A Substantial Minimum Wage Hike for Minnesota: Benefits, Costs and Economic and Political Consequences

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Abstract

The minimum wage in Minnesota, once considered to be a living wage and enough to keep a worker out of poverty, has continually eroded in real terms since 1968, falling from \$8.27 in real purchasing power to \$5.15 today. In other states with comparable economies to ours, voters and/or the legislatures have raised their minimum wages to between \$6.50 and \$7.00, sometimes with built-in cost of living adjusters. In this brief, we profile the Minnesota individuals and regions that would benefit from a substantial increase in the minimum wage. We summarize what is known about the minimum wage and the impacts of an increase on workers, consumers, businesses, aggregate levels of employment, welfare, training and the state budget. We compare it to another highly acclaimed mechanism for improving the income distribution, the earned income tax credit.

Some 6% to 7% of the state's workers are currently receiving a wage below \$7.00. Large numbers of near minimum wage workers would benefit from a higher minimum, so that as many as 539,000 Minnesota workers, or 19% of the workforce would see higher wages as a result. Minnesotans who work at the minimum wage are disproportionately young, female, rural and from minorities groups. They are heavily concentrated in sales, service and administrative support occupations, with the highest numbers in food service. They work primarily in eating and drinking establishments and for businesses in the retail, hospitality, and service industries.

The cost of a minimum wage hike would be borne by consumers in the form of higher prices; by businesses, if they cannot raise productivity to compensate, in lower profits; and by workers in the form of job loss or diminution in benefits or training. Because most of the businesses relying heavily on minimum wage workers compete only with other businesses in the state, most would be able to pass on price increases to consumers, who are likely to pay the largest share of the cost. The total cost, however, would be small, on the order of an increase in 0% to 2%, because the marginal wage increase is a small share of total business costs.

Despite the predictions of economic theory – that higher labor costs would create some unemployment on the margin, none of the many studies done have documented significant negative overall job loss at either state or federal levels following minimum wage increases. There is no evidence that small businesses are more vulnerable to minimum wage increases than larger firms or that they are more apt to lay off workers as a result. By including an analysis of multiplier and spatial effects, we show that the employment effect may be larger than is captured in empirical efforts to gauge impacts.

Benefits paid to workers do not appear to have declined as a result of minimum wage hikes. The evidence on the impact of a minimum wage on training opportunities is mixed, as are the findings on whether welfare rolls decline or increase following a

minimum wage hike. It is difficult to fully estimate the fiscal costs and benefits to state government, but it is likely that the costs are minimal and the benefits somewhat larger.

We anticipate that a minimum wage hike would generate substantial benefits for the state's economy in the longer run. While it might discourage export-oriented businesses dependent on low wages from locating or remaining in the state, it would be apt to induce productivity-enhancing investments on the part of those who do choose Minnesota as a place to do business. It would attract better quality workers to the state, reduce turnover and engender greater commitment on the part of workers to their employers. It would induce employers to engage in productivity-enhancing work re-organization and capital investments, with long-term benefits to the economy. It would enhance the state's reputation as a "high road" economy based on our strong educational system, diversified industrial and service economy and superior amenities and quality of life.

Three states whose economies are similar to Minnesota in recent growth experience, comparable cost-of-living and diversified, high tech profiles – Washington, Oregon and Illinois – have recently raise their minimum wages to \$7.01, \$6.90 and \$6.50 respectively. Washington and Oregon have also adopted automatic cost-of-living adjustments. In these and other states, one time "catch-up" increases range from 25% to 35% comparable to the increase espoused here. In evaluations to date, these minimum wage hikes have not resulted in net job loss, even among the occupations and sectors most vulnerable, nor in a higher cost of living.

We compare the minimum wage and the earned income tax credit (EITC) as two policy instruments for combating poverty and wage erosion at the lowest levels. While the earned income tax credit more precisely targets the working poor, it has several drawbacks. It is received by only 80% of those eligible. As much as 5% of what is received is paid to storefront tax-preparers. Unlike the minimum wage, it is a public subsidy, in the form of a tax expenditure. Some argue that taxpayers should not be underwriting the profits of firms who exploit low wage labor and worry that the EITC could become an increasingly large burden over time. We note that neither instrument helps the non-working poor. At any rate, the minimum wage was never designed as a poverty program but as a social norm designed to ensure that wages would not fall as low as the market would bear.

Our conclusion is that a minimum wage hike of 35%, from \$5.15 to \$7.00, which would bring workers just over half way back to the historic high and still fall far short of a living wage, will produce substantial gains for workers holding jobs at the lowest wage levels and benefit the state's economy in multiple ways without appreciably diminishing employment. It will add Minnesota's voice to those of other states who are insisting that workers should be paid a decent wage and are taking steps to that end. It will reverse, albeit modestly the erosion in the income distribution of the past three decades. We close by noting that the minimum wage is a time-honored social and labor market institution and that it offers several political advantages over other forms of combating poverty and ameliorating the worsening income distribution.

I. The Case for a Meaningful Hike in the Minimum Wage

Over the past few decades, the hourly wages of Minnesotan workers at the lower end of the income distribution have fallen behind the cost of living, increasing the numbers of people who are "working poor." The state minimum wage, which is currently at national levels, has failed to keep pace with inflation, declining from a real value of \$8.27 in 1968 to \$5.15 today (Charts 1, 2). Low wage workers' purchasing power has eroded despite the expansion of the 1990s, a modest increase in the federal minimum wage in 1996/7 and tremendous gains in productivity in the economy. Several tax and benefits programs ameliorate the growing gap in part, but coverage is uneven, and many are left unserved.

[Charts 1, 2 go here]

The easiest, fairest, most dignified and cost-effective way for the State to address the gap is to increase the minimum wage. Minnesota's minimum wage remains at \$5.15 an hour, the national minimum wage floor, despite the fact that many other states with prosperous economies have raised theirs as high as \$7.00 and beyond. A minimum wage hike could be accomplished by a simple vote of the legislature, would cost the state nothing while increasing income tax revenues and would require negligible administrative costs to deliver, because it would apply universally without eligibility screening.

Who would pay for a minimum wage, and what is the overall effect on low wage businesses? The cost of a minimum wage hike would be spread among three groups — businesses who cannot raise prices to cover costs and their shareholders, consumers who pay higher prices when costs do rise, and workers when jobs are eliminated because of higher costs. The businesses and industries most at risk are local-serving, especially in the retail, fast food and entertainment industries, so that they will most likely not lose business to competitors who do not face the same minimum wage standard. In these sectors, consumers are apt to pay the bulk of the cost in rather modest price hikes, resulting in some diminution of demand from those whose incomes are not affected by a minimum wage hike (i.e. who have higher wages). However, the increase in the minimum wage will create substantial new demand from those receiving it, some of which will be registered in these same local business sectors.

A minimum wage hike would generate substantial benefits for the state's economy in the longer run. While it might discourage export-oriented businesses dependent on low wages from locating or remaining in the state, it would likely increase productivity and competitiveness for those who do choose Minnesota as a place to produce. It would attract better quality workers to the state, reduce turnover and engender greater commitment on the part of workers to their employers. It would induce employers to engage in productivity-enhancing work re-organization and capital investments, with longer-term benefits to the economy. It would enhance the state's reputation as a "high

road" economy based on our strong educational system, diversified industrial and service economy and superior amenities and quality of life.

In this brief, we probe the economic impacts of a substantial minimum wage hike for the state. We summarize what is known from the economics literature and experience elsewhere on which workers and business sectors will be most affected, estimating the numbers for Minnesota. We review the socio-economic characteristics and regional locations of workers most likely to benefit. We examine the extent to which a higher minimum wage might or might not result in higher unemployment for workers at the lowest wage levels and review multiplier and spatial effects. We review what is know about the impacts on worker training, benefits and working conditions, on welfare rolls and on the state budget. We show that a number of other states have successfully raised their minimum wage levels by one third or more to levels as high as \$7.00, in some cases with ongoing cost-of-living adjustments built in. We compare a wage hike with the earned income tax credit as alternative means of addressing poverty.

