white contractors' representatives in Congress would have presented their views and opposed the Act at least in hearings testimony.[30] However, there is no record of an opposition to Davis-Bacon based on the interest of southern cheap-labor arbitragers because, as we shall see in section three of this report, the arbitrage of cheap southern black labor from South to North was of little importance in the overall flow of cheap construction labor in the 1920s.[31]

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[30] In the 1870s and 1880s the exclusion of cheap Chinese immigrant labor was a central legislative issue. While the Chinese themselves are not on the historical record defending themselves, those whites who employed Chinese were widely represented in newspapers, legislative hearings and other forums defending the practice of importing cheap Chinese labor. Martin Brown and Peter Philips, "Competition, Racism, and Hiring Practices Among California Manufacturers, 1860-1882." Industrial and Labor Relations Review, Cornell University, Vol 40, No. 1, October, 1986, pp. 61-74. Also see: 44th Congress, Second Session, Senate Report No. 689, Report of the Joint Special Committee to Investigate Chinese Immigration, Washington, G.P.O., 1877) pp. 535, 556 and 608. I am aware of no comparable outpouring of defense of cheap black labor from southern contractors wishing to protect their interest in arbitraging labor north.

[31] Dr. Thieblot states:

> 3. The itinerant contractor issue may have been a smoke screen to cloud the true purpose of the bill as a measure designed to bolster the status of the union movement. One opponent [of the Davis-Bacon Act, Texas Democrat Blanton, the only opponent] in the original hearings charged that the bill would have no chance of passage had it not been demanded by organized labor.
> 4. Whether real or not, the fear of itinerant contractors was overstated. On public construction projects tabulated at the time of the [Davis-Bacon] hearings, such itinerant workers as were employed worked mostly on a few projects undertaken in remote communities where the local labor force was small.

And in a footnote Dr. Thieblot goes on:

> It is interesting to note that at the time of the survey, towards the end of 1930, on the 26 federal construction projects studied throughout the country, there were 1,724 men, of whom 1,356 were locals and 368 were

While Professor Morse has tried to draw an analogy between prevailing wage laws and the poll tax, a more appropriate analogy to contemporaneous labor market regulation would be the movement which began at the same time as prevailing wage laws. This was the drive towards compulsory schooling and child labor laws. Like prevailing wage laws, these laws which began in the 1880s did not explicitly target any racial group.[32] Both advocates and opponents of these law recognized that the options of poor families would be regulated most heavily by these laws. Most poor families were not racial minorities, but most racial minority families were poor. Some have argued that immigrant families were targeted by these laws in order to Americanize these foreign groups. But no one has argued that because the majority of racial minority families were poor, compulsory schooling and child labor laws were motivated by racial animus or primarily had racially targeted effects. Proponents of compulsory schooling and child labor laws argued that the long term interest of the poor resided in these regulations which forced their children out of the work place and into schools.

Prevailing wage laws are similar to compulsory schooling and

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nonlocals (21 percent), including 34 aliens. More than half of all the nonlocal workers tabulated were employed on four projects located in the remote areas of Boise, Idaho; Fargo, North Dakota; Tucson, Arizona; and Juneau, Alaska. No outsiders worked on projects in such places as Brooklyn, Milwaukee, New Orleans, San Francisco or Seattle.

Armand J. Thieblot, Prevailing Wage Legislation: The Davis-Bacon Act, State "Little Davis-Bacon" Acts, The Walsh-Healey Act, and the Service Contract Act, Labor Relations and Public Policy Series, No. 27, University of Pennsylvania, the Wharton School Industrial Research Unit, 1986.

[32] There are exceptions for the South associated with segregated schools. The South was slow to adopt either compulsory schooling or child labor laws.

child labor laws. The majority of cheap construction labor was not black, but the majority of black construction labor was cheap. Interestingly, black labor was cheap not so much because of race, per se, but because black labor was primarily southern labor and southern labor (along with labor from the Great Plains) was cheap.[23] In any case, in the short run, the options of cheap laborers (black and white) were limited by prevailing wage laws. But we will see in section four, that in the long run, blacks along with other construction workers have benefitted from the intended effects of prevailing wage laws--namely the support and promotion of higher labor standards in the construction labor market.

Conclusion.

We have found the roots of the Davis-Bacon Act in the 1868 federal eight-hour day law and the Presidential Proclamation of 1869. No racial animus has been identified with the passage of this act. Furthermore, no racial animus has been identified with any of the eight states which passed prevailing wage laws between 1891 and 1923. As for the Davis-Bacon Act, itself, the true target of this law was cheap labor not black, cheap labor. The historical record has no voice saying "I employ Negro labor in construction. I carry those laborers North and make a fine profit from this arbitrage. I object to this law which would encumber my business."

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[23] In Section 3, we will show that in the occupations in which black construction labor was concentrated in the South--laborers, hod carriers, plasterers and lathers, blacks in Virginia earned from 93 percent to 97 percent of their white counterparts. Only in occupations such as carpenters where there were few blacks was the black-white wage gap wide.

We will see in the next section that such voices did not speak up because such businesses either did not exist at all or were of such little importance that they leave no trace on the historical record.

The stated goal of prevailing wage laws was to set labor standards, lower hours of work without lowering wages and preserve local labor conditions. Not one group, racial or ethnic, was singled out for regulation by the prevailing wage stipulation or exclusion by the citizenship stipulation in these acts. The one constant was that contractors were to be regulated in their employment and deployment of cheap labor.

Section 3: The Flows of Cheap Labor in the 1920s.

Introduction.

Central to plaintiffs' argument that the Davis-Bacon Act was inspired by racial animus is the contention that contractors from low-wage, principally southern states were bringing primarily black cheap-labor north. This factual assertion is false.[34] The majority of southern construction labor was white. The available data indicate that southern contractors operated integrated work forces. In occupations in which blacks had a significant or majority share (such as laborers, hod carriers, lathers and plasterers), white labor in these occupations was almost as cheap as black labor. Thus, whites would have been brought along as (say) plasterers along with blacks. In occupations where southern whites earned a significant premium (say carpenters), there were not enough blacks to form a significant labor pool. Thus, if a general contractor was going to go north, he would have to bring primarily white carpenters.

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[34] As noted in the previous section, Dr. Thieblot believes that "the fear of itinerant contractors was overstated." (See this Report, Section 2, fn 25). Dr. Thieblot does believe that the Davis-Bacon Act "was a 'Jim Crow' position, motivated by fears of job loss to blacks....[P]rotectionism of this sort has always been a part--though perhaps not a critically important part--of prevailing wage laws." Other than presenting Congressman Allgood's statement that "it is [black] labor of that sort which is in competition with white labor throughout the country", Dr. Thieblot presents no evidence showing that the arbitrage of cheap black labor was a significant factor in the trade of construction services in the 1920s. Indeed, not only does Dr. Thieblot suggest that the Allgood quote may be over-emphasized, his evidence on long-distance labor flows suggests, in his words, "itinerant workers as were employed [in 1930 on federal projects] worked mostly on a few projects undertaken in remote communities where the local labor force was small." Armand J. Thieblot, Jr., Prevailing Wage Legislation, Labor Relations and Public Policy Series, No. 27, University of Pennsylvania, Wharton School, Industrial Research Unit, 1986.

In any case, southern contractors were not the only source of cheap labor. The seven states of the West-North-Central region[35] accounted for a much higher proportion of all construction exports to the industrial heartland and the northeast than did the eight southern states Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana. The overwhelmingly white construction labor force of the West-North-Central region was not as cheap as southern labor but it was still considerably cheaper than labor in the high-wage states of Illinois, Indiana, Michigan, Ohio, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island and Massachusetts.

Furthermore, most flows of cheap labor came from within states and regions. Wage differences within the high-wage states varied considerably by city and state. This was the primary source of cheap labor regulated by the Davis-Bacon Act, and this labor was primarily white.

Professor Morse's Argument.

A central argument in Professor Morse's thesis is that :

> contractors from low-wage, principally Southern states, were conducting labor arbitrage operations. That is, contractors in low wage states were moving labor from a low wage region to a high wage region to do federal construction projects. And this lower wage labor was largely composed of black and minority workers.[36]

Professor Morse is referring to the time period prior to the

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[35] Nebraska, North Dakota, South Dakota, Minnesota, Iowa, Kansas, and Missouri.

[36] Jennifer Roback Morse, "Report Regarding the Davis-Bacon Act", November 30, 1995, p.3.

passage of the Davis-Bacon Act in 1931. She presents in footnote nine of her Report wage income data from the 15th U.S. Census, the Construction Industry showing that while the average income for construction workers in the U.S. in 1929 was $1,771, the income for construction workers in the East South Central states, (Mississippi, Alabama, Tennessee and Kentucky) was $1,208 while the average income for the Mid-Atlantic states (New York, New Jersey and Pennsylvania) was $2,074. This average income differential of 42 percent between the high income and low income states presumably was the economic basis for the aforementioned arbitrage of cheap labor from the South to the North.

These assertions of fact are important because they form the factual basis for Professor Morse's assertion that the Davis-Bacon Act "had the effect, and was understood to have the effect, of allocating wages to Northern, white workers, expressly at the expense of Southern black workers."[37]

Data from the same 1930 U.S. Census of Construction and the 1930 U.S. Census of Population, Occupations do not support Professor Morse's assertion that the Davis-Bacon Act's only or primary intent was to inhibit the arbitrage of low-wage Southern black construction workers into higher wage northern construction jobs.

Blacks Were a Minority of Southern Construction Workers.

Table 3.1 shows that in the eight southern states with the highest proportion of blacks in construction work, blacks were

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[37] Morse, p. 1.

nonetheless a distinct minority of all construction workers. Unless a special story can be told that southern contractors arbitraging cheap southern labor to the north only took the minority of southern black construction workers up north, the second part of Professor Morse's assertion (my underline) that

> contractors in low wage states were moving labor from a low wage region to a high wage region to do federal construction projects. And <u>this lower wage labor was largely composed of black and minority workers</u>

must be false.

Perhaps southern contractors divided into ones with black labor forces and others with white labor forces and only contractors with black labor forces engaged in the hypothesized long-distance arbitraging of labor. Professor Morse does not present any evidence to this effect and we know that this is not so for Virginia in 1910 and before. The Virginia Bureau of Labor and Industrial Statistics between the years 1901 and 1910 list all the general contractors, plumbing sub-contractors and bricklaying subcontractors in the state. Over two-hundred general contractors are typically listed each year and from thirty to fifty of each group of subcontractors are listed. The overwhelming majority of general contractors and subcontractors have integrated work forces although segregated occupations within these work forces is common. There is no evidence in Virginia of contractors dividing into racially specialized firms.[38] I know of no other source that breaks individual contractor records down by the demographics of

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[38] See, Virginia, Bureau of Labor and Industrial Statistics, Fourth through Thirteenth <u>Annual Reports</u>, Richmond, 1901 through 1910.

employment.

One might imagine that black labor was so much cheaper than white labor in the South, that at least in the occupations which blacks dominated such as laborers and hod carriers, construction contractors would only bring blacks with them north. However, this too is unlikely. Table 3.2 shows for the period 1919 to 1928, the average wage for specific construction occupations by race in Virginia. Blacks are 69 percent of all laborers and 68 percent of all hod carriers. In these two occupations, blacks earn 97 percent and 95 percent of what white Virginia construction laborers and hod carriers earned, respectively. Thus, if contractors were bringing Virginia laborers and hod carriers north, they would surely have brought cheap white labor along with cheap black labor.[39]

In the case of plasterers and lathers, blacks are not a majority of these occupations in Virginia and yet, the black-white wage gap is nonetheless narrow. Blacks earn 93 to 94 percent of what whites make in these occupations. Thus, Virginia contractors would have brought a majority of cheap white plasterers and lathers with them if they had gone north.

In Virginia in the 1920s, black carpenters earned only 67 percent of the average earnings of white carpenters. But Virginia general contractors would not have brought only or primarily cheaper black carpenters north simply because there were not enough black carpenters to bring. Blacks only accounted for 3 percent of all Virginia carpenters.

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[39] A hod carrier carries mortar to bricklayers.

Occupational segregation in the South raises the question whether the story of southern contractors arbitraging cheap black labor north is entirely a myth. If they were arbitraging cheap black labor north, why were they not arbitraging cheap southern black carpenters into these carpenter jobs held by whites in their own firms?

When (and if) southern contractors came north, they came with a majority of white workers reflecting the demographic mix of the southern construction labor force. But, as we shall see, southern contractors did not come north very often. In the next section I show that southern contractors formed a minuscule share of the overall export of construction services into high wage areas in 1929.

Most Movement of Cheap Labor Came from Within the State or Region.

Most construction work in 1929 was locally done. Fifty-seven percent of the value of all construction work was done by contractors in their own city of residence. An additional 25% was done by contractors outside the city in which their business resided but within that firm's state. Another 7 percent of work was done outside the city and state of residence but within the region of the contractor. Only 11 percent of all contract construction work was done by contractors in regions outside their own.[40]

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[40] (Regions here refer to nine Census Bureau categories--New England (NE), Mid-Atlantic (MA), East-North-Central (ENC), West-North-Central (WNC), South Atlantic (SA), East-South-Central (ESC), West-South-Central (WSC), Mountain (M) and Pacific (P). Alaska and Hawaii are excluded and Washington, D.C. is included in South Atlantic. U.S. 1930 Census of Population, Construction.

In four regions, construction exports out-of-region were above the national average of 11 percent of total construction. (table 3.3) Two of these regions, the South Atlantic and South-East-Central regions, include most of the southern states in which the black population was concentrated. However, the two other of these regions, New England and the West-North-Central regions, did not have many black residents.[41]

The West-North-Central and New England regions accounted for $88 million and $79 million of construction out-of-region exports while the South Atlantic[42] and East-South-Central[43] accounted for $62 million and $27 million in out-of-region exports. The East-South-Central region was the lowest construction income region of the country generating an average annual income of $1,190.[44] This income figure was only 57 percent of the average income for the

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[41] These regional classifications come from the U.S. 1930 Census of Population, Construction. The Census provides data from which one can calculate the value of construction services and wages paid within states and within regions. Cross-regional trade refers to construction services provided by a contractor from one region to a locale in another region. Later in this section, I will rearrange the Census regional categories in order to create a South region consisting of eight southern coastal states Virginia to Florida and across from Georgia to Louisiana. This will allow us to view the hypothesized trade in construction services and labor emerging from this area.

[42] South-Atlantic region includes West Virginia, Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia and Florida.

[43] East-South-Central regions consists of Mississippi, Alabama, Tennessee and Kentucky.

