

The Minimum Wage and Kentucky's Working Poor:

Low Hours or Low Wages?

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Many policymakers in Kentucky have suggested raising the state's minimum wage as a way to help poor families. In this report, we examine which Kentucky workers would be helped and hurt by a \$7 minimum wage in Kentucky. The results indicate that both the poor families, which the minimum wage increase is intended to help, and the state as a whole would be, if anything, less well off if the wage was raised. We investigate the earned income tax credit as an alternate method of assisting poor families and find it to be less disruptive and more likely to assist the targeted recipients.

Introduction

It has now been almost 10 years since the last increase in the federal minimum wage. After adjusting for inflation, the minimum wage is at its lowest level in over 50 years. That has led 18 states and the District of Columbia to increase their minimum wages. In the November 2006 election, voters in six additional states raised the minimum wage. A natural question is whether Kentucky should follow suit. To answer this question we examine the effects of raising the minimum wage for workers in Kentucky to \$7 an hour, or \$1.85 an hour more than the current federal minimum wage.

Most supporters of increasing the minimum wage argue that it would help workers in poor families (the "working poor") by providing them with a "livable wage." They also argue that it is the socially fair thing to do. Unfortunately, as anyone who has closely studied the minimum wage knows, increases in the minimum wage have a very small impact on poverty. In addition, the impacts of the minimum wage are far from fair by any measure — the minimum wage tends to provide a small amount of help to the most-skilled low-wage workers while imposing a severe hardship on the least-skilled low-wage workers. Finally, by lowering the demand for less-skilled labor among employers, increasing the minimum wage actually exacerbates the primary problem faced by workers in poor families — they are poor because they are out of the workforce for more than four months out of the year, not because they earn exceptionally low wages.

The goal of this report is to use a large representative data set, the March 2005 Current Population Survey (CPS), to document which Kentucky workers are helped and hurt by the proposed increase in the minimum wage. Along the way we will present estimates of how many Kentucky workers would lose their jobs if the minimum wage were raised from \$5.15 to \$7 an hour. Finally, we will suggest some alternative policies that are much better targeted towards the working poor because they address the root causes of poverty. These alternative policies could potentially have a much larger impact on poor working families in Kentucky.

A Description of the Current Population Survey

The primary dataset used in our analysis is the 2005 March CPS Annual Social and Economic Survey (U.S. Department of Commerce, Bureau of the Census, 2005). We begin our report with a brief description of these data.

The CPS is a credible and widely respected survey. The March 2005 CPS surveys nearly 77,000 households and asks questions that specifically address issues of employment and wages. It is administered by the Bureau of the Census for the Bureau of Labor Statistics and has been conducted for more than 50 years.¹ The response rate for the March survey is exceptionally high for a voluntary, household-based survey.² The sample is scientifically selected to represent the civilian non-institutional

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population. The Census Bureau states that the CPS sample provides estimates for the nation as a whole and contributes to model-based estimates for individual states and other geographic areas. The CPS is conducted by telephone and in-person (and thus includes residences without telephones).

The March 2005 CPS surveyed 210,648 people across the nation (76,447 households), and 3,033 people in Kentucky (1,138 households). When appropriately weighted, the estimated population count from the CPS is 291,156,238 for the United States and 4,074,129 for Kentucky. The count for Kentucky exactly matches published Census tabulations, while the count for the United States appears to be subject to a trivial amount of rounding error.³ Unless otherwise noted, all estimates in the paper are based on the weighted data.

The 2005 March CPS also identifies a number of localities in Kentucky, including Bowling Green, Lexington, Louisville, and northern Kentucky. These localities, when weighted, represent more than 40 percent of Kentucky's population, with Louisville and northern Kentucky alone representing 30 percent. Identification of these localities is important, because a significant portion of Kentucky's population lives in "border cities" where businesses can move across state lines (to Indiana, in the case of Louisville, and Ohio, in the case of northern Kentucky) in response to an increase in the cost of doing business in Kentucky. In such cases where businesses could move yet remain in the same labor market, one might expect that some jobs would be shifted from Kentucky to other states if employers were suddenly forced to pay higher wages to some workers in Kentucky. In our analysis of the labor market, we make adjustments for such border cities.

