

Linking the Minimum Wage to Productivity

by

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Abstract

One of the principal problems with the minimum wage is that adjustments to it must be voted on by Congress. Although recent congressional action solves the immediate problem of restoring value to a wage that has otherwise failed to keep pace with inflation, it has not removed the issue from the political agenda. Every time Congress acts, it does so amidst debate about the legitimacy of the wage. When Congress does act, it is usually too little and too late. Therefore, it might be preferable to create an automatic mechanism for adjusting the minimum wage that would not only assume the value of a wage floor to society, but be tied to levels of productivity. Such an approach would accomplish two objectives. First, it would be in keeping with the economic argument that an artificial wage floor can lead to greater productivity, rather than to the disemployment effect assumed in traditional economic textbooks. Second, because increases to the wage would be regular and expected, unlike the shocks attendant to sporadic increases. In the end such a plan might not only lead to less political opposition, but to greater efficiency.

During the summer of 1996, Congress once again passed, as it has done many times during the past sixty years, a minimum wage increase. Up from \$4.35 an hour, the minimum wage is currently \$5.15 an hour after being implemented in two increments. The first took effect in the fall of 1996 and the second just took effect during the fall of 1997. This latest increase no doubt settles the issue for a while. But at the same time, it fails to remove the issue from the political agenda, because each time it is discovered that the wage is no longer adequate, the issue must once again be acted on by Congress. That an increase in the wage requires an act of Congress means that the legitimacy of the wage can be revisited, and the same arguments constantly rehearsed. Invariably, by the time the wage is acted on, the increase is too little and too late to be of any real benefit. Still, the minimum wage is only a fraction of the median hourly wage of \$12.25 for 1996, and it will be almost \$2.00 below the median wage in the lowest wage sector of the economy — the retail sector — where most minimum wage workers tend to be. Even assuming an EITC of \$3,370 for a single mother with two children, that family with an effective income of \$14,082 will still be below the official poverty level.

Some municipalities, like Baltimore for instance, have passed “living wage” laws mandating that companies that do business with them pay their workers a wage of around \$7.60 an hour. And while it is indeed too early to tell what the effects of this will be, these laws stem from the firm conviction that there are some benefits to be derived, in addition to the moral consideration of fairness, from paying a wage that enables people to live in dignity and participate more fully in the market place as consumers. Although it is unlikely that Congress will mandate a minimum wage that might be considered a living wage, there are some critical policy questions that need to be addressed, nonetheless.

Given that the new welfare law — passed at the same time as the minimum wage increase — mandates that states create welfare-to-work programs and reduce their rolls by at least 50 percent by the year 2002, it is reasonable to ask whether the national wage floor also should not be adjusted so that the low-wage and low-skills jobs they qualify for (Burtless, 1995), will enable them to live at least as well as they were while on public assistance. When talking about the minimum wage, then, there are essentially two issues: the rate at which it is set and the frequency at which it is adjusted. And to a large extent, the fact that the latter has never seriously been addressed, the former has only become more volatile politically. The critical policy question, then, is whether it would not be preferable to create an automatic mechanism for adjusting the minimum wage, which not only would assume the value of a wage floor to society, but be tied to levels of productivity. A wage tied to productivity levels would be in keeping with another side of the standard text book theory of the wage, which unfortunately has received little attention. This is the idea that if an artificial wage floor does not lead to lower employment, it must then lead to higher productivity (Stigler, 1946). In this brief, I explore some reasons for why the minimum wage ought to be increased on a regular basis and offer some policy proposals for achieving it.

State of Minimum Wage Debate

The minimum wage, since its passage in the Fair Labor Standards Act (FLSA) of 1938, has always been a contentious issue. Despite periodic adjustments, the debate over the Federal minimum wage specifically and the concept of a wage floor generally has continued unabated. The argument often given for the increase is that the minimum has not kept pace with inflation

and as a result those working at the minimum wage find themselves below the poverty level. And indeed, as Table I shows the minimum wage for much of its history did indeed hover around 50 percent of average annual hourly earnings, but during the 1980s and much of the 1990s the wage was often below forty percent.

Table I Comparison Between Minimum and Average Annual

<i>Year</i>	<i>Minimum</i>	<i>Annual Average</i>	<i>Percentage</i>
1938*	\$.25	NA	NA
1939*	.30	NA	NA
1945	.40	NA	NA
1947	.40	\$1.13	35.4
1950*	.75	1.33	56.4
1956*	1.00	1.80	55.6
1961*	1.15	2.14	53.7
1963*	1.25	2.28	54.8
1967*	1.40	2.68	52.2
1968*	1.60	2.85	56.1
1974*	2.00	4.24	47.2
1975*	2.10	4.53	46.4
1976*	2.30	4.86	47.3
1978*	2.65	5.69	46.6
1979*	2.90	6.16	47.1
1980*	3.10	6.66	46.5
1981*	3.35	7.25	46.2
1990*	3.80	10.01	38.0
1991*	4.25	10.32	41.2
1995	4.25	11.46	37.1

* These are the years that increases in the minimum wage took effect.

Source: "History of the Federal Minimum Wage Rates Under the Fair Labor Standards Act -- 1938 Through 1991," U.S. Department of Labor, Employment Standards Administration; Bureau of Labor Statistics, Labstat Series Report, *Current Employment Statistics*, Series EEU00500006

Therefore, the wage should be increased so that the working poor can be given some relief, as well as those on public assistance might be given greater incentive to work. Moreover, it is a matter of simple fairness that those who work full time should be able to support themselves and

their families above the poverty line. Opponents of the minimum wage often counter with the argument that most minimum wage workers aren't poor and all an increase in the minimum wage will do is result in a disemployment effect among the teen labor market. Firms unable to pay higher labor costs will either have to cut back on their labor, reduce benefits or substitute technology — capital — for labor in order to achieve greater productivity.