[44] My data are derived from Table XXXIII of the Construction Census on page 48. My figure of $1,190 for the East-South-Central region differs slightly from Professor Morse' figure of $1,208 cited in footnote 9 of her Report and taken from Table XVI on page 32 of the Construction Census. I use the data from Table XXXIII because this table is replicated in the state reports.

highest paid Mid-Atlantic region.[45] However, the East-South-Central region accounted for only 4 percent of all cross-regional trade in construction services in 1929. The larger South Atlantic region with an average construction income of $1,290 (or 62 percent of the Mid-Atlantic average income) accounted for 10 percent of cross-regional trade. Taken together, these two regions with a high share of the entire black population accounted for 14 percent of all cross-regional trade. This compares with the 14 percent of all out-of-region trade from the relatively white West-North-Central region[46] which had an average income of $1,471 (or 71 percent of the average income for the Mid-Atlantic region).

The New England region, on average, was a relatively well paid construction area with an average income of $1,833, or 89 percent of the high income Mid-Atlantic region. Nonetheless, New England accounted for 12 percent of all cross regional trade. One may wish to presume that all of New England's long-distance exports of construction services was not motivated by the export of cheap labor although there were significant pockets of cheap labor within New England.

Table 3.4 shows the share of cross-regional trade held by each region in 1929. The Pacific and Mountain regions had very small shares simply because they were most distant from population centers east of the Mississippi River. Despite being low wage

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[45] Mid-Atlantic region is New York, New Jersey and Pennsylvania.

[46] Again, Nebraska, North Dakota, South Dakota, Minnesota, Iowa, Kansas and Missouri.

areas and closer to population centers, the West-South-Central region and the East-South-Central regions also had very low shares of cross-regional trade. Most cross-regional trade occurred between New England, the Mid-Atlantic region and the East-North-Central regions. These are relatively high-wage areas trading among each other. Two other lower-wage areas, the West-North-Central region and the South Atlantic regions, in general terms, may be viewed as trading into the high wage areas. I will argue below that to the extent there was cheap labor arbitrage, it occurred primarily within regions. But for the moment, let us concentrate on the West-North-Central and South-Atlantic regions trading into what is commonly called the Mid-West and Northeast.[47]

The South Was a Minuscule Part of Overall Regional Trade.

Because we are interested in the trade of southern, black, cheap labor to the north, I have redesigned the census region South Atlantic into a region I call South. The South-Atlantic has West Virginia, Delaware, Maryland and the District of Columbia in it and it excludes Alabama, Mississippi and Louisiana. I have created a grouping called South which excludes the former and includes the latter. Thus, South refers to eight southern states, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana. In this section we compare these eight states with the seven states in the Census Bureau's West-North-Central region.

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[47] These common categories Midwest and Northeast together roughly coincide with the Census regions East-North-Central, Mid-Atlantic and New England put together.

Table 3.5 lists the high-wage states (column 1) New York, Illinois, New Jersey, Michigan, Massachusetts, Connecticut, Ohio, Rhode Island, Pennsylvania and Indiana in order of their average construction income (column 2). Column 3 shows the value of construction service imports to each state from the West North Central region. Column 4 shows the percent of all out-of-region imports coming into each state that came from the West-North-Central region. For instance, in 1929, New York state received $6.8 million in construction services from contractors coming from the West-North-Central region and this amounted to 7 percent of all out-of-region imports coming into New York that year.

In columns 5 and 6 of Table 3.5, the same information is listed for the eight Southern states. Thus, for instance, New York state in 1929 received a total of $368,996 in construction services from the eight Southern states and that amounted to less than 1 percent of all out-of-region trade into New York.

The total out-of-region trade going into New York in 1929 was $28 million (column 7). This amounted to 28 percent of all out-of-state construction services coming into New York in 1929. Thus, almost three-fourths of construction services imports into New York in 1929 came from New Jersey and Pennsylvania, the other two states in the Mid-Atlantic region.

Focusing on the two lower-wage regions trading into these high wage states, the seven states of the West-North-Central region exported $38 million into these high-wage states in 1929 while the eight states of the South region exported $7.4 million. Thus, if

no other cheap labor flowed in the U.S. in 1929 other than from these two low-wage areas into this group of ten high-wage states, the southern exporting states would be one-fifth the size of the West-North-Central states. They would be bringing an integrated work force which would be predominately white. And, as the next sub-section will argue, southern contractors would be lost in the flow of cheap labor from within the North.

Wage Differentials within the North Were Wide Enough to Generate Significant Cheap Labor Flows within the Region.

Table 3.6 presents relative wages for cities within states and within a group of five states, Massachusetts, Connecticut, New York, New Jersey and Pennsylvania. The cities are listed in order of average annual construction worker income with New York City averaging $2,456 per year and Worcester, Massachusetts averaging $1,296 per year (similar to southern wages). The relative size of each construction labor force is presented in column 3. New York City's construction work force is almost 30 times larger than that of Worcester while New York City's wage is 189 percent that of Worcester (column 6). New York City's wage is 140 percent that of Buffalo (column 5) and Buffalo's construction work force is only one-tenth the size of New York City's. These data suggest there was ample room for labor arbitrage within these five states with a similar racial make-up. While we do not know where Buffalo contractors did their work outside the city, we do know that 57 percent of all work taken on by Buffalo contractors was outside the city but inside the state. There is a reasonable likelihood that some of that work was arbitraging cheaper Buffalo labor into New

York City. Similar stories can be told for most of the cities in table 3.6. The volume of in-state but out-of-city trade in construction services and in-region but out-of-state construction services dwarfed regional trade, particularly south-to-north trade. Table 3.6 shows that a significant share of that in-state and in-region trade could have been driven by cheap labor arbitrage. If so, the Davis-Bacon Act's primary effect would have been to discourage that flow of cheap labor rather than the hypothesized but undemonstrated flow of cheap black labor from the South.

Conclusion.

The Davis-Bacon Act's purpose was to prevent cheap outside labor from undercutting local labor standards including wages. By requiring local prevailing wage rates be paid, it reduced the incentives to arbitrage cheaper labor against more expensive labor within cities, within states, within regions and across regions. Because the cost of labor arbitrage rises with distance as information and transportation costs rise, it is not surprising that cross-regional labor arbitrage was the least common of the various arbitrages occurring in the 1920s. Even focusing only on cross-regional arbitrage to the exclusion of the more important, closer-in trading of construction services, the role of the South was significantly less compared to the role of the West-North-Central in providing construction services and cheaper labor to the Midwest and Northeast. Focusing only on labor flows from the South to the Midwest and Northeast, cheap white southern labor was twice as prevalent as cheap black southern labor. (See Table 3.1.)

These patterns of construction service exports and labor flows make it difficult to accept Professor Morse's proposition that the motivation for the Davis-Bacon Act and the understood effect of the Act was solely or primarily to restrict the opportunities of black construction labor in favor of white construction labor.

Table 3.1: Black Construction Workers as a Percent of All Construction Workers in Eight Southern States, 1930

State	Black as a Percent of All Construction Workers
AL	25%
FL	17%
GA	31%
LA	28%
MS	30%
NC	24%
SC	39%
VA	15%

Source: U.S. 1930 Census of Population, Occupations.

Table 3.2: Average Wage by Occupation and Race, Virginia Construction Worker 1919 to 1928

Occupation	Race	Avg Wage	Wage Gap	%Black
(1)	(2)	(3)	(4)	(5)
Carpenters	White	$5.78	67%	3%
	Black	$3.89		
Cement Masons	White	$6.29	78%	37%
	Black	$4.89		
Apprentices	White	$3.37	84%	10%
	Black	$2.85		
Bricklayers	White	$9.44	87%	17%
	Black	$8.26		
Helpers	White	$3.59	88%	29%
	Black	$3.17		
Plasterers	White	$8.35	93%	32%
	Black	$7.80		
Lathers	White	$5.65	94%	45%
	Black	$5.30		
Hod Carriers	White	$4.28	95%	68%
	Black	$4.08		
Laborers	White	$3.25	97%	69%
	Black	$3.15		

Source: Virginia, Bureau of Labor and Industrial Statistics, Twenty-Third through Thirty-Second Annual Report, 1920 to 1929.

Table 3.3: Distribution of Construction Service between In-City, In-State, In Region and Out-of-Region by Region, 1929.

	In City	In State Out of City	Out-of-State but In Region	Out of Region	Total
U.S.	57%	25%	7%	11%	100%
New England	44%	27%	11%	17%	100%
Mid-Atlantic	59%	24%	7%	9%	100%
East-North-Central	65%	20%	5%	10%	100%
West-North-Central	45%	25%	9%	21%	100%
South Atlantic	52%	21%	12%	15%	100%
East-South-Central	41%	35%	7%	17%	100%
West-South-Central	50%	41%	4%	6%	100%
Mountain	56%	28%	8%	8%	100%
Pacific	59%	36%	2%	3%	100%

Source: U.S.1930 Census of Population, Construction.

Table 3.4: Share of Cross-Region Trade by Region, 1929

	Percent of All Out-of-Region Trade Coming from This Region	Avg. Income	Income as a % of the Mid-Atlantic Region
Mid-Atlantic	31%	$2,070	100%
East-North-Central	23%	$1,900	92%
West-North-Central	14%	$1,471	71%
New England	12%	$1,833	89%
South Atlantic	10%	$1,290	62%
East-South-Central	4%	$1,190	57%
West-South-Central	3%	$1,276	62%
Pacific	2%	$1,688	82%
Mountain	1%	$1,570	76%

Source: U.S.1930 Census of Population, Construction.

Table 3.5: Cheap Labor Flows from Seven North-West-Center States and Eig Southern States into Ten High-Wage Midwest and Northeastern States.

		Value of Imports to Each Midwest and Northeast State from a) the Seven North-West-Center States, or b) the Eight South States, or c) All States Out-of-Region States; Plus in columns (4) and (6) Imports from either the N-W-C or South Regions as a Percent of All Out-of-Region Imports. In column (8), Out-of-Region Imports as a Percent of All Construction Imports into State					
	Income	North-West-Center		South		All Out-of-Region	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NY	$2,254	$6,813,693	7%	$368,996	0%	$28,014,007	28%
IL	$2,113	$15,910,901	29%	$486,095	1%	$35,681,385	66%
NJ	$2,036	$1,168,848	1%	$882,728	1%	$8,394,861	8%
MI	$1,921	$4,362,361	12%	$402,807	1%	$19,767,741	55%
MA	$1,874	$174,573	1%	$0	0%	$2,938,066	16%
CT	$1,842	$1,258	0%	$27,050	0%	$865,383	2%
OH	$1,786	$5,775,069	15%	$1,114,749	3%	$22,681,736	61%
RI	$1,774	$5,000	0%	$5,606	0%	$768,690	7%
PA	$1,755	$601,449	1%	$3,508,489	5%	$33,055,914	50%
IN	$1,581	$3,286,635	10%	$568,180	2%	$11,383,084	35%
		$38,099,787	23%	$7,364,700	5%	$163,550,867	

Source: U.S.1930 Census of Population, Construction.

Table 3.6: Within State and Within Region Wage Differentials for the State Massachusetts, Connecticut, New York, Pennsylvania and New Jersey

		Labor	Income	Income as a Percent of Lowest in:		Value of Work Done in:		
				State	Region	City	State	Out
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NY	NYC	84890	$2,456	140%	189%	42%	49%	10%
NY	Yonkers	909	$2,286	130%	176%	40%	60%	0%
NJ	Newark	6706	$2,207	149%	170%	27%	65%	8%
MA	Cambridge	1223	$2,123	164%	164%	18%	59%	23%
NJ	Elizabeth	771	$2,093	141%	161%	28%	64%	8%
MA	Somerville	277	$2,056	159%	159%	22%	77%	1%
CT	Bridgeport	1765	$2,049	110%	158%	39%	59%	2%
NJ	Trenton	1372	$2,048	138%	158%	42%	56%	2%
MA	Boston	20759	$1,970	152%	152%	22%	42%	36%
NY	Albany	1958	$1,952	111%	151%	39%	58%	2%
NJ	Paterson	1701	$1,933	130%	149%	20%	58%	21%
NJ	Jersey City	2887	$1,921	129%	148%	23%	37%	40%
CT	Hartford	2464	$1,895	102%	146%	42%	55%	4%
NY	Rochester	4234	$1,865	106%	144%	44%	56%	0%
CT	New Haven	2189	$1,856	100%	143%	42%	53%	5%

MA	Springfield	3278	$1,839	142%	142%	19%	31%	50%
NY	Utica	1089	$1,808	103%	140%	31%	69%	0%
NY	Syracuse	2407	$1,791	102%	138%	41%	58%	1%
MA	Lynn	485	$1,788	138%	138%	41%	56%	3%
NY	Buffalo	7962	$1,754	100%	135%	37%	57%	6%
MA	Lowell	314	$1,683	130%	130%	32%	60%	9%
MA	Fall River	634	$1,656	128%	128%	42%	44%	15%
MA	New Bedford	229	$1,609	124%	124%	40%	59%	1%
NJ	Camden	503	$1,484	100%	115%	26%	70%	3%
MA	Worcester	2979	$1,296	100%	100%	28%	41%	30%

Source: U.S.1930 Census of Population, Construction.

Section Four: Are the Current Effects of the Davis-Bacon Act Primarily Adverse to the Economic Interests of Racial Minorities?

Introduction.

Overview. Dr. Thieblot and Dr. Bloch address the question--Does the Davis-Bacon Act limit the job opportunities of blacks and/or minorities in construction? Both answer this question yes. Dr. Thieblot's analysis is clearly wrong and Dr. Bloch's analysis is probably wrong.

Dr. Thieblot's empirical results disappear once the eight southern states (Virginia, North Carolina, South Carolina, Georgia, Florida, Mississippi, Alabama and Louisiana) are removed from consideration. In other words, in comparing the ten non-southern states free from state prevailing wage laws[48] with either all states with state prevailing wage laws or the sixteen states with less than 5 percent black among the gainfully employed,[49] Dr. Thieblot's inverse correlation between state prevailing wage laws and the relative proportion of blacks employed in construction disappears entirely. Dr. Thieblot has found out something about the southern construction labor market and not something about prevailing wage laws.

Dr. Bloch argues that prevailing wage laws promote unions and higher wages. He argues that unions directly discourage black

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[48] Arizona, Colorado, Idaho, Iowa, Kansas, New Hampshire, North Dakota, South Dakota, Utah and Vermont.