Employment information in the CPS is elicited for all household members age 16 and over. The survey asks all adults questions about usual hours worked per week, annual earnings, weeks worked per year, employer's industry and firm size. Typically, a single CPS respondent reports for everyone in the household, although telephone callbacks to obtain particular items of information known only by someone else in the household are fairly common.⁴

The CPS provides demographic information for all respondents on age, education, race, ethnicity, gender, marital status, and disability. It also provides sufficient information to identify family relationships

across household members. This information is critical for classifying low-wage workers.

Characteristics of Low Wage Workers

We will use the CPS data to produce a picture of what type of workers earn wages below the proposed \$7 minimum wage and what type of workers are from poor families. If workers earning wages below the proposed minimum wage look like workers from poor families, then we would conclude that changes in the minimum wage could help workers from poor families. However, if the two populations look very different, then it is more difficult to imagine how changes in the minimum wage could help workers in poor families.

Table 1 presents, successively, summary statistics for non-elderly adults (those aged 16 to 64), adult workers, low-wage workers, and workers in poor families. We define low-wage workers as those workers who are earning less than \$7 an hour according to the CPS, since these are the workers that will be most affected by the change in the minimum wage.⁵ We classify workers as being in poor families using the poverty line defined by the U.S. government. In the U.S. the poverty threshold is fixed (in real dollars) over time but varies by the number of individuals living in the household. In 2004 a four-person household consisting of two adults and two related children was considered poor if total household income was less than \$19,157.

Looking at Table 1 we see that 2.01 million of Kentucky's 2.69 million non-elderly adults, or 75 percent, worked during 2004, with the average worker's age being 38.5 years. Among all workers, family income averaged more than \$65,000 and just 10 percent lived in poverty (all dollar amounts are expressed in 2006 dollars). The average wage among all workers was nearly \$18.32 per hour. In addition, the average worker received approximately \$1.03 per hour in employer contributions to health insurance plans.

Approximately 19 percent of all workers are low-wage workers earning less than \$7 per hour. These workers are clearly different from higher-wage workers, yet they are also different from workers who live in poverty. Low-wage workers are much younger, on average. The average age of low-wage workers is 32.1, making the typical low-wage worker more than six years younger than the typical adult worker. Among low wage workers 52 percent are teenagers

TABLE 1
Summary Statistics of Kentucky Adults, 2004
 (Author's tabulation of 2005 March CPS)

	All non-elderly adults	All workers	Workers Under \$7 Per Hour	All Poor Workers
Weighted Sample in Kentucky	2,696,043	2,012,061	380,929	201,300
Individual Demographics				
Age in years	39.1	38.5	32.1	32.2
Aged 16 to 19	7.9%	5.3%	16.8%	10.1%
Aged 20 to 29	22.7%	24.9%	36.3%	41.0%
Aged 30 to 39	19.1%	21.0%	18.5%	23.7%
Aged 40 to 49	22.7%	25.3%	14.5%	12.8%
Aged 50 to 59	21.0%	18.8%	11.1%	11.1%
Aged 60 to 64	6.7%	4.6%	2.9%	1.4%
Married	53.7%	56.7%	33.8%	29.9%
Male	49.5%	51.1%	42.0%	43.3%
No High School Diploma/GED	21.3%	13.4%	32.0%	27.8%
Enrolled in School	9.9%	7.0%	23.2%	11.8%
White	90.7%	90.9%	90.6%	88.9%
African-American	7.2%	7.1%	7.8%	6.7%
Individual Work Behavior				
Worked in 2004	74.6%	100.0%	100.0%	100.0%
Uninsured	19.0%	18.4%	37.0%	50.5%
Employer Health Insurance In Own Name	43.6%	54.1%	20.3%	19.8%
Adult has disability	13.2%	3.6%	5.8%	3.5%
Annual hours worked		1831.3	1441.2	1219.6
Usual Work Hours Per Week		39.3	35.9	36.0
Weeks Worked in 2004		45.5	39.2	33.0
Wage Rate		\$18.32	\$5.63	\$7.14
Wage Gap to \$7.00		\$0.26	\$1.37	\$1.03
Health Insurance Hourly Rate		\$1.03	\$0.22	\$0.72
Under \$7.00 Per Hour		19%	100%	69%
Annual Cost of Raising Wage		\$368.72	\$1,947.60	\$1,390.49
Family Characteristics				
Family Total Income	\$58,601.86	\$65,107.69	\$34,355.79	\$8,619.94
Number of Family Members	2.7	2.8	2.7	2.5
Number of Children Under 18	0.7	0.7	0.7	1.0
Under 100% of Poverty	16.5%	10.0%	36.2%	100.0%
Over 400% of Poverty	36.1%	41.9%	15.3%	0.0%
How Worker Fits Into Household				
One worker (single or married) with kids		11.7%	12.5%	29.2%
Worker lives with parent or relative		15.5%	28.0%	12.1%
Two workers in married couple with or without kids		45.8%	25.6%	16.8%
One worker (single or married) without kids		20.7%	21.9%	24.4%
Non-relative		6.3%	12.0%	17.6%