Data on the effects of the minimum wage has been ambiguous at best. The principal focus of much of the empirical research has been on the youth labor market. It has become the prevailing wisdom that the minimum wage does indeed take its greatest toll on the youth labor market, that a binding wage floor does reduce employment for younger and less-skilled workers. (Kosters & Welch, 1972; Welch, 1974, 1978; Meyer & Wise, 1983). Moreover these studies have been buttressed by a minimum wage study commission that has *not only* found that a 10 percent increase in the minimum wage leads to a 1-3 percent reduction in employment among teenagers, but has advocated the use of subminimum wages for teenagers (Nordlund, 1997). And while others have concluded these findings to be sound, they have also conceded that the effects are perhaps proportionately smaller among 20-24 year olds (Neumark & Wascher, 1992), and that adults on balance appear to be better off under a wage floor. And yet, despite the smaller effects among adults, they have not been the focus of much of the research.

Nevertheless, these studies have been consistent with a model of competitive markets. This model holds the costs to society of raising wages to be greater than any benefits. It is predicated on the assumption that market clearing wages can be achieved when the demand for labor is exactly equal to the supply of labor. In such a market there is no such thing as unemployment because the price of labor will drop to the point that all available labor can be

consumed, and this is the point at which the economy achieves full employment. It is at this intersection that there exists an equilibrium wage that enables both firms and workers to maximize profits and utility respectively. Should the supply of labor increase, there will naturally be a reduction in the cost of labor until supply once again equals demand. A wage floor, however, prevents the cost of labor from dropping, thereby forcing the firm to reduce its demand for labor, with the result being unemployment. In a competitive market, each worker receives the value of his or her marginal product. A minimum wage, if it is effective will do one of two things: it will either result in the layoff of those workers whose value is less than the minimum or it will result in an increase in productivity among low-efficiency workers (Stigler, 1946).

Consequently, the minimum wage ends up hurting the low wage workers — precisely those whom it was intended to help. As the cost of labor is increased the demand for labor decreases. Only if the demand for goods and services on the part of consumers is increased can it be expected that there will be an increased demand for labor that will effectively bid up wages. A minimum wage, then, benefits some — those who will be paid more money — at a cost to others — those who will either lose their jobs and/or not be able to find other jobs because employers do not believe their value to be worth the new minimum wage. A policy which artificially raises wages to help some at the expense of others is simply inefficient. Even if there is some outward appearance of benefit to be derived from an increase in the wage floor, there will invariably be a cost to be borne whether in the form of job loss, lost opportunity for jobs, lost benefits or increased output per man hour — the demand for higher productivity.

The problem with this model is that it represents a theoretical construct with characteristics that simply do not exist in the real world. Although the minimum wage is

assumed to be inefficient because it leads to an underutilization of labor in the aggregate, the competitive model fails to address the consequences of a world where wages could be allowed to drop to a level whereby demand would be equal to supply. In the real world, the minimum wage is likely to affect different people differently. Moreover, the model of perfect competition assumes the minimum wage to be besides the point because the source of low wages is not a function of distorted market power, but the failings of individuals. That is, they simply are not worth more than the low wages they have been receiving. Therefore, it is up to them to improve themselves, and a minimum wage cannot solve this problem; rather all that it can do is artificially inflate wages, thereby absolving low-wage workers of their responsibility for themselves. As the locus of the model is on the individual, it totally negates structural variables that may affect individual behavior. And yet, the focus of much of the research on the youth labor market through this particular set of lenses has only served to obscure the potential benefits that might accrue specifically to the working poor (Levitan & Belous, 1979).

In more recent studies by David Card and Alan Krueger, it has been found that increases in the minimum wage do not necessarily have a disemployment effect, but may actually lead to higher levels of employment. Moreover, the minimum wage has perhaps been kept artificially low because of labor monopsony — that there is principally one single industry that serves as the principal employer of those able to command the minimum wage, or those so deemed “worth” it (Card and Krueger, 1995). Specifically, in studies of the fast food industry in California and New Jersey, Card and Krueger found there to be little disemployment effect. The California study involved an increase in California's minimum wage from \$3.35— then the prevailing federal minimum — to \$4.25 during July of 1988. The unemployment rate in California fell from 5.8 to

5.1 percent from 1987-1989. During the same period, the national rate fell from 6.2 to 5.3 percent. Although this would suggest that economic growth in California was similar to, or maybe slightly slower than, the rest of the nation, the pattern was quite different for California teenagers. For teenagers the unemployment rate fell 3 percent from 16.9 to 13.9 percent. But the average U.S. rate only fell by 1.9 percent from 16.9 to 15 percent. The rise in minimum wages raised the wages of low-wage workers, with no adverse effects on employment.

In the New Jersey study, where the state raised its wage from \$4.25 to \$5.05, the focus was on the fast food industry in New Jersey with Pennsylvania serving as the control group. The average starting wage at fast food restaurants in New Jersey increased by 10 percent following the minimum wage increase. But the minimum wage increase had no apparent "spillover" on high-wage restaurants. Within New Jersey, employment expanded at low wage stores — those paying \$4.25 per hour — and contracted at high-wage stores — those paying \$5.00 or more per hour. Employment also contracted between February and November 1992 at fast-food stores that were unaffected by the rise in the minimum wage — those stores in Pennsylvania and New Jersey paying \$5.00 or more per hour. Moreover, there did not appear to be any substitution effect. Although the minimum-wage increase did lead to price increases for meals, suggesting that the costs of the increase were simply passed onto the consumer, there was no evidence that prices rose faster among stores in New Jersey that were most affected by the rise in the minimum wage. Moreover, the raise in minimum wage didn't negatively affect the number of store openings, and it had no disemployment effect (Card & Krueger, 1995).

