

## Summary

- 40% of Kentucky's minimum wage workers are age 25 or older.
- 66% of minimum-wage Kentucky families have one or more minimum wage earning parents.
- 70% of those in Kentucky affected by an increase in the minimum wage to \$6.50 are either adults in minimum wage families or individuals living alone or in a non-family household.
- Nationally, the anti-poverty effect of increases in the minimum wage has been small.
- Nationally, the job loss from increases in the minimum wage has been small.
- Nationally, the inflationary effect of increases in the minimum wage has been small.
- To date, the economic evidence for or against an increase in the minimum wage is not overwhelming.

# Rhetoric and Reality of the Minimum Wage

## Implications for Kentucky

by James P. Ziliak, Ph.D.\*

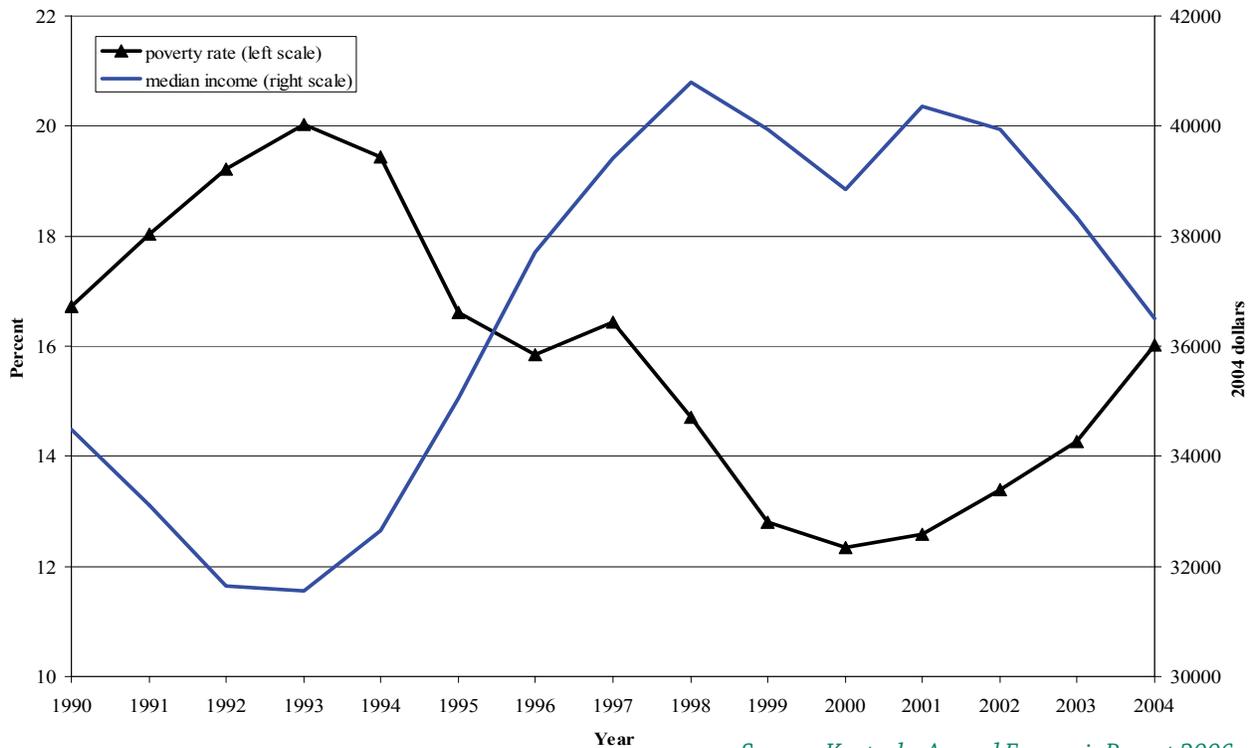
### The Issue

The minimum wage is among the more hotly debated public policies in the United States, and the Commonwealth of Kentucky is no exception. Supporters point to the anti-poverty and social justice benefits of the minimum wage, while opponents point to the costs of possible labor-market dislocation and undesirability of government intervention in private markets. Because of these opposing forces the Federal minimum wage has only been changed three times in the last 25 years (1981, 1990, and 1997). As a consequence many State governments have taken matters into their own hands and enacted separate minimum wage legislation. As of 2006, 18 states plus the District of Columbia have minimum wages that exceed the Federal level, 25 states have minimum wages equal to the Federal minimum, six states have no minimum wage, and one state has a minimum wage below the Federal level. Legislation was proposed in the 2006 legislative session in Kentucky to raise the minimum wage from the current Federal level of \$5.15 per hour to \$6.50 per hour by 2007, but the bill did not come to a vote. There is much rhetoric surrounding both the benefits and costs of the minimum wage, and the purpose of this policy brief is an attempt to separate the rhetoric from the reality of the minimum wage for Kentucky.

