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The Minimum Wage and Regional Wage Structure:
Implications for Income Distribution

by
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The issue of the minimum wage is often couched as a debate between those arguing the youth disemployment effects on the one hand and those arguing the potential benefits to those in poverty on the other. Because most minimum wage earners are teenagers, the argument goes, increasing the minimum wage to assist the poor would be poorly targeted. A better way to assist the poor is through refundable tax credits like the Earned Income Tax Credit (EITC). And yet, this particular focus has obscured some critical issues, mainly that as a labor market institution the minimum wage may have import for a community's wage structure and that this import may vary from one region to another. This point is by no means immaterial because opposition to it has always been stronger in some parts of the country than others. When legislation for the 1938 Fair Labor Standards Act (FLSA) was being debated, the fiercest opposition came from the South, where wages were considerably lower than in the industrial north (Nordund 1997).

Opposition to the minimum wage today isn't restricted just to the South, but often emanates specifically from those states with right-to-work laws – laws that are generally favorable to open shops and are otherwise hostile to union activity. In this paper I look at those earning around the minimum wage on the basis of regional and industry distribution. The minimum wage clearly has greater significance in some parts of the country than it does in others. At issue is just what the significance of the minimum wage might be on a region's wage structure. In this paper, I look at census data from the Integrated Public Use Microdata Series (IPUMS) for the years 1940 through 1990 in an effort to discern the effects of state type on the probability of earning around the minimum wage. By conventional wisdom, industry and educational level are critical factors in determining who is more likely to earn around the minimum wage. As important as they are, the data also suggest that state type is as important a factor. This is especially so when comparing those states that specifically are considered "right-to-work" with those that might otherwise be considered high union density. What I intend to show is that industries that traditionally would be associated with strong negative effects for earning around the minimum wage have strong positive effects for earning around the minimum wage in right-to-work states.

These differences and their relative effects are quite important because they provides some insight into why political resistance to the minimum wage has been so much stronger in some regions than in others. Aside from questions of culture, history and tradition, the minimum wage cuts to the core of some fundamental differences between the states — their respective wage structures. Were this issue to be postulated in the form of a couple of propositions, it might look as follows: The closer a wage floor is to either the average or median wages of a particular community, the more of a threat it will be to the overall wage structure of that community. Also the more people there are earning around that wage floor in a given community, the more politically charged that issue is likely to be. The data in this paper do not test these propositions in a direct way, but the implications derived from them nonetheless appear to confirm the likelihood of their being true. Moreover, the impact that the minimum wage may have on a region's relative wage structure should also have implications for the distribution of income, and the role that labor market institutions like the minimum wage and unions may play in ensuring a more equitable distribution.

Who Earns the Minimum Wage

The literature on the minimum wage is generally divided into two spheres: one theoretical, the other empirical. In the theoretical sphere, the minimum wage as a wage floor is considered to be harmful because it will result in

less employment. According to the competitive markets model, each worker receives the value of his or her marginal product. (The value of the marginal product of labor is the amount of increased revenues that result from an additional unit of labor.) If adding an additional worker results in a greater rise in total revenues than when the previous worker was added, then the firm's productivity rises by adding that worker. A wage floor, such as a mandated minimum wage, prevents the cost of labor from dropping below a set rate. If the minimum wage is higher than the equilibrium wage, fewer workers will be hired than are willing to work; that is there is unemployment. A minimum wage higher than the equilibrium wage will result either in the layoffs of workers whose value is less than the minimum or an increase in productivity among low-efficiency workers to justify their retention by firms (Stigler 1946).

In the empirical sphere, the effects of the minimum wage are not clear. Much of the literature that does exist suggests that the minimum wage primarily affects the teen labor market (Kosters and Welch 1972; Welch 1974, 1978; Meyer and Wise 1983; Neumark and Wascher 1992). More recently, however, the work of Card and Krueger has demonstrated that in a couple of states where the minimum wage was increased, there was no disemployment effect. Quite to the contrary, employment in the states they examined actually rose (1995; 1998). At the same time, there is a school of thought that maintains that findings such as these are besides the point. Most of the work force, it is argued, simply do not earn the minimum wage, and thus the minimum wage is a non-starter.

There are essentially two problems associated with the minimum wage, neither of which are mutually exclusive. The first problem has to do with problems of measurement and data. In reality, we lack adequate data on the minimum wage, and thus are not really in a position to say whether the minimum wage will truly have the disemployment effects usually predicted by models of competitive markets. To the extent that there are employment consequences, they are often considered to be relatively small (Brown, Kohen and Gilroy 1982). And as a corollary, there is the argument that just because new studies, such as Card and Krueger, demonstrate that modest increases haven't had disemployment effects, it still isn't known that there could not be were the wage to be increased to a certain point. There is still a point at which the minimum wage will bite, but the problem is that the data and measures currently available don't easily tell us what that point is (R. Freeman and A. Freeman 1991; Kennan 1995).

On a somewhat related point, studies like Card and Krueger may not be terribly useful because of their focus the fast food industry, and the fast food industry is essentially a labor monopsony. In the monopsony model, employers have the power to establish wage rates because as the only source of employment, they possess market power. Card and Krueger concede that the fast food industry, as the primary employer of minimum wage workers, is a monopsony. In a monopsony wage floors will generally lead to employment increases, which is the exact opposite of what happens in competitive labor markets. The firm seeking to maximize profits has a marginal cost of labor that is equal to the value of the marginal product of labor. Consequently, the resulting equilibrium wage winds up below what it would have been in an otherwise perfectly competitive market. In a monopsony, however, a minimum wage will result in greater employment and efficiency because it will still be less than the equilibrium wage in a perfectly competitive market. As Houseman observes: "Although this result has been long known, it was generally regarded as a theoretical curiosity because of the belief that, apart from one-company towns, the monopsony model was not a good description of labor markets (Houseman 1998, p. 163)."

