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MINIMUM WAGE TRENDS

Understanding past and contemporary research

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There is a growing view among economists that the minimum wage offers substantial benefits to low-wage workers without negative effect. Although there are still dissenters, the best recent research has shown that the job loss reported in earlier analyses does not, in fact, occur when the minimum wage is increased. There is little question that the overall impact of a minimum wage is positive, as the following facts make clear:

- If the minimum wage were increased nationally to $7.25:
    - 14.9 million workers would receive a raise,
    - 80% of those affected are adults age 20 or over, and
    - 7.3 million children would see their parents income rise.
- Families with affected workers rely on those workers for over half of their earnings.
- 46% of all families with affected workers rely solely on the earnings from those workers.
- Some minimum wage workers remain in low-wage jobs for substantial periods.
- The best recent research on the economic impact of the minimum wage shows positive effects without job loss.
- Even the research that suggests a negative labor market effect shows only a minimal impact that is more than offset by the higher wage levels.
- The states that have adopted higher-than-federal minimum wages have seen low-wage workers' incomes rise with no negative side-effects.
- Over 650 economists, including five Nobel Prize winners and six past presidents of the American Economics Association, recently signed a statement stating that federal and state minimum wage increases "can significantly improve the lives of low-income workers and their families, without the adverse effects that critics have claimed" (EPI 2006).

The federal minimum wage of $5.15 is currently at its lowest real (i.e., inflation-adjusted) value in over 50 years. Historically, when the federal government has failed to raise this floor, states have stepped in. In fact, a greater percent of the U.S. workforce is currently covered by higher state minimum wages than ever before. Twenty-two states plus the District of Columbia have minimum wages above the federal rate, covering 58% of the nation's labor force.

This Briefing Paper examines the evidence regarding the economic effects of state minimum wage increases, identifying the beneficiaries of an increase as well as any potential negative consequences.

Analysis of the 2005 Current Population Survey reveals that the workers potentially affected by a minimum wage increase are mainly adults who typically work full time and provide significant income to their families. If the federal minimum wage were increased to $7.25 per hour by 2008, 14.9 million workers would see their wages rise. The vast majority (80%) of workers affected are adults age 20 and above. Twenty-six percent of these workers are parents, and as a result over 7.3 million children of low-wage workers would see their parents' income increase if the federal minimum wage was increased to $7.25 per hour by 2008.[1] From a historical perspective, this demographic portrait is consistent with the make-up of workers benefiting from the last federal minimum wage increase (Bernstein and Schmitt 1998).

Furthermore, the earnings of minimum wage workers are essential to their families' total income. While not all minimum wage workers are poor or are the sole breadwinner for their families, it is striking how important low-wage workers' income is to their economic well-being. On average, families with affected workers rely on those workers for over half (59%) of the families' total earnings. Nearly half (46%) of all families with an affected worker rely solely on the earnings of those workers.

Today, the earnings of a full-time minimum wage worker (working 40 hours/week, 52 weeks/year) with a family of three would earn $10,712 a year, thus falling 35.5% below the official 2006 federal poverty level of $16,600. Although the federal poverty line is an inadequate measure of the income needed to support a family, this comparison highlights the severe insufficiency of the current minimum wage (Fisher 1999).

Though the earnings of most workers rise as they age, prospects for advancement among those earning at or near the minimum wage are not as bright as is often asserted. A study by William J. Carrington and Bruce C. Fallick found a considerable portion of workers earn wages at or near the minimum wage for extended periods of time. Women, people of color, and individuals with lower levels of education are more likely to remain at a level near the minimum wage for extended periods of time. Once finished with school, 15.1% of women and 16.2% of blacks spent at least half of the first 10 years of their careers in jobs that paid no more than $1.50 above the minimum wage (Carrington and Fallick 2001, 23). Additional research by Heather Boushey found evidence supporting Carrington and Fallick's results. Analyzing the Survey of Income and Program Participation (SIPP), Boushey found that over a third of prime-age adults (aged 25-64) in minimum wage jobs remained in them three years later (Boushey 2005).

It is worth remembering, however, that a wage floor is not just important for a specific population of workers, but for many in the workforce—whether they are low-income workers struggling to enter the middle class or middle-class teenagers saving money for college.

