# "A public outcry over wages... in turn-of-the-century sweatshops led to the first minimum wages in the U nited States." 

THE 20-PERCENT increase in the federal minimum wage scheduled to occur over the next year may not be the best way to boost the incomes of lowskilled workers and their families. This article explores the purpose and impact of the minimum wage in an effort to discover whether it is a good idea.

Proponents of the minimum wage argue that it ensures a "living wage" for workers who might otherwise be underpaid, while opponents claim it costs hundreds of thousands of workers their jobs and reduces new hires of unskilled workers. About 10 percent of workers will be directly affected by the two increases in the minimum wage Congress authorized in 1996. The first increase, which took effect on October 1, boosted the minimum wage from $\$ 4.25$ to $\$ 4.75$. The second increase, scheduled for September 1, 1997, will raise the wage floor to $\$ 5.15$.


A public outcry over wages and working conditions in turn-of-thecentury sweatshops led to the first minimum wages in the United States. Several states, beginning with Massachusetts in 1912, regulated minimum wages, maximum hours and working conditions for women and minors. A national minimum wage was created in 1938 when President Franklin D. Roosevelt signed the Fair Labor Standards Act (FLSA). Initially set at 25 cents per hour, the wage floor applied to industries engaged in interstate commerce and covered about one-fifth of the labor force. The FLSA also required overtime pay and set restrictions on child labor.

The basic goal of the minimum wage is to guarantee workers a "fair wage." Congress determines increases in the federal minimum wage and has usually set it at about one-half the average manufacturing wage. (Table 1 summarizes the history of the federal minimum wage.) Since the minimum wage is set in nominal terms, its real value declines as prices rise until Congress raises the wage floor again, creating the sawtooth pattern evident in Chart 1. As shown in the chart, the minimum wage fell dramatically relative to the average manufacturing wage during the 1980s, prompting one-third of the states to impose state minimum wages above the federal level. Over time, Congress has

| Table 1 <br> Feder al Minimum Wage Chronology |  |  |
| :---: | :---: | :---: |
| Date of legislation | Date of increase | Nominal minimum wage |
| 1938 | October 1938 | \$ . 25 |
|  | October 1939 | . 30 |
|  | October 1945 | . 40 |
| 1949 | January 1950 | . 75 |
| 1955 | March 1956 | 1.00 |
| 1961 | September 1961 | 1.15 |
|  | September 1963 | 1.25 |
| 1966 | February 1967 | 1.40 |
|  | February 1968 | 1.60 |
| 1974 | May 1974 | 2.00 |
|  | January 1975 | 2.10 |
|  | January 1976 | 2.30 |
| 1977 | January 1978 | 2.65 |
|  | January 1979 | 2.90 |
|  | January 1980 | 3.10 |
|  | January 1981 | 3.35 |
| 1989 | April 1990 | 3.80 |
|  | April 1991 | 4.25 |
| 1996 | October 1996 | 4.75 |
|  | September 1997 | 5.15 |
| NOTES: Nominal minimum wage is the highest minimum wage in effect; lower rates often are applied to workers newly covered by the Fair Labor Standards Act or to young workers. |  |  |
| SOURCE: U.S. Bureau of the Census, Statistical Abstract, various years. |  |  |

greatly expanded the coverage of the FLSA, and almost 90 percent of workers now must be paid at least the minimum wage. Most businesses with annual sales of less than $\$ 500,000$ are exempt from the minimum wage standard.

Concerns that the wage floor would reduce employment for certain groups of workers led to the creation of "subminimum wages." The federal wage floor has usually been lower for students, and in 1989, the subminimum wage was expanded to cover all teenagers. Under the 1996 law, employers will still be able to pay teenagers $\$ 4.25$ for up to 90 days. Tipped employees may also be paid less than the wage floor since the law currently includes a "tip credit" that allows employers to pay workers $\$ 2.13$ an hour and credit tips for the rest of the wage floor.

## Who Earns the Minimum Wage?

Before we assess the effects of minimum wage hikes, it is useful to examine the demographics of those earning the minimum wage to determine whether the policy helps low-skilled workers who support families or merely boosts the incomes of middle-class teenagers. Relatively few workers earn exactly the minimum wage - only 5.3 percent in 1995. Fewer than 10 percent of workers earned between $\$ 4.25$ and $\$ 5.15$.