[49] Alaska, Hawaii, Kentucky, Maine, Massachusetts, Minnesota, Montana, Nebraska, New Mexico, Oklahoma, Oregon, Rhode Island, Washington, West Virginia, Wisconsin, Wyoming.

construction employment because black unionization rates are lower than white unionization rates. Yet his data do not show that black unionization rates are lower within specific occupations and specific unions. Indeed, for the one occupation he has data, laborers, black unionization rates are higher than that of whites. Dr. Bloch argues that unions indirectly discourage black construction employment because unions promote higher wages: Higher wages discourage the employment of unskilled workers and black construction workers are less skilled than white construction workers. Yet Dr. Bloch's data do not show that within specific construction occupations, (say licensed electricians), black workers are any less skilled than white workers. Dr. Bloch's data clearly show there is very little substitution of unskilled laborers or helpers for the skilled crafts as wage rates rise. If higher wage rates do not induce a switch from skilled crafts to unskilled laborers, and black craft workers are as skilled as skilled white craft workers, then the argument that higher wages discourage the employment of blacks fails.

Finally, both Dr. Bloch and Dr. Thieblot agree that prevailing wage laws raise construction wages, but neither Dr. Thieblot nor Dr. Bloch considers whether blacks share in those wage gains. With over half of all blacks living in states with prevailing wage laws, it is quite possible that blacks as a group enjoy the income benefits associated with prevailing wage laws. I present data to show that this is the case.

Viewing Dr. Thieblot and Dr. Bloch Together. In analyzing the impact of the Davis-Bacon Act on the employment opportunities of blacks and other minorities, Dr. Thieblot and Dr. Bloch use distinctly different but largely complementary methods. Dr. Thieblot looks at state prevailing wage laws of varying strength, plus states that repealed their prevailing wage laws in the recent past, and states which never had prevailing wage laws. Dr. Thieblot notices a correlation between these various groups of states. Monotonically stronger state prevailing wage laws are associated with monotonically decreasing relative job opportunities for blacks. In contrast, Dr. Bloch sets aside a direct look at state prevailing wage laws in favor of analyzing two of the assumed effects of prevailing wage laws--higher construction wage rates and higher construction unionization rates. Dr. Bloch notices a correlation between higher unionization rates and higher wage rates on the one hand, and lower relative employment levels for blacks and minorities on the other hand.

Both analysts understand that observed correlations are relatively meaningless unless there is an underlying causal mechanism which generates these correlations. While each analyst presents marginally distinct theories to describe the underlying causes of these correlations, in general terms, their separate explanations are consistent with each other and complement one-another. Taken together, their explanations boil down to the following.

For a variety of historically rooted reasons, blacks and minorities are less skilled construction workers, in general, than are white construction workers. In support of this assertion, both analysts note that blacks are over-represented among construction laborers, a relatively less skilled sector of construction work, and blacks are under-represented among other construction occupations, many of which are skilled trades.[50] This fact does not demonstrate that black plumbers are any less skilled than white plumbers. This is important; because, if, when wage rates rise, there is very little substitution between laborers and plumbers, then the only way wage rates can discourage the employment of blacks under Dr. Thieblot's and Dr. Bloch's theories, is if black plumbers are less skilled than white plumbers (or electricians or carpenters etc.).

In the above argument, unions play an indirect and a direct causal role. Indirect. Unions are one mechanism whereby prevailing wage laws raise wage rates. Direct. Unions may be discriminatory institutions. If prevailing wage laws promote higher unionization rates, and unions are racist institutions, then prevailing wage laws may limit the job opportunities of blacks and minorities by promoting unions.[51]

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[50] It should be noted that Dr. Thieblot's analysis is limited to blacks while Dr. Bloch considers both blacks and minorities where minorities include non-white racial groups plus hispanics.

[51] It should be noted that this second argument seems implied in Dr. Thieblot's and Dr. Bloch's reports, but the argument is not clearly and forcefully presented. It is possible that these analysts do not mean to hypothesize this unions-are-racist connection at all. I will assume that the argument is reasonably extrapolated from their analysis and address the argument's plausibility. Even if the authors did not mean this argument, there

The purpose of undergirding simple correlations with a theoretical foundation is in order to test these hypothesized causal connections. It is by testing these hypothesized causal connections that we separate out spurious correlations from ones that identify cause and effect relationships. A central limitation of both Dr. Thieblot's and Dr. Bloch's analysis is that very little testing of the hypothesized causal mechanisms is done. This makes both their analyses vulnerable to spurious correlations. Furthermore, the little evidence within their reports that could shed light on these underlying connections is not very supportive of the links they presume to exist.

Dr. Thieblot's and Dr. Bloch's analysis is also one-sided. It is limited to the question of the relationship between the Davis-Bacon Act and the relative employment attainment of blacks and minorities. Because we are interested in the question does the Davis-Bacon Act adversely effect the overall economic interests of blacks and minorities, we must also ask the question what happens to the incomes of blacks and minorities under the regime of a prevailing wage law. Dr. Thieblot, Dr. Bloch and I all agree (and I will present evidence to show) that prevailing wage laws maintain higher wage rates in construction. Dr. Thieblot's data show that roughly half of all blacks employed in construction are working in prevailing wage law states. I will show that those blacks enjoy significantly higher construction incomes because of the prevailing

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is no harm done in addressing the hypothesis as a reasonable extension of their argument.

wage laws in those states.

Dr. Thieblot's Correlation.

In Dr. Thieblot's data, the apparent correlation between legal regimes and demographic employment patterns disappears once eight Southern states are excluded from the analysis. This is true whether you look at the 42 remaining states or you limit your gaze to only states with fewer than 5 percent of the labor market being African-American.[52] Dr. Thieblot's correlation cannot be found when comparing ten non-Southern states which either never had a state prevailing wage law or repealed it with either all 32 states with prevailing wage laws in 1990 or the subset of those 16 states with a limited black population of under 5 percent among all gainfully employed. This indicates that Dr. Thieblot's discovered correlation between prevailing wage laws and black employment is spurious. Dr. Thieblot has discovered something about the southern construction labor market not prevailing wage laws.[53]

To demonstrate the disappearance of Dr. Thieblot's correlation, I begin by making arithmetical corrections that infect the summary calculations in Dr. Thieblot's two tables in his original November 1995 report. Michigan had a state prevailing wage law in 1990 and in the spirit of Dr. Thieblot's analysis belongs in the table although Dr. Thieblot omitted Michigan from

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[52] In Dr. Thieblot's deposition he suggests that if one removes southern states free from prevailing wage laws, one must also remove from the analysis states with prevailing wage laws which have high concentration of blacks within their gainfully employed in order "to have an apples to apples comparison". Thieblot Deposition p. 168 lines 5 through 13.

[53] Precisely what Dr. Thieblot has discovered if unclear. But we know it is not tied to the effects of prevailing wage law regimes.

his calculations.[54] I include Michigan as a "strong-law" state.[55] I also update the data for Hawaii and Ohio. Dr. Thieblot uses 1980 data for these two states and the 1990 data are available to me. With these amendments in mind, Table 4.1 presents Dr. Thieblot's analysis, combining his tables into one. Notice that although these corrections lead to a different level of what Dr. Thieblot calls "sector ratios" and I call "reflection ratios", the general inverse relationship between legal regimes and the relative employment of blacks is sustained.

In Table 4.2, Dr. Thieblot's procedures are replicated with the exception that eight Southern states, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana are excluded from the analysis. Group totals and national totals are all calculated as if these eight Southern

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[54] Dr. Thieblot argues in his deposition that if one were to alter his analysis and only look at the non-southern states free from prevailing wage laws, one should also exclude states "that have high black concentration, for example, the State of California, for example, the State of Michigan, for example, the State of New York." This suggests that when one does a comparison including the eight southern states, Michigan should be included. Clearly the omission of Michigan in Dr. Thieblot's original calculations was an oversight on his part. Along with his arithmetical errors, I correct this oversight in my analysis. Thieblot, Deposition, p. 168, lines 8-10.

[55] Dr. Thieblot stated in his deposition that Michigan was a "strong-law" state. Thieblot Deposition p. 84, lines 6-8.

states did not exist. The reader will note the disappearance of Dr. Thieblot's monotonic decline in the relative proportion of blacks employed in construction as the legal regime moves from never having had a state prevailing wage law to states with strong prevailing wage laws.

In Table 4.3, Dr. Thieblot's procedures are again replicated with the eight Southern states removed and I also remove all states with prevailing wage laws and over 5% of their state work force being black. This leaves 4 states which never had a prevailing wage law, 6 states which repealed their prevailing wage law, 5 states with weak state prevailing wage laws, 6 states with average prevailing wage laws, and 5 states with strong prevailing wage laws. Again, Dr. Thieblot's negative correlation between progressively stronger legal regimes and relative black access to construction jobs disappears. This is strong evidence that Dr. Thieblot has found out something about the difference between the demographic structure of the Southern construction labor force compared to the rest of the nation rather than a causal relationship between prevailing wage laws and minority access to jobs.[56]

Dr. Thieblot's data do not support the notion that blacks are less skilled in construction or that higher wages lead to the

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[56] While Dr. Bloch's analysis does not rely upon Dr. Thieblot's, the fact that Dr. Thieblot's correlation disappears when the Southern states are removed raises the possibility that Dr. Bloch's correlations would disappear once he eliminated his metropolitan observations from the South and dropped his weighting procedure which discounts cities from the ten remaining no-law states. In general, Dr. Bloch's analysis is weaker because he has not introduced control variables such as one for southern states into his regression analysis.

employment of proportionately more skilled workers. Dr. Thieblot's data do show that blacks are over-represented among construction laborers. One might wish to tell a story where as wage rates in construction fall, laborers are substituted for skilled workers. Presumably as one moves from states with strong prevailing wage laws to ones with weak laws and no laws, one is moving from high to low wage rate areas. Dr. Thieblot's data shows that the proportion of all construction workers who are laborers remains constant at 15 percent as one moves from the group of strong-law states to the group of never-had-law states. If crew mixes alter as wage rates change, it is not primarily between laborers and craft workers.

Thus, while laborers are less skilled than (say) electricians, there is no visible substitution between these groups. Consequently, while there are proportionately more black laborers than electricians, there is no evidence in Dr. Thieblot's data to show that as construction wage rates fall, contractors substitute away from white electricians towards black laborers. It has not been shown that black electricians (or roofers or bricklayers) form a disproportionate share of all less-skilled electricians (or roofers or bricklayers).

Dr. Bloch's analysis supports the conclusion drawn from Dr. Thieblot's data that little substitution takes place between laborers and the crafts in construction. Dr. Bloch's simple correlations between average wage rate and laborers as a percent of the overall construction work force is small in magnitude and two

of his four tests for this effect are statistically insignificant.[57] These results are consistent with the pattern found in Dr. Thieblot's data of a relatively constant percent laborers across his groupings of states by legal regime.

This means that the story that both Dr. Thieblot and Dr. Bloch tell is at best unproven, and is probably false. They say that as wage rates rise, contractors switch away from unskilled black labor. But in contrast, their data says that contractors do not switch away from laborers (black or white) as wage rates rise. Thus, for their story to hold, they must prove that fully licensed black electricians are less skilled than licensed white electricians. They must show that higher wage rates induce a shift towards white electricians. This story is neither attempted nor proved.

Dr. Bloch's Correlation.

Dr. Bloch's research regarding the relation of the Davis-Bacon Act to minority and black employment presents two basic hypotheses. First, Dr. Bloch argues that because the Davis-Bacon Act promotes higher unionization rates and unions are disproportionately white, the Davis-Bacon Act promotes the employment of whites relative to minorities and blacks. Second, the Davis-Bacon Act promotes higher wage rates for construction workers. These higher wage rates, in turn, induce contractors to hire skilled labor in preference to unskilled labor. Because a higher proportion of minority and black

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[57] Regression output provided by Dr. Bloch to the Justice Department. Bloch Deposition Exh. 4.

construction workers (or potential construction workers) are unskilled compared to white actual and potential construction workers, the promotion of a more skilled crew-mix in construction adversely affects the employment opportunities of minorities and blacks.

1. Dr. Bloch's First Story--White Unions Chase Out Black Workers. Two basic empirical problems are apparent in Dr. Bloch's research findings. First, Dr. Bloch's data do not indicate that the unionization rates for whites, minorities and blacks in construction differ substantially. Second, Dr. Bloch's data do not indicate that blacks within specific construction occupations are any less skilled than whites. I deal with the first problem here and deal with the second problem below.

A careful study of Dr. Bloch's data indicate that unionization rates by race may not differ at all. In Dr. Bloch's report, he states that across all construction occupations the percent of all white workers who are unionized is 24.17 percent. The percent of all minority construction workers who are unionized is 22.18 percent and the percent of all black construction workers who are unionized is 20.51 percent.

No Test for Difference in Sample Means. These rates are derived from a sample of the U.S. construction work force derived from the Current Population Survey. Because this is a sample of construction workers rather than the population of construction workers, the possibility exists that these three average unionization rates found for these three groups are not

statistically significantly different from each other. Dr. Bloch does not report any test for the differences between these sample means.

Biased Sample. Perhaps more serious, the sample, itself, is a biased sample of the construction labor force. The sample includes workers in the construction industry from the Census occupational categories 563 to 599, and occupational categories 866 and 869. These occupations exclude supervisors, which is permissible. But Dr. Bloch also excludes various operating engineer categories of heavy equipment operators such as crane operators, grader and dozer operators.[58] These occupations are very important in the construction of roads, tunnels, bridges, dams and other activity associated with heavy and highway contractors. These construction activities are disproportionately subject to prevailing wage laws because much heavy and highway work is done under Davis-Bacon, and in states with prevailing wage laws almost all heavy and highway work is subject to either state or federal prevailing wage law. Also, operating engineer jobs are important because these occupations are often unionized. There is no rationale in Dr. Bloch's report to justify the exclusion of heavy and highway work in deference to building construction. It is a segment of construction that directly relates to his focal variables of unionization and Davis-Bacon wage rates simply because

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[58] In the Census occupational codes these are listed as subcategories of material moving equipment operators. When the industry selected is construction, the matching of these occupations with construction yields most of the workers on road crews and those engaged in dirt moving at building sites.

these occupations are in a relatively unionized sector of construction and are usually subject to the Davis-Bacon Act and/or state prevailing wage laws. Thus, Dr. Bloch's demographic breakdown of unionization rates comes from a sample, not a population. He does not show that these sample means are statistically significantly different. Furthermore, the sample itself is seriously biased by excluding heavy and highway workers.

Three Types of Aggregation Bias. Setting aside the problems of sample bias and statistical significance, Dr. Bloch's figures for the aggregate differences in unionization rates comparing white to minority to black rates mask the fact that among laborers, the unionization rates of both minorities and blacks are higher than the unionization rate for whites. Dr. Bloch reports that white laborer-helper union members account for 20.25 percent of all white laborers and helpers; minority laborer-helper union members account for 21.90 percent of all minority laborers and helpers; and black laborer-helper union members account for 21.80 percent of all black laborers and helpers.[59] These average unionization rates still may not be statistically significantly different from each other. But the key point is that by looking at the aggregate demographic unionization rates, we would not know that in at least one occupation, laborers and helpers, the unionization rates of whites are not greater than the unionization rates of minorities and

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[59] Dr. Bloch's deposition, Exhibit 3. This result does not include the bias from excluding operating engineers and teamsters because laborers on heavy and highway jobs are included in the laborer occupation. So this result is not from a biased sample.

blacks.