Economic models and assumptions

For most of the 1970s and 1980s, the literature exploring the link between minimum wages and employment largely consisted of *time-series* analyses that suggested statistically significant negative employment effects resulting from minimum wage increases (given their small magnitude, discussed below, the economic significance of these early findings is subject to debate). These findings served to confirm the simple *competitive model* of the labor market.

Such a model inherently assumes that employers have perfect information about all employees and prospective hires, and hiring and firing is entirely without cost. Similarly, job-seekers have perfect information about all prospective employers, and there are no costs associated with job loss and unemployment. The model further assumes

that workers and employers have essentially unlimited access to other employment and hiring options. All of these assumptions lead to a labor market in which firms can hire as many workers as they please at a given market rate (over which they have no sway or control). According to such a model, if employers lower wages by 1 cent, then all workers will instantly quit. By this same logic, employers receive no benefit from paying a wage higher than the barest minimum necessary to hire workers. In this idealized world, a binding minimum wage (that is, a minimum wage higher than the equilibrium market-clearing wage) will necessarily lead to a decrease in employment.

This model is based on the assumption that low-wage workers can withhold their labor if they are not paid a sufficient amount. This is clearly a flawed vision of the labor market, especially for adults working in the low-wage labor market (the majority of those affected by a minimum wage increase). The reality is that low-wage workers must work to survive, and they must accept whatever wages they can negotiate via their limited bargaining power. But even this highly simplified model appeared to fit the empirical data (later research—see Bernstein and Schmitt (1998)—revealed the econometric flaws in these early time-series models). In the early 1990s, however, empirical studies began to appear that called into question this conventional wisdom.

The new economics of the minimum wage

In 1991, Alison Wellington extended the previous time-series estimates to include data from the 1980s. Over that decade, the real value of the minimum wage declined significantly, providing a chance to test the effect of decreases in the minimum wage. Wellington found statistically significant negative employment effects associated with higher minimum wages, but her estimate of an elasticity of -0.06—meaning that teenage employment declined less than 1% when the minimum wage increased 10%—was smaller than the lowest previous estimates (Wellington 1991). Wellington also found no statistically significant effect on young adults. Teenagers are often studied in the minimum wage literature because a high percentage of teenagers are low-wage workers. (Note, however, that teenagers compose only a small percentage of those most affected by minimum wage increases.)

In 1992, David Card of Princeton University published a study breaking with the time-series tradition. A limitation of time-series studies is that they invariably use relatively few statistical controls to disentangle the effects of the minimum wage from all of the many other changes occurring in the economy during the period examined. Card studied the 1990 increase in the federal minimum wage by examining state-by-state variation in the proportion of workers affected by the minimum wage. All else being equal, if the minimum wage actually decreases employment, then states with more low-wage workers will see larger decreases in employment (Card 1992a). Card found that the minimum wage had a positive effect on wages, but no significant employment effects one way or the other.

Another 1992 study by Card on California's state-specific 1988 minimum wage increase applied the *differences-in-differences* methodology. This technique provides an especially useful way to ensure that the researcher is controlling for all the relevant factors in the economy that, along with the minimum wage, might be determining employment outcomes. Rather than specifying a model to include all economic phenomenon over time, the difference-in-difference approach mimics experimental treatment and control groups used in clinical trials. Comparing California to a group of similar states that did not experience a minimum wage increase, Card again found a significant wage effect with no significant employment effect (Card 1992b).

Also in 1992, Lawrence Katz of Harvard University and Alan Krueger of Princeton University published a study using longitudinal data on fast-food establishments, tracking employment effects at the firm level after the 1991 increase in the minimum wage. Like Card, Katz and Krueger created a treatment group and a control group by examining variations in wages by using firms already paying higher-than-minimum wages before the minimum wage increase as a control group, because such firms ought to be unaffected by changes in the minimum wage. This study found a statistically significant positive employment effect (Katz and Krueger 1992). That is, employment increased more in firms for whom the minimum wage change was binding than for other firms.