Notes: Authors' tabulation of 2005 March CPS, covering the 2004 calendar year. All dollar amounts are expressed constant 2006 dollars. Wage rate is computed by dividing annual earnings by the product of usual hours worked per week and weeks worked; non-negative values of the wage rate that were below \$5.15 were then imputed as \$5.15 an hour. The CPS asks only individuals aged 16 to 24 whether they are enrolled in school; the analysis assumes no adults age 25 and over are enrolled in school.

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or in their twenties, compared with 30 percent of all workers. They are also far more likely to be single and enrolled in school: only 33 percent of low wage workers are married compared to 56 percent of all workers, while nearly one-quarter of low wage workers are still in school compared with only 7 percent of adult workers.

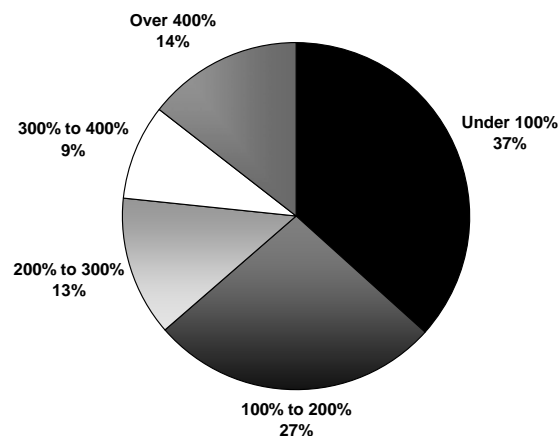
Although the average wage rate among low-wage workers is only \$5.63 per hour, these workers tend to live in households that are far from poor. The average family income of low-wage workers exceeds \$34,000. As Figure 1 shows, slightly more than one-third of workers live in families with incomes below 100 percent of the poverty line, and just as many live in families with incomes at least 200 percent of the poverty line. Perhaps most relevant, however, is how the worker fits into the household. As we can see in Figure 2, only 12 percent of low wage workers are sole-earners supporting children. The most common living arrangement for a low-wage worker is with his or her parents (or other relatives), which is the living arrangement of 28 percent of low-wage workers. More than 25 percent are spouses in two-earner families, and 33 percent are either childless workers or non-relatives in the household (e.g., roommates). Thus, the notion that raising the minimum wage primarily benefits poor working families is mistaken. (See, for example Economic Policy Institute's web site, http://www.epinet.org/content.cfm/issueguides_minwage_minwagefacts). These figures should dispel the notion that poverty and low wages are synonymous.

The notion is further dispelled by looking at workers in poor families. Returning to the final column of Table 1, here we see that 64 percent of workers in poor families are between 20 and 39 years old compared with only 54 percent of low wage workers. In addition, only 11.5 percent of workers in poor families are in school, a number that is almost double that of all adult workers but well below the number for low-wage workers. However, the most striking difference between low-wage workers and workers in poor families concerns their wages. The average wage among workers in poor families is \$7.19 per hour – higher than a \$7 per hour minimum wage. More than one-third of workers in poor

families have wages above the proposed minimum wage. The key difference between poor workers and the typical adult worker is in hours of work – workers are poor because, on average, they work 1,236 hours per year compared with 1,831 hours per year for all adult workers. As we will show in Table 4, the poverty rate could be dramatically lowered if less skilled adults worked full-time throughout the year. Finally, when we look at how workers in poor households fit into the family we see that 29 percent of workers in poor families are sole workers in families with children, in contrast to the 12 percent of low-wage workers.