In obtaining his unionization rates by race, Dr. Bloch employs three aggregation techniques which make racial differences in unionization rates potentially appear greater than they are.

i) Occupational Aggregation Bias. First, we cannot conclude from an aggregate difference in demographic unionization patterns that the unionization rates of whites, minorities and blacks are unequal in any one construction occupation, (say carpenters). Just as the laborer unionization rate across racial groups turns out to be equal, so might that of carpenters (or brickmasons or plumbers). Unionization rates also differ across crafts. Minority participation rates differ across crafts. White and minority unionization rates within crafts may be perfectly equal and yet the joint effect of differing unionization rates and differing minority participation rates across crafts will generate an unequal aggregate comparison of white, minority and black unionization rates. This compositional effect will give the illusion that white and minority unionization rates differ when in fact they may not within the specific occupations that individual craft unions organize.

ii) Geographic Aggregation Bias. Compositional effects are not limited to the dimension of occupation. Unionization rates can differ across geographical regions. Historically, construction unionization rates have been higher in the north than in the south while minority participation rates in construction have been higher in the south than in the north. One might infer from this cause

(i.e. more unions) and effect (i.e. fewer blacks). However, that conclusion would be cast into doubt if the unionization rates of whites and minorities in the south were the same. Dr. Bloch does not break down unionization rates by region so we do not know.[60]

iii) Annual Aggregation Bias. Compositional effects on the demographic pattern of unionization rates can also occur over time. Many construction trade unions have had a history of racial exclusion, either formal or informal. The unionization rates of black construction workers into the 1960s was very low.[61] The increase in minority and black participation in unions rose in a rapid but unknown fashion in the 1970s and 1980s. In order to increase his sample size for specific Metropolitan Statistical Areas (MSAs), Dr. Bloch combines together data over a nine-year period, 1986 to 1994. This is roughly the last third of the period in which the union participation rates for minorities and blacks in construction went from a very low number to around 20 to 22 percent (using Dr. Bloch's rates). White unionization rates are presumably falling during this time period. We know that overall construction unionization rates are falling,[62] and if black and minority construction unionization rates are rising, white unionization

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[60] The reader should know that Dr. Bloch's unionization rates are proprietorial. They were derived in a complex fashion from the Current Population Survey and could not be readily checked in the time period permitted for researching and writing this report.

[61] F. Ray Marshall and Vernon M. Briggs, Jr., The Negro and Apprenticeship, John Hopkins Press, Baltimore, 1967. Also, Ray Marshall, The Negro and Organized Labor, John Wiley and Sons, New York, 1965.

[62] Teresa Ghilarducci, Garth Magnum, Jeffrey Petersen and Peter Philips, Building Portable Pensions: The Central Pension Fund of the International Union of Operating Engineers, Quorum Books, 1995.

rates must be falling. Dr. Bloch has these data but does not tell us.

If black and minority unionization rates are on the rise and white unionization rates are falling, averaging the last nine years will not accurately reflect the current state of demographic patterns within unions. It may be that Dr. Bloch's most recent data do not show a statistically significant difference between the current white, minority and black unionization rates.

Why are occupational, geographic and annual aggregation bias important in this case? One of the two main arguments Dr. Bloch presents is that unions are disproportionately white. When laws promote unions they therefore directly promote white employment in preference to minority and black employment. But occupational, regional and time composition problems make it difficult to conclude that specific construction craft unions are indeed disproportionately white today. Dr. Bloch does not decompose his data, so we do not know. We do know that in the one instance where he did occupationally decompose his data into laborers and other, the laborer category did not show differing unionization rates by race.

A Puzzle in the Case of Laborers. This is a puzzle for Dr. Bloch's statistical results. At the bottom of Tables Two and Four of Dr. Bloch's Report, he shows that higher unionization rates lead to a lower relative proportion of minorities and blacks in laborer and helper occupations. Presumably, this reflects a direct and an indirect effect. First, according to his story, there are fewer

minorities and blacks because laborer unions are disproportionately white. Second, indirectly, laborer unions discourage minority and black employment by raising wage rates including Davis-Bacon wage rates and union markups. All these higher wage rates (in Dr. Bloch's model) directly discourage minority and black employment by inducing a switch in the mix of laborers and helpers towards the more skilled and experienced among all laborers. This should supposedly mean white laborers and helpers (although the general lack of skill and experience for black laborers relative to white laborers is not demonstrated).

The puzzle is that the direct effect should not be occurring at all. Because laborer unions are not disproportionately white, unions do not chase out blacks. Setting aside the hypothesized process where the union lowers black employment through higher wages, there should be no direct union effect on minority and black employment among laborers and helpers. If anything, it should be the reverse--more union members should lead to higher minority and black participation among laborers simply because laborer unions are disproportionately minority.

One might explain this puzzle by saying that the union variable in this case is simply picking up the indirect effects of higher wage rates. But if this were true then the union variable should have an equal or smaller effect on minority and black participation compared to the three wage variables in the lower segment of Dr. Bloch's Tables Two and Four with their direct effects. However, in five of the six cases presented at the bottom

of Dr. Bloch's Tables Two and Four, the union variable has a larger effect than the various direct linkages between wage measures and minority and black laborer participation rates.

The anomalies found in the one case where Dr. Bloch decomposed his data by occupation cast doubt on the overall interpretation Dr. Bloch is giving all his statistical results. If the story is that when unionization rates for electrical workers rise, the electrician work force becomes whiter simply because the electrician union is disproportionately white compared to the electrician work force, this story has to be tested for electricians. This, Dr. Bloch does only for one occupation, laborers. We know in the case of laborers, the story does not work because laborer unions are not disproportionately white. Yet, by not telling us this in his Report, the story is made to look like it works.

2. **Dr. Bloch's Second Story: Higher Wages Chase Out Unskilled Blacks.** Dr. Bloch has two stories. He also argues that the Davis-Bacon Act has a skill effect. By raising wage rates, the Act encourages unions which in their turn promote higher wage rates. These higher wage rates induce a shift to a more skilled mix of workers. Minorities and blacks are less skilled, and consequently, skill-favoring technologies are adverse to the interest of minorities and blacks. This is not an argument that minorities and blacks are being discriminated against by contractors but rather for reasons not fully developed by Dr. Bloch, minorities and blacks in each occupation within construction are, on average, less

skilled than whites.

There is no evidence in Dr. Bloch's report supporting the proposition that licensed minority electricians in (say) Utah are any less skilled than licensed white electricians in Utah. Nor is there any evidence to show that black bricklayers in Alabama are any less skilled than white bricklayers in Alabama. Indeed, the only evidence in Dr. Bloch's report supporting the notion that minority and black construction workers are in fact less skilled than white construction workers is the fact that minorities and blacks are relatively over-represented among laborers and helpers and relatively under-represented among the skilled trades. Dr. Bloch hypothesizes that as average construction wages (or the union premium or the Davis-Bacon laborer wage) falls, contractors will switch from hiring more electricians to more laborers, thus switching from a relatively white group to a relatively minority or black group of substitute labor.

Dr. Bloch finds little support for this hypothesis. In Table Five, Dr. Bloch reports that in the case of unionization rates and the union wage markup over nonunion wage rates, there is no statistically significant relationship between union prevalence or union premiums and the mix of crew skills as measured by the percent laborers among all construction workers. In two other tests, the average wage rate and the Davis-Bacon laborers rate are statistically significantly related to crew mix but the effect is small. As these wage rates go up, the percent unskilled laborers among all construction workers goes down <u>but not by very much</u>. The

magnitude of the effects he finds are very small. A one dollar increase in the average construction wage leads to less than one-half of one percentage point drop in the percent of all construction workers who are unskilled laborers.[63]

The next logical step in Dr. Bloch's analysis would have been to look at the correlation between the percent laborers (his measure for unskilled labor) and the percent minority or black in construction. He does not take this step. The link between shifting crew mix and the proportion of the labor force which is minority or black remains entirely untested.

In short, Dr. Bloch tells a story with two parts: first, wage rates rise inducing a shift to less skilled workers, and second, a greater proportion of less skilled workers leads to more blacks and minorities. He tests the first part of this story and finds the link weak, but he then fails to test the second step at all even though he has the data to do so.[64]

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[63] This result makes Dr. Bloch's calculation of minority job losses due to higher wage rates unbelievable. Bloch Report pp. 11-12. Dr. Bloch does not make his job loss calculation though the causal mechanisms of higher wages leading to fewer unskilled workers and then fewer unskilled workers leading to fewer blacks and minorities. Rather in his calculation of job losses, Dr. Bloch avoids his causal story and jumps directly to a correlation between wage rates and relative unemployment rates. This secondary correlation may be picking up all sorts of influences that Dr. Bloch is unaware of and does not control for. This is not proper, particularly when his tested link between wage rates and the percent unskilled is so weak.

[64] Dirty Data? Dr. Bloch has an explanation for his poor statistical results. Dr. Bloch argues that the weakness of his results in Table Five are due to the roughness of his data. He argues that his detailed occupational data are inaccurate:

> Occupational data are based on respondent answers, and often two or more occupations would be an apt response. Thus, some laborers working with brickmasons might report themselves as brickmasons rather than laborers. Given that detailed occupational characteristics are likely subject to much more error than those for broad occupation or race, it may be relatively difficult to achieve statistical significance [with detailed

Wage Rates Change Skill Mixes Within Specific Construction Occupations.

Dr. Bloch cannot find a clear relationship between either unionization or measures of higher wages, and the percent laborers among all construction workers. He does find a clear connection between wage rates and skills. In Table One, Dr. Bloch shows that there is a strong relationship between all three variables-- the union markup, the Davis-Bacon laborer rate, and the mean construction wage--and his measure of the unionization rate.

The literature is clear that union workers are more skilled. Steven G. Allen (whom Dr. Bloch cites) estimates that union workers are anywhere from 17 percent to 52 percent more productive compared to nonunion workers.[65] This helps explain why labor costs as a percent of total costs do not vary widely across regions even

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occupational breakdowns such as laborer]. Bloch Report p. 13

Dr. Bloch may or may not be right in this speculation. But if he is right, the problem is more serious than he states because it would also infect his dependent variable (various measures of relative minority and black employment). Similar to the occupational data, respondent self-classification of race within the current population survey is also subject to multiple and conflicting responses. The problem of mixed racial ancestry is sufficiently large that in the upcoming census, the Bureau of the Census is considering adding a new category of mixed racial ancestry. (USA Today, January 2, 1996) If this uncertainty of response is a real problem, all of Dr. Bloch's results fall into question simply because the measure of what you are trying to explain (the dependent variable) must be accurate for your explanations to mean anything.

If you do not know what you are measuring in the dependent variable, then you do not know what you are explaining. Most of the causal linkages in Dr. Bloch's story run through Table 5, where he looks for a link between changing wage rates, on the one hand, and changing skill composition on the other hand. Because his results in Table 5 are so weak, and because he never takes the second step, of testing the relationship between skill mix and the demographic mix of the construction work force, his overall hypothesized explanation must be rejected.

[65] Allen, Steven G. "Unionized Construction Workers Are More Productive," Quarterly Journal of Economics, 1984, v99(2), 251-274.

though wage rates do.[“] This is evidence from the secondary literature that when wage rates rise, skilled labor in specific occupations is substituted for less-skilled among that occupation and, in particular, more skilled union labor is substituted for less skilled nonunion labor. But this happens more within occupations than between crafts and laborers. So the key question is when higher wage rates within an occupation induce the selection of skilled union workers, are the unionization rates of blacks and whites within that union the same? Dr. Bloch has shown that they are at least similar and decomposing his data by occupation, region and year may well show that the unionization rates are in fact the same.

Are Blacks and Minorities Less Skilled in Specific Occupations?

While Dr. Thieblot and Dr. Bloch do not offer any direct evidence that blacks and minorities are systematically less skilled construction workers compared to whites, they do tell a story of higher wages discouraging the employment of younger and less experienced construction workers who may be disproportionately black. I tested to see if blacks are younger and less experienced construction workers.

Overall in the construction labor force, black and white workers have essentially the same average age, 37.5 years for whites and 37.7 years for blacks. In states without prevailing wage laws the average age is 37.5 for whites and 37.7 for

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[“] See for example school construction by region in U.S. Department of Labor, Monthly Labor Review, April 1979 p. 41.

blacks. In states with prevailing wage laws the average age is 37.5 for whites and 37.7 for blacks.[67] Thus, on the face of it, a story about the absence of prevailing wage laws encouraging the participation of a higher proportion of younger and therefore less experienced black workers is unsupported.

In contrast to age, there are distinct differences in the educational attainment of blacks compared to whites in construction.[68] Overall in construction, the average educational attainment for whites was 9.9 while that of blacks was 9.0. This is a statistically significant difference in means. In the states without prevailing wage laws, the mean difference was wider with white educational attainment at 9.8 and black educational attainment at 8.6. In the prevailing wage law states the educational attainment of black construction workers was much closer to that of whites, black equalling 9.5 and white equalling 10.0. All these differences are statistically significantly different within each pairing. Assuming formal schooling contributes to or correlates with construction skills, this result seems to support the notion that the absence of prevailing wage laws allows for the entrance into construction work of less skilled black workers.

However, when one eliminates the eight Southern states and

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[67] These data are based on the 1990 U.S. Census of Population Public Use Microdata 5% Sample.

[68] Using the Census coding does not generate precise years of schooling as early years are grouped together so that the number I report should be seen as an index of schooling. Thus, a better terminology than years of schooling might be index of educational attainment.

again looks at the states without prevailing wage laws, the picture changes. Statistically, the educational attainment of blacks and whites is the same. The black attainment is 10.12 and the white attainment is 10.15. In these ten no-law states, there is no tendency for the absence of a prevailing wage law to allow for the entrance of significantly less-well educated group of black construction workers. The southern construction labor market may employ a higher proportion of unskilled blacks, but labor markets free from prevailing wage laws do not.

Prevailing Wage Laws Raise the Incomes of Blacks and Minorities.

According to Dr. Thieblot's data, roughly half of all black construction workers reside in states with state prevailing wage laws. Whatever negative employment effect prevailing wage laws may have on minorities and blacks must be viewed in the light of higher incomes for those who remain employed.

The 1990 Census of Population Public Use Microdata 5% Sample may be used to explore these potential income effects of prevailing wage laws. I restrict the sample to individuals in the construction industry, using the same group looked at by Dr. Bloch with the addition of supervisors and operating engineers. The individuals had to report a wage or salary income of greater than $1 in 1989. In Tables 4.4 to 4.7, I report 16 earnings regressions of various specifications focusing on the relationship between state prevailing wage laws and income given a variety of control

variables which include reported control variables (sex, age, educational attainment, type of firm) and unreported control variables (region, occupation, annual hours worked).