Our conclusion is that a minimum wage hike of 35%, from \$5.15 to \$7.00, which would bring workers just over half way back to the historic high and still fall far short of a living wage, will produce substantial gains for workers holding jobs at the lowest wage levels and benefit the state's economy in multiple ways without appreciably diminishing employment. It will add Minnesota's voice to those of other states who are insisting that workers should be paid a decent wage and are taking steps to that end.

Raising the minimum wage is a public policy rather than an economic matter. For generations, Americans have supported the legal mandate for a wage higher than what the market might bear without a standard. Just as we have standards for worker health and safety, restrictions on child labor, and guarantees for workers' rights to organize unions and collective bargaining, we have elected as a society to politically ensure a minimal hourly compensation for every worker, even when this may raise the cost of goods and services to consumers, require public spending on regulation and oversight, or result in marginal or exploitative firms going out of business.

II. Which Workers and Industries will be Most Affected?

Many Minnesotans already make considerably more than the minimum wage, and many businesses pay considerably more per hour for most of their workers. Based on inferences from recent work done on the state of Illinois and from past studies of wage changes following a hike in the minimum wage, we estimate that between 10% and 30% of Minnesota's lowest paid workers would be affected by an increase of the minimum wage to \$7.00. The bulk of minimum wage jobs are concentrated in certain occupations and industries. They are held disproportionately by younger, less well educated, rural and women workers.

Which workers benefit from a minimum wage hike?

A hike in the minimum wage is targeted directly to the lowest paid workers in Minnesota. In 2002, Minnesota firms employed approximately 56,000 workers or 2.3% of the workforce earning at or below \$5.15 per hour. An additional 2.6 percent of the workforce earned between \$5.15 and \$6.15 per hour. Although we do not have figures for the breakout below \$7.00, it is likely that at least 6% of Minnesota workers would receive mandated increases to \$7.00 an hour if a \$7.00 minimum were adopted.

But a hike in the minimum wage will also boost wage levels of workers above the new level. The wage hike will ripple up through the ranks of other low-paid workers as employers raise wages to maintain some measure of pay hierarchy between the lowest-paid and those earning somewhat above the minimum. Based on experience elsewhere, Minnesota workers currently making up to \$8.75 an hour would be likely to receive a wage increment if the minimum wage rises to \$7.00. Those making between 7.00 and \$8.75 would receive a median wage increase approximately one-third the size of those closest to the minimum wage. The ripple effect magnifies the size of the aggregate wage increase significantly. In addition, an unknown (and growing) number of workers in the informal sectors who are also receiving wages at or below these levels would likely make gains as well.

How many Minnesota workers currently make less than \$8.75 an hour? Wage levels are not conveniently broken out at that interval, but totals are available for workers making \$8.44 or less in 2001, enabling us to make an estimate. More than 539,000 people in Minnesota who made less than \$8.44, or 19% of the workforce, would benefit from an increase in the minimum wage (Table 1). The breakout by region shows that higher percentages of people in more rural areas of the state are making low wages, and they would thus benefit accordingly. One in three workers would benefit in the West Central and Headquarters regions compared with just 14% in Twin Cities region.

Table 1. Minnesota workers making less than \$8.44 per hour, by region, 2001

Region	% making under	2001 total	# making under	
	\$8.44	employment	\$8.44	
West Central	34%	107261	36,361	
Headwaters	34%	37789	12,735	
Upper Southwest	31%	2344	736	
North Central	29%	72300	21,039	
Arrowhead	29%	159588	45,961	
Southwest	29%	61886	17,761	
Northwest	28%	44974	12,413	
South Central	27%	123895	33,452	
East Central	27%	65293	17,303	
Southwest Central	26%	57775	14,790	
Southeast	24%	251099	59,510	
Central	23%	188437	42,398	
County Twin Cities	14%	1581318	224,547	
Minnesota	19%	2753959	539,008	

Source: Jobs Now, Cost of Living in MN, 2002 and Minnesota Department of

Economic Security

How much does a full-time minimum wage job generate in annual income? A full time individual working for \$5.15 an hour makes a pre-tax annual gross income of \$10,712 (40 hours per week, 52 weeks per year). The average hourly wage for Minnesota workers, at \$17.76, is more than three times this wage level, and the median is \$14.71 (Table 2).

Is this level sufficient? Because the federal poverty level is widely agreed to be inadequate, iii we use the notion of the "basic needs budget." A recent study of the cost of living in Minnesota by the Jobs Now Coalition estimates that to meet one's basic needs, a single adult would have to earn \$11.37 per hour or \$23,640 per year. A single adult with one child working full time would require \$15.71 per hour to meet this "basic needs" budget. For individuals without children, then, a basic needs wage is double the federal minimum wage of \$5.15, while for a parent with one child, it is nearly triple. Computation of basic needs in this budget excludes vacation time, restaurant meals and any expenditure on higher education. In Section IX below, we compare earnings of individuals and households at minimum wages, working full and part time, with the national poverty level and the basic needs budget (see Table 9).

Table 2. Wage Breakdown by Average and Percentiles, U.S. and Minnesota

	Average Hourly Wage	Employment	Hourly Wage Percentiles				entiles
			10th	25th	50th	75th	90th
					(median)		
US	\$17.11/hr	127,980,410	\$7.07	\$9.12	\$13.61	\$21.25	\$31.63
Minnesota	\$17.76/hr	2,613,250	\$7.67	\$10.17	\$14.71	\$22.05	\$31.31

Source: Minnesota Department of Economic Security, Research and Statistics Office

Who currently works at or below the minimum wage? For the nation as a whole, minimum wage workers are more likely to be younger, less well-educated, non-white, female and students, than are workers as a whole (Table 3). In Minnesota, the patterns are similar. Some 73% of minimum wage workers are over the age of 20 (Table 4). The group of people most likely to be supporting children, those aged 25 to 54 years old, make up 41% of all Minnesota's minimum wage workers. Minimum wage workers are more likely to be female than male (63%), and they are less well educated with 55% having a high school diploma or less. Nearly half are employed in out-state Minnesota, which accounts for 38% of the total workforce.

Table 3: Statistical Mean for Selected Variables, All U.S. Workers, 2001

	All U.S. Workers	U.S. Workers Earning \$5.15 to \$6.50 per hour		
Hourly Pay Rate	\$16.36	\$5.95		
Age	38.90	32.30		
Usual Weekly Hours	38.30	31.10		
% High School Graduate	30.9	32.4		
% Some Post-Secondary	29.3	23.8		
% College Graduate	18.5	4.5		
% Less Than High School Diploma	12.5	38.1		
% Female	48.1	61.0		
% Unmarried	29.1	52.4		
% Married	56.3	35.4		
% Divorced	14.6	13.1		
% Nonwhite	27.8	40.2		
% Student	6.0	22.9		
% Head of Household	51.3	33.5		
% Presence of Own Children	66.0	46.4		

Source: Baiman et al, 2003, based on U.S. Current Population Survey Data.

Table 4. Characteristics of Minimum and Near-Minimum Wage Workers in Minnesota, 2002

Percentage earning at or below \$5.15		Percentage earning between \$5.15 and \$6.15	Percentage earning below \$6.15	
Number in Workforce 56,000		61,000	117,000	
Percent of Workforce	2.3	2.6	4.9	
Gender				
Male	37.5	39.3	37.6	
Female	62.5	62.3	61.5	
Age				
16 - 19	26.8	41.0	34.2	
20 and older	73.2	60.7	65.8	
Marital Status				
Married	32.1	24.6	28.2	
Other	66.1	75.4	71.8	
Residence				
Twin Cities MSA	1.9	-	-	
Other	3.0	-	-	

Source: Minnesota Department of Labor and Industry, Minimum Wage Report – 2002

Who works at minimum wage levels? Critics have argued that most minimum wage workers are students, teenagers and those without dependents. But in reality less than a quarter of minimum wage earners are students, many of whom are trying to support themselves through school. Although they are young, the average age of minimum wage earners is 31 years old, right in the thick of child-bearing years. One-third of all households with workers earning at or near minimum wages depend completely on that income to meet the family's basic needs. Many young people spend a considerable number of post-education years in jobs where they make within \$1 of the minimum wage, and a surprising number of older workers rely on jobs paying at or near the minimum wage.