The second problem, however, has to do with the problems associated with defining what it means to earn the minimum wage. One of the biggest measurement questions surrounding the minimum wage has to do with who actually earns the minimum wage. To a large extent, the focus over the last couple of decades on the youth labor market is a function of teenagers constituting the primary labor market earning the minimum wage. Because the teen labor market might be the primary earners of the minimum wage, little attention has been paid to the potential benefits of the minimum wage for assisting the poor. This is perhaps most unfortunate because it also obscures those potential benefits that might accrue specifically to the working poor (Levitan and Belous 1979).

The principal argument for not focusing on the potential benefits to the poor, however, is that most of the minimum wage workers are not adults. Much of the data on who earns the minimum wage show that only a small fraction of the labor force earns it and that most of them are teen-agers. Earners of the minimum wage

are for the most part teenagers or contributing members of a household budget (Burkhauser and Finegan 1989). Those who fall into the category of the dependent poor are not currently employed in those jobs, even though those are the jobs for which they would most likely qualify (Burtless 1995). On these grounds, it is often concluded that raising the minimum wage would not greatly help the poor, largely because most of the poor – which might include the homeless population – do not work (Shapiro 1990-91; Burkhauser and Finegan 1989). And yet, these findings assume a narrow construction of the labor market that earns the minimum wage. Perhaps the question ought not to be who is actually earning the statutory minimum wage, but who is earning around the minimum wage.

Unquestionably, if only a small segment of the labor market is earning the minimum wage, it should be considered an insignificant issue not terribly relevant to the public debate. And yet, the minimum wage appears to engender considerable political antagonism. If truly irrelevant, it should matter little either way. Its impact on the labor market will be negligible because so few people are earning it and its impact on the poverty population too will be negligible because few in poverty are actually earning the minimum wage. Moreover, as critics of the minimum wage often concede that recent wage hikes have had no disemployment effects because the statutory minimum wage is so far below a market clearing wage that it couldn't have an effect (R. Gordon 1995), it is hard to see why the minimum wage receives the attention it does in the public debate. That there is this level of opposition to the minimum wage would suggest that the minimum wage perhaps affects a larger population than commonly thought. Or that its symbolism is so powerful that it could influence those wages around it.

David Gordon has argued that the minimum wage population is very small only if viewed in terms of those actually earning the statutory minimum wage. Most conventional estimates only look at those earning the minimum wage at a single point in time. A decline in the real value of the minimum wage, however, also affects those earning in between the point where the wage used to be and where it is at the end of its decline in value. This is in addition to those "minimum wage" workers who earn at or below the wage. When viewed in these terms, a decline in the real minimum wage may be seen as a contributing factor to the wage squeeze and to the growing income inequality (D. Gordon 1996, 214-215). Galbraith too has suggested that the decline of these two institutions together should be seen as contributing factors, although the main culprit is the shift in federal policy after 1970 from full employment to anti-inflation (Galbraith 1998).

A similar argument was made much earlier by John Dunlop when he suggested that the internal wage structure of a firm was affected as much by external forces as internal ones. Specifically, if an economy's overall wage structure could be thought of in terms of wage contours (defined as a group of workers with similar characteristics working in similar industries), and that in each case there was a group of rates surrounding the key rate, change in the key rate would have an effect on those surrounding it (Dunlop 1957). If the minimum wage can be thought of as representing a particular wage contour, those in other contours around it will be affected by the minimum wage. So to the extent that the minimum wage represents that key rate, they too have a stake in the minimum wage. If this is true, a strong argument could be made for defining the minimum wage population in terms of those earning around the statutory minimum wage, which would include a range from some point below the wage to some point above.

In their study of the minimum wage William Spriggs and Bruce Klein suggested that the minimum wage's greatest import was that it served as a reference point for those wages around it. They found that when the minimum wage remains constant – thus falling in real terms – minimum wage earners' wages are held down. More important than its impact on employment levels is the role it plays in determining the wages of America's overall workforce – especially those with only a high school education and those living in rural areas. Moreover, despite changes in minimum wages, firms merely maintain their internal wage structures. That is, they view the minimum wage as a reference point for what starting wages ought to be. Although some evidence might suggest that higher labor turnover relates significantly to increases in employment after minimum wage changes, increases generally do not have a significant effect overall on employment. Rather the cost of maintaining low value for the minimum wage is the diminished opportunities for young adult workers during the 1980s (Spriggs and Klein 1994). This was because those minimum wage jobs available did not afford their occupants the opportunity to earn a wage above the poverty line. If minimum wages, as they suggest, are a cultural artifact, the implication might be enormous. Presumably that reference point could be altered, and when it is altered it will have an impact on those wages around it. More importantly, their findings would appear to

reinforce Dunlop's earlier theory of wage contours.

Another problem with the narrow approach to the minimum wage that has been taken thus far is that many of these studies are based on national averages, which do not take into account regional differences. Congressional opposition to the minimum wage has tended to be stronger in the South and "right-to-work" states – even among Democrats whom otherwise vote for increases – than in high union density states where wage rates on average are considerably higher (Levin-Waldman 1998). Previous studies of wage differentials between the North and the South have concluded these differentials to be a function of differences in the cost of living (Coelho and Gladi 1971).