These studies, however, have been controversial, and as such have raised a whole host of other research questions. The locus of these questions have been over the issue of measurement

and the quality of available data. John Kennan, for instance, has suggested that it is simply not known that there would not be adverse consequences were the minimum wage to be increased beyond a certain threshold. Moreover, it is unlikely that we will find out even if we were to employ a more sophisticated methodology on the existing body of data. Rather what is needed is more sophisticated data (Kennan, 1995). That is, one argument for why these increases may not have had the consequences predicted by the competitive model is because the minimum wage is so far below a market clearing wage (Freeman & Freeman, 1991; R. Gordon, 1995). Another issue — also a twist on the notion that the wage has essentially been too low — is whether the minimum wage as such represents an adequate measure of well-being. So even if there is no real disemployment effect, it is largely besides the point if the wage still will not serve to lift people out of poverty (Burkhauser, Couch & Wittenburg, 1996). And yet, these types of criticism only support the contention that there are other policy considerations to take into account other than the possibility of a disemployment effect.

An important subtext, often neglected, to the whole minimum wage debate is that there isn't any conclusive data to make any definitive statements about any effects at all, whether they be positive or negative. Evidence suggests that we may know very little about the minimum wage or its actual effects. Charles Brown has suggested that the minimum wage is essentially overrated by both critics and supporters alike. Since its passage in 1938, it has averaged a bit less than half of hourly earnings. Those who earn the minimum wage account for 6-12 percent of those employed and less than five percent of wage and salary income. The reduction in employment in the standard model isn't necessarily accomplished by any number of workers being discharged because the turnover rates in minimum wage jobs are on the order of 12-15

percent per month (Brown, 1988). Nevertheless, there are complications to empirical estimates of the effects of the minimum which stem largely from the fact that the Fair Labor Standards Act has exempted some employers. Those exempted were generally smaller ones, with the standard of “smallness” gradually being tightened over time. Indeed, the original legislation exempted more than it included, and this was done largely to obtain the support of Southern politicians who were generally opposed because their wages were considerably lower than in the north (Nordlund, 1997).

As of 1988, the uncovered sector consisted mostly of retail trade and service employees. Therefore, the basic message for empirical work is that one must account for the extent of coverage and elasticity of total unskilled employment with respect to the minimum that will be smaller than elasticity of demand. The second complication is that minimum wage workers bear no unique identifying marks besides wage rates, and the effects of the minimum wage on employment are smaller than one would have supposed. Therefore, when viewed in overall context, Brown finds it hard to see any evidence that minimum wage increases have benefits which would overcome an economist’s instinctive aversion to interfering with reasonably competitive markets (Brown, 1988). Or stated differently, the minimum wage only benefits a small proportion of the labor market that its potential benefits would not justify incurring the possible deleterious effects.

At the same time, as David Gordon has argued, this is only true if the wage is viewed solely in terms of only those who earn the 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 the dip. 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 the growing income inequality (Gordon, 1996, pp. 214-215). Turned around, then, an increase in the minimum wage, along with other labor market policies, could have a beneficial effect on the economy insofar as it would begin to reverse the decline of wages and the growth in income inequality. And consequently, there may be greater productivity.

Arguments for Increasing the Minimum Wage

That there is such ambiguity in the data is good reason in and of itself to look to the other potential benefits of a minimum wage. From the stand point of economic theory, there are essentially three arguments to be made in favor of the minimum wage. Two are microeconomic and the other is macroeconomic. The first microeconomic argument is a monopsony one because it assumes there to be something called market power, and because of that power firms are in a position to pay lower wages. An increase in the wage would then serve to empower low-skilled workers, and this in turn may result in some supply-side effects. This model, which has by and large been ignored until the work of Card and Krueger brought it back, suggests that there are potential benefits from increases in the minimum wage that may counter most of the negative consequences. Among the potential benefits is that individual behavior will be affected because higher wages will offer greater incentives to work. The higher the minimum wage, the more likely it is to attract individuals into the labor market. Such an approach then becomes a powerful one for assisting the poor. According to this model, the minimum wage might be

viewed as a positive vehicle for lifting those at the low end of the wage scale out of poverty. It suggests that an increase in the minimum would make low-wage/low skill jobs attractive to those who are currently on welfare (Ellwood, 1988; Bane and Ellwood, 1994). Not only would the higher wage enable them to live better, but they may feel a greater sense of dignity from the work itself, regardless of how menial it might otherwise seem.

The other microeconomic argument is an efficiency-wage argument that suggests that higher wages lead to greater efficiency because workers become more productive. Individuals essentially respond to changes in expected net income or wealth or they respond to net prices of working and saving which may be affected by transfer programs. Although it is believed that current transfer programs do have an impact on overall labor supply, it is difficult to conclude precisely just what that impact may be (Danziger, Haveman and Plotnick, 1981). Therefore, raising the minimum wage might have the effect of offering positive inducement to work. Moreover, they will work harder and thus be more productive. And employers concerned about shirking will pay less in monitoring costs because the higher wage is likely to result in less shirking (Shapiro and Stiglitz, 1984).

Often referred to as the “Webb” effect after Sidney Webb, it argues that a wage floor can lead to greater efficiency because workers become more productive. Although an increase in the minimum wage may well result in a wage exceeding the marginal product of the worker, the employer now has incentive to find ways to increase productivity either by getting his workers to produce more or by substituting technology for labor. The worker too has incentive to improve his or her skills so the value of his/her labor will justify the new wage. (Webb, 1912). Subsumed under this model is the notion that a minimum wage would also make workers more productive

because it would better enable them to maintain themselves physically, which in turn would sustain them spiritually. Although this model does not receive much attention today, it was very influential during the early part of the twentieth century, and it figured prominently in an array of state reform efforts that ultimately culminated in the Fair Labor Standards Act of 1938. And yet, despite its lack of attention it nonetheless assumes the supply and demand function contained in the competitive model, but essentially turns the assumptions flowing from it on their head. That is, those who are forced to pay higher wages would simply be forced to find ways to improve their productivity (R. Gordon, 1995). More importantly, it calls attention to the fact that society through a wage policy is essentially expressing a value preference.