Rural workers, where economies are often quite depressed, will benefit the most from an increase in the minimum wage. The median hourly wage for greater Minnesota is \$11.50, or \$4.01 less than that of the Twin Cities at \$15.51. With 50% of all Greater Minnesota workers earning wages below \$11.50 per hour and 25% more below \$8.19 an hour, the ripple effect of an increase would spread further in greater Minnesota than it would in the Twin Cities. This would be true, too, for larger cities in out-state Minnesota – the Duluth-Superior, Saint Cloud, Fargo-Moorhead, and Grand Forks metro areas – that consistently have median pay rates lower then those of the state as a whole.

Which occupations would be most affected?

Some 68% of Minnesota's minimum wage workers are concentrated in service, sales and administrative support occupations (Table 5). Service occupations alone account for nearly half of them, and 8.5% of all workers in service occupations receive the minimum wage or less. Food service workers make up an astounding 33% of all minimum wage workers.

Table 5. Minimum Wage Workers by Occupation in Minnesota, 2002

Occupation	Percentage of total workforce at or below \$5.15/hour	Group as a percentage of all workers at or below \$5.15/hour	
Managerial and professional	1.1	14.9	
Technical, sales and administrative support	1.6	20.5	
Technicians	0.6	1.2	
Sales	2.3	10.9	
Administrative support, including clerical	1.3	8.5	
Services	8.5	48.4	
Private household	19.6	3.6	
Protective service	1.4	0.8	
Food service	14.4	33.4	
Health service	2.1	2.1	
Cleaning and building service	3.4	3	
Personal Service	7.9	5.6	
Farming, forestry and fishing	5.4	2.9	
Precision production, craft and repair	0.8	3.5	
Mechanics and repairers	0.8	1.3	
Construction trades	0.9	1.4	
Precision production and mining	0.7	0.9	
Operators, fabricators and laborers	1.8	9.8	
Machine operators and assemblers	1.4	3.2	
Transportation equipment operators	1.7	2.7	
Handlers, helpers and laborers	2.7	3.9	

An increase in the minimum wage would be most beneficial for persons working in occupations as ushers, lobby attendants, ticket takers, motion picture projectionists, food and beverage servers, waiters and waitresses. According to the Minnesota Department of Economic Security's Research and Statistics Office, these occupations have median hourly pay rates of \$7.00 per hour or less. The broader occupational group of food preparation and serving related occupations has a median wage of \$7.66 per hour

(\$15,933 before tax income per year if working full time) meaning there are 99,175 people making less than that in Minnesota. Of the 198,350 people working in food service occupations, 25% or 49,588 make less than \$6.51 per hour and 10% or 19,835 people make less than \$5.92 per hour.

Which industries would be most affected?

Minimum wage workers are not evenly distributed between various industries. Service-producing industries accounted for 89% of all minimum wage workers. This is partly because a large number of people in the workforce are employed in the service sector (76%). Eating and drinking places account for 31% of all minimum wage workers, though tips are not included in the calculation. Services such as health, educational, and social services also account for a large number of minimum wage workers (38.1%).^x

Table 6. Minimum Wage Workers by Industry in Minnesota, 2002

Industry	Percentage of industry employees at or below \$5.15/hour	Group as a percentage of all workers at or below \$5.15/hour		
Eating and drinking places	13.5	30.5		
Agriculture	5.1	3.2		
Social services	4.9	6.6		
Other services	3.3	20.3		
Other retail trade	2.1	10.4		
Educational services	1.8	6.8		
Finance, Insurance, and real estate	1.3	4.1		
Health services	1.0	4.5		
Transportation, communication and utilities	1.0	2.9		
Construction	1.0	2.3		
Wholesale trade	0.9	1.7		
Public Administration	0.9	1.3		
Mining	0.9	0.1		
Manufacturing	0.7	5.3		

Source: Minnesota Department of Labor and Industry, Minimum Wage Report – 2002

Most of the state's industries pay 95% or more of their workers more than the minimum or near minimum wage. Based on comparable research in Illinois, industries with high shares (greater than 20%) of their employees in minimum wage and near-minimum wage jobs are as follows (Table 7):

Table 7. Shares of Workers Below New Minimum Wage, Illinois, 2003

Industry	% of Employees Earning Between \$5.15 and \$6.50		
Eating and Drinking Establishments	58		
Gasoline Service Stations	39		
Cinemas	34		
Hotels and Motels	29		
Food Stores	28		
Retail Stores	27		
Private Household Services	24		
Apparel and Accessory Stores	23		
Personnel Supply Services	21		
Building Services	21		

Source: Baiman et al, 2003, based on U.S. Current Population Survey Data.

Several other sectors have significant total numbers of low wage workers even though their shares of employment are smaller. These include nursing, personal care and related health facilities (15%) and child care (13%). These sectors account for a very large share of the workers whose wages would be boosted by a minimum wage hike. Firms in these industries range from the largest in the nation – the Walmarts, Hyatts, and MacDonalds – to small mom-and-pop shops and franchises.

Three factors ameliorate the impact that a hefty minimum wage increase would have on total business costs. First, a large portion of these industries' total costs consist of materials (food, gasoline, films, consumer goods) from elsewhere. In the fast food industry, for instance, the cost of a meal covers not just labor but also the raw ingredients, non-food supplies, equipment, rent or mortgage payments, property taxes, sales taxes, utilities, and the corporate franchise fee, and building new plants elsewhere. Furthermore, since the increase would affect only those currently at substandard wages, the increase in the total wage bill in each industry would be modest, even for those with high shares of minimum wage workers. The estimated impact of the \$1.35 wage hike passed this summer in Illinois is highest for food and drinking establishments, where total payroll will rise 3.4%. Only two other industries are expected to have cost increases over 1 percent of total industry wages: Furniture and Home Furnishing Stores (1.2%) and Child Care Services (1.1%). For the state as a whole, the wage increment would be less than 1% of current wages, but this small share increase would result in \$900 million in additional sales for Illinois' businesses as workers spend it.^{xi}

Second, all the heavily impacted sectors, with the exception of portions of the hotel and motel industry, are local-serving, meaning that sales are highly localized and that their customers reside within the state. Thus a higher state minimum wage would affect competitors for such services equally and make it easier for them to pass wage increases on to consumers in the form of price hikes.

Third, spending by workers receiving a minimum wage hike is apt to be quite elastic for retail, fast food, health care and child care services. Thus businesses in these sectors will

enjoy increased demand even as they face higher costs. Next, we analyze the extent how the cost of an increased minimum wage is likely to be shared among businesses, workers and consumers.

III. Who Will Bear the Cost of a Minimum Wage Hike?

Where will the tens of millions of dollars to raise workers' wages at the lowest end of the workforce come from? Who will bear the cost? Since employers will directly pay the higher wages, the answers to these questions depend on employer responses to a minimum wage increase. Employers will do one or more of the following:

- 1) raise prices they charge for products and services
- 2) increase productivity
- 3) redistribute profits between workers and owners
- 4) relocate elsewhere
- 5) lay off workers

The evidence suggests that the first three of these account for the lion's share of responses, especially the first – higher prices. Relocation out of the state will be negligible, due to the nature of industries relying on minimum wage workers, and layoffs will be minimal if any. Where unemployment results, it is apt to affect the least educated and youngest workers, especially teenagers. We examine each of these responses as first-round, or short-term, phenomena. In a later section, we consider ameliorating feedback effects such as higher spending by low wage workers, higher sales for businesses through the multiplier effect and greater long-term inducements to productivity that would result from a minimum wage hike.

The largest portion of a minimum wage increment would be born by consumers. Most businesses relying heavily on minimum wage workers are local-serving, as we demonstrate above, and are able to pass on the increase to consumers in the form of higher prices. Their ability to do so without losing sales is conditioned on two factors: the extent to which their competitors must also pay the higher minimum wage and the price elasticity of demand by consumers. In the fast food industry, where demand is local, consumer demand appears to be relatively inelastic with respect to price, meaning that people will continue to buy fast food meals despite modest price increases. Because labor represents only a small share of the cost of a restaurant meal, a sizeable increase in minimum wage will result in only a modest price hike, even if fully passed on. In the New Jersey study, a full price fast food meal rose 3.4%, just matching total costs increases, following minimum wage hikes of over 18%. Manufacturing firms that are competing with firms elsewhere will be less able to pass on their costs, but as we've shown above, the share of workers paid minimum wages in manufacturing, and the share of labor in total costs, is quite low, minimizing adjustment effects.