Clearly there are some significant differences between the typical low-wage worker who would be affected by an increase in the minimum wage and the typical worker in a poor household. Minimum wage workers tend to be young, are likely to be enrolled in school and live with a parent or relative who still works. Research by Carrington and Fallick (2001) also finds that minimum wage workers typically earn the minimum wage for a relatively short period of time. All of this suggests that the majority of minimum wage workers are young workers in the early part of their careers who earn the minimum wage for only a short period. In contrast, the typical worker in a poor household is older, earns a wage above \$7.00 an hour and is the sole worker in a family with children. The primary reason workers tend to be poor is not due to low wages, but is due to working fewer hours than the typical adult worker. Given these differences between low wage workers who would be affected by the

Figure 1
Poverty Status of Low Wage Workers



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proposed change in the minimum wage and poor workers, it seems highly unlikely that an increase in Kentucky's minimum wage would have much impact on poor workers.

Effect of Kentucky's Proposed Increase in the Minimum Wage

We now use the CPS data to estimate what effect the proposed minimum wage increase would have on the Kentucky labor market and on workers. One of the fundamental principles of economics is that if the price of a good increases the demand for that good will fall. Another way of stating this principle is that demand curves slope downwards. This principle has been well documented and shown to be true for goods as varied as apples, gasoline and (most important for our purposes) labor. This means that if the price or wage for labor is increased then the demand for labor will fall. The only question is: by how much will demand fall?

Economists use a concept called elasticity to measure how responsive the demand for a good is to changes in the price of the good. The elasticity indicates how much the demand for a good will decline when the price of the good increases by 1 percent. For example, if the elasticity of a good is -0.5 this means that a 10 percent increase in the price of a good will lead to a 5 percent decrease in the demand for the good. In a report published by the Show-Me Institute David Neumark (2006) has reviewed the economics literature estimating how responsive labor demand is to changes in the minimum wage.

According to Neumark the best estimates of the elasticity fall in the range of -0.1 to -0.3, meaning that a 10 percent increase in the minimum wage will lead to a fall in labor demand of 1 percent to 3 percent. David Neumark and William Washer (2000) estimate an elasticity of -0.22.⁶ When estimating the impact of the proposed increase in the minimum wage on the Kentucky labor market we will assume elasticities of -0.1, -0.22, and -0.3. However, there are reasons to believe that the impact of the proposed minimum wage increase would be larger in some parts of Kentucky than in others because the two major labor markets in Kentucky – Louisville and northern Kentucky – are both located on the borders of the state. This means that it would be relatively easy over the long run for business in these two areas to relocate to Indiana or Ohio, where the minimum wage has not changed, in reaction to the increase in the minimum wage in Kentucky. Therefore, we will also produce an estimate of the impact of the proposed increase in the minimum wage assuming an elasticity of -0.3 for workers in Louisville and northern Kentucky and assuming an elasticity of -0.22 for workers in the rest of Kentucky.

Table 2 contains our estimates of job loss from Kentucky's proposed new minimum wage. Using the March CPS, we estimate that there are 380,929 workers with hourly wage rates under \$7.00. The first row in Table 2 presents our best estimate of the job losses that would occur in Kentucky with the proposed increase in the minimum wage. In this line we apply an elasticity estimate of -0.3 to workers in

the two "border areas," Louisville and northern Kentucky, and an elasticity of -0.22 to workers in the rest of Kentucky. When we do so, we find that the minimum wage increase would result in a loss of more than 24,298 jobs, representing 6.3 percent of low-wage employment. The other lines in Table 2 present estimates of the job loss assuming elasticities of -0.1, -0.22 and -0.3, respectively.

Table 3 profiles job losers and job keepers, based on our estimates from line 1 in Table 2. To create this profile, we examine the 380,929 low wage workers, separating them out into the 24,298 who would lose their

Figure 2
Household Structure of Low Earners

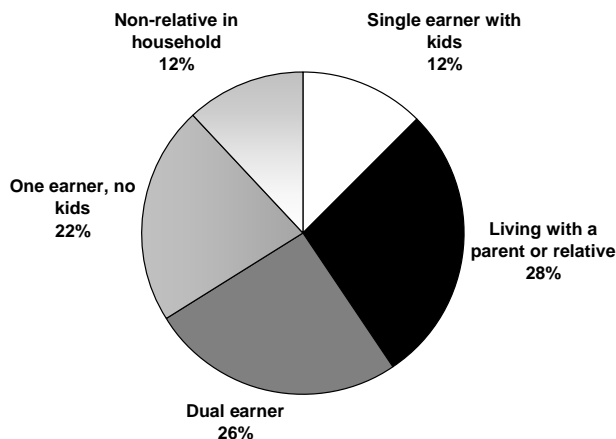


TABLE 2
Estimates of job loss by raising minimum wage to \$7 per hour
 (Authors' calculations using 2005 March CPS)