In Table 4.4, models one through four are reported. The dependent variable is the log of annual wage and salary income for each individual in the sample. Models one and two report for non-whites relative to whites, while models three and four report for blacks relative to whites.[69]

Our focus is on the separate effect of prevailing wage laws on the incomes of construction workers in general and black and minority workers in particular. In models one and three, no distinction between weak, average and strong state prevailing wage laws is made. In these models, two variables are introduced. The first, "P.W. Law" simply measures whether the construction worker is in a state with a prevailing wage law, while a second "P.W. Law" variable is reported below "Non-White in:". This second P.W. Law variable marks whether the construction worker is a non-white (or in model three a black) in a state with a prevailing wage law. The regression result indicates that controlling for the aforementioned factors (including regional differences in construction incomes), all construction workers in prevailing wage law states receive 10 to 12 percent higher annual earnings. Non-whites (which includes blacks) and blacks (which excludes Asians and American Indians) in prevailing wage law states receive an additional 8 to 9 percent

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[69] My measure of non-white differs from Dr. Bloch's concept of minority in that he includes in minority hispanics who may be of any race.

higher incomes compared to the same group in a non "P.W. Law" state. In this formulation, nonwhite and black construction workers benefit more from prevailing wage laws than do whites.

When prevailing wage laws are decomposed into repeal states, weak laws, average laws and strong laws following Dr. Thieblot's method, the increase that all construction workers receive from being in a prevailing wage law state is primarily associated with strong law states although the increase that non-whites and blacks receive from being in a prevailing wage law state is spread across all states which have a prevailing wage law.

In Table 4.5, the same regression models are run without controls for occupational attainment. When one does not know the occupation of these workers, the model gives greater weight to the role of age (as a proxy for experience) and schooling (as a proxy for skill). Presumably experience and skill are two determinants of occupational attainment. This gives some confidence that these proxy variables are picking up the experience and skill variations that they are intended to capture.

The markers (dummy variables) for nonwhite (and black) become more negative indicating that the difference in earnings of minorities and blacks in construction is partly due to differential occupational attainment (such as blacks being over-represented among laborers). If one believed that the age and schooling variables perfectly captured differences in construction experience and schooling, then the negative rise in the minority dummy variable coefficients would suggest that there is some other factor

that provides some explanation for the difference in earnings, e.g., occupational discrimination within construction generally. Because the skill variables are imperfect, it is possible the dummy variable is picking up differential skills by race. Eliminating occupational controls does not alter the overall pattern of prevailing wage law impacts both in the aggregate or in their decomposed form distinguishing various strengths of these state laws.

Notice the stark changes in the nonwhite dummy variables in Tables 4.6 and 4.7 when the eight Southern states Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana are removed from the analysis. For these forty-two states in models which control for occupational attainment, there is no difference in the earnings of non-whites and blacks compared to white construction workers. Whatever earnings discount nonwhites and blacks experience in the construction industry (controlling for occupational attainment, skills and experience) is concentrated in the eight excluded Southern states.

Construction workers in the 32 states with prevailing wage laws receive an earnings premium of around 11 percent compared to the remaining 10 non-prevailing wage law states in the sample. This is roughly the same effect as when the southern states were included. When the state laws are decomposed, the earnings premium in the strong-law states is highest but the other two legal regimes still garner 10 percent earnings premiums (again, controlling for among other things, annual hours worked). The markers for

nonwhites and blacks in these four models are generally statistically insignificant. (The one exception is non-whites in the model which aggregates legal regimes.) On the whole, this suggests that minorities and blacks experience the same earnings premiums as white construction workers in prevailing wage law states (controlling for occupational attainment).

When the controls for occupational attainment are dropped in Table 4.7, a small to moderate earnings discount for non-whites and blacks emerges. This suggests that the occupational attainment of non-whites and blacks in these non-southern states is somewhat unfavorable compared to whites. By implication, comparing these results to Table 4.5 suggests that the occupational attainment of non-whites and blacks in the eight southern states is markedly unfavorable compared to whites. It is not easy to attribute this unfavorable occupational attainment for non-whites and blacks in the South to the absence of prevailing wage laws allowing the entrance of unskilled workers simply because it is not a pattern found when considering the remaining ten states without prevailing wage laws.

Regression Summary. These regression models suggest that prevailing wage laws do raise wage rates. This confirms a key unexplored element in Dr. Thieblot's and Dr. Bloch's analysis. Setting aside whether or not Dr. Thieblot and Dr. Bloch succeed in showing that prevailing wage laws discourage minority and black employment, these regression models suggest that non-white and black construction workers in prevailing wage law states enjoy a

roughly 10 percent premium in their earnings associated with the influence of prevailing wage laws on the construction labor market in those states. Non-whites and blacks in the strong-law states along with their white counterparts enjoy a twenty percent earnings premium. Dr. Thieblot's data indicate that roughly one-quarter of all black construction workers reside in these strong-law states. Thus, it is reasonable to conclude that in evaluating the favorable and adverse effects of prevailing wage laws on the economic interests of non-whites and blacks as groups, whatever negative employment effect may exist must be balanced against these positive earnings effects.

Conclusion.

Dr. Thieblot's correlation between legal regimes and demographic patterns of employment is an artifact which disappears when eight Southern states are removed from the set of 18 states without prevailing wage laws. Dr. Thieblot has found out something about the southern construction labor market, not prevailing wage laws. Neither Dr. Thieblot nor Dr. Bloch demonstrate that within occupations nonwhites or blacks are less skilled than their white counterparts. Both Dr. Thieblot and Dr. Bloch demonstrate there is little substitution between construction laborers and other skilled construction trades. Thus, they must show that higher wages among (say) electricians lead to the use of more white electricians relative to non-whites and blacks. They do not show this. Evidence I present on age shows that black and white construction workers are the same age across legal regimes. Thus, the story

that prevailing wage laws exclude the young and inexperienced is not supported with age data. Evidence that I present on schooling differences shows that blacks in construction have lower educational attainment than whites and that this educational gap is greatest for states without prevailing wage laws. But this educational gap only holds for the eight Southern states and the gap between black and white education disappears entirely in the 10 non-southern no-law states. Thus, it is difficult to argue that prevailing wage laws close the door to the less skilled and the absence of those laws opens the door up. Taken together or separately, Dr. Thieblot and Dr. Bloch fail to show that prevailing wage laws limit the employment opportunities of minorities and blacks in construction.

All this being said, Dr. Thieblot and Dr. Bloch have looked at only half the story. The question posed is -- Are prevailing wage laws adverse to the economic interest of minorities, non-whites and blacks? We all agree that prevailing wage laws maintain higher wage rates in construction. Do non-whites and blacks benefit from these higher wages? Earnings regressions applied to U.S. Census data suggest the answer is yes. The range of benefit is from a 10 percent to a 20 percent increase for slightly over half of all blacks because that is the percentage of all black construction workers living in prevailing wage law states.

The evidence that prevailing wage laws deprive minorities and blacks of jobs is weak and the evidence that it raises the incomes of many minority and black construction workers is strong.

Table 4.1

State	Employed in Construction: Con. Mgt. and Skilled All	Black	%	Reflection Ratio	Over (Under)	Con. Laborers All	Black	%	Reflection Ratio	Over (Under)	All Con. All(B+W)	Black	All Con. %	Employed in All Employments: All	Black	%	Reflection Ratio	Over (Under)
	4482381	303724	6.8%	0.647	-10%	841380	114699	13.6%	1.293	34%	5323761	420423	7.9%	106329112	11233582	10.5%	0.749	0
GA	138654	22227	16.0%	0.697	-5%	28303	9662	34.1%	1.485	74%	166957	31889	19.1%	3029119	696470	23.0%	0.831	8%
IA	42235	228	0.5%	0.415	-33%	9368	151	1.6%	1.240	49%	51603	379	0.7%	1522066	17191	1.1%	0.563	-18%
MS	44621	9330	20.9%	0.745	-0%	9305	3650	39.2%	1.413	66%	53926	13020	24.1%	1020108	286310	28.1%	0.860	11%
NC	153224	20984	13.7%	0.717	-3%	25741	6727	26.1%	1.367	62%	178965	27711	15.5%	3169414	605731	19.1%	0.810	6%
ND	9113	10	0.1%	0.374	-37%	1805	15	0.8%	2.834	207%	10918	25	0.2%	279657	820	0.3%	0.781	3%
SC	84852	18615	21.9%	0.864	11%	13727	6358	46.3%	1.587	84%	100579	24953	24.8%	1586243	402825	25.4%	0.977	23%
SD	10871	24	0.2%	0.757	1%	2236	8	0.4%	1.226	48%	13107	32	0.2%	308101	899	0.3%	0.837	9%
VT	13810	13	0.1%	0.248	-50%	2113	2	0.1%	0.286	-46%	17923	15	0.1%	280382	930	0.3%	0.252	-50%
VA	146572	18331	12.5%	0.746	-0%	25393	6589	25.7%	1.533	79%	172165	24920	14.5%	2910820	488283	16.8%	0.863	11%
NEVERHAD	645952	89762	13.9%	0.773	2%	120191	33182	27.6%	1.536	79%	766143	122944	16.0%	13906110	2499439	18.0%	0.893	14%
AL	82931	12102	14.6%	0.711	-4%	16294	5459	33.5%	1.632	88%	99225	17561	17.7%	1723104	353740	20.5%	0.862	11%
AZ	57939	862	1.5%	0.510	-24%	10602	458	4.3%	1.480	73%	68341	1320	1.9%	1402716	40946	2.9%	0.660	-9%
CO	54250	968	1.8%	0.515	-23%	9899	202	2.0%	0.389	-16%	64149	1170	1.8%	1524939	52788	3.5%	0.527	-22%
FL	291638	26966	9.2%	0.766	2%	53379	11777	22.1%	1.827	108%	345037	38743	11.2%	3604217	676802	12.1%	0.930	18%
ID	17886	43	0.2%	0.825	8%	3727	8	0.2%	0.736	-1%	21613	51	0.2%	422527	1232	0.3%	0.809	6%
KS	38511	996	2.6%	0.587	-16%	8679	547	6.3%	1.431	68%	47190	1543	3.3%	1129493	49742	4.4%	0.742	1%
LA	72934	13897	19.1%	0.787	4%	14128	5642	39.9%	1.650	90%	87062	19539	22.4%	1611263	389891	24.2%	0.927	18%
NH	27679	66	0.2%	0.425	-32%	5641	41	1.1%	2.008	126%	31320	107	0.3%	567256	3181	0.6%	0.609	-14%
UT	26016	62	0.2%	0.426	-32%	4935	17	0.3%	0.615	-13%	30951	79	0.3%	699421	3916	0.6%	0.456	-29%
REPEALED	669804	55962	8.4%	0.780	3%	123284	24151	19.3%	1.801	105%	795088	80113	10.1%	14684938	1372238	10.7%	0.941	19%
TOT NO LAW	1313736	145724	11.1%	0.778	3%	243475	57333	23.4%	1.640	89%	1361231	203057	13.0%	28591048	4071697	14.2%	0.913	16%
NE	23827	379	1.5%	0.531	-22%	5750	115	2.0%	0.724	-2%	31577	494	1.6%	756797	20909	2.8%	0.566	-18%
OK	43127	1630	3.6%	0.567	-18%	8866	733	8.3%	1.298	55%	53993	2363	4.4%	1249310	79576	6.4%	0.687	-6%
TN	99234	7478	7.5%	0.563	-18%	19208	3077	16.0%	1.200	43%	118442	10555	8.9%	2227920	297296	13.3%	0.668	-8%
KY	68203	2035	3.0%	0.497	-25%	14095	836	5.9%	0.988	24%	82300	2871	3.5%	1352539	93179	6.0%	0.581	-17%
ME	32511	82	0.3%	0.818	7%	4002	6	0.1%	0.486	-26%	36513	88	0.2%	565796	1744	0.3%	0.782	-3%
MD	113722	16761	14.7%	0.616	-13%	17922	5519	30.8%	1.287	54%	131644	22280	16.9%	2377786	368946	23.9%	0.707	-4%
MT	12700	0	0.0%	0.000	-75%	2254	6	0.3%	1.711	96%	14954	6	0.0%	334839	521	0.2%	0.258	-49%
TX	268832	17209	6.4%	0.534	-19%	53747	7439	13.8%	1.199	45%	322379	24648	7.6%	6753469	779756	11.5%	0.662	-9%
WEAKER	666158	45574	6.8%	0.588	-16%	123844	17731	14.1%	1.210	46%	792002	63305	8.0%	13818436	1841927	11.6%	0.686	-6%
DE	17471	1457	8.3%	0.553	-19%	2810	631	22.5%	1.495	75%	20281	2086	10.3%	326274	49023	15.0%	0.685	-6%
CN	68278	3233	4.7%	0.642	-11%	9388	863	9.2%	1.247	50%	71666	4096	5.3%	1631366	120299	7.4%	0.715	-3%
WY	8339	7	0.1%	0.162	-59%	2128	11	0.5%	1.001	25%	10467	18	0.2%	199766	1032	0.5%	0.333	-42%
NM	21706	196	0.9%	0.454	-30%	4725	49	1.0%	0.521	-23%	26431	245	0.9%	511009	10168	2.0%	0.466	-28%
AR	40184	2718	6.8%	0.554	-19%	8208	1295	15.8%	1.293	54%	48392	4013	8.3%	979558	119319	12.2%	0.680	-7%
IN	102982	3707	3.6%	0.574	-18%	21367	1325	6.1%	0.979	23%	124549	5032	4.0%	2388115	162392	6.8%	0.644	-10%
PA	221927	8846	4.0%	0.537	-21%	42398	3594	8.5%	1.143	39%	264325	12440	4.7%	5335834	395614	7.4%	0.635	-11%
AK	8428	134	1.6%	0.453	-30%	1613	38	2.4%	0.671	-8%	10041	172	1.7%	209094	7337	3.5%	0.488	-26%
NV	29529	879	3.0%	0.500	-25%	5822	415	7.1%	1.198	45%	35351	1294	3.7%	551509	32810	5.9%	0.613	-13%
OR	48964	481	1.0%	0.709	-4%	9026	184	2.0%	1.472	72%	57930	665	1.1%	1250691	17318	1.4%	0.828	-8%
WV	33007	432	1.3%	0.529	-22%	7545	135	1.8%	0.724	-3%	40552	567	1.4%	666594	16485	2.5%	0.563	-18%
WI	81163	1247	1.5%	0.469	-28%	14081	414	2.9%	0.897	11%	93246	1661	1.7%	2341816	76722	3.3%	0.532	-22%
AVERAGE	681980	23337	3.4%	0.563	-19%	129311	8934	6.9%	1.139	39%	811291	32291	4.0%	16589626	1008719	6.1%	0.655	-9%
IL	184237	10068	5.5%	0.462	-29%	33733	3599	10.7%	0.902	15%	217970	13667	6.3%	5063215	599168	11.8%	0.530	-22%
MO	88551	3349	3.8%	0.424	-32%	20227	1650	8.2%	0.915	17%	108778	4999	4.6%	2330848	207727	8.9%	0.516	-23%
RI	22467	463	2.1%	0.657	-9%	2458	145	5.9%	1.880	113%	24925	608	2.4%	469441	14733	3.1%	0.777	-3%
OH	178198	8079	4.5%	0.501	-25%	32883	2975	9.0%	0.999	25%	211085	11054	5.2%	4456836	403467	9.1%	0.578	-17%
MN	71478	435	0.6%	0.389	-36%	11735	114	1.0%	0.622	-13%	83213	549	0.7%	2143548	33494	1.6%	0.422	-33%
MI	142931	6973	4.9%	0.426	-32%	24011	2006	8.4%	0.730	-2%	166942	8979	5.4%	3649852	417744	11.4%	0.470	-28%
WA	95599	1623	1.7%	0.642	-11%	16498	513	3.1%	1.175	43%	112097	2136	1.9%	2125383	56225	2.6%	0.720	-3%
III	9679	122	1.3%	0.323	-43%	1691	50	3.0%	0.757	1%	11370	172	1.5%	170387	6652	3.9%	0.387	-36%
CA	487201	21640	4.4%	0.573	-18%	103326	6586	6.4%	0.821	7%	590727	28226	4.8%	10950207	848400	7.7%	0.617	-13%
NJ	145474	9561	6.6%	0.524	-22%	26736	3806	14.2%	1.133	39%	172210	13367	7.8%	3602461	431914	12.5%	0.619	-13%
NY	279807	26093	9.3%	0.622	-13%	51196	8476	16.6%	1.105	36%	331003	36569	10.4%	7658084	1147484	15.0%	0.697	-5%
MA	112865	2683	2.4%	0.557	-19%	16036	761	4.7%	1.110	56%	128921	3444	2.7%	2909720	124231	4.3%	0.626	-12%
STRONG	1818487	91089	5.0%	0.529	-22%	340750	30681	9.0%	0.951	20%	2159237	121770	5.6%	45329982	4311239	9.5%	0.596	-15%
TOT LAW	3166623	160000	5.1%	0.550	-20%	593905	57366	9.6%	1.04	30%	3762530	217366	5.8%	77938064	7161883	9.2%	0.629	-12%