Perhaps the most famous recent minimum wage study examined the employment effect of raising New Jersey's minimum wage. This study by Card and Krueger was groundbreaking because it examined firm-level data using a natural experiment methodology that examined the responses of firms on both sides of the New Jersey-Pennsylvania state border before and after the imposition of New Jersey's 1992 minimum wage increase. Card and Krueger focused their analysis on fast-food restaurants, as these would be the most heavily affected by the increase. By conducting a phone survey of a sample of over 400 fast-food restaurants, the researchers were able to conclude that the increase in the New Jersey minimum wage did not lead to any measurable negative effect on employment. Card and Krueger's results actually point to a slight positive effect on fast-food employment (Card and Krueger 1994).

Following the release of Card and Krueger's study, the Employment Policies Institute (EmPI), a restaurant-supported lobbying and research organization, immediately began public criticism of the findings (Neumark and Wascher 2000, 1,395). They recommended that payroll records collected directly from restaurants would be more accurate than the results from phone surveys. EmPI then solicited responses directly from restaurants without the use of a standardized procedure.[2]

Utilizing the data collected by EmPI, David Neumark of Michigan State University and William Wascher, an economist on the staff of the Federal Reserve Board, added additional data to re-evaluate the Card and Krueger results. Analysis of this combined dataset led Neumark and Wascher to reach the conclusion that the New Jersey minimum wage increase had statistically significant negative employment effects (with an elasticity of -0.21 to -0.22).

A number of questions were raised about the Neumark and Wascher results. During the time that both sets of data were collected, restaurant owners were widely aware of Card and Krueger's findings. This allows for introduction of possible bias on behalf of the respondents. Restaurant owners opposed to minimum wages had a personal interest in overstating the impact of the minimum wage increase to skew the results in order to dissuade future minimum wage increases. Neumark and Wascher solicited responses directly from restaurants with a letter explaining that they were trying to "re-examine the New Jersey-Pennsylvania minimum wage study" (Neumark and Wascher 2000, 1,395).

In a review of Neumark and Wascher's findings, Card and Krueger found that the results were driven by a *single franchisee* that provided Pennsylvania data showing a strong increase in employment. By reporting much stronger employment growth in Pennsylvania, which was the control state, this outlier skewed the expected result for New Jersey in the absence of a minimum wage increase. But when that outlier was excluded from the data, no statistically significant results could be found. Card and Krueger also found that the EmPI-collected data showed a much stronger negative employment effect (i.e., higher elasticity) than the data collected by Neumark and Wascher, which on its own did not show a statistically significant result.

Responding to concerns that both sets of data were not from an official government source, Card and Krueger expanded their research to include analysis of ES-202 data from the federal Bureau of Labor Statistics. These data are employer-provided and collected by state employment security agencies for unemployment insurance tax purposes and, as such, represent a virtual census of employment. Using these data, Card and Krueger find that their original results remained the most plausible—that the minimum wage increase in New Jersey had no effect on employment in the fast-food industry (Card and Krueger 2000).

Looking at the three studies as a whole, the minimum wage increase in New Jersey appears to have had no effect on employment. Setting aside either the highly questionable data collected by EmPI, or the single outlier Pennsylvania franchisee, even the Neumark and Wascher study finds no statistically significant result. After reviewing Card and Krueger's final study, Neumark and Wascher stated that they can only decisively conclude that "New Jersey's minimum wage increase did not *raise* fast-food employment in that state" (Neumark and Wascher 2000, 1,391). This set of studies is particularly important because it is the closest examination of firm-level data in a natural experiment

setting that provides a good comparison between firms affected and not affected by a minimum wage increase. Other studies are attempts to econometrically sift through much broader sample-based data, where isolating the impact of the minimum wage from the other forces in the economy is very difficult and prone to spurious results.

Coined the "new economics of the minimum wage," this most recent body of work found persuasive evidence of errors in earlier research. In an effort to reconcile differences between current and previous research, Card and Krueger undertook a comprehensive research review in 1995. In Card and Krueger's meta-analysis, they found that the earlier research on minimum wages was hampered by systematic methodological flaws that led many researchers to faulty conclusions; these flaws were not previously explored because the results were so thoroughly in line with the prevailing theory that they were not carefully questioned (Card and Krueger 1995b).