These conclusions, however, are problematic, in part, because they defy logic. Living costs will no doubt have a part to play in determining how much workers need to earn, but it is the wage rate itself that affects their purchasing power and ultimately their demand for goods and services. It is probably the case that the higher one's wages, the more one will demand a higher standard of living. But it doesn't necessarily follow that one will demand lower wages because the standard of living is lower. Still, the fact that these wage differentials do exist does beg the question of whether the regional differences are merely a matter of simple economic differences or other cultural, demographic, political, and even ideological factors that need to be accounted for. And yet, nobody has undertaken a serious analysis of just how those differences might drive the debate over minimum wage policy. In the next section, I examine the effects of state type and industry on those earning around the minimum wage.

Regional Wage Structure

Economists have been looking at the national wage structure for some time now, with particular attention to the distribution of income. Studies on the declining fortunes of the middle class and stagnant wages are by no means new (Phillips 1990; Newman 1993; Hungerford 1993; Wolf 1994; Danziger and Gottschalk 1995). Though sources of rising wage inequality are open to question, they would appear to fall into two primary camps. One stresses structural changes in the economy which has resulted in a mismatch between good paying jobs and the skills available to workers. This school of thought suggests that the labor market is divided into a primary market where high premiums are placed on skilled workers, and a secondary market where unskilled workers are trapped in the lowest-wage service sector of the economy. And because of the skills differentials between the primary and secondary labor markets, there has been a growth in wage inequality between the two (cf. Katz and Murphy 1992; Krueger 1993). But the story isn't only about human capital, it is also about individual responsibility. Individuals can pass from the secondary labor market into the primary one if through education and training they upgrade their skills. By definition, then, labor market institutions like the minimum wage and unions are irrelevant. They only inflate wages beyond the worth of those workers in the secondary labor market. Therefore, it is incumbent upon them to upgrade their skills so that they can pass from the secondary labor market to the primary labor market.

The other school suggests that the growing inequality is due to a shift in public policy and a corresponding decline in labor market institutions like unions and the minimum wage (Piore 1995; Gordon 1996; Galbraith 1998). Fortin and Lemieux (1997), for instance, found that whereas the decline in unions contributed to increased wage inequality among men, the decline in the minimum wage contributed to increased wage inequality specifically among women. And yet the question remains: are there some regions where wages are more likely to be stagnant than others? And are there some regions where workers are more likely to earn the minimum wage that others? Moreover, are there any observable trends over time? Demographic profiles can be drawn from census data with regards to who is more likely to earn around the minimum wage, and through the IPUMS census microdata is accessible for the period from which the minimum wage was first introduced til the present. The key question has to do with those earning around the minimum wage and which factors have either a positive or negative probability for earning around the minimum wage. Because the question concerns the relative effects of different variables, a logistical regression analysis would be useful. At least on this basis, it can be determined which factors, region, industry or education level, have a greater effect for earning around the minimum wage.

My analysis is specifically focused on the period from 1940 to 1990 because that is the period where census data encompassing the minimum wage period from its inception in 1938 til the present is available. In the

IPUMS data set, the sample sizes are different for each census year, ranging from 1.5 million to 3 million individuals. The data sets are comprised of two files, one a household and one a personal. I have pulled out of these files those individuals, primarily key income earners in a household who are employed and who specifically work for wages. Although this reduces the sample sizes, they still range from 225,000 in 1940 to over 660,000 in 1990.

The easiest way to construct a model for analyzing regional differences is to divide the states between those that are specifically right-to-work and those that are high union density. Right-to-work states are those that specifically have legislation favorable to businesses, and often hostile to unionizing activities. Although some right-to-work states might have relatively high union densities, most have relatively low ones because unionization is considerably more difficult. Today union density in most cases doesn't exceed 30 percent and often hovers around 15-25 percent in the most heavily of unionized states. A distribution of unionization for 1996 can be seen in Table 1.

Table 1 Percentage of Unionized Workers

Right-to-work	*Middle*	*High Union Density*
Alabama (13.6)	Colorado (9.9)	Alaska (24.1)
Arizona (8.0)	Delaware (13.0)	California (17.7)
Arkansas (7.8)	Kentucky (12.6)	Connecticut (20.2)
Florida (7.3)	Maryland (14.9)	D.C. (15.1)
Georgia (6.8)	Missouri (14.6)	Hawaii (24.6)
Idaho (8.1)	New Hampshire (12.6)	Illinois (20.2)
Iowa (12.1)	New Mexico (9.4)	Indiana (16.5)
Kansas (10.2)	Oklahoma (9.3)	Maine (15.6)
Louisiana (7.0)	Vermont (9.3)	Massachusetts (16.2)
Mississippi (5.2)		Michigan (23.7)
Nebraska (9.1)		Minnesota (20.3)
Nevada (20.2)		Montana (15.8)
North Carolina (4.2)		New Jersey (21.9)
North Dakota (10.0)		New York (27.7)
South Carolina (3.3)		Ohio (18.5)
South Dakota (7.7)		Oregon (20.1)
Tennessee (9.5)		Pennsylvania (18.9)
Texas (6.5)		Rhode Island (19.4)
Utah (9.0)		Washington (21.0)
Virginia (6.7)		West Virginia (16.3)
Wyoming (11.2)		Wisconsin (17.7)

Source: Drawn from Table 8 in Barry T. Hirsch and David A. Macpherson, *Union Membership and Earnings Data Book: Compilations from the Current Population Survey (1996 Edition)* . Washington, D.C.: The Bureau of National Affairs, Inc., 1996, pp. 22—23.