Elasticity	Job Loss	Low Wage Workers	% of Low Wage Workers
-0.22 except Louisville & Cincinnati	24,298	380,929	6.4%
-0.22	21,556	380,929	5.7%
-0.10	9,792	380,929	2.6%
-0.30	29,392	380,929	7.7%

jobs based on our calculations and the 356,631 who would keep them.⁷ The most remarkable finding is that both groups look extremely similar in terms of demographics. Both those who keep their jobs and those who lose their jobs tend to be young (over 16 percent of both groups are under 20 years old) and still in school. In addition, neither group is particularly poor: the typical worker in each group lives in a household with around \$32,000 in family income. In both groups more than ten percent of workers live in families with incomes that are over four times the poverty line. All of this provides further evidence that the minimum wage effects are not well targeted at the poor. The 356,631 workers who receive a pay raise (and keep their jobs) add \$685 million in labor costs, while those who lose their jobs reduce labor expenditures by \$183 million. In total, the labor costs of Kentucky businesses would likely increase by more than \$500 million due to the minimum wage proposal.

One additional important fact to note is that the proposed increase in the minimum wage would result in relatively small gains in income experienced by some workers and in very large losses felt by other workers. On a per-worker basis, those who keep their jobs would see their incomes rise by \$1,921 – an increase of 5.5 percent in their family incomes, while those who lose their jobs would see their incomes fall by \$7,536 – a decrease of 24 percent in their family incomes. While it is impossible to assess whether the increase in income among those who keep their jobs is worth more than the loss in income suffered by those who lose their jobs, what is clear is that the rather small gain in income experienced by some workers would be paid for by a severe loss in income suffered by other workers.

Impact of the Minimum Wage, Work Hours and the EITC on the Poverty Rate

In the final part of our analysis we estimate the impact the \$7 minimum wage would have on the poverty rate. Table 4 simulates poverty reductions from raising the minimum wage, and also considers how the poverty rate would change if, instead of raising the minimum wage, all low-wage workers and workers in poor families worked full-time (2,080 hours in a year, the product of 40 hours per week of work and 52 weeks per year). Finally, the table simulates the effects of a state-level earned income tax credit (“EITC”) that matched the federal EITC.

The table presents poverty estimates for the 4.07 million individuals in all families, the 948 thousand individuals in families with a low wage worker, and the 754 thousand individuals in poor families. Among all individuals in Kentucky, the poverty rate was 18.5% in 2004. Among individuals in families with a low-wage worker, the poverty rate was 28.3%, and by definition, the poverty rate was 100% for individuals in poor families. The reason why the poverty rate in Table 4 differs for low wage workers is because this table includes other family members besides the low wage worker (e.g., non-workers, children, elderly, etc.).

Among individuals in families with low-wage workers – the only individuals for whom a higher minimum wage could reduce poverty – poverty rates would fall by 9 percent if the minimum wage was raised to \$7 per hour, after accounting for hours reductions due to the higher wage floor. Although this reduction is certainly significant, it pales in comparison to the results of policies that would

TABLE 3
Job Losers and Job Keepers Under \$7 Per Hour Minimum Wage
 (Authors' tabulation of 2005 March CPS)