Evidence from the 1990s changes economists' minds

The belief that raising the minimum wage causes job loss was more commonly accepted by economists decades ago, but high-quality research by leading academic economists has forced the economic community to re-evaluate these arguments. This consensus view rapidly eroded following evidence from the 1990s. Even Benjamin Bernanke, President Bush's appointee as the Chairman of the Federal Reserve, has noted that "economists disagree about …whether increases in the minimum wage reduce employment of low-wage workers" (Bernanke 2006). In lieu of negative employment effects, economists are frequently citing higher productivity, decreased turnover, lower recruiting and training costs, decreased absenteeism, and increased worker morale as ways in which employers may be able to offset some of the costs of a wage increase (Bernstein and Schmitt 1998; Card and Krueger 1995a).

Some distinguished economists have acknowledged their change of opinion on the issue. Former Federal Reserve Vice Chairman and current Princeton economist Alan Blinder commented, "My thinking on this has changed dramatically. The evidence appears to be against the simple-minded theory that a modest increase in the minimum wage causes substantial job loss" (Chipman 2006). The latest version of his popular introductory economics textbook reflects his change in thinking:

> Elementary economic reasoning...suggests that setting a minimum wage...above the free-market wage...must cause unemployment....Indeed, earlier editions of this book, for example, confidently told students that a higher minimum wage must lead to higher unemployment. But some surprising economic research published in the 1990s cast serious doubt on this conventional wisdom. (2006, 10th edition**,** 493)[3]

Intensive research followed the 1996 and 1997 federal minimum wage increases. Applying three previously used methodologies to examine the potential disemployment effects of the federal minimum wage increase, Jared Bernstein and John Schmitt of the Economic Policy Institute found no systematic job loss resulting from the 1996-97 minimum wage increases. "The effect on employment is generally economically small and statistically insignificant; any impact is almost as likely to be positive as negative, varying unpredictably across demographic groups" (Bernstein and Schmitt 1998, 4). In fact, following the 1996-97 increases, the low-wage labor market actually performed better than it had in decades (e.g., lower unemployment rates, increased average hourly wages, increased family income, decreased poverty rates).

Following the 1997 federal minimum wage increase, Nobel Laureate Joseph Stiglitz of Columbia University observed, "We saw no ripple effect at all in the unemployment rate. Unemployment just continued to go down." The minimum wage increase, he said, "was totally swamped by other factors going on in the economy" (Chipman 2006). Accordingly, the 1999 Economic Report of the President stated: "Many studies have examined this issue, and the weight of the evidence suggests that modest increases in the minimum wage have had very little or no effect on employment."

Such research has lead prominent economists to publicly support modest federal and state minimum wage increases. According to a statement signed by over 650 economists, including five Nobel Prize winners in economics and six past presidents of the American Economics Association, modest increases in state and federal minimum wages can "significantly improve the lives of low-income workers and their families, without the adverse effects that critics have claimed" (Economic Policy Institute 2006).[4]

Other evidence from the past decade

While substantial movement away from the old way of thinking about minimum wage increases has occurred, some economists, primarily working under the commission of the restaurant industry lobby and the group, the Employment Policies Institute, have continued to describe negative employment effects and the potential devastation that a state minimum wage increase could bring.[5] The majority of the papers produced by these groups follow a cookie-cutter methodology of adopting a negative elasticity of -0.22 (i.e., that a 10% increase in the minimum wage leads to a 2.2% reduction in employment among the affected group) and then calculating the number of job losses that would supposedly result. The lynchpin of these analyses is the assumption of the negative elasticity—without that assumption, there is no basis for the subsequent elementary calculations of job loss.

This negative elasticity comes from the aforementioned Neumark and Wascher paper re-evaluating the New Jersey minimum wage hike. As mentioned earlier, these findings were ultimately cast in serious doubt by Card and Krueger's re-evaluation of Neumark and Wascher using unbiased government data. Without the assumption of a negative elasticity, there is no basis for the finding of job loss. According to Nobel Laureate Robert Solow of MIT, the application of these negative elasticities in state minimum wage analyses is "irresponsible."[6]

Since their 2000 report, Neumark and Wascher have written minimum wage literature reviews to argue that the minimum wage has adverse employment effects (Neumark 2006; Neumark and Wascher 2006). In a forthcoming paper, they rehash their disputes with Card and Krueger and highlight 19 studies they deem "more reliable tests of employment effects"—the majority of which agree with Neumark and Washer's own conclusions (the primary exception being one of the Card and Krueger studies). Ten of the studies are analyses of other countries, including Indonesia, Colombia, and Mexico. Of the eight U.S. studies they cite as agreeing with Neumark and Wascher's conclusions, Neumark is an author of six of them. An objective criterion for selecting the 19 studies is not readily evident, although they are somewhat dismissive of the natural experiment approach (see discussion of Card and Krueger on p. 4).