On one level it would represent a preference for minimum wages above some poverty threshold. But on another, it might represent a preference for a higher wage economy on the assumption that a higher wage floor might offer managers incentive to provide the type of on-the-job training that would make their workers more productive. Piore and Sabel have couched this choice as the difference between the low and high roads. The low-road essentially assumes a mass production industrial economy in which most functions can be performed by cheap and low-skilled workers. If labor is not cheap at home, work can easily be outsourced to those locations where labor costs are substantially lower. The high-road, by contrast, would entail developing an innovative information-based economy with a flexible and high skilled labor force able to command higher wages. The skills, and ultimately productivity of the labor force would be developed through education and training programs (Piore and Sabel, 1984). Although a higher wage alone could not stand as the sole path towards a high wage economy, it might provide a necessary stick for employers to invest in the necessary education and training for their

workers to make them “worth” the new wages. Such arguments were quite persuasive during the early part of the century when many in industrial mass production were earning anything but a “living wage.” The problem is that productivity is difficult to measure and with the advent of greater empiricism to the evaluation of the minimum wage during the 1970s and 1980s, it has become easier to focus on a particular segment of the labor market.

But as difficult as productivity is to measure, there are nonetheless reasons to believe that the productivity arguments are correct. The best indicator is the impact higher wages have had on unionized firms. Freeman and Medoff have argued that although many unionized firms may have lower levels of profitability, they nonetheless have greater efficiency because the wage gains achieved through collective bargaining has resulted in greater productivity. Therefore, despite the reduced profitability for some, there are still some social efficiency gains to be derived from wage and other securities arising from collective bargaining agreements (Freeman & Medoff, 1984). But higher wages would also lead to greater efficiency because it might lead to lower levels of turnover. Because job-turnover is so high, employers have generally been reluctant to offer on-the-job training — the type of investment that might automatically lead to higher levels of productivity (Freeman, 1994; Lynch, 1994).

Lastly, the macroeconomic argument suggests that insofar as a higher wage will offer low-wage workers more purchasing power, they in turn will be able to demand more goods and services. As they do this, businesses will produce more, and they in turn will hire more workers, which may have the inevitable result of naturally bidding up wages across the board. Therefore, an increase in the minimum wage, though it may lead to some short-term adverse consequences, will lead to long-term benefits to the economy as a whole.

What is perhaps ironic about these three arguments is that they were indeed instrumental in attaining the adoption of the minimum wage in the first place. Therefore, there would be ample historical precedent to return to these arguments as foundations for a new policy that would establish an independent mechanism for automatically adjusting the minimum wage on a regular basis.

Historical Precedent

During the early part of the century, many economists, though mindful of the standard theoretical construct that a minimum wage might lead to lower employment, often advocated a legal minimum wage on the grounds that it would lead to greater productivity. They essentially argued the value of an efficiency wage on the premise that those who were paid more would be able to maintain themselves better and thus produce more. Webb, in particular, argued that a wage floor would be beneficial to employees and employers alike. Employers would most appreciate the security it would provide them against being undercut by dishonest or disloyal competition. There was in fact a distinction to be drawn between the fixing and enforcing of a minimum wage and the fixing and enforcement of a wage. From the standpoint of economic theory, Webb reasoned that there was nothing in a legal minimum wage that could be calculated to diminish productivity. On the contrary, it would actually increase productivity. Universal enforcement of a minimum wage would in no way eliminate competition for employment; rather it would transfer pressure from one element in the bargain to the other. Unregulated employment leads employers to select the cheapest labor, but not necessarily the best labor. Preference might instead be given the incompetent, the weak and those with just plain bad character. As a result of

this, productivity will naturally tend to be low, and ultimately so too will efficiency. The aggregate efficiency of the nation's industry would be promoted as the best available candidates are hired. A legal minimum wage, then, would positively increase the productivity of the nation's industry by ensuring that those who are left unemployed would be the least productive members of the workforce. Not only would employers be forced to look for the best workers so as to increase their overall productivity, employees would be forced to develop their skills so that they could be counted among the better class of workers (Webb, 1912).

This position wasn't just consigned to the other side of the Atlantic, for on this side John Bates Clark was already arguing that in the absence of a wage, employers would essentially choose from the ranks of the most necessitous men and women. Trade unions would, of course, go a long way toward removing this evil, but in the absence of unions, the law might remove it.

As Clark observed:

Mere need and helplessness give citizens a certain valid claim on the state, even though it has done nothing to cause their troubles. Privation that is traceable to social defects makes a more cogent claim. This, in fact, is the basis of the demand for minimum wage laws, since the ill-paid workers are regarded as victims of social arrangements (Clark, 1913, p. 294).

Although many in the American business community were opposed to the imposition of a legal minimum wage on the grounds that it would represent some type of abridgement of their property rights (McSweeney, 1913; Brown, 1917), there were those very supportive of it again because it would lead to greater overall productivity. One of the most notable supporters of it in the business community was Edward Filene. In the pages of the *American Economic Review*, Filene wrote that one way of increasing efficiency was for employers to pay wages that would command higher quality employees. This would be more efficient because employers would not

have to spend as much time providing direction and correcting the errors of those who were inefficient. But with regards to the traditional argument that minimum wages would simply drive certain businesses out of the state, Filene thought that it was just as well to let them go. From his standpoint, any business that could not pay a living wage — a wage sufficient to sustain profitable consumers was not good for the state and therefore had no right to be in it. Low wages simply result in employers having cheap standards and that these low standards produced inefficient employees. Employers would not be able to get effective organization out of those who were unintelligent, and they could not be intelligent if they did not have enough to live on properly.