	Job Losers	Job Keepers
Weighted Sample in Kentucky	24,298	356,631
Individual Demographics		
Age in years	31.2	32.2
Aged 16 to 19	16.1%	16.8%
Aged 20 to 29	41.7%	35.9%
Aged 30 to 39	17.7%	18.5%
Aged 40 to 49	12.1%	14.7%
Aged 50 to 59	9.0%	11.2%
Aged 60 to 64	3.4%	2.8%
Married	31.6%	33.9%
Male	42.5%	42.0%
No High School Diploma/GED	29.2%	32.2%
Enrolled in School	22.6%	23.2%
White	88.7%	90.7%
African-American	9.3%	7.7%
Individual Work Behavior		
Worked in 2004	100.0%	100.0%
Uninsured	37.4%	36.9%
Employer Health Insurance In Own Name	19.6%	20.3%
Adult has disability	6.2%	5.8%
Annual hours worked	1412.7	1443.2
Usual Work Hours Per Week	36.0	35.9
Weeks Worked in 2004	38.7	39.2
Wage Rate	\$5.34	\$5.65
Wage Gap to \$7.00	\$1.66	\$1.35
Health Insurance Hourly Rate	\$0.24	\$0.22
Under \$7.00 Per Hour	100.0%	100.0%
Annual Cost of Raising Wage	\$2,331.98	\$1,921.41
Family Characteristics		
Family Total Income	\$31,465.85	\$34,552.69
Number of Family Members	2.6	2.7
Number of Children Under 18	0.7	0.7
Under 100% of Poverty	40.3%	35.9%
Over 400% of Poverty	12.8%	15.5%
How Worker Fits Into Household		
One worker (single or married) with kids	12.0%	12.5%
Worker lives with parent or relative	28.0%	28.1%
Two workers in married couple with or without kids	23.6%	25.7%
One worker (single or married) without kids	23.7%	21.8%
Non-relative	12.8%	12.0%
Increase In Wage Bill For Job Keepers		\$685,233,656
Decrease In Wage Bill For Job Losers	-\$183,130,894	
Total Increase In Wage Bill		\$502,102,762

Notes: Authors' tabulation of 2005 March CPS, covering the 2004 calendar year. All dollar amounts are expressed constant 2006 dollars. Wage rate is computed by dividing annual earnings by the product of usual hours worked per week and weeks worked; non-negative values of the wage rate that were below \$5.15 were then imputed as \$5.15 an hour. The CPS asks only individuals aged 16 to 24 whether they are enrolled in school; the analysis assumes no adults age 25 and over are enrolled in school.

TABLE 4
Impact of Policies on Poverty Rates

	All individuals	Individuals in families with low wage worker	Individuals in poor families
Baseline Poverty Rate	18.50%	28.27%	100.00%
Raise Minimum Wage to \$7 with hours reduction	17.90%	25.72%	96.79%
Full time, full-year work for non-elderly adults	16.58%	20.04%	89.64%
State level EITC equal to federal EITC for adults not enrolled in school	17.28%	26.69%	93.44%
Population	4,074,129	947,953	753,608

encourage workers to work full-time. The poverty rate among this group falls by 29 percent by simply bringing low-wage workers and non-working adults up to full-time, full-year work, *at their existing wages*. Lastly, we observe that a state-level EITC that matched the federal EITC reduces poverty among this group by a smaller amount than the minimum wage.

Next, we turn to the 754 thousand poor individuals in Kentucky. As we have shown in Table 1, poor workers live in quite different circumstances than low-wage workers, and different policies are socially desirable if the ultimate goal is to alleviate poverty. Raising the minimum wage would remove approximately 24 thousand individuals from poverty. Increasing work effort among adults would remove 78 thousand individuals from poverty and raising the EITC would remove nearly 50 thousand from poverty.

The first column shows the overall effect on poverty in Kentucky. Raising hours of work reduces poverty rates by nearly two percentage points.⁸ In this case we observe that raising the minimum wage would have a trivial effect on overall poverty. For example, the poverty rate would fall by 0.6 percentage points after we account for the resulting loss in jobs. The numbers in Table 4 again demonstrate that the problem of poverty stems from a lack of work hours much more than from low wages. What is particularly insidious about increasing the minimum wage is that it provides employers with an incentive to *decrease* the hours of low wage workers – which has exactly the opposite effect that we need to decrease poverty among poor workers. Instead we should consider adopting or expanding programs that are designed to encourage poor workers to enter the labor market or to work more hours.

The best way to increase the hours worked by workers in poor families depends on the reasons why workers are not working full-time. Three possible

reasons why workers in poor families work so few hours are: that poor workers do not have enough incentive to work or to work more hours; that poor workers lack the necessary skills to obtain full-time jobs; or that poor workers have situations – such as taking care of children or transportation issues – that make it very costly for them to work at full-time jobs. However, we already have a number of government programs designed to help workers with these problems. First, the Earned Income Tax Credit (EITC) is a program that gives poor workers a tax credit if they work but have low earnings. The EITC has historically provided very modest tax credits for childless households and more substantial credits to households with children (while differentiating between households with one child and those with more than one child).