Table 4.2

State	Employed in Construction - Con. Mgt. and Skilled All	Black	%	Reflection Ratio	Over (Under)	Con. Laborers All	Black	%	Reflection Ratio	Over (Under)	All Con. All(B+W)	Black	All Con. %	Employed in All Employments All	Black	%	Reflection Ratio	Over (Under)
	3466935	163272	4.7%	0.551	-8%	632910	58815	9.0%		-63%	4119845	222087	5.4%	85874822	7333530	8.5%	0.631	0
IA	42235	228	0.5%	0.415	-22%	9368	151	1.6%	1.240	61%	51603	379	0.7%	1322066	17191	1.3%	0.565	-7%
ND	9113	10	0.1%	0.374	-26%	1805	15	0.8%	2.834	220%	10918	25	0.2%	279657	820	0.3%	0.781	15%
SD	10871	24	0.2%	0.757	13%	2236	8	0.4%	1.226	59%	13107	32	0.2%	308101	899	0.3%	0.837	21%
VT	13810	13	0.1%	0.248	-38%	2113	2	0.1%	0.286	-35%	17923	15	0.1%	280382	930	0.3%	0.252	-38%
NEVERHAD	78029	275	0.4%	0.389	-24%	15522	176	1.1%	1.252	62%	93551	451	0.5%	2190406	19840	0.9%	0.532	-10%
AZ	57939	862	1.5%	0.510	-12%	10602	458	4.3%	1.480	85%	68541	1320	1.9%	1402716	40946	2.9%	0.660	3%
CO	54250	968	1.8%	0.515	-12%	9899	202	2.0%	0.589	-4%	64149	1170	1.8%	1524939	52788	3.5%	0.527	-10%
ID	17886	43	0.2%	0.825	19%	3727	8	0.2%	0.736	10%	21613	51	0.2%	422527	1232	0.3%	0.809	18%
KS	38511	996	2.6%	0.587	-4%	8679	547	6.3%	1.431	80%	47190	1543	3.3%	1129493	49742	4.4%	0.742	11%
NH	27679	66	0.2%	0.425	-21%	3641	41	1.1%	2.008	138%	31320	107	0.3%	567256	3181	0.6%	0.609	-2%
UT	26016	62	0.2%	0.426	-21%	4935	17	0.3%	0.615	-2%	30951	79	0.3%	699421	3916	0.6%	0.456	-18%
REPEALED	222281	2997	1.3%	0.510	-12%	41483	1273	3.1%	1.162	53%	263764	4270	1.6%	5746352	151805	2.6%	0.613	-2%
TOT NO LAW	300310	3272	1.1%	0.504	-13%	57005	1449	2.5%	1.175	54%	357315	4721	1.3%	7936758	171645	2.2%	0.611	-2%
NE	25827	379	1.5%	0.531	-10%	5750	115	2.0%	0.724	9%	31577	494	1.6%	756797	20909	2.8%	0.566	6%
OK	45127	1630	3.6%	0.567	-6%	8866	733	8.3%	1.298	67%	53993	2363	4.4%	1249310	79576	6.4%	0.687	6%
TN	99234	7478	7.5%	0.565	-7%	19208	3077	16.0%	1.200	57%	118442	10555	8.9%	2227920	297296	13.3%	0.668	4%
KY	68205	2035	3.0%	0.497	-13%	14095	836	5.9%	0.988	36%	82300	2871	3.5%	1552539	93179	6.0%	0.581	-5%
MS	32511	82	0.3%	0.818	19%	4002	6	0.1%	0.486	-14%	36513	88	0.2%	565796	1744	0.3%	0.782	15%
MD	113722	16761	14.7%	0.616	-2%	17922	5519	30.8%	1.287	66%	131644	22280	16.9%	2377786	568946	23.9%	0.707	8%
MT	12700	0	0.0%	0.000	-63%	2254	6	0.3%	1.711	108%	14954	6	0.0%	334839	521	0.2%	0.258	-37%
TX	268832	17209	6.4%	0.554	-8%	53747	7439	13.8%	1.199	57%	322579	24648	7.6%	6753469	779736	11.5%	0.662	3%
WEAKER	666158	45574	6.8%	0.588	-4%	125844	17731	14.1%	1.210	58%	792002	63305	8.0%	15818456	1841927	11.6%	0.686	6%
DE	17471	1457	8.3%	0.555	-8%	2810	631	22.5%	1.495	86%	20281	2088	10.3%	326274	49023	15.0%	0.685	5%
CN	68278	3233	4.7%	0.642	1%	9388	863	9.2%	1.247	62%	77666	4096	5.3%	1631366	120299	7.4%	0.715	8%
WY	8339	7	0.1%	0.162	-47%	2128	11	0.5%	1.001	37%	10467	18	0.2%	199766	1032	0.5%	0.333	-30%
NM	21706	196	0.9%	0.454	-18%	4725	49	1.0%	0.521	-11%	26431	245	0.9%	511009	10168	2.0%	0.466	-17%
AR	40184	2718	6.8%	0.554	-8%	8208	1295	15.8%	1.293	66%	48392	4013	8.3%	979558	119519	12.2%	0.680	5%
IN	102982	3707	3.6%	0.574	-6%	21567	1325	6.1%	0.979	35%	124549	5032	4.0%	2588115	162392	6.3%	0.644	1%
PA	221927	8846	4.0%	0.537	-9%	42398	3594	8.5%	1.143	51%	264325	12440	4.7%	5333834	395614	7.4%	0.635	0%
AK	8428	134	1.6%	0.453	-18%	1613	38	2.4%	0.671	4%	10041	172	1.7%	209094	7337	3.5%	0.488	-14%
NV	29529	879	3.0%	0.500	-13%	5822	415	7.1%	1.198	51%	35351	1294	3.7%	551509	32810	5.9%	0.613	-2%
OR	48964	481	1.0%	0.709	8%	9026	184	2.0%	1.472	84%	57990	665	1.1%	1250691	17318	1.4%	0.828	20%
WV	33007	432	1.3%	0.529	-10%	7545	135	1.8%	0.724	9%	40552	567	1.4%	666594	16485	2.5%	0.565	-7%
WI	81165	1247	1.5%	0.469	-16%	14081	414	2.9%	0.897	27%	95246	1661	1.7%	2341816	76722	3.3%	0.532	-10%
AVERAGE	681980	23337	3.4%	0.563	-7%	129311	8954	6.9%	1.139	51%	811291	32291	4.0%	16589626	1008719	6.1%	0.655	2%
IL	184237	10068	5.5%	0.462	-17%	33733	3599	10.7%	0.902	27%	217970	13667	6.3%	5063215	599168	11.8%	0.530	-10%
MO	88551	3349	3.8%	0.424	-21%	20227	1650	8.2%	0.915	28%	108778	4999	4.6%	2330848	207727	8.9%	0.516	-12%
RI	22467	463	2.1%	0.657	3%	2458	145	5.9%	1.880	125%	24925	608	2.4%	469441	14733	3.1%	0.777	15%
OH	178190	8079	4.5%	0.501	-13%	32883	2975	9.0%	0.999	37%	211081	11054	5.2%	4436836	403467	9.1%	0.578	-5%
MN	71478	435	0.6%	0.389	-24%	11735	114	1.0%	0.622	-1%	83213	549	0.7%	2143548	33494	1.6%	0.422	-21%
MI	142931	6973	4.9%	0.426	-20%	24011	2006	8.4%	0.730	10%	166942	8979	5.4%	3649852	417744	11.4%	0.470	-16%
WA	95399	1623	1.7%	0.642	1%	16498	513	3.1%	1.175	54%	112097	2136	1.9%	2125383	56225	2.6%	0.720	9%
IL	9679	122	1.3%	0.323	-31%	1691	50	3.0%	0.757	13%	11370	172	1.5%	170387	6652	3.9%	0.387	-24%
CA	487201	21640	4.4%	0.573	-6%	103526	6586	6.4%	0.821	19%	590727	28226	4.8%	10950207	848400	7.7%	0.617	-1%
NJ	145474	9561	6.6%	0.524	-11%	26736	3806	14.2%	1.135	50%	172210	13367	7.8%	3602461	451914	12.5%	0.619	-1%
NY	279807	26093	9.3%	0.622	-1%	51196	8476	16.6%	1.105	47%	331003	34569	10.4%	7658084	1147484	15.0%	0.697	7%
MA	112865	2683	2.4%	0.557	-7%	16036	761	4.7%	1.110	48%	128921	3444	2.7%	2909720	124231	4.3%	0.626	-1%
STRONG	1818487	91089	5.0%	0.529	-10%	340750	30681	9.0%	0.951	32%	2159237	121770	5.6%	45529982	4311239	9.5%	0.596	-4%
TOTI	3166625	160000	5.1%	0.550	-8%	595905	57366	9.6%	1.048	42%	3762530	217366	5.8%	77938064	7161885	9.2%		-0%

Table 4.3

State	Employed in Construction Con. Mgt. and Skilled All	Black	%	Reflection Ratio	Over (Under)	Con. Laborers All	Black	%	Reflection Ratio	Over (Under)	All Con. All(B+W)	Black	All Con. %	Employed in All Employments All	Black	%	Reflection Ratio	Over (Under)
	998377	15221	1.5%	0.529	8%	179528	5559	3.1%		-61%	1177905	20780	1.8%	25393488	731971	2.9%	0.612	0
IA	42235	228	0.5%	0.415	-20%	9368	151	1.6%	1.240	63%	51603	379	0.7%	1322066	17191	1.3%	0.565	5%
ND	9113	10	0.1%	0.374	-24%	1805	15	0.8%	2.834	222%	10918	25	0.2%	279657	820	0.3%	0.781	17%
SD	10871	24	0.2%	0.757	14%	2236	8	0.4%	1.226	61%	13107	32	0.2%	308101	899	0.3%	0.837	22%
VT	15810	13	0.1%	0.248	-36%	2113	2	0.1%	0.286	-33%	17923	15	0.1%	280582	930	0.3%	0.252	-36%
NEVERHAD	78029	275	0.4%	0.389	-22%	15522	176	1.1%	1.252	64%	93551	451	0.5%	2190406	19840	0.9%	0.532	8%
AZ	57939	862	1.5%	0.510	-10%	10602	458	4.3%	1.480	87%	68541	1320	1.9%	1402716	40946	2.9%	0.660	5%
CO	54250	968	1.8%	0.515	-10%	9899	202	2.0%	0.589	2%	64149	1170	1.8%	1524939	52788	3.5%	0.527	9%
ID	17886	43	0.2%	0.825	21%	3727	8	0.2%	0.736	12%	21613	51	0.2%	422527	1232	0.3%	0.809	20%
KS	38511	996	2.6%	0.587	-2%	8679	547	6.3%	1.431	82%	47190	1543	3.3%	1129493	49742	4.4%	0.742	13%
NH	27679	66	0.2%	0.425	-19%	3641	41	1.1%	2.008	140%	31320	107	0.3%	567256	3181	0.6%	0.609	0%
UT	26016	62	0.2%	0.426	-19%	4935	17	0.3%	0.615	0%	30951	79	0.3%	699421	3916	0.6%	0.456	-16%
REPEALED	222281	2997	1.3%	0.510	-10%	41483	1273	3.1%	1.162	55%	263764	4270	1.6%	5746352	151805	2.6%	0.613	0%
TOT NO LAW	300310	3272	1.1%	0.504	-11%	57005	1449	2.5%	1.175	56%	357315	4721	1.3%	7936758	171645	2.2%	0.611	-0%
NE	25827	379	1.5%	0.531	-8%	5750	115	2.0%	0.724	11%	31577	494	1.6%	756797	20909	2.8%	0.566	-5%
OK	45127	1630	3.6%	0.567	4%	8866	733	8.3%	1.298	69%	53993	2363	4.4%	1249310	79576	6.4%	0.687	8%
KY	68205	2035	3.0%	0.497	-11%	14095	836	5.9%	0.988	38%	82300	2871	3.5%	1552539	93179	6.0%	0.581	-3%
ME	32511	82	0.3%	0.818	21%	4002	6	0.1%	0.486	-13%	36513	88	0.2%	565796	1744	0.3%	0.782	17%
MT	12700	0	0.0%	0.000	61%	2254	6	0.3%	1.711	110%	14954	6	0.0%	334839	521	0.2%	0.238	35%
WEAKER	184370	4126	2.2%	0.509	-10%	34967	1696	4.9%	1.104	49%	219337	5822	2.7%	4459281	195929	4.4%	0.604	-1%
WY	8339	7	0.1%	0.162	-45%	2128	11	0.5%	1.001	39%	10467	18	0.2%	199766	1032	0.5%	0.333	-28%
NM	21706	196	0.9%	0.454	-16%	4725	49	1.0%	0.521	-9%	26431	245	0.9%	511009	10168	2.0%	0.466	-15%
AK	8428	134	1.6%	0.453	-16%	1613	38	2.4%	0.671	6%	10041	172	1.7%	209094	7337	3.5%	0.488	-12%
OR	48964	481	1.0%	0.709	10%	9026	184	2.0%	1.472	86%	57990	665	1.1%	1250691	17318	1.4%	0.828	22%
WV	33007	432	1.3%	0.529	8%	7545	135	1.8%	0.724	11%	40552	567	1.4%	666594	16485	2.5%	0.565	5%
WI	81165	1247	1.5%	0.469	-14%	14081	414	2.9%	0.897	29%	95246	1661	1.7%	2341816	76722	3.3%	0.532	8%
AVERAGE	201609	2497	1.2%	0.497	-12%	39118	831	2.1%	0.852	24%	240727	3328	1.4%	5178970	129062	2.5%	0.555	6%
RI	22467	463	2.1%	0.657	4%	2458	145	5.9%	1.880	127%	24925	608	2.4%	469441	14733	3.1%	0.777	17%
MN	71478	435	0.6%	0.389	-22%	11735	114	1.0%	0.622	1%	83213	549	0.7%	2143548	33494	1.6%	0.422	-19%
WA	95599	1623	1.7%	0.642	3%	16498	513	3.1%	1.175	56%	112097	2136	1.9%	2125383	56225	2.6%	0.720	11%
HI	9679	122	1.3%	0.323	-29%	1691	50	3.0%	0.757	15%	11370	172	1.5%	170387	6652	3.9%	0.387	-22%
MA	112865	2683	2.4%	0.557	-6%	16056	761	4.7%	1.110	50%	128921	3444	2.7%	2909720	124231	4.3%	0.626	1%
STRONG	312088	5326	1.7%	0.567	-5%	48438	1583	3.3%	1.086	47%	360576	6909	1.9%	7818479	235335	3.0%	0.637	2%
TOT LAW	698067	11949	1.7%	0.533	8%	122523	4110	3.4%	1.045	43%	820590	16059	2.0%	17456730	560326	3.2%	0.610	0%