There are two main types of minimum wage workers: youths who are earning a starting wage, often while still in school, and adult women for whom the minimum wage is a primary source of household income. In 1995, more than one-third of all workers earning the federal minimum wage were teenagers, and another one-fifth were aged 20-24. The vast majority were part-time

workers, and over 60 percent of workers paid the federal minimum wage were female. Table 2 summarizes the characteristics of minimum wage workers.

Minimum wage workers are highly concentrated in the retail trade and service sectors and in small businesses. Over four-fifths of workers paid the federal minimum wage in 1993 were employed by retail trade or service establishments. More than one-half of all workers earning the minimum wage were employed at establishments with fewer than 25 employees, and about 85 percent were employed by establishments with fewer than 100 employees. In addition, a higher fraction of workers employed by small businesses are paid the minimum wage; almost 4 percent of employees at establishments with fewer than 25 employees earned the minimum wage, compared with less than 1 percent at establishments with more than 250 employees.

Many economists believe that the minimum wage raises the wages of middle-class teens while doing little to help the working poor get out of poverty. Edward Gramlich (1976) found that any income gains among teenagers resulting from the minimum wage are about evenly split between high-income and low-income families. The vast majority of minimum wage workers are not the primary wage earner in a poor
family; Richard Burkhauser and T. Aldrich Finegan (1989) estimated that in the mid-1980s only 7 percent of lowwage workers were heads of families living in poverty. Burkhauser, Kenneth Couch and David Wittenberg (1996) found that almost 40 percent of all workers directly affected by the minimum wage increases in 1990 and 1991 were from families in the top half of the income distribution, with 4 percent of affected workers in the top decile.

The minimum wage does have the potential to raise the incomes of some poor households, particularly those headed by women. About 40 percent of poor adults worked in 1994, and

## Table 2 <br> Char acteristics of Minimum <br> Wage Workers in 1993

Percentage of minimum wage workers*
Age 16-19 37 Age 20-24 20 Female 61 Black 13 Hispanic 13
14 Part-time** 68 In retail trade or services Employed by small businesses*** 60

[^0] $\$ 4.25$, the federal minimum wage. All figures based on the 1993 Current Population Survey. Establishment data are from D. Card and A. Krueger (1995).
** Usual weekly hours less than 35
*** Establishments with fewer than 25 workers.
low-wage workers contribute about one-half of household earnings. Over one-fourth of all workers in the lowest family income decile were affected by the 1990 and 1991 federal minimum wage increases, according to Burkhauser, Couch and Wittenberg. Because women tend to have lower earnings than men, working women are more likely to be in poverty. In 1987, the earnings of nearly 18 percent of working female household heads were less than the poverty level.

However, the minimum wage is not high enough to lift most single-earner families out of poverty. After the federal minimum reaches $\$ 5.15$ in 1997, a full-time, year-round worker will earn about $\$ 10,700$ annually before taxes, less than the poverty level for a family with two children. More than one-half of all families headed by single women with children were below the poverty level in 1993.

In addition, low-skilled adults may be the most likely to be laid off when the minimum wage is raised. Minimum wage increases may draw more-skilled workers into the labor market and cause employers to switch from lowskilled workers to high-skilled ones. Indeed, Kevin Lang (1994) found that minimum wage increases appear to have caused restaurants to substitute teenagers for lower skilled adult workers. Similarly, research by David Neumark and William Wascher (1995) suggests that employers substitute higher skilled teens for lower skilled teens when the minimum wage is raised.

Youths who earn the minimum wage are soon likely to earn higher wages, while adults with low levels of education are more likely to get stuck at the wage floor. Ralph Smith and Bruce Vavrichek (1992) followed a group of workers earning the minimum wage in the mid-1980s and found that over 60 percent of them were earning higher wages after one year, with a median wage gain of 20 percent. However, over one-third of those workers who were
still employed a year later did not experience any wage increase, even before adjusting for inflation. These workers tended to be older and have less education than workers who experienced a wage increase. These demographics suggest that a substantial minority of low-wage workers might receive even lower wages in the absence of a minimum wage.

Teens and low-skilled women are the primary earners of the minimum wage. If the minimum wage is designed to ensure a "living wage" for families, it fails to accomplish this because it does not raise a single-earner household with children out of poverty. Although the minimum wage raises some workers' wages, it also may hurt the very workers it is designed to help since businesses may respond to minimum wage increases by reducing the number of employees, cutting the number of hours worked by employees and/or raising prices.