Although this table merely represents a snapshot in time, it nonetheless provides a reference point for the division of states into state types into three categories: "right-to-work," middle and high union density. For the exception of Nevada, all the "right-to-work" states have union densities below 14 percent. High union density states have union densities in excess of 15 percent. Those states that are neither "right-to-work" nor have union densities higher than 15 percent, fall into a middle category. But even among this middle category, there are some states with union densities similar to some of the "right-to-work" states.

One possible methodological objection might be that instead of dividing the states into right-to-work versus high union density, they simply be divided into low union density versus high-union density. It is certainly true that right-to-work states will for the most part have low union densities because of laws that are hostile to

unionizing activities. But a low union density state by itself doesn't necessarily capture the spirit of a political, legal, and economic structure that is hostile to unions. The point is to demonstrate that because certain states have a particular hostility to unions and other wage enhancing institutions, there is perhaps a greater likelihood of wages being lower. The goal of the analysis, then, is to specifically compare right-to-work states to high union density states and show the relative impact of each on wage structure as a basis for inferring why the minimum wage appears to have greater significance is some places as opposed to others.

Because I want to look at those earning around the minimum wage, I have constructed a uniform range from 50 percent below the statutory minimum to 50 percent above. Table 2 shows the relative percentages of those earning around the minimum wage according to this construction.

Table 2 Earnings around the Minimum Wage by State Type

Year	*Overall*	*Right--to-work*	*Percentage Above Overall*	*Non-Right-to-work*	*High Union Density*	*Percentage Below Overall*	*Non-High Union density*
1940	29.9	37.0	**7.1**	27.5	26.7	**3.2**	35.6
1950	28.4	36.2	**7.8**	25.6	24.6	**3.8**	35.0
1960	19.3	26.5	**7.2**	16.4	15.7	**3.6**	25.2
1970	17.0	22.8	**5.8**	14.5	13.8	**3.2**	21.8
1980	19.7	23.7	**4.0**	17.8	17.3	**2.4**	22.7
1990	14.2	16.8	**2.6**	8.4	12.4	**1.8**	16.4

Note: On the basis of chi-square tests, all are significant at the 95% confidence level.

When the minimum wage is conceived of in terms of the broader definition, a not so insignificant segment of the labor force earns around the minimum wage. Although it is true that the percentages of wage earners earning around the minimum wage drops over time, it is still considerably larger than the percentages of those solely earning the statutory minimum wage. Also, the percentages of those earning around the minimum wage are both substantially higher in right-to-work states than overall and lower in high union density states than overall. Again, while these percentages narrow over the fifty year period, the overall trends nonetheless hold. The fact that the trend continues to hold at the end of this period is especially important, as it follows a period of intensive economic development, especially in the South, which as a region passed right-to-work laws. These efforts at economic development, for which the minimum wage figures prominently as a policy tool, were designed to replace low-wage and low-skilled industries with higher wage industries (Wright 1986; Schulman 1991).

Contemporary critics of the minimum wage often claim that most of those earning the minimum wage are teenagers. But as Table 3 makes clear the highest percentage of those earning around the minimum wage are in the 25-34 age cohort, and the percentages of those earning around the minimum wage in that cohort are higher in the right-to-work states than they are in the high union density states. It is true that as time passes, the percentage of those in the 18-24 age cohort increases, but most workers earning around the minimum wage are clearly adults.

Table 3 Comparative Demographics on Age, Education and Industry

Age	*1940*		*1950*		*1960*		*1970*		*1980*		*1990*	
	Rtw	Hu	RTW	HU	RTW	HU	RTW	HU	RTW	HU	RTW	HU
0-17	.1	.1	.2	.1	.3	.3	.2	.2	.2	.1	.1	.1
18-24	12.0	11.5	15.8	12.5	19.7	18.6	24.4	25.4	24.5	23.5	18.4	19.2
25-34	33.2	25.0	26.7	23.1	22.1	18.3	19.0	16.9	27.8	27.9	25.3	23.7
35-44	25.6	23.9	25.3	20.1	19.2	16.3	15.4	12.9	14.1	13.9	18.0	17.4
44-54	17.6	23.2	17.2	19.5	19.6	18.0	17.4	18.9	13.2	12.4	12.7	11.7
55-64	8.8	14.8	10.9	17.4	13.9	17.8	4.6	7.0	13.3	14.1	13.3	13.3
65-72	2.3	3.6	3.3	6.2	4.1	8.3	1.5	2.7	5.4	6.1	8.4	10.2
73 +	.4	.7	.6	1.2	1.1	2.5	.6	1.3	1.6	1.9	3.7	4.3
Education												
1-11th grade	84.2	82.9	78.8	72.1	70.3	63.8	57.5	47.4	37.9	30.1	36.9	28.7
12th grade	10.0	11.4	13.5	18.5	19.3	21.9	25.9	30.1	36.7	38.8	45.4	47.9
1-4 years college	3.7	3.5	4.7	5.7	6.8	8.7	10.9	13.8	16.4	18.8	5.4	7.0
4 years college	1.6	1.4	2.1	2.4	2.4	2.9	3.7	4.6	5.3	6.6	8.8	11.0
more than 4 years	.6	.7	.9	1.4	1.3	2.6	2.1	4.1	1.5	2.9	3.4	5.4

*All are statistically significant at the 95 percent confidence level.

Although educational attainment does increase over time, irrespective of state type, there is surprisingly an increase of those with 1-4 years of college earning around the minimum wage. Still, as to be expected, greater percentages of those with lower levels of education appear to be more likely to earn around the minimum wage. The critical point about the education variable is that the educational levels of those earning around the minimum wage are lower in the right-to-work states than they are in the high union density states.