Table 4.4: Dependent Variable-Log of Annual Income
(Includes Occupational Controls; Includes All States)

	With Occupational Controls			
	Non-White	Non-White	Black	Black
	(1)	(2)	(3)	(4)
Non-white or Black	-14%	-16%	-19%	-19%
Female	-37%	-38%	-38%	-38%
Age	58%	58%	58%	59%
Schooling	29%	29%	32%	32%
Self-Employed	9%	9%	10%	10%
Govt-Employed	10%	10%	11%	11%
Private-Profit-Employed	19%	19%	21%	21%
P.W. Law	10%		12%	
Repeal State		-1%		-1%
Weak State		2%		3%
Avg State		3%		4%
Strong State		16%		18%
Non-White in:				
P.W. Law	8%		9%	
Repeal State		2%		n.s.
Weak State		10%		7%
Avg State		9%		10%
Strong State		9%		9%
R2	0.62	0.62	0.62	0.62
Observations	380691	380691	355918	355918

Control variables not reported include: annual hours of work, detailed occupation of individual and region of country. "n.s." indicates not significant at the .01 level.

Table 4.5: Dependent Variable-Log of Annual Income
(Occupational Controls Removed; Includes All States)

	Without Occupational Controls			
	Non-White	Non-White	Black	Black
	(5)	(6)	(7)	(8)
Non-white or Black	-18%	-20%	-23%	-23%
Female	-26%	-26%	-27%	-27%
Age	64%	64%	65%	65%
Schooling	37%	37%	41%	41%
Self-Employed	12%	12%	13%	13%
Govt-Employed	12%	12%	12%	13%
Private-Profit-Employed	19%	19%	20%	20%
P.W. Law	10%		12%	
Repeal State		n.s.		n.s.
Weak State		3%		4%
Avg State		3%		4%
Strong State		17%		18%
Non-White in:				
P.W. Law	10%		11%	
Repeal State		2%		n.s.
Weak State		11%		7%
Avg State		11%		11%
Strong State		10%		10%
R2	0.60	0.61	0.60	0.60
Observations	380691	380691	355918	355919

Control variables not reported include: annual hours of work and region of country. "n.s." indicates not significant at the .01 level.

Table 4.6: Dependent Variable-Log of Annual Income
(Includes Occupational Controls; Excludes 8 Southern States)

	Excludes Eight Southern States			
	With Occupational Controls			
	Non-White	Non-White	Black	Black
	(9)	(10)	(11)	(12)
Non-white or Black	-1%	n.s.	-7%	n.s.
Female	-38%	-39%	-39%	-39%
Age	60%	60%	60%	60%
Schooling	29%	29%	32%	32%
Self-Employed	7%	7%	8%	8%
Govt-Employed	10%	10%	10%	11%
Private-Profit-Employed	20%	20%	21%	21%
P.W. Law	11%		12%	
Repeal State		7%		6%
Weak State		9%		8%
Avg State		9%		9%
Strong State		22%		22%
Non-White in:				
P.W. Law	-5%		n.s.	
Repeal State		n.s.		n.s.
Weak State		n.s.		n.s.
Avg State		n.s.		n.s.
Strong State		n.s.		n.s.
R2	62%	62%	62%	62%
Observations	302973	302973	279962	279962

Control variables not reported include: annual hours of work, detailed occupation of individual and region of country. "n.s." indicates not significant at the .01 level.

Table 4.7: Dependent Variable-Log of Annual Income (Occupational Controls Removed; Excludes Eight Southern States)

	Excludes Eight Southern States			
	Without Occupational Controls			
	Non-White	Non-White	Black	Black
	(13)	(14)	(15)	(16)
Non-white or Black	n.s.	n.s.	n.s.	n.s.
Female	-28%	-28%	-28%	-29%
Age	66%	66%	67%	67%
Schooling	37%	37%	41%	41%
Self-Employed	10%	10%	11%	10%
Govt-Employed	10%	11%	11%	11%
Private-Profit-Employed	19%	20%	21%	21%
P.W. Law	11%		12%	
Repeal State		-28%		7%
Weak State		10%		9%
Avg State		10%		9%
Strong State		23%		23%
Non-White in:				
P.W. Law	-5%		n.s.	
Repeal State		n.s.		
Weak State		n.s.		n.s.
Avg State		n.s.		n.s.
Strong State		n.s.		n.s.
				n.s.
R2	61%	61%	61%	61%
Observations	302973	302973	279962	279962

Control variables not reported include: annual hours of work and region of country. "n.s." indicates not significant at the .01 level.

Section 5: Prevailing Wage Laws and Access to the Skilled Trades

A Decline in Training and Black Apprentices.

Overview. Craft unions and union contractors in the construction industry bear most of the burden of training skilled construction workers. This is done through joint apprenticeship programs into which a group of employers pool their apprentices. This ensures that the apprenticeship programs are relatively large. This is important because affirmative action regulations do not cover apprenticeship programs with fewer than 5 apprentices. In the 1970s, when affirmative action regulations were altering the demographic composition of the construction apprenticeship system, the average size of a nonunion apprenticeship program was less than three apprentices. This is because in the non-union sector, single-employer apprenticeship programs are common and single employers often have only one or two apprentices. The average size of a union-union contractors program was 32 apprentices.[70] In states that repealed their prevailing wage laws after 1979, apprenticeship training fell off by 40 percent. Black apprenticeship training fell even further because union apprenticeship programs fell even further. As merit shop (i.e. nonunion) apprenticeship programs became relatively more important, minority access to skilled training in construction fell.

Training. The U.S. Department of Labor, Bureau of Apprenticeship Training, monitors registered apprenticeship

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[70] U.S. Bureau of Apprenticeship Training, internal memo, 1979.

programs – union and non-union – in the construction industry. Data are available for 1975-78 and 1987-90. Not all states have reported to the Bureau of Apprenticeship Training for all years during these periods. Nonetheless, 29 states did report registered construction apprentices for every one of those years. The states included 6 states that eventually repealed their prevailing wage laws, 4 states that never had prevailing wage laws, and 19 states that retained a state prevailing wage law throughout the period. These 29 states can be divided into the categories "repeal," "never-had," and "retained-law," for comparison (Figures 5.1 and 5.2). No state had repealed its prevailing wage law by 1978. By the end of the first quarter of 1987, all nine repeal states had passed their repeals except Louisiana which repealed in 1988. The data for 1987 are for the summer of 1987, after Kansas had repealed in that year.[71]

In the "before" period, states that had prevailing wage laws, those that retained such a law, and those that had not yet repealed theirs, typically trained a higher percentage of registered apprentices than the states that never had a prevailing wage law. See Table 5.3. For unknown reasons, the year 1976 is an exception to this pattern. During this pre-repeal period, the states that would eventually repeal their laws had as high or higher training rates compared with the states that kept their laws throughout the

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[71] Figures 5.1 and 5.2 include all states for which any data are available, except California, Delaware, the District of Columbia, Hawaii, and Rhode Island – for which there are no Bureau of Apprenticeship Training data for the second period. We exclude these states and the District of Columbia (for the same reason).

period. By 1987, training rates had fallen for all states, but they had fallen least in states that had retained their prevailing wage laws. By 1989, the states that had repealed their prevailing wage laws had training rates as low as the states that never had prevailing wage laws. This is clear evidence that repealing state prevailing wage laws lowers formal apprenticeship training.

A simple analysis can help isolate the effect on training of repealing state prevailing wage laws from a general downward trend in construction apprenticeship training. Apprenticeship training rates for states that repeal their prevailing wage laws in the late 1970s and 1980s are presented as a percentage of the training rates of states that retained their prevailing wage laws (Table 5.3, col. 2). Throughout the 1970s, before repeals, the repeal states had training rates that were at or above the average training rates for states that had and would keep their prevailing wage laws. After the repeals in the late 1980s, the repeal states had training rates that fell to as little as 63 percent of the training rates of states that kept their prevailing wage laws. By 1990, the repeal states had relative training rates that were as low as the states that never had prevailing wage laws. Thus, while training in construction has been falling for all states, the fall for repeal states has been the most precipitous and – setting time trends aside – the repeal states matched the training rates of the retaining states prior to repeal and fell to the rates of states

never having had prevailing wage laws after the repeal.[72]

In regression analysis of these training data, the negative effect of state repeals on apprenticeship training persist even when controlling for time trends in training, the unemployment rate, and regional differences in apprenticeship training.[73]

Thus, looking at training rates from a variety of measures and methods of analysis, it is clear that state repeals of prevailing wage laws have significantly lowered formal, organized, and quality training of construction workers. The effect is to lower training rates by about 40 percent.

Blacks. When apprenticeship training falls as a result of repeals of state prevailing wage laws, minority participation in apprenticeship programs falls even farther (see Figure 5.4). Minorities comprise almost 20 percent of all construction apprentices in the repeal states in the years before repeal of state prevailing wage laws. In the same states, after repeal of their prevailing wage laws, minority participation in apprenticeship programs falls to just under 13 percent of all apprentices. While construction apprenticeship training is falling in these states by around 40 percent, the share of minorities in this downsized training also falls by about 36 percent. One reason for the decline in minority training is the decline in union

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[72] We do not know what accounts for the unusually high training rate for "never-had" states in 1976. This anomaly disappears when average training rates by decades are compared.

[73] Peter Philips, Garth Mangum, Norm Waitzman and Anne Yeagle, Losing Ground, Lessons from the Repeal of Nine Little Davis-Bacon Acts, working paper, Economics Department, University of Utah, 1995.

training.

In Figure 5.4, the share of minorities in apprenticeship training appears the same for states that retain their prevailing wage laws and states that never had such laws, but this is an illusion. Many of the states that have never adopted prevailing wage laws are in the South where there is a high percentage of minorities in the overall state population. I account for that factor with the ratio of the minority percentage in construction apprenticeship programs, divided by the minority percentage in the state population. This ratio is 100 percent if the two percentages are equal. I call this the "minority reflection percentage" because it measures whether minorities in apprenticeships reflect minorities in the state population.[74]

In the repeal states before repeal, the minority reflection percentage was 107 percent (Figure 5.5), which means that the construction apprenticeship programs slightly over-represented minorities. After repeal, minority representation in apprenticeships fell to 85 percent of minority representation in the state population. See Figure 5.5. In the states that retained their prevailing wage laws throughout the period under review, minority representation in apprenticeships just about mirrored minority representation in the state population (a ratio of 102 percent). But, in states that never had prevailing wage laws, minority representation rates averaged 83 percent throughout the period. Thus, both repealing states prior to repeal and

[74] This reflection ratio is similar to Dr. Thieblot's sector ratios.

"retaining" states throughout the period had minority participation in construction apprenticeships that mirrored the state population. In contrast, both repealing states after the repeal and states which never had prevailing wage laws had substantially under-represented minority participation in construction apprenticeships.

Conclusion.

We can say that since the 1970s unions and union contractors have been doing a better job training skilled minority workers. We can say that the repeal of prevailing wage laws hurts apprenticeship training. Because union apprenticeship programs are hit hardest by state repeals, minority apprentices suffer most. While Davis-Bacon was not designed as an act to promote minority employment in skilled construction work, the annulment of Davis-Bacon would be detrimental to the interest of young minority workers seeking skilled employment in construction.