Higher minimum wages may also evoke greater efforts to raise productivity on the part of businesses paying low wages. Some increases of this sort would occur without effort, through what economists' call "efficiency wage" effects: increased worker effort, lower turnover and absenteeism, and lower costs of recruitment, training and supervision. Turnover rates, in particular, offer considerable prospects for productivity gains. Potential for such gains appear large in the food and hotel industries; an employer survey found average annual turnover rates for these sectors of 50% in Santa Monica, California xvi

Businesses may also choose to redistribute net returns between workers and owners. The economics literature acknowledges that despite theory, wages in practice may not be rigidly determined by worker productivity. One summary of this literature places this discretion as high as 30% and suggests that employers can respond to living wage or minimum wage hikes by using their discretionary control to follow a higher wage strategy that would be partly recouped in productivity gains. Productivity growth would enable firms to enjoy a rising absolute level of profit even if profit share is declining. In the New Orleans case, Pollin et al (2002: 858) estimate that a one-time 18% minimum wage increase (equal to a 1% minimum wage cost increase as a share of the average firms' operating budget) would require a 1% increase per year in productivity to cover the raise, hold all other costs constant and avoid cuts in real wages to other workers or in profits, a level they believe is feasible. To the extent that businesses cannot pass on wage increases via prices or absorb them through higher productivity, they may have to accept lower profits, at least in the short run. Fast food firms experienced slight declines in profitability following the early 1990s minimum wage hike in New Jersey.

For reasons explored in the next section, the negative effect of a state minimum wage hike on employment, through either layoffs or relocation, is likely to be a draw in the aggregate and at most modestly negative for teenage workers. There are several reasons why relocation in response to the minimum wage is apt to be minimal. In order for a firm to be willing to undertake the costs of moving from the state, it would have to 1) have a customer base not closely tied to the state and 2) face a significant increase in operating costs as a result of the wage hike. As we have shown above, the industries with the largest exposure to low wages are those with a customer base tied to localities and regions within the state. Those more apt to be independent of local demand, such as manufacturing, wholesaling and business services, have rather low exposure. Unless they already have operations elsewhere, to which they can shift work, they will be unlikely to decide to undertake major capital expenditures in order to avoid a small increment in labor costs. In addition, the regional economics literature documents other barriers to firm exit from a region, such as reliance on local inputs and skilled labor, networking and ties with other firms, and manager and owner attachment to the region. **viii*

Before moving on to that issue, it is worth asking whether increased costs to consumers due to a minimum wage hike would result in hardships for poor families. Food stores and restaurants in poor neighborhoods would likely raise prices to cover costs. In the New Orleans study, a minimum wage hike of 18% was expected to increase food prices by

1.5% in such neighborhoods. To the extent that food stamps compensate for such increases the result would be a wash. However, food stamps do not cover all poor families' food costs, both because of incomplete program usage (70% in Louisiana) and coverage levels that vary with need (food stamps cover 50% of the average eligible family's food purchases in Louisiana). A poor family might thus incur a 0.25 (with food stamps) to 0.5 (without food stamps) increase in the cost of living for a minimum wage hike. Xix As with other poverty alleviation programs, the result is dependent, however, on whether the poor family includes a working member. For the 50% of poor families who do, this living cost increase would be more than counterbalanced by an increase of roughly 3–4% in disposable family income. For those with no employed member, neither the minimum wage or the earned income tax credit, discussed below, will compensate for this increase.

IV. Will a Higher Minimum Wage Cost Jobs for Workers and the State?

If employers respond to a higher minimum wage by laying off workers or relocating, some low wage workers will lose their jobs entirely, worsening rather than improving their situation. xx Other may experience a diminution of benefits, working conditions or on-the-job training. Economists reason that a higher nominal minimum wage would lead to some business cutbacks, failures and relocations, and/or the substitution of higher skilled workers or machines for low wage labor. They also reason that such losses would be counter-acted by more robust sales for state businesses as a result of the stimulative effect of higher pay and from productivity gains induced by higher wages. Economists attempt to test the relative size of these negative and positive effects by looking at responses, nationally or state by state, to discrete minimum wage increases over time, either for individual industries or in the aggregate. The evidence is hotly debated. National level studies suggest a negligible overall employment effect from an increase in the minimum wage, but a possible negative effect for teenagers. However, under-studied multiplier and spatial effects may result in more net new jobs than these studies have detected. Here, we review what is known about employment consequences for individual industries, age groups and small businesses.

Studies on individual industries suggest that even in the most vulnerable, e.g. the fast food industry, net employment effects are positive or at least neutral, rather than negative. *xxi Fast food managers appear to be enjoying lower turnover (and thus lower costs) as a result of paying higher wages and compensating in other ways by measures taken to increase productivity. A study of home care workers in San Francisco found that a higher wage, mandated by the county and paid in part by State funds, induced a substantial increase in both the demand for and supply of people willing to care for the aged indigenous in their homes and thus an increase in employment, while raising the quality of care and decreasing net public expense through reducing the need for emergency room and nursing home care. *xxiii*

No evidence of employment loss or even job growth slowdown for high risk industries has been found in response to individual states' adoption of higher minimum wages. In a

study of the impact of minimum age hikes on employment in seven of the most vulnerable industries (a set similar to those we list above) for all US states over the years 1983 to 2001, a period in which various states raised their minimum wages at different rates and times, researchers found no significant impact on employment in these industries. They also found no evidence that employers substituted better – educated workers for less-educated workers following minimum wage increases. If these industries show no observable net job vulnerability to a higher minimum wage, it is very unlikely that a state economy as a whole would experience net job loss. A significant swath of businesses would experience a sales boost from the indirect and induced demand from workers' higher wages, estimated in the Illinois case to be in the range of \$900 million dollars, xxiv and these would undoubtedly create jobs in more dispersed sectors.

Teenage employment may, however, decline following an increase in the minimum wage. A study using Current Population Survey data from 1979 through 1997 found a significant but modest negative relationship between minimum wage increases and teenage employment. These results differ from previous studies because of differing assumptions made about macro-economic performance. However, lower teen employment could result from a cutback in hours given higher wages — what economists call a "backward-bending supply curve for labor" among young people who want a target amount of money for car insurance or college expenses but would prefer to work less hours if possible. It is important to note that the study in question did not find higher teenage *unemployment* following a minimum wage increase. Thus teenagers' labor force participation decisions may explain lower employment levels.

Does a hike in the minimum wage affect businesses' willingness to extend benefits, improve working conditions or offer on-the-job training? The most recent study suggests that there is no change in benefits or working conditions following minimum wage increases. Studies on the impact on training come to contradictory conclusions. One study, using the National Longitudinal Survey of Youth for the period 1987–1992 and comparing across states, finds that higher minimum wages appear to have little effect on training investments for low-wage workers and rules out large negative effects. Another study uses Current Population Survey supplementary data and concludes that formal on-the-job training declined significantly following state-level minimum wage hikes. These reductions were largest for 20–24 year olds rather than teenagers (who receive little formal training at any rate); training for individuals in older age brackets was not affected. The study does not, however, take into account any general skill accumulation that might respond favorably to an increase in the minimum wage. These findings suggest that provisions for modestly lower minimum wages for teenage workers during initial months of work may be warranted.

Would small businesses disproportionately be hurt by a minimum wage and be more apt to lay off workers? A survey of small business responses to the 1997 national minimum wage hike found that a large majority of them did not and would not anticipate doing so if the minimum wage rose to \$6.00 an hour. Only 6.6% of all small businesses changed their hiring or employment practices, and of these, only 10.8% reported laying off

workers. In other words, only 0.7% of small businesses in the sample responded to the higher minimum wage by laying off workers. xxix

Although much work remains to be done in determining precisely the minimum wage impact on changing employment levels, the evidence we have cited here can conservatively be summarized as demonstrating no appreciable net losses in employment in industries most vulnerable to a minimum wage hike, small businesses or groups in middle and older age brackets. It is important to note that creation or elimination of jobs for low wage workers is affected by many other trends in a state's economy besides changes in the minimum wage: average wage rates, aggregate growth rates in the economy, and structural decline in one or more sectors of specialization. Employment following a minimum wage hike may worsen if a state in is recession or structural change, but that loss should be attributed to these other factors, not to the wage hike itself. It is also likely that a hike in the minimum wage may result in job losses in particular businesses within an industry but gains for others in the same or other industry.