The major advantage that the EITC has over the minimum wage is that instead of providing a wage subsidy for relatively wealthy teenagers, the EITC is directly targeted at workers in poor households. Initially, the EITC is phased-in with a “credit rate,” which is, in essence, a wage subsidy. From 1994 onward, this subsidy has been equal to 34 percent for one-child households and 40 percent for two-plus child households. In 2006, the maximum subsidy was \$2,747 for a household with one child and income between \$8,080 and \$14,810, and \$4,536 for a household with two or more children and income between \$11,340 and \$14,810. A full-time worker in these circumstances who earned the minimum wage could be entitled to a tax credit as high as \$4,285.⁹ After household income exceeds \$14,810, the credit is gradually phased out. Households with incomes exceeding \$36,348 would not be eligible for the EITC in 2006.¹⁰

The EITC moves many workers out of poverty.¹¹ The EITC provides a strong incentive for poor individuals who are currently not working to begin

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working, and it provides incentives for poor workers who are doing some work to increase the amount that they work. In fact, many researchers have attributed much of the dramatic decline in the number of families on welfare in recent years to the increases in the EITC in the 1990s (Blank, 2002).

Fourteen states and the District of Columbia supplement the federal EITC with a state-level EITC. These states include two of Kentucky's neighbors – Illinois, and Indiana. Other states with a state EITC include Iowa, Kansas Michigan, Oklahoma and Wisconsin. In most of these states, the state-level EITC is simply a fixed percentage of the federal EITC. The percentage varies by state and exceeds 30 percent some cases. For example, in Kansas, the state-level EITC provides a credit equal to 15 percent of the federal EITC. Thus, a household in Kansas could receive a cumulative tax credit as high as \$5,216.¹² Almost all workers would escape poverty if they worked full time and received a state-level EITC at this level. For example, a single parent working full-time, with two children, would need a wage rate of \$5.48 per hour to escape poverty if the federal and state EITC refunds were counted in poverty calculations.¹³ A much more effective policy for reducing poverty than increasing the minimum wage would be for Kentucky to follow the lead of neighboring states and, instead of raising the minimum wage, adopt a state-level EITC.

As part of welfare reform in the 1990s, the federal government increased the availability of child care subsidies and increased spending on job training programs designed to increase the skills of poor workers. These programs have the distinct advantage that they are much better targeted towards the poor than increases in the minimum wage, and they therefore have a much larger impact on poverty than any proposed minimum wage increase.

Conclusion

The advocates of raising the minimum wage are driven by the best of intentions. Poor families in Kentucky face many challenges, and it's appropriate to consider ways to help them. In crafting anti-poverty programs, it's important to consider the costs of the programs. A law that imposes a large cost on the economy while achieving only small reductions in poverty is bad public policy.

Unfortunately, most of the benefits of a minimum wage hike would go to people who don't need them.

The vast majority of workers who would enjoy higher wages under the proposal do not live in poor households. Almost a quarter of low-wage workers are students, and more than 28 percent of low-wage workers live with their parents. Only 12 percent of low-wage workers are single parents. On the other side of the ledger, the costs of the minimum wage hike would be large. We estimate that 24,000 workers would lose their jobs. And businesses would face \$500 million in increased labor costs.

A far more cost-effective strategy for combating poverty is to expand the Earned Income Tax Credit, a program whose benefits are narrowly targeted at those who need help the most. We estimate that an expansion of the EITC would be more than twice as effective at reducing poverty as an increase in the minimum wage. And it would help poor workers without destroying jobs or imposing hundreds of millions of dollars of higher labor costs on Kentucky employers.