Assuming that low education would more likely predispose one to earn around the minimum wage, the critical question is what are the effects relative to the other variables? A logistical regression analysis can demonstrate quite well just what the relative effects are. With earning around the minimum wage (MNWAGE) as the dependent variable, I have set up four different equations for each year. The independent variables are as follows:

LOEDUCAT = those with an educational level between 1st and 11th grade.
HU = high union density states
RTW = right to work states
MANUFACT = manufacturing
RETRADE = retail trade
WLTRADE = wholesale trade
CONSTRUC = construction
HULOED = interaction between low education and high union density states
RTWLOED = interaction between low education and right-to-work states
RTWMANUF = interaction between manufacturing and right-to-work states
HUMANUF = interaction between manufacturing and high union density states
RTWRETRD = interaction between retail trade and right-to-work states
HURETRD = interaction between retail trade and high union density states
RTWWLTRD = interaction between wholesale trade and right-to-work states
HUWLTRD = interaction between wholesale trade and high union density States

Table 4 presents the results of two regression equations. The first shows the relationship between low education, industry and state type. The second shows the relationship between industry and the interaction between low education and state type. All equations are based on each variable

being set to a value of 1.

Table 4 Logistical Regression Results by Industry, Education and State Type

1940

Variable	B	Sig	Variable	B	Sig
LOEDUCAT	.7312	.0000	HULOED	.4270	.0000
HU	-.2548	.0000	RTWLOED	.8568	.0000
RTW	.1902	.0000	WLTRADE	-.1786	.0000
MANUFACT	-.0214	.0654	RETRADE	-.6670	.0000
RETRADE	-.4179	.0000	MANUFACT	-.2321	.0000
WLTRAD	.0317	.0343	Constant	-1.1253	.0000
CONSTRUC	.7495	.0000			
Constant	-1.3911	.0000			

1950

LOEDUCAT	.7664	.0000	HULOED	.4176	.0000
HU	-.3230	.0000	RTWLOED	.9639	.0000
RTW	.1693	.0000	WLTRADE	.0835	.0001
MANUFACT	-.1743	.0000	RETRADE	-.1335	.0037
RETRADE	-.0648	.1623	MANUFACT	-.1927	.0000
WLTRADE	.1009	.0000	Constant	-1.2320	.0000
CONSTRUC					
Constant	-1.2457	.0000			

1960

LOEDUCAT	.5648	.0000	HULOED	.2361	.0000
HU	-.3039	.0000	RTWLOED	.9240	.0000
RTW	.3029	.0000	WLTRADE	-.3659	.0000
MANUFACT	-.4131	.0000	RETRADE	.2736	.0000
RETRADE	.2668	.0000	MANUFACT	-.4267	.0000
WLTRADE	-.3601	.0000	Constant	-1.5938	.0000
CONSTRUC	-.0411	.0051			
Constant	-1.5877	.0000			

1970

LOEDUCAT	.4883	.0000	HULOED	.1615	.0000
HU	-.3222	.0000	RTWLOED	.8440	.0000
RTW	.2340	.0000	WLTRADE	-.3866	.0000
MANUFACT	-.4048	.0000	RETRADE	.2279	.0000
RETRADE	.1830	.0000	MANUFACT	-.3803	.0000
WLTRADE	-.4233	.0000	Constant	-1.6816	.0000
CONSTRUC	-.3030	.0000			
Constant	-1.5855	.0000			

1980

LOEDUCAT	.4765	.0000	HULOED	.2849	.0000
HU	-.1599	.0000	RTWLOED	.6960	.0000
RTW	.1894	.0000	WLTRADE	-.3049	.0000
MANUFACT	-.4116	.0000	RETRADE	.3183	.0000
RETRADE	.2953	.0000	MANUFACT	-.4015	.0000
WLTRADE	-.3226	.0000	Constant	-1.4530	.0000
CONSTRUC	-.1625	.0000			
Constant	-1.4345	.0000			

1990

LOEDUCAT	.7559	.0000	HULOED	.5635	.0000

HU	-.1820	.0000	RTWLOED	.9377	.0000
RTW	.1181	.0000	WLTRADE	-.3914	.0000
MANUFACT	-.4782	.0000	RETRADE	.5700	.0000
RETRADE	.5417	.0000	MANUFACT	-.4622	.0000
WLTRADE	-.4112	.0000	Constant	-1.9076	.0000
CONSTRUC	-.1858	.0000			
Constant	-1.8546	.0000			

What the fist equation shows is the effects of each of these variables by themselves. As to be expected low education has a strong positive effect for earning around the minimum wage, an effect that is consistent throughout the fifty year time period. Manufacturing by itself has a negative effect while other industries have different effects in different decades. In 1940, for instance, retail has a negative effect for earning around the minimum wage, but by 1960 it becomes positive and remains so through 1990. On the other hand both wholesale trade and construction have positive effects for earning around the minimum wage in 1940, but beginning in

1960 they become negative and remain so through 1990. In terms of state type, both right-to- work and high union density status have positive and negative effects respectively for earning around the minimum wage, and they too remain consistent throughout the period. On the basis of the first equation, it should be clear that low education appears to have the strongest positive effects for earning around the minimum wage, and this is followed by industry type.