As background for the ensuing discussion it is instructive to examine how the poorest Kentuckians and the typical Kentuckian have fared in recent years in terms of economic status. This leads to the following reality check: Poverty is on the rise and incomes are on the decline in Kentucky post 2000.

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**Figure 1. Trends in Poverty and Median Income in Kentucky, 1990-2004**



Source: Kentucky Annual Economic Report 2006.

Figure 1 depicts trends in the poverty rate (left axis) and inflation-adjusted median household income (right axis) in Kentucky over the past 15 years. The data for Figure 1 draws from the 1990–2005 waves of the Annual Social and Economic Study of the Current Population Survey (CPS). The Annual Social and Economic Study is conducted each March and serves as the primary source of information regarding money income, poverty, and health insurance in the United States. The measure of the poverty rate in Figure 1 refers to a two-year, weighted, moving average of the percentage of persons in poverty, while median household income (i.e. that income level where one-half of households have incomes above and one-half have incomes below) is a weighted two-year average and adjusted by the Consumer Price Index for Urban Consumers (CPI-U) to reflect real 2004 dollars. The Census Bureau recommends two-year averages when examining state-specific outcomes in the CPS.<sup>1</sup>

1. Cseh, Attila, Kenneth Troske, and James P. Ziliak. 2006. "Poverty Trends in Kentucky: A Return to Normal?" *Kentucky Annual Economic Report 2006*. Center for Business and Economic Research, University of Kentucky.

Since the last minimum wage increase in 1997, the poverty rate first fell from 16% to just over 12% by 1999, but it has risen back to 16% by 2004. Indeed, according to the 2005 Census Bureau report Kentucky's position compared to the other 49 states fell between 2003 and 2004 from being the 10th poorest state to being the 6th poorest state in the nation (based on two-year averages). Median income likewise rose but has fallen by nearly \$5,000 since the late 1990s peak and in 2004 was at a similar level as in 1996. In light of these trends in poverty and median income over the past several years, coupled with the declining real purchasing power of the minimum wage (a decline of 15% since 1997 in 2004 dollars), many in Kentucky have advocated for the establishment of a separate, state minimum wage above the Federal minimum. However, the merit of the minimum wage as an anti-poverty policy is the subject of much debate among economists, policy makers, business leaders, and voters. There is much rhetoric from both supporters and opponents about who wins and who loses from an increase in the minimum wage. I have assessed some of the claims from both sides of the debate in a bid to separate rhetoric from reality.

**Table 1. Age distribution of total and minimum wage workers in the U.S. and in Kentucky**

	Age	All workers	Minimum wage workers	Minimum wage males	Minimum wage females
US	15-19	9.36%	29.88%	32.40%	28.62%
	20-24	16.10%	25.13%	24.94%	25.22%
	25-39	33.28%	24.14%	24.57%	23.92%
	40-64	38.25%	16.90%	15.52%	17.58%
	65-	3.02%	3.96%	2.57%	4.65%
		100%	100%	100%	100%
KY	15-19	9.98%	30.19%	39.57%	23.78%
	20-24	15.11%	30.52%	23.42%	35.37%
	25-39	34.34%	21.15%	15.58%	24.95%
	40-64	38.05%	14.38%	15.30%	13.76%
	65-	2.53%	3.76%	6.13%	2.14%
TOTAL		100%	100%	100%	100%

### Rhetoric

The minimum wage is a poorly targeted anti-poverty policy, as most minimum wage workers are teenagers in middle and upper-income families.

### Reality

Most economists agree that the minimum wage is not ‘target efficient’ in the sense that the policy per se is not targeted at poor families—the typical unit used for poverty analyses—but instead at low-skilled workers who may or may not reside in poor families. At the same time, the claim that the minimum wage primarily assists teenagers is not correct. Table 1 depicts the age distribution of all workers and minimum wage workers in Kentucky and in the United States. The data for this analysis come from the Merged Outgoing Rotation Group component of the Current Population Survey (CPS-ORG). Unlike the March CPS, the CPS-ORG contains data on actual hourly wages of workers, which permits a more accurate portrait of minimum wage recipients in the U.S. For the U.S. we use the 2004 survey, but for Kentucky we use a 3-year average across 2002–2004 because I wanted to minimize the undue influence of extreme values given the relatively small sample sizes in the Kentucky data.