Most studies of employment changes following a minimum wage hike do not take into account multiplier or spatial effects. Several arguments may be made about how a minimum wage hike works its way through a regional economy and may create jobs, especially in poorer neighborhoods and rural areas.

First, there is the multiplier effect. We have seen, from the Illinois study, that the estimated total pay increase in Minnesota may come to hundreds of millions of dollars in additional sales. Lower income workers are more apt to spend higher shares of their wages rather than to save them, in what economists call "the marginal propensity to consume." When these increments are spent within the state, they generate sales for and create new jobs in other state businesses. They may do so quickly as well, circulating these dollars faster in the area economy. Historically, regional economists have found income multipliers to be in the range of 1.5 to 2.0 for a state the size of Minnesota. In other words, for every dollar earned from minimum wage hikes, \$1.50 to \$2.00 of income will be generated in the state economy. Of course, if other consumers face higher prices and business owners' income is diminished, lower spending by these groups will act as a drag. However, such costs to them are more apt to come out of savings rather than consumption. The net result is that the multiplier effect for low wage increases may in fact be higher than for other forms of economic stimulus or for the status quo, thus creating additional jobs in the economy.

Second, there is the spatial effect. It can be argued that low wage workers are more apt to spend their dollars locally than are higher wage workers. Large spending categories for them include food, rent, health care, financial services, used cars and public transportation, most of which will be purchased locally. Low income workers, to the extent that they are concentrated in inner city neighborhoods and rural areas, are less apt to travel to suburban discount stores to shop, and they are less apt to travel and consume luxury goods that would result in large leakages out of the state economy. Neighborhood and small town food and retail stores and restaurants, in particular, would be likely to see sales increase as a result of a minimum wage hike, even given that they are likely to be

able to pass on their own minimum wage costs to relatively captive customers. If so, new jobs would be created. Thus, given considerable class segregation by residence and region in Minnesota, a minimum wage increase would have the salutary result of concentrating job gains created through multiplier effects in poorer neighborhoods or rural areas.

V. Will a Minimum Wage Lower the Numbers of People on Welfare?

Does a hike in the minimum wage increase or decrease people on the welfare rolls? Economists believe the effect could go either way. On the one hand, a higher minimum wage raises the cost to employers of unskilled labor vis-à-vis more skilled labor and capital equipment. They may in response substitute higher skilled, higher pay workers or automate jobs out of existence. Either would increase welfare dependency. On the other hand, higher minimum wages may increase the attractiveness of working to those on welfare, especially those who face high work-related costs, such as transportation and child care.

Studies done on the impact of higher minimum wages on welfare provide conflicting answers, in part because it is methodologically challenging to chart the relationship between the two. While several studies have found that the welfare rolls appear to have increased as a result of minimum wage hikes, the most recent research finds that a 10% increase in the minimum wage would reduce long-term welfare recipiency by 11% and short-term recipiency by 5%. **xxi* These studies chart AFDC participation and do not include other forms of public sector programs, such as food stamps, housing assistance and so on. The evidence remains unsatisfying, however, because none of the studies takes into account the dramatic change in welfare policy and eligibility since the mid-1990s. With many fewer people receiving welfare, this particular aspect of the minimum wage may be less important than before.

VI. Longer-term Benefits for Workers and Businesses

The consequences of the minimum wage hike examined above consist of short run gains, losses and behavioral adjustments by workers, employers and consumers. In the longer run, economists believe, the dynamic path of a regional economy can be shaped by public policy and by choices made by its chief decisionmakers, employers and workers. In an increasingly integrated world economy, decisionmakers can compete by pursuing a "high road," in which they invest in skills and technologies that will improve productivity. Or they can compete by striving to lower the cost of doing business by foregoing investments in human and physical capital and pursuing cheaper inputs and labor. A great deal has been written about the longer-term futility of the latter course for more advanced economies like the US, and within it, the higher tech states, and even for Mexico. **

Firms and workers are unlikely to be able to compete with increasingly accessible low wage products and services from other countries in the world.

A high road strategy for a state favors economic development incentives that encourage skill acquisition through education and training, entrepreneurship – the start-up and financing of new companies with employment growth prospects, investments in machinery, equipment and research and development in more mature sectors, and better production, management and business practices, all of which contribute to a superior product and service mix and higher productivity. Excellence in specific industries may bring strategic advantages in trade, as long run increasing returns to scale means that those who are "first movers" will enjoy continued growth despite high costs XXXIV – Silicon Valley is an outstanding example. Minnesota as a state economy has operated in recent decades as a "high road" state, able to withstand the exodus of low wage manufacturing jobs by replacing them with high-wage manufacturing and service sectors that compete well nationally and internationally. It is admirably high-tech for its size, both in manufacturing and services, and belongs in the class of states, including Massachusetts, Connecticut, New Jersey, Washington, Oregon and parts of California, that have successfully been able to add jobs and maintain high real incomes. xxxv The Twin Cities possesses a diversified and skilled occupational mix that would be the envy of most regions in the country. xxxvi

Would a hike in the minimum wage contribute to a high road strategy? Yes, it would encourage firms to pursue productivity-enhancing strategies and workers to invest in human capital through schooling and other training options. Employers often choose between high and low road strategies in a single industry facing comparable market challenges – some may go the lower cost route while others pursue a higher productivity strategy, and both sets may succeed, at least in the intermediate run. **xxxviii** High road responses to a minimum wage hike are most likely in those firms that face competition from out of state. But even fast food employers appear to have engaged in some productivity improvements as a way of coping with higher minimum wages. **xxxviii**

The salutary effect on the workforce would be considerable in the longer run, especially as the ripple effect broadens the ranks of those affected. Almost universally, studies show that American economic performance, and that of its states and localities, is ever more closely tied to skilled labor than to any other factor of production. Workers would be more motivated, more attached to the employers and more willing and able to invest in further education and training. Better workers would be attracted to the state and induced to stay.

In some states, explicit "high-road" partnership initiatives between companies and unions on an industry by industry basis have been put in place to design and implement workforce training systems outside the walls of any particular firm to upgrade incumbent workers' skills and provide for a new generation of skilled workers by recruiting and training young, hard-to-employ youth. Wisconsin's Regional Training Partnerships are an outstanding example. These partnerships began in Milwaukee's heavy machinery industries in the early 1990s but have spread to other sectors such as services and health care around the state.

VII. Impacts on Taxpayers and the State Budget

We have found no studies of the fiscal impact on state budgets of a higher minimum wage, perhaps it is difficult to model adequately the effects. State governments would be affected both on the spending and revenues sides of the budget. State spending would go down, presumably, on welfare and other forms of public assistance and in-kind programs, though as we have seen, the evidence for this is not definitive. "Tax expenditures" would go done to the extent that Working Family Tax Credit payouts decline with higher wages for those working, although if more people are drawn into the labor force, that would work in the opposite direction. On the revenue side, an increase in personal income taxes is likely, especially because of the ripple effect where workers making somewhat above the minimum wage (and not eligible for the Earned Income Tax Credit) will also enjoy wage increases. This will be a net gain unless the bulk of wage increases come from business profits, in which case a fall in corporate income taxes would counter-act this tendency depending on effective tax rates. To the extent that the income and employment multipliers will be larger with a minimum wage than without, due to both higher marginal propensity to consume and more localized spending, sales and business tax receipts should also increase modestly. These effects will be undermined to the extent that the state experiences any net employment loss from the higher minimum wage.

Fiscally, a minimum wage hike can be compared favorably to the sizeable economic development subsidies to firms paid out by the state in the last decade. A study of 550 Minnesota economic development disclosure reports, tracking more than \$176 million in loans, grants and tax increment financing extended during the 1990s, found extravagant levels of state spending per job created and a high incidence of very low wages for the jobs created. Although unemployment fell in the same era, the numbers of Minnesotans claiming food stamps or Medicaid did not, suggesting that the creation of low wage jobs was associated with hidden taxpayer costs.