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The Stata data and programs used in the analysis are available at: <http://gattton.uky.edu/faculty/yelowitz/kentucky.htm>

Endnotes

1. See <http://www.bls.census.gov/cps/overmain.htm>.
2. The CPS has a large percentage of in-person interviews that improves coverage and reliability and leads to a very high response rate. Interviewers use laptop computers to administer the interview, asking questions as they appear on the screen and directly entering the responses obtained. Households are interviewed eight times over the course of sixteen months. During the first and the fifth interviews, an interviewer usually visits the sample unit. Almost all of the remaining interviews are conducted by telephone. Even though the CPS is a voluntary survey, the March interview of recent years has between 92 and 93 percent of the eligible households providing basic labor force information, and between 80 and 82 percent of the eligible households completing the ADS supplement. For the March 2002 basic CPS, the nonresponse rate was 8.3 percent. The nonresponse rate for the March supplement was an additional 8.6 percent, for a total supplement nonresponse rate of 16.2 percent. See <http://www.bls.census.gov/cps/ads/1995/sdacodes.htm>, <http://www.bls.census.gov/cps/ads/1995/smethovr.htm>, and http://www.bls.census.gov/cps/ads/2002/S&A_02.pdf for additional discussion.
3. See http://pubdb3.census.gov/macro/032005/health/h05_000.htm.
4. See <http://www.bls.census.gov/cps/ads/1995/sdacodes.htm>.
5. Wage rates are computed by dividing an individual's annual earnings by annual hours of work (the product of weeks worked and usual hours worked per week). Since the CPS data reflect the 2004 calendar year, the wage rates were converted into 2006 dollars by inflating them by 7.7%. For workers under the \$5.15 federal minimum, wage rates were bottom-coded at \$5.15 per hour. This procedure in the March CPS yields a higher proportion of low-wage workers than one would obtain in the Merged Outgoing Rotation Groups. A key advantage of the March CPS for our purposes is its comprehensive questions on family income, which is important for the poverty simulations. In addition, wages over the course of an entire year reflect sporadic temporary work and short jobs, both of which may not be well captured in the ORG.
6. Yelowitz (2005a,b) finds significant effects of Santa Fe's citywide minimum wage. The unemployment rate among less-educated workers increased, while weekly hours fell. After adjusting the estimates for the fact that only 55% of workers were covered (because the \$8.50 ordinance only affected firms with 25 or more employees), he estimates an elasticity of -0.24. See <http://www.SantaFeLivingWage.com> for these calculations.
7. Specifically, for each low-wage worker in the CPS, we compute the percent change in the wage rate to move that worker to the higher \$6.50 wage floor. Then we apply the -0.22 elasticity (or -0.30 in St. Louis and Kansas City), to compute the percent change in employment. Finally, we multiply the result by the CPS sample weight to compute the number of workers who lose their jobs and the number who keep their jobs. Those new weights – which add up to the initial number of low wage workers – are used to compute the summary statistics in Table 3. To illustrate, imagine a worker in the CPS with a given set of characteristics who initially has a wage rate of \$5.50 per hour, lives in St. Louis, and has a sample weight of 1,300 (meaning that individual represents 1,300 people similar to himself). In that case, the change in the wage rate is 18.2 percent ($=6.50/5.50 - 1$). Applying this percentage increase in the wage floor results in a 5.5% reduction in employment (the elasticity of $-0.3 = -5.5\%/18.2\%$). Therefore, 72 of the 1,300 workers would lose their jobs (multiplying the 5.5% employment reduction by the sample weight of 1,300) and these 72 people all have the same characteristics. We would apply such a procedure for all low-wage workers, giving one set of sample weights for job losers, and another for job keepers. We then compute the summary statistics for individuals we identify as losing and keeping their jobs using the sample weights. A similar approach is taken in MacPherson (2006).
8. When computing poverty rates for full-time, full-year work, we imputed wage rates for non-workers with a procedure suggested by Heckman (1979). We use number of family members and number of children to identify the model in the third column. For such workers, we bottom-coded predicted wages at \$5.15 per hour.
9. This is the tax credit a worker would receive if they had a spouse and two children, earned \$5.15 an hour and worked 2080 hours in the year.
10. See http://www.taxpolicycenter.org/TaxFacts/TFDB/Content/PDF/eitc_parameters.pdf.
11. The official definition of poverty ignores transfers such as the EITC when computing poverty rates. The maximum credit in 2003 was \$4,204 (Green Book, 2004, 13-38), and the average family credit was \$1,784. In 2002, the poverty rate would have fallen from 12.1% to 8.2% if non-cash benefits (such as the EITC) had been included (Green Book, 2004, Table H-7, p. H-11).
12. See <http://www.taxcreditsresources.org/pages.cfm?contentID=39&pageID=12&Subpages=yes>.
13. See <http://aspe.hhs.gov/poverty/06poverty.shtml>