Notice that the age distribution across the 3-year average of 2002–2004 in Kentucky is nearly the same as in the U.S. in 2004. About 30% of minimum wage workers are teenagers, another 30% are in their early 20s, and the remaining 40% are age 25 and older. Nationally about 40% are between the ages of 25-64, and about 35% are in this age range in Kentucky. In Kentucky, among female minimum wage workers about 75% are between the ages of 20-64. In short, for both the U.S. and Kentucky the typical minimum wage worker is not a teenager.

Given that 70% of minimum wage workers are not teenagers, this begs the question as to whether the rhetoric that the minimum wage is not target efficient in terms of its anti-poverty focus on family bread winners is well founded. To examine this issue I decompose in Tables 2 and 3 the distribution of minimum wage workers across different family structures in the U.S. and Kentucky, respectively. Consider the following characterization of family types<sup>2</sup>:

2. Horrigan, Michael and Ronald Mincy. 1992. “The Minimum Wage and Earnings and Income Inequality.” In *Uneven Tides: Rising Inequality in America*, S. Danziger and P. Gottschalk, eds., New York: Russell Sage Foundation.

**Table 2. Distribution of minimum wage workers in 2004 by family structure in the U.S.**

	% of workers at or below \$5.15/hour	% of workers at or below the greater of the state or Federal minimum wage
Unrelated individuals	35.85%	32.72%
Families maintained by women	17.75%	16.06%
Families maintained by men	1.91%	1.93%
Single-earner families	7.44%	10.44%
Dual-earner families	0.84%	2.36%
Mixed-earner families	15.41%	15.34%
Child-earner families	15.79%	16.18%
All other families	5.01%	4.97%
Total	100.00%	100.00%

NOTE: Data are drawn from the 2004 Merged Outgoing Rotation Group of the Current Population Survey and consist of the weighted population of workers either earning the Federal minimum wage or less (column 1), or earning at or below the greater of the worker's respective state minimum wage or the Federal minimum wage (col. 2).

*Unrelated individuals* – minimum wage earner individuals living by themselves or in a non-family household (students sharing an apartment would be an example for this latter group).

*Families maintained by women* – families with a minimum wage earner female head and no spouse present.

*Families maintained by men* – families with a minimum wage earner male head and no spouse present.

*Single-earner families* – married couple families in which only one spouse works and is a minimum wage worker.

*Dual-earner families* – families in which both spouses are minimum wage earners.

*Mixed-earner families* – married couple families in which both spouses work but only one is a minimum wage worker.

*Child-earner families* – families in which at least one child is a minimum wage worker on the condition that the family is not in one of the above categories.

*All other eligible families* – families with a minimum wage worker who is not included in any of the above categories.

In Table 2, I differentiate workers by family type

in the U.S. who are paid \$5.15 per hour or less, or whether they are paid their higher state-specific minimum wage or less. In Table 3, I differentiate Kentucky workers by family type based on whether they earn \$5.15 per hour or less, whether they earn at or below the proposed higher state minimum wage of \$6.50 per hour, or whether they are paid between \$5.15 and \$6.50 per hour. This last column represents the set of current workers who may gain with a higher minimum wage (or lose should their firms cut employment in response to the higher minimum wage).

Nationally, in 2004 about 16% of minimum-wage workers reside in families where neither working parent is paid the minimum wage. The comparable estimate for Kentucky is about 21%. Thus, the reality is that most minimum-wage workers are not teens residing in non-minimum-wage families. Perhaps surprising, 43% of minimum-wage workers in the U.S. are parents in intact families, and the comparable figure for Kentucky is 45%. This implies that among Kentucky families about two-thirds have a parent who is a minimum wage earner. The largest single group is unrelated individuals (36% in U.S., 32% in Kentucky).

Who are likely to be the winners and losers of a minimum wage increase to \$6.50 per hour in Ken-

**Table 3. Distribution of minimum wage workers in 2002-04 by family structure in Kentucky.**

	% if workers at or below \$5.15/hour	% of workers at or below \$6.50/hour	% of workers affected by wage change from \$5.15 to \$6.50/hour
Unrelated individuals	31.86%	26.22%	22.97%
Families maint. by women	15.84%	17.90%	19.08%
Families maint. by men	1.53%	1.89%	2.10%
Single-earner families	10.96%	11.82%	12.31%
Dual-earner families	4.31%	3.02%	2.28%
Mixed-earner families	12.72%	12.01%	11.59%
Child-earner families	21.35%	22.83%	25.25%
All other families	1.42%	3.32%	4.41%
Total	100.00%	100.00%	100.00%

NOTE: Data are averages drawn from the 2002–2004 Merged Outgoing Rotation Group of the Current Population Survey and consist of the weighted population of workers in Kentucky either earning \$5.15/hour or less (column 1), earning at or below \$6.50/hour (column 2), or earning between \$5.15 and \$6.50/hour (col. 3).

tucky? Table 3 shows that 70% of those affected by a higher minimum wage would be unrelated individuals (23%) or adults in minimum-wage families (47%), where the latter groups include single mothers (19%), single-earner couple families (12%), and mixed-earner families (11.6%). Teenagers residing in non minimum-wage families comprise a sizable 25% of potential winners and losers, but this group is clearly dominated by other family types.