Therefore, if the state fixes a minimum wage it helps the employer as well as the employee. It enables the employer to be sure that he will not be undersold at the expense of other employers. It prevents employers from having a body of employees who, because they are poorly paid, are able to be consumers of his business. Employers who do pay more are in turn forced to take an interest in their employees — to educate them to a level that will make them worth the wage. And minimum wage laws force employers to be interested in community affairs. But even if the wage should result in a certain number of people losing their jobs, it is still to the good of the larger community because it would force the state to do its job of providing education and training workers. To this extent, the minimum wage would serve to enhance public efficiency (Filene, 1923). They further argued that those who paid less than what was necessary to support their labor, were essentially parasites on the community, as the difference would ultimately have to come from some place (Leher, 1987, p.77). Or as H. LaRue Brown noted, nothing would make for greater inefficiency than hunger, worry, discontent. Those employees able to maintain

themselves would surely be better workers. Minimum wages, then, had to be seen as part of a great social advance (H. Brown, 1913). And indeed, only a few years after the initial minimum wage laws took effect, Arthur Holcombe of Harvard observed that the minimum wage neither led to the replacement of women by men nor did it result in any decrease in efficiency. On the contrary, the experience suggested that the benefits originally anticipated by the early advocates were indeed being secured (Holcombe, 1917).

The initial minimum wage legislation during the early part of the century had been promulgated by the states and only applied to women. Men, it was believed, did not need such protection, as it was believed that they sought to join labor unions. Women, however, were not allowed to join the unions. And while unions originally favored minimum wage legislation for women, they opposed it for men because they wanted to encourage voluntary association. But progressives who supported the minimum wage for women also viewed themselves as supporters of what came to be known as a family wage. This was the notion that men should be paid a wage sufficient to support a family and that a women's place was in the home taking care of her family. Hence a minimum wage for women would naturally lead to a greater preference for men in hiring, thereby shoring up the integrity of the family.

But by the time the Fair Labor Standards Act took effect in 1938, which applied to both, there were larger economic issues to consider. As much as the various states with their own minimum wage laws during the Progressive era may have paved the way for the federal law in 1938, the new law was very much a product of the Great Depression. As a matter of simple economics, the depression generated two key problems: high unemployment and depressed wages and prices. The goal of policy, then, was to 1) generate jobs and 2) inflate prices. Public

works would serve to generate jobs in the name of putting purchasing power into the hands of potential consumers. As they demanded goods and services, prices would eventually begin to rise. Wages could also be inflated by legally sanctioning collective bargaining as one means of achieving higher wages. But they could also be inflated by creating a mandatory wage floor. Although scholars have debated whether or not the New Deal as a whole was revolutionary, the thinking at the time was actually quite conservative — to get business back on its feet. In as much as these steps were radical — as measured against laissez-faire standards — they were conservative in the larger Burkean tradition of striving to conserve a venerated tradition: capitalism. And as much as the minimum wage too may have been viewed as part of this larger effort to get business back on track, there were still plenty who opposed it, and for many of the same reasons it was always opposed.

The objective was to establish a minimum set of standards that would ensure that producers in one region of the country would not have unfair competitive advantage over producers in another because they were either paying substandard wages or working their employees excessively long hours. There were, however, a number of exemptions from the law. For the most part, the only workers covered by the law were those engaged in goods production and interstate commerce. Excluded from coverage were those engaged in local retail sales, intrastate commerce, transportation, and agriculture. Of course, executive, administrative and professional workers were excluded, as it was assumed that 1) their wages were considerably more than the minimum and 2) the nature of their work was such that a time clock could not be imposed. What is important to note is that many of those whom we today associate with the lower end, if not the lowest end, of the wage scale were simply not covered by the provisions of

the FLSA. And those for whom the law did apply, they were more likely to be members of a trade union, in which case their wages would be higher than the statutory minimum any way.

Within six months of its passage, Elmer Andrews, the Wage and Hours administrator, was proclaiming it a success insofar as it had successfully become a permanent part of the law of the land. At the same time, he was careful to note that its popularity perhaps derived from the modesty of the statute itself that better enabled business to adjust. Because of its limited scope, compliance was the rule; not the exception (Andrews, 1939). The law did no doubt create a major precedent for federal involvement in wage regulation, but the more important accomplishments were yet to come in the subsequent amendments. Still, one wonders, given its limited scope, just what the federal government was attempting to accomplish. Although it was likely to be the case that northern parts of the U.S. where wage rates were already higher than the established statutory minimum would not be affected that much, those regions where rates were considerably lower — particularly in the South — were. The minimum wage would achieve some measure of fairness by eliminating regional disparities. States with lower wage rates would effectively lose some of their comparative competitive advantage by having to pay a higher wage rate. That some states enjoyed this competitive advantage was viewed to be unfair. At the same time many of the exemptions appeared to apply to workers who were more likely to be congregated in the South and the West. In the end, then, consensus was built on the basis of a law that would be extremely limited in both its impact and scope. Most of the opposition would effectively be muted by limiting the scope to areas and people that would not immediately affect them politically.