## Effects of Minimum Wage Increases

Neoclassical economic theory predicts that a minimum wage increase will reduce the number of low-wage workers demanded by employers. Under this model, employment of workers who initially earned less than the new wage floor should fall when the minimum wage is increased. If employers need to raise the wages of other workers to maintain a wage hierarchy within the firm, the ripple effect can cause even greater employment losses.

Economists have tested this theory by examining the effect of minimum wage increases on employment among teenagers. Most studies have found that an increase in the minimum wage slightly lowers teenage employment. ${ }^{1}$ In their 1982 survey of minimum wage research, Charles Brown, Curtis Gilroy and Andrew Kohen conclude that a 10percent increase in the minimum wage reduces teen employment by 1 to 3 percent. In a recent study, Donald Deere,

Kevin M. Murphy and Finis Welch (1995) conclude that the 1990 and 1991 increases in the federal minimum wage caused teen employment to be at least 10 percent lower than it would otherwise have been.

Several recent studies, however, have found that minimum wage increases appear not to reduce employment among low-wage workers. David Card and Alan Krueger (1995) find that increases in federal and state minimum wages during the 1980s and early 1990s did not reduce employment among teenagers or workers at fast-food restaurants. Indeed, their research suggests that the increases may even have slightly raised employment. In a particulany controversial study, Card and Krueger find that a 90 -cent increase in New Jersey's minimum wage in 1992 appears to have increased employment at fast-food restaurants relative to neighboring Pennsylvania, which did not experience a minimum wage increase. This research, and its implications for public policy, has been strongly criticized on methodological and theoretical grounds.

There are several potential reasons employment might not fall when the minimum wage rises. First, an increase in the minimum wage simply might not be large enough to raise wages. Even if the minimum wage hike raises workers' pay, there are several possible scenarios in which employment might not fall or might even increase. One such possibility is monopsony, in which a firm can attract more workers if it increases the wage. If workers with similar skills have different reservation wages-the lowest wage at which they are willing to work-then an employer will first hire those workers with the lowest reservation wages. As a firm hires more workers, it must raise the wage, but employers may not be willing to pay higher wages to all workers to attract additional workers. Under this theory, a minimum wage increase forces the employer to offer a higher wage and
increases the number of persons willing to work, thereby possibly increasing employment. ${ }^{2}$ Another possibility is that existing workers become more productive when the minimum wage is raised or higher skilled workers enter the labor market, and increased output balances out the higher cost of labor to employers.

These explanations for why minimum wage increases may not reduce employment are not particularly compelling or realistic. Monopsony power effectively requires that an individual firm have a monopoly on jobs. This almost certainly does not characterize the labor market for most firms, particularly those that employ low-skill, lowwage labor-just consider the number of fast-food restaurants in your town and think about whether any one of those firms can be considered a monopoly provider of jobs for low-skill workers. In addition, if a firm can increase output and potentially earn greater profits by offering a higher wage, it should be willing to offer the higher wage without the mandate of the minimum wage.

Another reason employment might not fall when the minimum wage increases is that businesses may reduce hours while keeping the same number of workers. This practice potentially leaves workers better off if they are able to earn the same amount as before by working fewer hours at a higher wage. However, there is no current empirical evidence to support or refute this hypothesis. Economists have also suggested that employers may replace labor with capital over the long run in response to minimum wage hikes, in which case the true impact of a minimum wage increase cannot be observed for several years.

Employers may raise prices as well as reduce employment when the minimum wage increases. This effect has been documented in fast-food prices, which is not surprising since most restaurant employees' wages are near

## "A tax-based policy can be both more equitable and more efficient than the minimum wage."

the minimum wage. Several researchers have found that a 10 -percent increase in the minimum wage is correlated with a 1-percent increase in fast-food prices. Minimum wage increases can contribute to inflation through two channels: firms may raise prices to recoup higher labor costs, and workers earning higher incomes may raise aggregate demand, creating further upward pressure on prices.

## Is There a Beter Way?

The historical basis of the minimum wage was to prevent the exploitation of labor. Proponents of the federal minimum argue that it is still needed almost 60 years after its creation to ensure a living wage. Although the wage floor does raise wages for some workers, it can also reduce employment opportunities and raise prices. Minimum wage supporters often argue that the povertyreducing effects of the minimum wage outweigh the potential small disemployment effects. However, most minimum wage workers are not from impoverished families, and the least skilled, lowest wage workers are the most likely to be laid off when the minimum wage is increased.