### Rhetoric

The minimum wage fights poverty and inequality.

### Reality

There is limited support for this claim, and what evidence exists indicates that the anti-poverty effectiveness of the minimum wage is small. Research that I published with Craig Gundersen of Iowa State University in the journal *Demography* shows that each 10% increase in state minimum wages over and above the federal minimum wage reduces the poverty rate in those states by about 0.3%.<sup>3</sup>

3. Gundersen, Craig, and James P. Ziliak. 2004. "Poverty and Macroeconomic Performance Across Space, Race, and Family Structure," *Demography* 41(1): 61–86.

The small anti-poverty effect is perhaps not surprising given the complexity of the minimum-wage impacts across various family structures as demonstrated in Tables 2 and 3. The minimum wage does lower individual earnings inequality, but has little effect on family income inequality because minimum wage workers in mixed and child-earner families tend not to reside in families with incomes below the poverty line. Another reason for the expected small anti-poverty effect of a higher minimum wage is that the minimum wage — even after the proposed increase to \$6.50 per hour — still leaves most Kentucky families well below the poverty line. Given that the poverty line for a family of 4 this year is roughly \$20,000, a single-earner family working a full-time, 40-hour work week for 50 weeks would need to earn \$10.30 per hour before taxes to reach the poverty line. This implies that relatively few families will be lifted above the line with minimum wage increases. Moreover, because the minimum wage is not indexed to inflation, but the poverty line is, the 4-person, single-earner family working full time at the minimum wage is \$4,000 further from crossing the poverty line today than it was in 1997. Thus, raising the minimum wage

is more likely to reduce the depth of poverty than the number of people in poverty.

### Rhetoric

An increase in the minimum wage will destroy jobs.

### Reality

The consensus among economists is that increases in the minimum wage do reduce employment. The overall effect, though, is small. For each 10% increase in the minimum wage employment is likely to fall 1%. These effects, however, are not evenly distributed among the population of minimum wage earners. For instance, evidence suggests that young, low-skilled, African-American males are more likely to lose their jobs than others after an increase in the minimum wage.<sup>4</sup>

If the Kentucky legislature had passed the proposed minimum wage increase, the wage would have increased to \$6.00 per hour this year and to \$6.50 per hour in July 2007. Based on the consensus estimate on employment the higher wage of \$6.00 this year would be expected to reduce employment among those affected by 1.65%, and raising it to \$6.50 by July 2007 would be expected to reduce employment by an additional 0.83% (relative to the \$6 base). Using data from the CPS-ORG averaged across 2002-2004, it is estimated that about 172,000 families and individuals in Kentucky fall at \$6.50 an hour or below (about 110,000 of these are currently between \$5.15 and \$6.50). This implies that over the two years about 4,500 workers could be displaced by increasing the minimum wage to \$6.50 an hour, holding all else constant. In other words, there is ‘no free lunch’ to an increase in the minimum wage. Some individuals -- perhaps teenagers in middle income families, perhaps bread winners in poor single-earner families -- are likely to be displaced from the higher wage. That said, the Kentucky economy is dynamic and is constantly creating and destroying jobs. The amount of time it

4. Brown, Charles. 1999. “Minimum Wages, Employment and the Distribution of Income,” in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol 3B, Amsterdam: North Holland, Ch. 32.

takes for workers displaced by the minimum wage to find new employment is generally unknown, as are the long-term consequences of the minimum wage on the labor market.

### Rhetoric

The minimum wage increase will have a positive ‘ripple’ effect on the wages of workers near the minimum wage.