VIII. Precedents in Other States

Citizen and elected officials' concerns about the eroding value of the minimum wage is demonstrated by recent increases in state minimum wages elsewhere in the US and by successful living wage campaigns in some sixty-eight cities and counties around the US. In some states, a cost of living adjustment (COLA) has been added, so that the minimum wage will slowly and automatically rise with inflation. Minnesota's minimum wage has remained at the federal level since the last increase in 1997 while 12 states and the District of Columbia have raised theirs well above that. These higher wage levels range from \$7.15 per hour in Alaska to \$6.15 per hour in Delaware, Rhode Island and the District of Columbia. While some of these states' cost of living is considerably higher than Minnesota's, others are not, particularly Illinois, Oregon and Washington, all of whom have chosen to set their minimum wages at \$6.50 or above, either through legislative action or popular vote (Table 8). We explore here the experience of these three states and what is known about consequences to date. They make a good comparative set because they each have relatively strong, diversified economies, like Minnesota, and have been pursuing "high road" growth strategies at the state and local level.

Table 8. States with Minimum Wages Above the Federal Wage

State	Minimum Wage (\$)	COLI
	2003	2002
Delaware	6.15	na
District of Columbia	6.15	137.6
Rhode Island	6.15	na
Hawaii	6.25	154.6
Illinois	6.50	100.8
Maine	6.25	na
Vermont	6.25	na
California	6.75	130.7
Massachusetts	6.75	127.2
Connecticut	6.90	126
Oregon	6.90	106.5
Washington	7.01	101.6
Alaska	7.15	128.2
Minnesota	5.15	102.9

Source: U.S. Department of Labor and Missouri Economic Research and Information Center

In Washington in 1998, residents voted overwhelming to increase the state's minimum wage. They also voted to index the minimum wage level to inflation annually, which allows it to keep up with the increases in the cost of living. These increases remain modest at 1 to 3% per year instead of the dramatic increase of 30% from 1999 to 2001. Currently, the state of Washington has the second highest minimum wage in the nation at \$7.01 per hour. A study of post-adoption employment and inflationary effects by the Employment Opportunity Institute found no significant connection between the minimum wage adapted in 1998 and either unemployment or inflation subsequently. Although the state of Washington has experienced high unemployment as of late (6.7%), the increase is attributed to the national recession, the loss of 40,000 jobs at Boeing (the region's largest employer) and the contraction of the high-tech industry. The majority of the jobs lost were high-paying jobs, which would not be affected by increases in the minimum wage. If the higher unemployment rate were to be explained by the higher minimum wage, the job losses would have occurred in sectors with low-wages such as the retail and restaurant industry. Employment grew in low-wage sectors from 1998 to 2001, by 3.6% in the restaurant and hospitality sector, during a period when the state added nearly 100,000 jobs. Seattle's CPI closely mirrored those of other major western cities without minimum wage increases from 1997 to 2002, and Washington's cost of living remains quite modest, just 1.6 percentage points about the national average. While this study does not control for all factors that might explain observed employment growth and changes in the cost of living over the period, it offers circumstantial evidence for minimum negative employment and price consequences of Washington's higher minimum wage. xlii

^{*} na: not available

The state of Oregon has set the minimum wage at \$6.90 per hour, and voters there recently passed an initiative that indexes the minimum wage to inflation annually. An evaluation of Oregon's minimum wage policy by the Oregon Center for Public Policy concluded that the increase successfully raised the hourly wages of those at the lower end of the wage distribution without creating unemployment. The wages of nearly 16% of the Oregon workforce have increased due to the higher minimum wage level. Workers at the 10th and as high as the 15th percentile experienced wage increases – from 1996 to 1999, wages for workers at the 10th percentile rose 22.3%. Surprisingly, given the research cited above, the employment rate of young, uneducated workers grew faster than the rate of the entire workforce during this period. The percentage of people aged 16–24 with a high school degree or less who where employed rose from 55.9 in 1995 to 58.5 in 2000. Xhiii These employment growth rates may be explained in part by other factors, but they demonstrate that a higher minimum wage has not been a deterrent to growth in low wage work employing young people.

Most recently and despite the recession, the Illinois legislature in the summer of 2003 increased the state's minimum wage to \$6.50 beginning January, 2004 without a COLA adjustment. The increase is projected to raise the wages of 450,000 people who are currently earning up to \$6.50 per hour. An assessment of the proposed impact, conducted by the University of Illinois, highlights the benefits that would occur due to an increase in the minimum wage. They suggest that most businesses would experience small increases in costs and that these costs would be offset by the new wage payments that would generate \$900 million in additional sales for businesses.

How much have states increased the minimum as a percent of the existing wage and over how many years do they phase it in? Generally, such increases range from 25% to 35% and are phased in over at most two years. In 1996, California added a minimum wage hike onto the federal increase for a joint increase of 35% over the period 1996–98. Washington's hike amounted to 30% over the period 1999–2001. Oregon's minimum wage increased 27% between 1997 and 999 and another 6% in 2003. Illinois raised its minimum wage 26% in one fell swoop.

The lumpiness of minimum wage increases and the political energy they require have induced many states to consider indexing the minimum wage to a cost-of-living index (COLA). In January of 2003, the state of Alaska instated a policy that indexes the minimum wage to inflation on an annual basis. Other states are considering indexing to a COLA as well as increases in a minimum wage. They include Delaware and Rhode Island, where wages are already set above the federal level at \$6.15 per hour, as well as Michigan and New Jersey. XIVI

It is worth noting that a large number of cities across the US have adopted living wage ordinances and many more are considering them. These ordinances prescribe minimum wages, benefits and working conditions for firms with a relationship to the local government, such as service contractors and economic development recipients. In a few cases (New Orleans, Washington, DC), they cover all employers within the city limits.

Living wages generally exceed \$9.00 per hour if the employer provides no benefits and \$8.00 an hour if they do. High living wages are found in places such as Fairfax, California (\$14.75 without benefits), Southfield, Michigan (\$11.31) and Boston, Massachusetts (\$10.54). Evaluations of living wage ordinances suggest that they do not significantly raise contract costs to the city nor render them less attractive to firms interesting in economic development incentives, and they are successful in discouraging local government service outsourcing driven by purely wage-undercutting. Riviii Evaluations of the impact of living wage ordinances on standards of living city-wide have found large positive effects, but these are controversial, as mentioned in Section V above.

Nationally, a diversity of studies and organizations have called for a higher minimum wage. Weighing the advantages and disadvantages, and acknowledging that the minimum wages may not be well-targeted for all low wage workers, researchers at the nation's more centrist and liberal think-tanks support minimum wages hikes as a central means of reducing poverty and raising living standards of lower wage workers. Democrats in Congress have proposed an increase to \$6.65 an hour, and Congressional Republicans have proposed a minimum wage hike of \$1 spread over three years, but the current leadership has not given this proposal priority.

IX. Comparing the Minimum Wage with the Earned Income Tax Credit

The minimum wage and the earned income tax credit (EITC) are two powerful tools for improving the disposable income of poor families and individual workers. Both have the advantage of requiring minimal enforcement, screening or administrative costs compared with other poverty programs. In this section, we review briefly the virtues of the EITC and explore several problems with arguments favoring it as a public policy tool over the minimum wage. We show that both the EITC and the minimum wage, for different reasons, are important public policy instruments for raising standards of living and that resorting to one without the other undercuts the efficacy of each.

Some scholars contend that the EITC is a more effective way to combat poverty, because it targets low-income families while a minimum wage increase accrues to individuals regardless of family income. In addition, since some families' EITC would decline if their wages levels increased, the marginal impact of a minimum wage increase would be slightly eroded for those receiving the EITC and higher for those not covered.

The EITC is a refundable Federal income tax credit for low-income working individuals and families. Congress originally approved the tax credit legislation in 1975 in part to offset the burden of payroll taxes and to provide an incentive to work. When the EITC exceeds the amount of taxes owed, it results in a tax refund to those who claim and qualify for the credit. The purpose of the EITC is to reduce the tax burden on low-income workers, supplement their wages, and assist in the welfare-to-work transition.