With 22 states now having higher-than-federal minimum wages, if such wage levels did lead to job loss or other adverse economic effects, then there has been ample opportunity to observe them. In particular, if the elasticities being used in the Employment Policies Institute studies were true, we would have seen hundreds of thousands of jobs lost in recent years as state minimum wages have increased. Simply put, there is no evidence that the job losses predicted by these studies have ever materialized. If anything, over the past decade, state minimum wage increases have boosted the income of low-wage workers without causing negative economic effects.

In 2003, Baiman and a group of collaborators from the University of Illinois-Chicago undertook a comprehensive study to examine how raising the minimum wage might affect a state's economy and particularly its low-wage workers. Using a cross-sectional time-series panel regression for each industry, they found no significant correlation between minimum wages and employment growth (Baiman et al. 2003). This analysis revealed no evidence of state-wide employment loss or even job growth slowdown in heavily impacted industries in response to minimum wage increases. Additionally, they found that state minimum wages did not displace less-educated workers in favor of higher-educated workers. Finally, this research found that increasing a state's minimum wage does not place businesses in the state at a competitive disadvantage. Minimum wage jobs are largely geographically specific, locally oriented jobs, and include work such as service and retail jobs. In comparison to a state's "basic," export-driven

industries such as manufacturing, which compete in national and international markets, these "non-basic" jobs cannot be offshored and only compete in local markets (hotels and motels being a minor exception to this rule). Non-basic firms compete in a local market. In this situation, a minimum wage increase would affect non-basic firms equally and therefore not harm the competitiveness of these firms (Baiman et al. 2003).

A forthcoming paper by Paul Wolfson of Dartmouth College explores increases in state minimum wages since the 1997 change in the federal minimum wage. Using the difference-in-difference approach as well as panel regression, the study finds that these state-by-state increases were effective at raising the wages of the affected population, but had no statistically significant effect on employment (Wolfson 2006). The paper looks both at teenagers and young adults generally, and the restaurant industry specifically.

Analysis of broader economic measures

Another approach to examining the impact of state minimum wages is to look at how states with higher-than-federal minimums have done by broad economic measures. Although one would not expect to see any effects in such broad measures because the minimum wage involves a relatively small amount of additional wages to a small number of people, opponents of increases in the minimum have made extravagant claims of negative consequences—specifically that high state unemployment rates are the result of state minimum wages, and that raising a state minimum wage would be an economic disaster.[7] Thus, it is worth an examination of unemployment, overall job growth, and specifically retail-sector job growth. Most of the studies discussed and summarized below focus on a single state, although several offer nationwide analyses.

Job growth

In response to dire predictions made by minimum wage opponents prior to the enactment of Florida's minimum wage, Bruce Nissen of Florida International University and Luke Shaefer of the University of Chicago followed up with a comprehensive study of Florida's economy one year after the minimum wage increase. Their conclusion:

> No empirical evidence shows that Florida's minimum wage has caused businesses to lay off workers. Instead, state employment has shown strong growth since the new wage took effect, better than in previous years and better than the U.S. as a whole. (Shaefer and Nissen 2005, 3)

Similarly, an examination of the Wisconsin labor market one year following the implementation of an increase by the Center on Wisconsin Strategy (COWS) at the University of Wisconsin-Madison found that the most-affected industry, eating and drinking establishments, grew three times more rapidly than the overall Wisconsin job growth rate (COWS 2006).