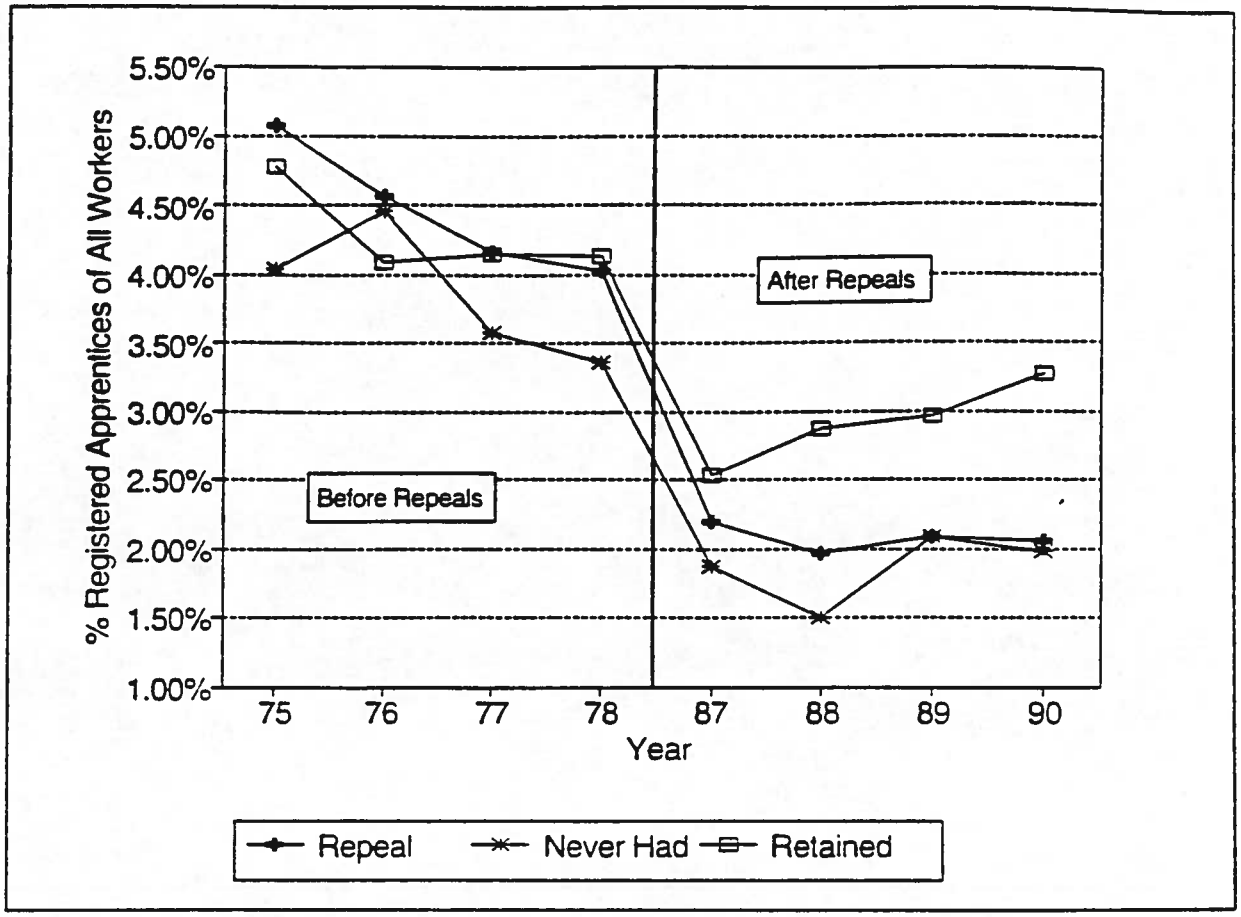

Figure 5.1 Apprenticeship training rates, by state groups, before and after repeals
Source: U.S. Department of Labor, Bureaus of Labor Statistics and Apprenticeship Training.

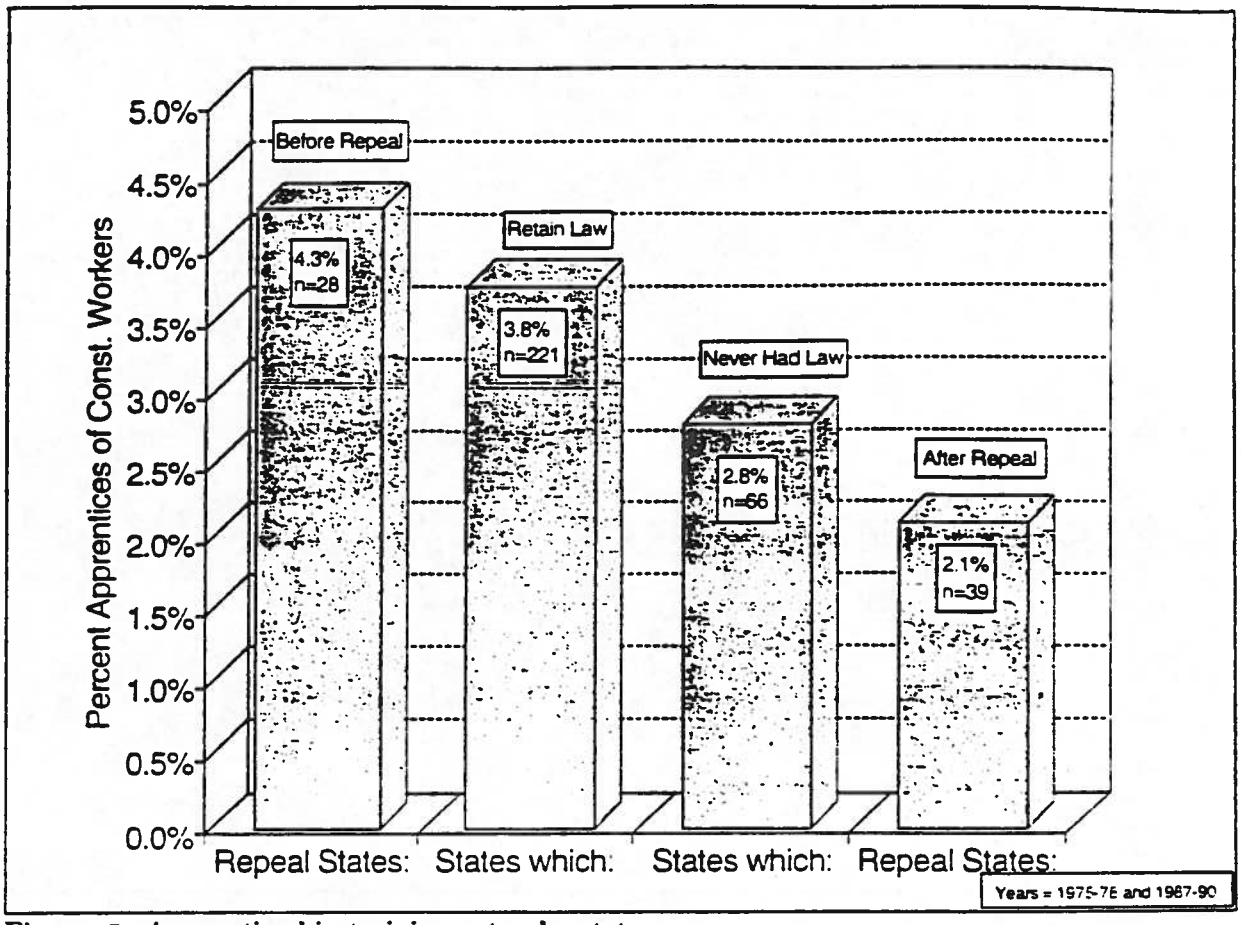

Figure 5.2 Apprenticeship training rates, by state
Source: U.S. Department of Labor Bureaus of Labor Statistics and Apprenticeship Training.

Table 53 Training rates in repeal and never-had states as a percentage of training rates in states which retained their wage laws

	Repeal States	States Never Having Had Law
(1)	(2)	(3)
1975	106%	85%
1976	112%	109%
1977	100%	86%
1978	97%	81%
1987	87%	74%
1988	68%	52%
1989	70%	70%
1990	63%	60%

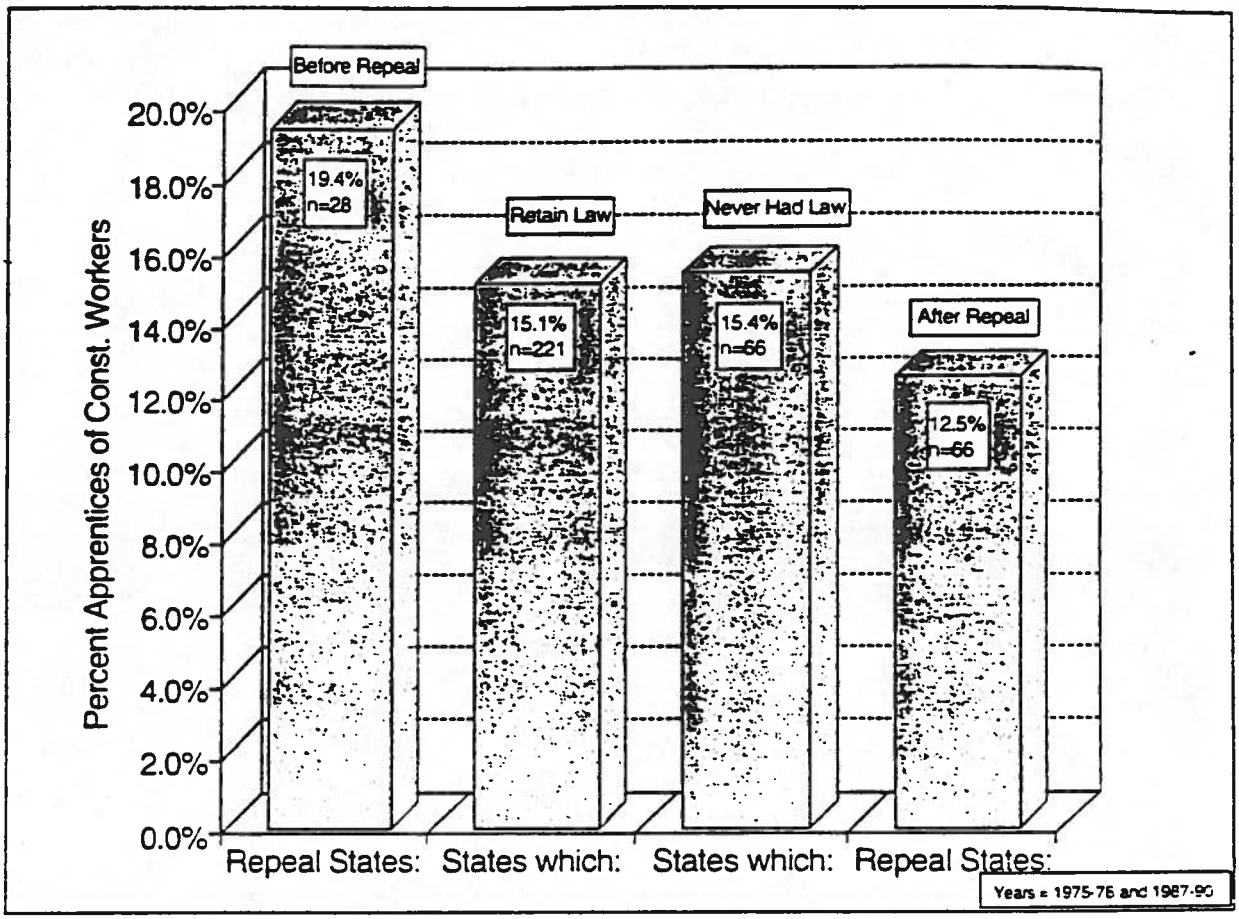

Figure 5.4 Minorities as a percentage of all construction apprentices by state groups
Source: U.S. Department of Labor Bureaus of Labor Statistics and Apprenticeship Training.

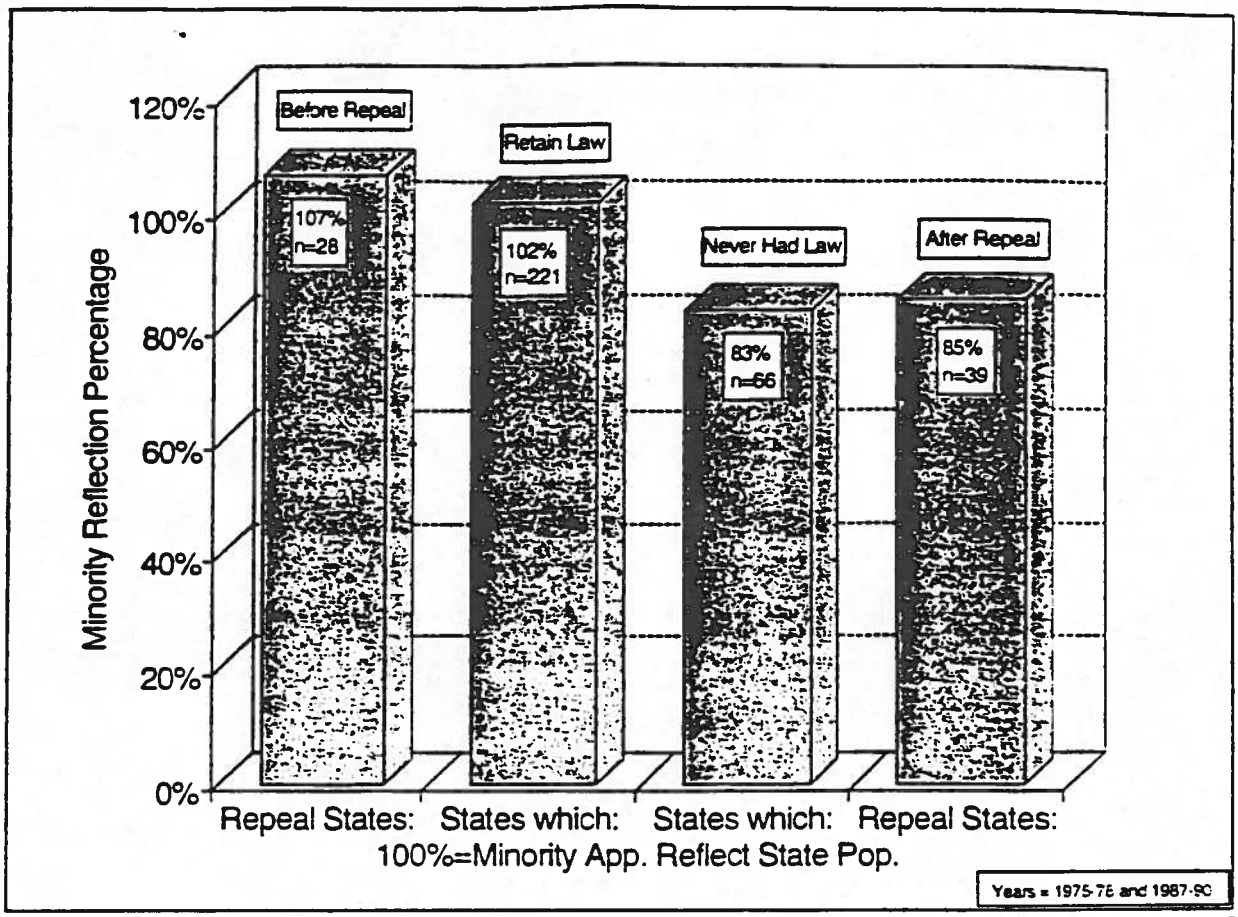

Figure 55 Ratio of the percentage of minorities in construction divided by the percentage of minorities in the state population, by state groups
Source: U.S. Department of Labor, BAT and BLS.