The critic, then, will naturally say that when compared to educational attainment — regardless of whether or not it says anything about skills level — state type doesn't appear to be nearly as significant. But the interaction between low education and state type in the second equation would appear to suggest otherwise. When controlling for the effects of low education, those in right-to-work states have a greater probability of earning around the minimum wage than those in high union density states, and this trend does remain consistent throughout the period. The interaction between low education and being in a right-to-work state has at least 2-3 times the positive effect than the interaction between low education and being in a high union density state. Even though being from a high union density state by itself has a negative effect for earning around the minimum wage, having a low educational level even in a high union density state will mean that one is more likely to earn around the minimum wage. But that likelihood is considerably stronger in right-to-work states.

Although some industries are more likely to result in their workers earning around the minimum wage, the question remains as to just how the location of these industries in certain types of states affects whether one is likely to earn around the minimum wage. Table 5 shows the relationship within industries. Industry demographics showed there to be no real difference in distribution between right-to-work and high union density states. In other words, there was no evidence of a saturation of any specific industries that might result in the depression of wages. Nevertheless, regional differences did affect pay levels.

Table 5 Logistical Regression Results Within Industries

1940

Variable	B	Sig	Variable	B	Sig
RTW	.0615	.0010	RTW	.0501	.1843
RTWMANUF	.6305	.0000	RTWMANUF	.6313	.0000
MANUFACT	-.1405	.0001	MANUFACT	-.1888	.0000
HU	-.2051	.0000	HU	-.2280	.0000
HUMANUF	-.1778	.0000	HUMANUF	-.1915	.0000
Constant	-.7047		RTWLOED	.0003	.9934
			HULOED	.0422	.2702
			LOEDUCAT	.8006	.0000
			Constant	-1.3040	.0000
RTW	.1963	.0000	RTW	.1553	.0000
RTWRETRD	-.0455	.6799	RTWRETRD	.0801	.4756

RETRADE	-.5141	.0000	RETRADE	-.3621	.0001
HU	-.2678	.0000	HU	-.2777	.0000
HURETRD	-.2282	.0196	HURETRD	-.2427	.0144
Constant	-.7183	.0000	RTWLOED	.0357	.3921
			HULOED	.0117	.7598
			LOEDUCAT	.7798	.0000
			Constant	-1.3159	.0000
RTW	.1964	.0000	RTW	.1447	.0002
RTWWLTRD	.0165	.7350	RTWWLTRD	.0626	.2064
WLTRADE	-.0274	.5058	WLTRADE	.0438	.2956
HU	-.2536	.0000	HU	-.2592	.0000
HUWLTRD	-.1803	.0001	HUWLTRD	-.1992	.0000
Constant	-.7291	.0000	RTWLOED	.0440	.2908
			HULOED	.0100	.7945
			LOEDUCAT	.7931	.0000
			Constant	-1.3421	.0000
1950					
RTW	.0994	.0010	RTW	.0776	.1320
RTWMANUF	.4459	.0000	RTWMANUF	.4429	.0000
MANUFACT	-.1391	.0115	MANUFACT	-.2325	.0000
HU	-.2839	.0000	HU	-.1643	.0005
HUMANUF	-.1436	.0147	HUMANUF	-.1212	.0433
Constant	-.7359	.0000	RTWLOED	-.0182	.7621
			HULOED	-.1519	.0041
			LOEDUCAT	.8666	.0000
			Constant	-1.2886	.0000
RTW	.1986	.0000	RTW	.1466	.0040
RTWRETRD	.0526	.1747	RTWRETRD	.0883	.6201
RETRADE	-.4901	.0008	RETRADE	-.2925	.0492
HU	-.3618	.0000	HU	-.2420	.0000
HURETRD	.4211	.0069	HURETRD	.3619	.0225
Constant	-2.2219	.0000	RTWLOED	.0251	.6752
			HULOED	-.1640	.0030
			LOEDUCAT	.8383	.0000
			Constant	-1.3141	.0000
RTW	.2439	.0000	RTW	.1880	.0003
RTWWLTRD	-.2575	.0003	RTWWLTRD	-.2199	.0025
WLTRADE	.2795	.0000	WLTRADE	.3159	.0000
HU	-.3269	.0000	HU	-.1998	.0000
HUWLTRD	-.1418	.0338	HUWLTRD	-.1391	.0409
Constant	-.8122	.0000	RTWLOED	.0197	.7420
			HULOED	-.1769	.0013
			LOEDUCAT	.8551	.0000
			Constant	-1.3843	.0000
1960					
RT	.2380	.0000	RTW	.1035	.0000
RTWMANUF	.3736	.0000	RTWMANUF	.3629	.0000
MANUFACT	-.4531	.0000	MANUFACT	-.5040	.0000
HU	-.2767	.0000	HU	-.2661	.0000
HUMANUF	-.0876	.0073	HUMANUF	-.0781	.0175
Constant	-1.2298	.0000	RTWLOED	.1891	.0000