Washington has the highest minimum wage in the country and was the first state to annually adjust its state minimum wage for cost-of-living increases. The Washington-based Economic Opportunity Institute has found that Washington has out-performed the rest of the country in jobs since the end of the recession in November 2001, and that industries most-heavily affected by the minimum wage have not seen adverse employment impacts (Smith 2003; Watkins 2004; Chapman 2004).

Studies by the Oregon Center for Public Policy (OCPP) have found that Oregon has had faster job growth than 41 other states since its minimum wage and indexing went into effect in 2002. Furthermore, low-wage employers have been adding jobs at a faster rate than Oregon employers overall since the higher minimum wage and annual cost-of-living adjustments were implemented (OCPP 2005a; OCPP 2005b).

A recent University of Minnesota study into the potential effect of raising Minnesota's minimum wage found that the multiplier effect of the minimum wage could result in hundreds of millions of dollars in additional sales for Minnesota businesses, as well as the creation of additional jobs. Using estimates from regional economists, Markusen

and her colleagues found that, for every dollar earned from minimum wage hikes, $1.50 to $2.00 of income will be generated in the state economy (Markusen et al. 2004). Additionally, Markusen found that minimum wage increases could act as an economic stimulus in areas with a high concentration of low-wage workers.

Overall, it is clear that higher minimum wages are not an impediment to aggregate job growth. Washington and Oregon, the two states with the highest minimum wages, are both in the top 10 in overall job growth over the last year. Neither of the two states with net job loss over the last year had higher minimum wages (although Louisiana, one of the two states, is still recovering from Hurricane Katrina and is obviously a special case). Minimum wage states had higher job growth over the past 12 months than the national average (1.6% versus 1.5%). Job growth was substantially higher than the national average in the five states with minimums at $7.00 or more for 2006 (2.3%).

Retail and small business job growth

A recent Fiscal Policy Institute (FPI) study of state minimum wages found no evidence of negative employment effects on small businesses or in the retail industry (FPI 2006). Examining government data, FPI found that none of the many states that have raised their minimum wages above the federal level have seen labor market or other economic problems arising from their higher rates. This study is consistent with a 30-year study that found "no discernable correlation between minimum wage increases and a rise in business failures, either in the year the increase occurred or in the following year" (Waltman et al. 1998).

An analysis done by the Center for American Progress and Policy Matters Ohio had similar findings. They found that employment in small businesses grew faster (9.4%) in states with higher minimums than states with the federal minimum wage (6.6%). They also found more positive growth in the number of small business establishments and payrolls in higher minimum wage states (Burton and Hanauer 2006).

If there is any sector that would show a negative impact of raising the minimum wage in aggregate jobs it would be the low-wage retail sector. Yet over the last year, five of the top 10 states in retail trade job growth have had higher-than-federal minimum wages—including the two states with the highest minimum wages—Washington ($7.63) and Oregon ($7.50). Over that period, the higher minimum wage states had better job growth in that the retail sector than the national average (0.8% versus 0.5%). There are states with higher-than-federal minimum wages with slow growth in retail trade employment, but clearly a high minimum is not a barrier to growth in this low-wage sector.[8]

Unemployment

In testimony before the Industrial Welfare Commission, Dan Galpern, a researcher from the California Budget Project, found that minimum wage increases in California have been accompanied by declining rates of unemployment. From 1996 to 1999, the unemployment rate for teenagers (16-19 years old) fell from 23.5% to 16.5%. Similarly, unemployment rates also dropped for non-white workers and overall workers during the same time period. However, Galpern cautions that the improvement in economic indicators should not be viewed as resulting from minimum wage increases, stating, "A more plausible interpretation is that economic growth has simply overwhelmed any employment effect caused by increases in the minimum wage in California" (Galpern 1999).

An analysis of the Massachusetts minimum wage increase in 2000 and 2001 found that employment in two of the sectors (leisure and hospitality and other services) with a high percentage of minimum wage workers grew more rapidly following the 2000-01 increase than other sectors in Massachusetts as well as growing faster than the national average for those sectors (McLynch 2004, 22).

Overall unemployment is not correlated with higher minimum wages (Chapman 2004). Both Florida and Hawaii, two states with higher-than-federal minimum wages, had the lowest unemployment rates in the country for 10 of the last 12 months. In 10 of the last 12 months the average unemployment rate in states with higher minimum wages was at, or below, the average for all states.