The circumstances under which the wage was passed is ultimately what is responsible for the type of ambivalence the nation has had towards the minimum wage since. As a matter of course, Congress has not been able to introduce a scheme of indexation for fear that it would lead to inflation. Indexation was first introduced during discussions of the 1977 amendments to FLSA. Not only was organized labor arguing for an immediate restoration of the minimum wage to 60 percent of average annual hourly earnings, but indexation to ensure that it would always remain at 60 percent. Not only was it believed that this would assist the working poor, but it would be beneficial to business insofar as it would offer them stability and a regular pattern of cost increases (Levitan & Belous, 1979). And yet, even in those cases where indexation has even been suggested, it has been abandoned just to obtain the support for an increase itself. And yet, as recent history has shown, this critical failure in policy has resulted in a wage which has failed to keep up with the rate of inflation — and perhaps a situation where the only group willing to work for the minimum wage is specifically the teen labor market.

In a study for the Economic Policy Institute, William Spriggs and Bruce Klein found that when the minimum wage rises, the starting wages of nearly 3/5 of those in starting positions also rise, regardless of whether their jobs actually pay minimum wages or not. When the minimum wage remains constant— thus falling in real terms — their wages are held down. Because the minimum wage was held constant from 1981-1989, a full time worker heading a family of three and earning the minimum fell \$2,300 below the poverty line in 1992. But this worker would have been above the poverty line in 1979. This same worker in a family of two would have fallen \$606 below the poverty line. And if this worker was heading a family of four, s/he would have fallen \$5,364 below the poverty line. According to this study, although minimum wages may be

important in affecting employment levels, it plays a significant role in determining the wages of America's overall workforce — especially those with only a high school education and those living in rural areas. This is because 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). Also as David Gordon has argued more recently, conventional estimates look at those earning at or below the minimum wage at a specific point in time. And yet, a decline in the real value of the minimum wage affects a much wider segment of the labor market. It also affects those earning in between where the real minimum wage used to be and where it winds up at the end of the dip. Therefore, an increase in the minimum wage is likely to cause an upward pressure on the wages of those earning above the old minimum wage and those earning the new wage (Gordon, 1996, p. 215). If minimum wages, as they suggest, are a cultural artifact, the implication might be enormous. Presumably that reference point could be altered. In other words, is this reference point really a function of where the market clears, or is it because there is a broad consensus of what the wage is?

The more important implication, however, is the notion that wages are determined more by structural factors than by competitive markets. Consider the following data.

Table II Percent of Hourly Paid Workers Earning Minimum Wage

<i>Year</i>	<i>Both Sexes</i>	<i>Men</i>	<i>Women</i>
1979	13.3	7.7	20.2
1980	15.1	9.6	21.6
1981	15.1	9.6	21.2
1982	12.8	8.6	17.3
1983	12.2	8.4	16.4
1984	11.0	7.5	14.8
1985	9.9	6.9	13.2
1986	8.8	6.9	11.9
1987	7.9	5.4	10.5
1988	6.5	4.4	8.6
1989	5.1	3.5	6.7
1990	5.1	3.3	7.0
1991	9.3	6.7	11.8
1992	7.6	5.7	9.5
1993	6.6	5.0	8.2
1994	6.2	4.7	7.8

Source: Drawn from Table 9, U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the Current Population Survey (CPS)

Table III Percentage of Minimum Wage Earners by Sex, Marital Status and Age

	<i>Both Sexes</i>	<i>Men</i>	<i>Women</i>
Total, 16 years and over	6.2	4.7	7.8
Never Married	11.3	9.4	13.7
16 to 24 years	15.7	13.2	18.5
25 years and over	5.1	4.3	6.2
25 to 54 years	5.0	4.2	6.2
Married, spouse present	3.3	1.9	4.7
16 to 24 years	8.5	5.2	11.4
25 years and over	2.9	1.7	4.2
25 to 54 years	2.7	1.4	4.1
Other Marital Status	5.4	2.9	6.9
16 to 24 years	13.2	6.1	16.9
25 years and over	5.1	2.8	6.5
25 to 54 years	4.6	2.6	6.0

Source: Drawn from Table 7, U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the CPS.

Those who point to the low percentage of those earning the minimum wage as evidence that the wage as an aid to the poor would be poorly targeted, often fail to note that in 1979 the percentage of the labor force earning the minimum wage was more than double. Although there is a higher percentage of women earning the minimum wage than men relatively speaking, the percentage of women earning the minimum wage in 1979 was considerably higher. The gap between men and women narrows from 12.5 in 1979 to 3.1 in 1994.

It is true that the highest percentage of minimum wage workers are to be found among the 16-24 age cohort, but there is still a considerable number of minimum wage earners outside that cohort. What appears to have gotten little notice is that this decline also appears to coincide with a period when the minimum wage declined in value. If there is a relationship, it would seem to have some critical implications. On the one hand, it might be inferred that fewer people earning the minimum wage is a measure of progress in that fewer minimum wage earners might presuppose that these workers have been successful in moving out of minimum wage jobs. This is clearly an argument that supporters of the competitive market model are likely to make. On the other hand, it is perhaps disturbing that this trend does coincide with the declining value of the minimum wage. We are perhaps left to wonder whether those who were earning the minimum wage previously didn't simply drop out because the value of the wage was simply inadequate. Many of these people, especially women with children, have been able to receive greater income through public assistance programs. If this is true, it would lend support to the notion that a higher wage, or at least one that more closely approximates 50 percent of average annual hourly earnings, will attract those at the low end of wage scale into the labor market. It is the latter argument that we are more likely to see from those supporters of the monopsony model.