### Reality

It makes intuitive sense that firms would increase the wages of experienced workers earning near, but above, the minimum wage after an increase in the minimum in order to maintain positive worker morale. That is, if Kentucky raises the minimum wage to \$6.50 per hour one might expect that current workers earning near that level would subsequently receive a pay boost in order to differentiate more productive, experienced workers with new and inexperienced hires. There have been several papers by economists over the years confirming the existence of such positive ripple effects.<sup>5</sup> But some recent research suggests that the ultimate effect on near-minimum-wage workers is more nuanced.<sup>6</sup>

The authors find that workers near the minimum wage (i.e. those workers between 1.1 and 1.5 times the minimum) do indeed experience wage gains, but because hours and employment decline over time, the total earnings of this group declines over time as well. Thus, while there is evidence of ripple effects on wages, it is less clear what the ultimate effect is on total labor market earnings because of possible job loss and hours reductions among near-minimum-wage workers.

5. Gramlich, Edward. 1976. “Impact of Minimum Wages on Other Wages, Employment, and Family Income.” *Brookings Papers on Economic Activity* 2:409–51; Lee, David. 1999. “Wage Inequality in the United States during the 1980s: Rising Dispersion or Falling Minimum Wage?” *Quarterly Journal of Economics* 114(3): 977–1023.

6. Neumark, David, Mark Schweitzer, and William Wascher. 2004. “Minimum Wage Effects Throughout the Wage Distribution.” *Journal of Human Resources* 39(2): 425–450.

## Rhetoric

Increases in the minimum wage are inflationary.

## Reality

There has been surprisingly little research regarding the effects of minimum wage increases on the general level of prices to confirm or deny this rhetoric. For the minimum wage to affect the prices of products produced by such workers, one needs to know how many minimum wage workers there are in the economy, what fraction of total firm costs are in the form of labor costs, and the extent of 'spillover' from the price of labor to the price of output. Because of the bunching of minimum wage workers in the restaurant industry one would think that if such inflationary pressures of the minimum wage do exist they could be found in that sector. Some recent evidence suggests that a 10% increase in the minimum wage leads to a 0.4–0.7% increase in restaurant prices, and to a 1.5% increase in fast food prices.<sup>7</sup> These price effects are small even in a sector of the economy that the effects should have the greatest impact, and thus the inflationary effects of the minimum wage are likely of little importance to the overall economy.

## Rhetoric

A minimum wage increase will reduce dependence on government assistance.

## Reality

There is some merit to this argument in theory, though there is not a significant body of research providing direct evidence. Mechanically, as wages

7. Aaronson, Daniel. 2001. "Price Pass-Through and the Minimum Wage." *Review of Economics and Statistics* 83(1): 158–169.

increase the size of many income transfers -- such as food stamps, TANF, Section 8 housing subsidies, and SSI, to name a few -- declines. The reason is that these programs implicitly tax labor-market earnings; that is, as labor-market earnings increase the generosity of the transfer is reduced. If earnings rise enough then the worker no longer qualifies for the welfare benefit. That said, taking into consideration the fact that some workers will likely lose their jobs after a minimum wage hike, or have hours cut back, dependence on government transfers could rise. Indeed, one study suggests that for every 10% increase in the minimum wage the size of the AFDC case load rose by 1.5%.<sup>8</sup> This effect, like most others surrounding the minimum wage, is small. Moreover, it only captures the effect of participation and not total expenditure, which could fall due to the mechanical effect mentioned above. Hence, the effect of the minimum wage on government assistance is largely an unresolved question.

## Summary

In summary the evidence to date suggests that the economic case for or against raising the minimum wage is not overwhelming. Adult workers are more likely to benefit from a higher minimum wage than teenagers, but the ultimate effect on the level of poverty is small and comes with a potential cost of reduced employment. Because the economic costs and benefits of the minimum wage are small, policy makers and the voting public may wish to resort to other criteria (e.g. views on social justice and/or the proper role of government intervention in private markets) to determine support or opposition to raising the minimum wage.

8. Page, Marianne, Joann Spetz, and Jane Millar. 2005. "Does the Minimum Wage Affect Welfare Caseloads?" *Journal of Policy Analysis and Management* 24(2): 273–295.

## About the UK Center for Poverty Research

The UK Center for Poverty Research (UKCPR) was established in October 2002 as one of three federally designated Area Poverty Research Centers, with core funding from the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services. The UKCPR is a nonprofit and nonpartisan academic research center housed in the Department of Economics at the University of Kentucky.

The Center's research mission is a multidisciplinary approach to the causes, consequences, and correlates of poverty and inequality, with a special emphasis on the southern United States. To learn more about the programs of the UKCPR please visit our Web site at <http://www.ukcpr.org>. If you would like to support the mission of UKCPR, offer comments on this publication, or make suggestions e-mail us at [ukcpr@uky.edu](mailto:ukcpr@uky.edu), or write UK Center for Poverty Research, 302D Mathews Building, Lexington, KY 40506-0047. Phone: (859) 257-7641.