The EITC is one of the most successful anti-poverty programs ever developed. Since its inception, the EITC has grown into the largest federally-funded, means-tested cash assistance program in the United States. It lifts more people out of poverty each year than any other government program. Nearly 5 million people, primarily children, escape from poverty each year due to the effects of the EITC. Studies show that for households with children during the period of 1976–1996, the EITC offset 29 percent of the decline in incomes in the first quintile of the population and 9 percent of the decline in the second quintile. Noughly half of total EITC payments directly reduce the poverty gap.

Because of the success of the federal program, a rising number of states, including Minnesota, have enacted their own EITCs. Minnesota's Working Family Tax Credit (WFTC) is, like the federal EITC, a refundable tax credit. In tax year 1999, 210,724 individuals and families received the EITC in Minnesota. Viii States are enacting their own programs because of the EITC's proven track record of target efficiency and results in reducing poverty and increasing labor force participation. Moreover, a state EITC that piggybacks on the federal EITC is simple for a state to administer.

The EITC, then, is more closely targeted to poverty alleviation than is the minimum wage. If families rather than individuals are conceptualized as the beneficiaries, non-low-income families as well as low-income families benefit from a higher minimum wage.

Some 44% of families eligible for the EITC live below the poverty level. In contrast, an increase in the minimum wage would likely have only a very modest impact on poverty diminution. One study finds that the 1997 national increase reduced the number of persons in poverty by only 1%. Another finds that only 19% of the benefits of a minimum wage increase go to workers below the poverty line. Ix

Three points can be made however, regarding the claim for the superiority of the EITC over the minimum wage: its incomplete and untimely coverage; the fact that it is paid for by taxpayers rather than businesses and consumers; and its inference that individual wage workers are undeserving. Poverty alleviation, we argue, is not the heart of the justification for the minimum wage. We summarize these points here.

First, the EITC, despite its great virtues, is imperfect as a poverty alleviating mechanism: the take-up rate is somewhere around 80%, good for a poverty program but still leaving substantial numbers of people behind; few people receive it in a timely fashion, because they do not withhold through the year (many are embarrassed to reveal to their employers their eligibility); and a percentage of it, around 5% on average, is creamed off by tax preparers. The need to and cost of filing taxes reduces the take-up rate and net size of the EITC. A family must complete both federal and state tax returns in order to receive the EITC. This can be a complex and confusing process – many low income families go to storefront tax companies to prepare their returns. Given that the average low-income family was charged \$100 in 2002 for tax preparation, and the average refund in Minnesota for the EITC and the Minnesota's Working Family Tax Credit (WFTC) combined was \$1,900, low-income families lost about five percent of their credit to processing fees. (CDF Minnesota, 2003). In contrast, the minimum wage is easy to implement and the full value goes to the worker as it is earned throughout the year.

Second, if the EITC is increasingly resorted to as a low wage supplement, the public sector and its citizens and business constituents bear the cost. The EITC is a tax expenditure, which means that it is not a direct appropriation from an annual budget but spending in the form of foregone taxes. This means that federal and state governments must either spend less on something else, raise taxes concommitantly, or resort to deficit financing (which only the federal government is permitted to do). In the latter case, the impact is second-hand, since household and private business investments will be crowded out by higher interest rates. In contrast, an increase in the minimum wage, as discussed above, is paid for by higher prices for the goods and services, productivity gains and lower business profits. A related drawback of the EITC is that it does not induce employer-sponsored productivity improvements.

If the real minimum wage continues to lose value due to inflation and the EITC has to take up the slack, the public sector (and taxpayers and citizens) are implicitly being asked to shoulder a larger share of a burden. Over time, the EITC would grow in size as a supplement to the increasingly low salaries of workers at minimum-wage-paying businesses and is thus a subsidy to these businesses and their consumers. It is worth debating whether the EITC should be increasingly relied upon to permit large fast good

and similar companies to continue to make the profits that are financing investments around the world.

Third and perhaps most important, the minimum wage was not designed as a povertyfighting device but as a societal norm or consensus on an acceptable floor for what a worker should earn for an hour's work. It was originally put in place by Congress to prevent market forces from driving the wages of the least skilled workers down below a level deemed fair. This norm has been undermined over the decades by inflation, requiring national and state legislative costly campaigns to raise the minimum level, only partially successfully in restoring it to its longer term value. To treat some workers, because they are young or living with their parents or single as undeserving of a minimum wage is akin to the now discredited notion that women should be paid lower wages than men for the same work because their earnings are "pin money" for their families. Since the current minimum wage for a full time worker is close to the poverty line but inadequate to cover a basic needs budget, there is no reason to treat any worker as undeserving. Furthermore, young workers are as a group in need of a wage adequate to help them build an independent life, buy a car to enable them to reach work, and invest in a home and an education to increase their lifetime earning capability. Holding down wages may force younger workers to put in more hours making it more difficult for them to devote time to study.

The bottom line is that a higher minimum wage and the EITC work best in tandem to reduce the number of families living below the poverty line. State EITCs such as Minnesota's Working Family Tax Credit (WFTC) can further build on the federal program. Even in states like Minnesota with additional tax credits, low-income families are best served by a combination of the EITC and a minimum wage adjusted for inflation, not one or the other. A full-time, year-round minimum wage worker is boosted above the poverty level by the EITC, but a full-time minimum wage worker supporting several family members lives below the poverty line even after taking into consideration the effects of the EITC (see Table 9). Neither makes it anywhere near the Jobs Now basic need budget.

Table 9: Earned Income Tax Credit Levels by Family Income Levels, 2001

	Gross Earnings	Federal EITC	25% State EITC	Net Income	Jobs Now Basic Needs	Federal Poverty Line
Single Worker						
Half-time minimum wage	\$5,350	\$364	\$91	\$5,805	\$23,640	\$8,590
Full-time minimum wage	\$10,700	\$54	\$14	\$10,768	\$23,640	\$8,590
Family of three, 1 child						
Half-time minimum wage	\$5,350	\$1,819	\$455	\$7,624	\$27,828	\$14,100
Full-time minimum wage	\$10,700	\$2,428	\$607	\$13,735	\$27,828	\$14,100
Family of four, 2 children						
Half-time minimum wage	\$5,350	\$2,140	\$535	\$8,025	\$34,152	\$18,100
Full-time minimum wage	\$10,700	\$4,008	\$1,002	\$15,710	\$34,152	\$18,100

Sources:

Jobs Now Coalition. 2003. "The Cost of Living in Minnesota Wage and Budget Calculator." http://www.jobsnowcoalition.org

Johnson, Nicholas. 2001. "A Hand Up: How State Earned Income Tax Credits Helped Working Families Escape Poverty in 2001." Center on Budget and Policy Priorities. http://www.cbpp.org/12-27-01sfp.pdf

U.S. Department of Health and Human Services. "The 2001 HHS Poverty Guidelines." http://aspe.hhs.gov/poverty/01poverty.htm

Colorado Fiscal Policy Institute. 2002. "Colorado Earned Income Tax Credit." http://www.cclponline.org/cfpi/eitc2002.pdf

In order for the EITC and WFTC to be most effective in raising the incomes of poor working families, the minimum wage should be adjusted regularly for inflation. A single mother with two children working 40 hours per week year-round at the minimum wage would have earned \$9,893 after Social Security and Medicare taxes in 1997. This would put the family at 77% of the poverty line. The EITC of \$3,656 would have boosted the family over the poverty threshold, which is adjusted annually for inflation. In 2001, this same family would earn the same wages in nominal dollars, but since the poverty threshold is adjusted for inflation, the earnings would place the family at 69% of the poverty line. The EITC of \$4,008 would no longer raise the family's income above the poverty line, and they fall far below the basic needs budget of \$37,000. The EITC loses its effectiveness over time if the minimum wage is not adjusted to account for inflation. lixi

Finally, it should be noted that neither the EITC nor the minimum wage target the non-working poor. In about half the families below the poverty line, no member is working; even among non-elderly poor families, 43% have no workers during a typical year. It is possible that an increase in either might encourage members in such families to seek work, but the impact is not apt to be large. Higher wages and the EITC have only a modest effect on the poor because most do not work full-time, full-year. Policies that

increase full-time, full-year work will have the largest effect on poverty. Indeed, if all non-elderly poor households included one full-time, full-year worker, poverty among these households would be reduced by two-thirds. Thus employment initiatives and poverty programs that target these groups will therefore meet an ongoing need. Better welfare, employment and training programs will be needed to address this population.