There are better ways for government to help the working poor, particularly those who are supporting families. One option is to use tax policy to ensure that workers earn at least the poverty level for their household. The minimum wage could be replaced by a combination of tax credits and a negative income tax. This approach has several advantages. A tax policy could easily be targeted to help only workers from poor families instead of benefiting all workers regardless of need. While the minimum wage acts as a tax on businesses that hire low-skilled workers, an alternative program could be funded with general tax revenues. A tax-based policy can be both more equitable and more efficient than the
minimum wage.
In addition, a tax-based policy would offer low-skilled workers greater opportunity to acquire job-market experience. The minimum wage can be a disincentive for firms to hire low-skilled workers, reducing the ability of workers to get a foot in the door and learn skills through on-the-job training. Of course, a primary disadvantage of eliminating the minimum wage is that some firms might be able to exploit workers and pay them below-market wages.

The United States already has a policy similar to the one outlined above: the Earned Income Tax Credit (EITC), which provides a wage subsidy to low-income workers with dependents. In 1996, for example, a worker who has two children and earns less than $\$ 8,890$ receives a 40 -percent wage subsidy under the EITC. Benefits are phased out as earnings increase and families rise above the poverty level. Unlike the minimum wage, the program only benefits low-income workers, and the benefit is based partially on family size. The EITC also can move more working families with only one wage earner out of poverty than can the minimum wage. ${ }^{3}$

Given that programs like the EITC are a better way to "make work pay" than the minimum wage, why do we continue to have a minimum wage? Surveys show the vast majority of the American public supports the minimum wage. Politicians support it because it offers a way to redistribute income through an indirect tax on businesses, whereas tax-based programs such as the EITC require government funding in an era of budget deficits. Some members of Congress have recently even called for reducing the EITC to reduce government expenditures. Unless the public and politicians recognize that a taxed-based program is a better way to help the working poor, the federal minimum wage policy almost certainly will continue to exist.

- Madeline Zavodny


## Notes

Economists focus on the effect of the minimum wage on employment instead of on unemployment since the minimum wage potentially affects labor supply as well as employment. Several studies have found that teen labor supply falls when the minimum wage increases, and, therefore, teen unemployment can decline even though the teen employment falls.
${ }^{2}$ Dynamic monopsony, a variant of the monopsony model, is another theory for why employment might increase when the minimum wage rises. In this model, the minimum wage helps solve imperfect information problems. In one plausible version of the dynamic monopsony model, an increase in the minimum wage raises employment by reducing labor turnover.
${ }^{3}$ A worker with two children earning the minimum wage of $\$ 4.25$ in 1996 would have earned $\$ 8,840$ annually. A minimum wage of $\$ 5.15$ raises the family's income to $\$ 10,712$, while the current EITC program raises it to $\$ 12,376$. The poverty level for this family was $\$ 12,278$ in 1995.

## References

Brown, C., C. Gilroy and A. Kohen (1982), "The Effect of the Minimum Wage on Employment and Unemployment," Journal of Economic Literature 20 (June): 487-528.

Burkhauser, R., K. Couch and D. Wittenberg (1996), "'Who Gets What' from Minimum Wage Hikes," Industrial and Labor Relations Review 49 (April): 547-52.
———, and T. A. Finegan (1989), "The Minimum Wage and the Poor: The End of a Relationship," Journal of Policy Analysis and Management 8 (Winter): 53-71.

Card, D., and A. Krueger (1995), Myth and Measurement (Princeton, N.J.: Princeton University Press).

Deere, D., K. M. Murphy and F. Welch (1995), "Employment and the 1990-1991 Minimum Wage Hike," American Economic Review Papers and Proceedings 85 (May): 232-37.

Gramlich, E. (1976), "Impact of Minimum Wages on Other Wages, Employment, and Family Incomes," Brookings Papers on Economic Activity 2: 409-51.

Lang, K. (1994), "The Effect of Minimum Wage Laws on the Distribution of Employment: Theory and Evidence," Working Paper, Boston University.

Neumark, D., and W. Wascher (1995), "The Effects of Minimum Wages on Teenage Employment and Enrollment: Evidence from Matched CPS Surveys," NBER Working Paper No. 5092, April.

Smith, R., and B. Vavrichek (1992), "The Wage Mobility of Minimum Wage Workers," Industrial and Labor Relations Review 46 (October): 82-88.


[^0]:    NOTES: * Defined as workers paid an hourly wage of