			HULOED	-.0120	.6583
			LOEDUCAT	.5097	.0000
			Constant	-1.5180	.0000
RTW	.3351	.0000	RTW	.1765	.0000
RTWRETRD	.1525	.0002	RTWRETRD	-.1317	.0012
RETRADE	.4526	.0000	RETRADE	.4407	.0000
HU	-.3510	.0000	HU	-.3421	.0000
HURETRD	.0267	.4890	HURETRD	.0375	.3328
Constant	-1.3807	.0000	RTWLOED	.2213	.0000
			HULOED	-.0158	.5585
			LOEDUCAT	.4700	.0000
			Constant	-1.6551	.0000
RTW	.3133	.0000	RTW	.1595	.0000
RTWWLTRD	.1616	.0482	RTWWLTRD	.1968	.0167
WLTRADE	-.3766	.0000	WLTRADE	-.3458	.0000
HU	-.3495	.0000	HU	-.3363	.0000
HUWLTRD	-.0192	.8123	HUWLTRD	-.0015	.8871
Constant	-1.3152	.0000	RTWLOED	.2152	.0000
			HULOED	-.0212	.4311
			LOEDUCAT	.4721	.0000
			Constant	-1.5932	.0000
1970					
RTW	.1855	.0000	RTW	.0751	.0001
RTWMANUF	.3135	.0000	RTWMANUF	.2950	.0000
MANUFACT	-.3841	.0000	MANUFACT	-.4231	.0000
HU	-.2959	.0000	HU	-.2663	.0000
HUMANUF	-.1050	.0008	HUMANU	-.1052	.0008
Constant	-1.3892	.0000	RTWLOED	.1822	.0000
			HULOED	-.0489	.0492
			LOEDUCAT	.4323	.0000
			Constant	-1.5728	.0000
RTW	.2693	.0000	RTW	.1435	.0000
RTWRETRD	-.1599	.0000	RTWRETRD	-.1519	.0000
RETRADE	.3569	.0000	RETRADE	.3413	.0000
HU	-.3785	.0000	HU	.3454	.0000
HURETRD	.1240	.0004	HURETRD	.1317	.0002
Constant	-1.5149	.0000	RTWLOED	.2040	.0000
			HULOED	-.0686	.0056
			LOEDUCAT	.4008	.0000
			Constant	-1.6905	.0000
RTW	.2441	.0000	RTW	.1210	.0000
RTWWLTRD	.1463	.0416	RTWWLTRD	.1600	.0264
WLTRADE	-.4439	.0000	WLTRADE	-.4310	.0000
HU	-.3659	.0000	HU	-.3314	.0000
HUWLTRD	.1116	.1132	HUWLTRD	.1101	.1189
Constant	-1.4518	.0000	RTWLOED	.1990	.0000
			HULOED	-.0692	.0051
			LOEDUCAT	.4050	.0000
			Constant	-1.6318	.0000

1980

RTW	.1629	.0000	RTW	.1220	.0000
RTWMANUF	.2223	.0000	RTWMANUF	.2106	.0000
MANUFACT	-.4179	.0000	MANUFACT	-.4572	.0000
HU	-.1469	.0000	HU	-.1384	.0000
HUMANUF	-.0754	.0031	HUMANUF	-.0830	.0012
Constant	-1.2877	.0000	RTWLOED	.0728	.0014
			HULOED	.0090	.6853
			LOEDUCAT	.4413	.0000
			Constant	-1.4020	.0000
RTW	.2281	.0000	RTW	.1780	.0000
RTWRETRD	-.154	.0000	RTWRETRD	-.1437	.0000
RETRADE	.4495	.0000	RETRADE	.4397	.0000
HU	-.2055	.0000	HU	-.1964	.0000
HURETRD	.1010	.0004	HURETRD	.1044	.0003
Constant	-1.4340	.0000	RTWLOED	.0935	.0000
			HULOED	-.0125	.5735
			LOEDUCAT	.4019	.0000
			Constant	-1.5441	.0000
RTW	.2083	.0000	RTW	.1614	.0000
RTWWLTRD	.0107	.8467	RTWWLTRD	.0120	.8278
WLTRADE	-.2807	.0000	WLTRADE	-.2744	.0000
HU	-.1924	.0000	HU	-.1827	.0000
HUWLTRD	.0379	.4802	HUWLTRD	.0453	.3992
Constant	-1.3638	.0000	RTWLOED	.0871	.0001
			HULOED	-.0141	.5248
			LOEDUCAT	.4073	.0000
			Constant	-1.4769	.0000
1990					
RTW	.1266	.0000	RTW	.0808	.0000
RTWMANUF	.1172	.0004	RTWMANUF	.0874	.0081
MANUFACT	-.4812	.0000	MANUFACT	-.5181	.0000
HU	-.1719	.0000	HU	-.1669	.0000
HUMANUF	-.1140	.0000	HUMANUF	-.1258	.0001
Constant	-1.6583		RTWLOED	.1059	.0002
			HULOED	.0362	.1949
			LOEDUCAT	.6968	.0000
			Constant	-1.7790	.0000
RTW	.1632	.0000	RTW	.1082	.0000
RTWRETRD	-.1559	.0000	RTWRETRD	-.1409	.0000
RETRADE	.7493	.0000	RETRADE	.7326	.0000
HU	-.2176	.0000	HU	-.2132	.0000
HURETRD	.0236	.4140	HURETRD	.0253	.3832
Constant	-1.8566	.0000	RTWLOED	.1157	.0000
			HULOED	.0135	.6301
			LOEDUCAT	.6547	.0000
			Constant	-1.9729	.0000
RTW	.1414	.0000	RTW	.0916	.0000
RTWWLTRD	-.0555	.3965	RTWWLTRD	-.0445	.4986
WLTRADE	-.3991	.0000	WLTRADE	-.3902	.0000
HU	-.2145	.0000	HU	-.2096	.0000
HUWLTRD	.0384	.5471	HUWLTRD	.0374	.5588

Constant	-1.7224	.0000	RTWLOED	.0986	.0004
			HULOED	.0127	.6485
			LOEDUCAT	.6702	.0000
			Constant	-1.8445	.0000

Even those industries, like manufacturing, which by itself would ordinarily have a negative effect for earning around the minimum wage, have a positive effect for earning around the minimum wage when located in right-to-work states. And conversely, the negative effects for earning around the minimum wage are initially stronger in high union density states than overall. Over the years that trend reverses, which could be a function of two possibilities: The first possibility is the general decline of unionism in those regions. And the second is that the prominence of manufacturing in those regions may have diminished. Still, in each industry, there are still substantial differences in effects between being in a right-to-work state and being in a high union density state.