Summary of broad economic effects of minimum wage increases

While these facts certainly don't prove that higher minimum wages actually *cause* a stronger state economy, they do demonstrate that the dire predictions by minimum wage opponents have failed to materialize. The variety in outcomes is evidence that the minimum wage is just one small component in a state's economy. As Nobel Laureate Joseph Stiglitz commented about the last federal minimum wage increase, "[it] was totally swamped by other factors going on in the economy" (Chipman 2006).

Minimum wage offers benefits under any scenario

Interestingly, although opponents of the minimum wage use dubious negative elasticities to argue against the minimum wage, it is not clear that such elasticities suggest the minimum wage is, in the end, a bad policy. Even assuming that the negative elasticities claimed by the opposition are correct, this would still mean that a 20% increase in the minimum wage would cut low-wage employment by 4%. In the low-wage labor market there is generally job growth and always a great deal of turnover and changing of jobs. In that environment, a negative elasticity implies a risk of longer gaps in employment, not low-wage workers facing complete and perpetual unemployment. Workers are not likely to actually get laid off as a result of the increase, but rather employers would simply adjust by not replacing workers who vacate a position. When new workers look for a job, under this worst-case scenario, there will be 4% fewer jobs available than before the minimum wage was raised. On average, then, these job seekers would have to wait 4% longer to get a new job that will pay 20% more once they get it. On an annual basis, even if the critics positing the worst-case scenario are correct, workers are 15.2% better off than they were before. In other words, putting well-founded skepticism regarding the negative elasticities aside and accepting the prognostications of those opposed to a minimum wage increase, it is unclear why low-wage workers should be concerned. The benefits far outweigh the costs even in the gloomiest scenarios.

Conclusion

Since the last federal minimum wage increase in 1997, state minimum wage increases have provided an important boost to the incomes of low-wage workers and their families. These states have provided a testing ground for the exaggerated claims of harm made by minimum wage opponents. If the minimum wage had substantial negative effects on the economy or the well-being of low-wage workers, then it would have been observed in these states. The reality is that the states with higher minimum wages have not seen ill effects. This has been shown both in rigorous econometric studies and in assessments of broad economic indicators. These findings confirm what has been seen in a variety of other economic analyses of the minimum wage.

While the findings of economists on the minimum wage are certainly not unanimous, the weight of opinion has clearly been moving toward a belief that the minimum wage improves the lives of low-wage workers without adverse consequences. Even, however, if the negative findings of some researchers were to be accurate, minimum wage workers as a whole would be better off, as the temporary losses of the few would be far more than offset by the wage gains of the many. The positive effects of the minimum wage are difficult to dispute. The minimum wage sets a floor for the value of work and lifts the living standards of low-wage workers.

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Endnotes

1. See EPI Minimum Wage Issue Guide for more statistics: http://www.epi.org/content.cfm/issueguides_minwage. For more detail on the methodology, see Chapman, Jeff and Liana Fox, *The Wage Effects of Minimum Wage Increases*, Washington, D.C.: Economic Policy Institute (forthcoming).
2. When asked about the methods EmPI used to collect their data, David Neumark replied, "to the best of my knowledge there was no form; this was all solicited by phone" (Card and Krueger 2000, 1,408).
3. The text from the first edition of his text book states: (1979, 519) "... the minimum wage effectively bans the employment of workers whose marginal product is less than [the minimum wage]. The primary consequence of the minimum wage law is not an increase in the incomes of the least skilled workers but a restriction of their employment opportunities."
4. See EPI Economist Statement 2006.
5. See Burkhauser Couch and Wittenburg (2000); Neumark and Wascher (2002).
6. Press conference call. Oct. 11, 2006. Economic Policy Institute
7. For examples, see: Clarke, Susan Strother. 2006. Wage goes up, no Armageddon. *Orlando Sentinel*. February 22. http://www.orlandosentinel.com/business/orlclarke2206feb22,0,6398279.column?coll=orlbusinessheadlines; Sasso, Michael. 2005. Minimum effect. *Tampa Tribune*. Nov. 20. http://www.tampatrib.com/MGBXOR0P8GE.html.
8. Data from the period August 2005 to August 2006.

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