X. The Minimum Wage as a Social Norm and Labor Market Institution

A minimum wage increase is primarily a strategy for combating growing American income inequality and improving the economic well-being of lower-middle class and working class Americans, two groups who have experienced the greatest wage erosion over the past twenty years. Some 48% of the benefits of a higher minimum wage go to working families whose income is between one and three times the poverty line, kiv thus enabling many of them to reach the Jobs Now basic needs budget. Since these households and individuals are more apt than the poor to hold full-time, full-year jobs, the impact for them is magnified.

The minimum wage is not simply a regulatory device. It is a labor market institution, one with the potential to drive up the wages of those at the bottom of the income distribution with potential ripple effects in wage intervals above. Its decline in real terms over the past few decades has been a major contributor to the erosion in the American income distribution. A minimum wages serves as a reference point for wages around it, and thus it may play an important role in determining the wages of the state's overall workforce, especially for workers with only a high school education and those living in rural areas.

Many low wage workers, not just those at minimum wage, will benefit from a higher minimum wage. In addition to the ripple effect described above, where higher wage workers receive a smaller premium, a minimum wage hike is the most powerful way for a society to restate its social norms. Workers currently making even less than the minimum wage will benefit as a new notion of "fair wage" diffuses through the ranks of employers. lxviii

Politically, there are good reasons to pursue growth and justice through a better minimum wage. As Timothy Bartik of the Upjohn Institute for Employment Research puts it:

Focusing on the poor may not be the best political strategy for reducing poverty. A focus on the poor may elicit less support from the many non-poor who believe themselves immune from poverty. Focusing on the poor's problems may imply that the solutions to poverty come from the poor changing their character and skills.

A political strategy to reduce poverty may be more successful if it focuses on institutional or social conditions that affect the well-being of many lower-middle class and working class groups, not just the pool. Wage rates are one such issue. lxix

In addition, since the largest shares of workers affected are in relatively young age cohorts, an increase in the minimum wage, even a highly publicized public debate about it, might help to bring young workers, whose voting participation is low, into the political arena.

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Our analysis relies heavily on recent work by professional and academic economists in simulating and evaluating minimum wage and living wage hikes elsewhere in the US. We have done some original research on comparisons between Minnesota and other states, and on the industrial and occupational consequences for a minimum wage hike in Minnesota. More original work could be done to hone elements of our synthesis, but we believe the net result of extent economists' thinking and research makes a very strong case for such an increase. While this brief is presented in an essay format, we reference the bodies of evidence for each point we make.

ii Our estimates are based on evidence from the California experience with a joint state and federal minimum wage increase of 35% in 1996-1998 (Pollin et al, 2002); Pollin et al's findings are similar to those summarized for other states in Card and Krueger, 1995. iii Citro and Michael, 1995.

iv Jobs Now Coalition. The Cost of Living in Minnesota, 2002. www.jobsnowcoalition.org/research/newreports.html

^v Anderson, Berry and Jung, 2003.

vi See for instance Wilson, 2001.

vii Baiman, Doussard, Mastracci, Persky and Theodore, 2003: 4-8.

viii Carrington and Fallick, 2001.

ix Minnesota Department of Economic Security data taken from 2001 employment data. Wage estimates were updated to second quarter 2003. http://www.mnwfc.org/lmi/salary/ ^x Anderson, Berry and Jung, 2003.

xi Baiman et al, 2003.

xii In contrast to the lively empirical debate on the aggregate employment effects of the minimum wage, reviewed below, evaluative research on alternative business responses to higher minimum wages is hard to come by. Several studies have been done of particular industries' actual responses, especially Card and Krueger's work (1994, 1995, 2000) on the fast food industry. Several others have modelled the likely responses with secondary data, the best of which is Pollin, Brenner and Luce (2002) on the consequences of the 1992 New Orleans city minimum wage increase of nearly 20%.

xiii Card and Krueger, 1995: 52-6, 62-3.

xiv Pollin, Brenner and Luce, 2002; Bartik, 2002: 5.

xv Fernsten and Croffoot, 1986; Worcester, 1999.

xvi Pollin et al, 2002: 857.

xvii Bartik, 2002: 5.

xviiiBartik, 1991, 2002; Pollin et al, 2002.

xix Pollin et al, 2002: 856-7.

xx See the critique of minimum wage proposals in Employment Policies Institute, 2003. xxi In a seminal study of the impact of a substantial 1992 minimum wage hike (\$4.25 to \$5.05) on franchise fast food establishments in New Jersey, economists David Card and Alan Krueger (1994, 1995) found positive rather than negative employment effects. Their findings were challenged by economists David Neumark and William Wascher (2000a). who compared New Jersey fast food establishments to those in Pennsylvania, a state that did not raise its minimum wage in the same period, finding higher employment growth in the latter. Their sample was, however, challenged by Card and Krueger (2000), who improved and re-calibrated their own model and found that the increase in question "probably had no effect on total employment in New Jersey's fast-food industry and possibly had a small positive effect" (p. 38). xxii Howes, 2002.

xxiii Baiman, Doussard, Mastracci, Persky and Theodore, 2003. This study study controls for other factors such as overall economic growth rates and average state wage rates, isolating the effect of changes in minimum wages.

xxiv Ibid, p. iii.

xxv Burkhauser. Couch and Wittenburg. 2000.

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xxvi Simon and Kaestner, 2003.
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Acemoglu and Pischke, 2002.

xxviii Neumark and Wascher, 2001. Both this and the paper cited in footnote 19 address each others' methodologies. The Neumark and Wascher study also concludes that there is no clear consensus on whether minimum wages affect schooling decisions of young workers (footnote 3, p. 565).

xxix Levin-Waldman, 1999

xxx Pollin et al, 2002, is the onlu study reviewed that addresses these differential neighborhood effects.

Turner and Bicakova, 2003. The authors review the statistical methods used in and results of prior studies. For similar empirical controversy over the impact of a living wage 60% above the minimum wage, estimated by Neumark and Adams (2001) to reduce the number of poor people in the region by 8%, see Bartik (2002: 25) and Pollin et al (2002).

xxxii Reich, 1991; Hinojosa, 2003.

xxxiii See Eisinger, 1988, and Fitzgerald and Green Leigh, 2002, for compendiums on strategies that work for states and localities.

xxxiv Krugman, 1991, 1994.

xxxv Chapple et al, 2003.

xxxvi Markusen and Schrock, 2003.

xxxvii Parker and Gray, 2003.

xxxviii Card and Krueger, 1995, 2000.

xxxix Mathur, 1999; Markusen, 2003.

xl Parker and Rodgers, 1999.

xli Leroy and Slocum, 1999.

xlii Smith, 2003.

Thompson and Sheketoff, 2001.

xliv Baiman et al, 2003.

^{xlv} Pollin et al, 2002: 848.

xlvi Prah, 2003.

xlvii Zabin and Kern, 2003.

xlviii Elmore, 2002.

xlix See, for instance, the Brookings study of Sawhill and Haskins, 2002. The more partisan think tanks such as the Heritage Foundation (opposed) and the Economic Policy Institute (in favor) have also done exhaustive analyses.

¹ Turner and Bicakova, 2003.

li Neumark and Wascher. 2000b.

lii Internal Revenue Service. "EITC Overview."

http://www.irs.gov/individuals/article/0,,id=96406,00.html

liii Hotz, 2001.

liv Johnson, 2001.

lv The National Tax Assistance for Working Families Campaign. "EITC Fact Sheet." http://www.eitc.info/resources/pdf/fact_sheet.pdf

lvi Hotz, 2001.

lvii Johnson, 2001.

lviii Turner and Barnow, 2003.

lix Houseman, 1998.

lx Burkhauser, Couch and Wittenberg, 1996.

lxii Bernstein, 2002.

lxii Bartik, 2001: 37.

lxiii Bartik, 2002: 4; Sawhill, 1999).

lxiv Burkhauser, Couch and Wittenberg, 1996.

lxv Dunlop, 1957; Levin-Waldman, 2002.

lxvi Golbraith, 1908

lxvii Galbraith, 1998.
lxvii Spriggs and Klein, 1994; Levin-Waldman, 2002: 639.
lxviii Bartik, 2002: 27.
lxix Bartik, 2002: 28-9.