The other issue to consider, of which unfortunately there is little data on the matter, is just how many people would have been attracted to the labor market were the wage set at a higher level — a wage sufficient to make work viable for many who previously may have found public assistance to be more attractive. Although there is little data on this, the question is critical given recent changes to the national welfare law. As a function of new law, states will have to reduce their welfare rolls by 50 percent by 2002. Some of this will be done through the creation of work programs intended to assist some recipients in job search and other in the development of skills and other work habits. But much of it will be accomplished by directing as many as possible into the private labor market. Therefore, in order for “work” to be a successful option, it does indeed need to pay (Bane & Ellwood, 1994)

Policy

To achieve a liveable wage would require a drastic measure by Congress. To even bring the wage into lines with 50 percent of average annual hourly earnings would require an immediate increase of at least 15 percent. Herein lies the political problem that has been driving many of the economic consequences of a declining minimum wage. The larger the increase in the minimum wage, the more of a shock it is bound to be to that sector of the economy that hires most minimum wage workers. A mechanism for increasing the wage in small increments on an annual basis would offer greater stability. But because of the immediate shock that would attend to such a large increase, Congress is less likely to vote on an immediate increase. The natural consequence of this is that the value of the wage erodes even further. So by the time Congress feels that it can act because it in fact must, it is too little and too late.

To have a wage that enables individuals to support a family above the poverty line would require some mechanism for automatically adjusting the wage on an annual basis. The obvious mechanism for this would be to simply tie the wage to the Consumer Price Index (CPI). This has the obvious benefit of raising wages by whatever percentage increase there is in the CPI. So a three percent increase in the CPI would result in a three percent increase in the wage. But for a variety of reasons, this is not necessarily the path that Congress ought to take. First of all, studies have shown the CPI to overstate the rate of inflation (Papadimitriou & Wray, 1996). Although the CPI does indirectly reflect productivity increases through price increases, it still is not known how much of a productivity increase there has been. Because there hasn't been a direct measure of productivity that is directly commensurate with increase in wages, there may be a tendency to view such a measure as having an inflationary effect. Indeed an increase in the wage without a commensurate increase in productivity would be inflationary. And in fact, many businesses have moved away from the traditional cost-of-living adjustment in favor of annual bonuses based on productivity.

Therefore, a minimum wage indexation mechanism tied to productivity increases would probably be the wisest policy course from both the standpoint of economic theory and political feasibility. The problem with a productivity index is that productivity is very hard to define, let alone measure. Nevertheless, there are a couple of policy approaches that could be employed, which would not require getting mired in the labyrinth of productivity definition. The first would simply involve tying the minimum wage to a certain percentage of mean hourly earnings or the median of annual earnings. And indeed, for much of the history of the minimum wage program, the wage did hover around 50 percent of average annual hourly earnings. The problem with

means, however, is that they may not be good measures of people's actual wages. Averages, after all, can be skewed by extremes at either end of the spectrum. Therefore, a better measure might be to create an index on the basis of median wages. Were the wage to be set at that level based on the median for 1996 of \$12.25, the minimum wage would be \$6.13 as opposed to the \$5.15 it is currently. Then whatever percentage the average annual wage increases by, the minimum wage increases by the same percentage. Table IV shows what the relationship between the minimum wage and the median hourly wage would have been had it been tied to a percentage of average annual hourly earnings.

Table IV Median Annual Wage Index (assumes minimum wage at 50%)

<i>Year</i>	<i>Med. Wage</i>	<i>% increase</i>	<i>indexed wage</i>	<i>actual minimum</i>	<i>difference</i>	<i>% diff</i>
1983	7.73		3.87	3.35	(0.33)	9.9
1984	8.15	5.4	4.08	3.35	(0.72)	21.5
1985	8.58	5.3	4.30	3.35	(0.95)	28.4
1986	8.95	4.3	4.48	3.35	(1.13)	33.7
1987	9.33	5.0	4.70	3.35	(1.35)	40.3
1988	9.63	3.2	4.85	3.35	(1.50)	44.8
1989	9.98	3.6	5.02	3.35	(1.67)	49.9
1990	10.38	4.0	5.22	3.80*	(1.42)	37.4
1991	10.75	3.6	5.41	4.25*	(1.16)	27.3
1992	11.13	3.5	5.60	4.25	(1.35)	31.8
1993	11.58	4.0	5.82	4.25	(1.57)	36.9
1994	11.68	0.9	5.89	4.25	(1.63)	38.4
1995	11.98	2.6	6.03	4.25	(1.78)	41.9
1996	12.25	2.3	6.17	4.70*	(1.47)	31.3
1997**	12.62	3.0	6.36	5.15*	(1.21)	23.5

*These are the years that increases in the statutory minimum wage took effect. The figures for **1997 represent estimates based on a 3.0 percent increase.

Source: Authors calculations based on data in unpublished tables from the U.S. Department of Labor, Bureau of Labor Statistics for the years 1983-96.

On the basis of this index, the minimum wage comes out to \$6.36, a \$1.21 more than the current statutory minimum wage. And by applying the increase to minimum wage workers, everybody shares in the benefits of productivity growth.

The virtue of this approach over the CPI is the assumption that could reasonably be made that whatever increase occurred was based on an increase in productivity. The only drawback to this approach is the apparently arbitrary nature of establishing the wage rate. Why, after all, assume that a minimum wage worker is only worth 50 percent as opposed to more? The policymaker may not want to get involved in making moral judgements about the intrinsic worth of individuals. But at the same time, there is historical precedent for this approach because in the past, Congress, when it would raise the wage, would aim to restore it to somewhere between 50-55 percent, as has already been noted in Table I.

The second approach would be to look at the median of the lowest wage workers in the U.S. and to regard them as being in effect low-skilled workers. Instead of dealing with the different gradations of skills, we would simply assume there are two kinds of workers: skilled and unskilled. The average wage of the lowest skilled workers would, to a large extent, serve as a reference point, and for all practical purposes be the putative minimum wage. This, would, of course, have implications for the statutory minimum wage. Again, whatever percentage increase there was in the putative minimum wage would simply be applied to the statutory minimum wage. Again, it would be assumed that increases in the putative minimum wage are based on productivity increases, which ultimately means that instead of the government deciding on the rate of increase, the private sector would be doing so. The assumption, again is that the private sector is better poised to make determinations of productivity increases. This scenario can be seen in Table V.