The fact remains that by 1990 manufacturing in right-to-work states still had a positive effect for earning around the minimum wage, even though that effect was not as serious as it was in 1940. One, of course, might respond that this may be accounted for by differences in the type of manufacturing. That the strength of the effect has declined over this period may be a testament to the growth of high-wage and high-technology industries in many right-to-work states, especially those in the South, where much of the "New Economy" was a product of "military Keynesianism (Schulman 1991, p. 107)." By 1990 there were fewer low wage industries than there were in 1940. But this cannot fully explain the differences between right-to-work and high union density states. Despite the decline in unionism, and capital flight from the northeastern and midwestern industrial belts, which resulted primarily in the loss of union jobs, there was little change in the negative effects of manufacturing in high union density states from 1940 to 1990.

Implications

The differences in effect as a function of working in high union density states over right-to-work states would suggest that there are clearly differences in regional wage structure. Labor market institutions that affect wages, like unions and the minimum wage, are likely to have more import on wage structure, especially on those wages around the minimum wage, in right-to-work states where wages have traditionally been lower. If unions are more difficult to organize in the right-to-work states, the minimum wage effectively becomes the only labor market institution that can serve to prop up wages, especially for those at the bottom end of the scale. As Galbraith suggests, minimum wages and unions effectively give workers a degree of monopoly power they otherwise would not have. In the absence of all workers to be unionized, the minimum wage offers a modicum of monopoly power to workers, especially in low- wage and low-skilled labor markets to in effect counter balance the monopoly power of employers. "Minimum wage laws can move people en masse from the crowded first floor toward the second or third in our wage building (Galbraith 1998, p. 61)." That states actually passed laws aimed at making unionization more difficult would imply that they sought to maintain the monopoly power of employers at the expense of workers. This would also suggest that they have an even greater stake resisting the minimum wage. To the extent that through a wage floor it may offer workers a slight modicum of monopoly power, or an attempt to provide them access to some, it must be resisted. It should also be remembered that whereas right-to-work laws are promulgated from within as a matter of "states rights," the minimum wage, and its periodic adjustment, are imposed from without and are viewed as an attempt to interfere with state sovereignty. It is often for this reason alone that the minimum wage is often resisted in the public policy debate.

Nevertheless, there are issues of regional equity that need to be addressed. One of the reasons why northern industrial states, most of which are high union density states, favor increases in the minimum wage is because it will force up wages in other parts of the country, thereby making capital mobility to those regions less attractive, especially if wage differentials are a factor in such decisions. Indeed, these concerns were voiced during the initial debate over the FLSA in the 1930s. Among those earlier debates was the question of whether there should be cost-of-living differentials. The Roosevelt administration, backed by organized labor and even business interests supportive of the measure, refused to incorporate them. To this day there are no regional differences based on cost-of-living differentials. Instead states are free to establish higher wage rates over and above the national wage floor. Although some states have seized upon this opportunity over the years, many

have not. Nevertheless, the fact that wages are lower in right-to-work states implies that a wage floor could have a greater impact there. This, of course, begs the question: would the cost of living not be higher in those regions where wages are also higher? The gap between the statutory minimum wage and the median hourly wage in the right-to-work states isn't as great as it might be in the high union density states.

These differences might suggest the need to think of how the minimum wage could be used to equalize disparities between the states. From a national perspective, there is no gain from states stealing industry away from other states, especially if the federal government will have to bear the burden of providing assistance to those regions that lose industries as a function of the wage differentials. At the same time, the policymaker might want to be mindful of cost-of-living differentials between regions and attempt to avoid exacerbating them. Therefore, the policymaker might want to think in terms of different minimum wages for different regions. This doesn't mean that the statutory minimum wage should be reduced in those regions, but that it should perhaps be higher in high union density states where the gap between the statutory minimum wage and the median hourly wage is considerably greater. This might then have the virtue of narrowing the earnings gap as well. It is also perhaps on this level that the minimum wage ought to be conceived – as a viable policy for narrowing the earnings gap. If anything, these findings suggest that if policies like right-to-work laws can have the effect of maintaining low wages, with the effect of perhaps widening the earnings gap, then policies like the minimum wage can have the effect of raising those wages, with the effect of perhaps narrowing that gap. There is a difference between opposing minimum wage increases because of the belief that in competitive markets it will lower employment and opposing it because the suppression of the minimum wage might have the effect of favoring one region of the country with investment over another. Admittedly, this is an issue that state and local policymakers might want to be concerned with, but the national policymaker ought to remain region neutral.

Overall, however, the data would appear to clue us into why the minimum wage does engender the type of antagonism it often does, and why more so in some regions of the country than others. The minimum wage itself isn't as important as what it represents for those wages around it. To this extent, the minimum wage merely represents a tangible symbol for those wages around it. And this is all the more so in those regions with lower wage structures, like the right-to-work states. Politically, opposition to the minimum wage has always been greater in the South and other right-to-work states, which owes to the fact that wages in those areas have always been lower. That the impact is greater in these regions can be seen in the political fights between them would imply the propositions I put forth at the beginning of the paper are indeed true. Moreover, the findings that the minimum wage does have greater impact in one region over another also suggests that the minimum wage can be conceived of in the broader terms of income distribution rather than the narrow focus of employment consequences versus possible poverty benefits. That the debate has taken this narrow focus is perhaps less a statement of the weaknesses of the minimum wage per se, but a testament to the strength of those interests that benefit from maintaining such a narrow focus.

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