Table V Median Wages of the Lowest Wage Sector

<i>Year</i>	<i>Med. Wage</i>	<i>% increase</i>	<i>indexed wage</i>	<i>actual minimum</i>	<i>difference</i>	<i>% diff</i>
1983	4.70			3.35		
1984	5.00	6.4	3.56	3.35	(0.21)	6.3
1985	5.00	—	3.56	3.35	(0.21)	6.3
1986	5.13	2.6	3.65	3.35	(0.30)	9.0
1987	5.33	3.9	3.79	3.35	(0.44)	13.1
1988	5.53	3.8	3.93	3.35	(0.58)	17.3
1989	5.75	4.0	4.09	3.35	(0.70)	20.9
1990	6.13	6.6	4.36	3.80*	(0.56)	14.7
1991	6.40	4.4	4.55	4.25*	(0.30)	7.1
1992	6.48	1.3	4.61	4.25	(0.36)	8.5
1993	6.68	3.1	4.78	4.25	(0.53)	12.5
1994	6.68	—	4.78	4.25	(0.53)	12.5
1995	6.85	2.5	4.90	4.25	(0.65)	15.3
1996	7.08	3.4	5.06	4.70*	(0.36)	7.7
1997**	7.29	3.0	5.21	5.15*	(0.06)	1.2

*These are the years that increases in the statutory minimum wage took effect. The figures for

**1997 represent estimates based on a 3.0 percent increase.

Source: Authors calculations based on data in unpublished tables from the U.S. Department of Labor, Bureau of Labor Statistics for the years 1983-96.

Although the indexed wage does not come out much higher than it is currently, and most likely it still does not offer much assistance to low-wage workers, it would still have the virtue of evolving through a gradual and regular process, which would remove the shock attendant to most increases according to the procedures currently in place. The virtue of the second over the first is that most of those who are going to take minimum wage jobs are going to be working in the lowest wage sector of the economy. Therefore, it might seem reasonable to allow that sector to have a greater say in the rate of increase, based on productivity levels, that could be applied to the statutory minimum wage. Even though the minimum wage worker is not much better off than s/he would be under the current statutory minimum wage, this worker would still see an increase in his/her earnings over the next few years. This would then slow down the decline in the value

of his or her wages until the next supposed crisis that would force Congress to finally take action, which would again be too little and too late. This is by no means immaterial, for if the new welfare-to-work programs are to succeed in moving welfare recipients into the labor market and keep them there, these people need to see tangible evidence that their wages will grow and that “work” can ultimately pay.

This, then, leads to yet another consideration. That is to ask just how much one would need to cover basic living expenses. Doug Henwood, for instance, has estimated that in 1991 dollars a household would need to \$29,614 to cover yearly expenses on the assumption of an average annual wage of \$10.33. At this rate, this household would have to work 55 hours a week. If this is a family of four, it is only at twice the poverty level. An estimated wage on the basis of the median for the lowest wage sector would still leave one below the poverty level, even working at 55 hours a week. The other would not succeed in lifting a household above the poverty level at all.

Although it would be quite a jump to raise the minimum wage from its current \$5.15 an hour to the lowest- wage sector median of \$7.29, the policymaker might want to consider establishing an indexed wage initially set at that level. Were the severity of the initial increase to pose a hardship for employers, perhaps short-term subsidies could be offered to help defray the initial costs. These subsidies could be paid for by eliminating the EITC, because a minimum wage at \$7.29 an hour would most likely exceed the combined value of the current minimum wage and the EITC combined. And yet, the greater loyalty that higher wages might engender among employees might be immeasurable, as it would presumably lead to higher productivity.

Conclusion

Regardless, of which approach is taken, the effect would be to create a public-private partnership type of relationship whereby government implements a new wage rate based on what is happening in the private sector of the economy. Instead of the decision being made by a government bureaucrat, the decision would effectively be a grass roots decision on the basis of a consensus that was arrived at through the collectivity of private decisions. Critics of indexation schemes often claim that such measures would be inflationary. And yet, because the statutory minimum wage is so far below the putative minimum wage of the lowest-wage sector, it is hard to see how the minimum wage increasing at the same rates as the others could exert much inflationary pressure. On the contrary, annual increases in the wage would actually reduce much of the shock that many employers of minimum wage workers must experience each time Congress actually does implement a new minimum wage. When Congress has had to act, it has at times had to increase the wage by as much as 25 percent just to bring it within the 50 percent range of the average, which in most cases leaves it below that range for the median. And even during the years when the minimum wage was restored to a level that was still below 50 percent, increases in their first phases were still over 11 percent. Such increases are considerably greater than whatever increases would be mandated through an indexation mechanism. Would this not have a greater impact on a firm's cost structure than gradual increases? Of course, were the minimum wage worker to be fortunate enough to obtain as much as an 11 percent increase, it would be a function of higher productivity levels as opposed to a form of largess that rewards inefficiency. Also because the wages of those at the bottom would be rising along with everybody else's, the disparity between the top and the bottom would not be as great.

Ultimately the whole question of indexation requires us to revisit the economic theory which holds that increases in the minimum wage leads to lower employment. Is lower employment a function of the increase per se? Or is it a function of the size of the increase? If the great concern of most minimum wage employers is the wage rates of those earning around the minimum wage, gradual increases would not have as great an impact as larger increases. Moreover, automatic indexation would remove the issue from politics and ensure that those at the low end of the wage scale can continue to earn a wage that keeps up. This might also serve to reduce the level of turnover in minimum wage jobs. In as much as this might reduce turnover, employers would have greater incentive to invest in on-the-job training, which in turn will only lead to greater productivity.

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