CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

January 9, 2007

Honorable Charles E. Grassley
Chairman
Committee on Finance
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

In response to your request, the Congressional Budget Office (CBO) analyzed some of the potential consequences of a hypothetical increase in the federal minimum wage rate from $5.15 per hour to $7.25 per hour and of several hypothetical expansions in the earned income tax credit (EITC). To provide the information, as requested, about the potential impacts on workers whose family income was below the federal poverty threshold, the analysis used data from the March 2005 Current Population Survey (CPS).

The analysis is subject to a number of limitations and should not be interpreted as a cost estimate of the effects of implementing changes in the federal minimum wage or the EITC in future years. CBO simulated the impacts of those policy options as if they were in effect in 2004 and did not incorporate any effect on employment levels or the number of hours worked. Since that time, the number of workers with wage rates in the $5.15 to $7.25 range has fallen by almost 30 percent and is expected to continue to decline as increases in state minimum wage rates and other changes in the labor market occur. For simplicity, CBO assumed that an increase in the minimum wage rate would have affected only the wage rates of workers earning between the old and the new minimum rates. Some workers with wage rates outside that range might also be affected by an increase in the minimum wage. For example, employers are permitted to pay certain tipped workers as little as $2.13 per hour if their tips bring their total hourly earnings up to the federal minimum wage; thus, an increase in the federal minimum wage could cause some of those employers to raise their wage rates. Also, some employers of workers already paid at or just above the new minimum wage rate might increase those workers' wage rates as well.

In addition, the CPS does not contain all of the information needed to compute the EITC, limiting the accuracy of those estimates. Based on the CPS, the estimated amount of EITC payments in 2004 was about 25 percent below the actual amount that year. CBO does not have a basis to infer whether that discrepancy would lead to an underestimate or an overestimate of the share of additional payments resulting from the hypothetical expansions of the EITC that would go to poor

families. Moreover, the Joint Committee on Taxation produces the official estimates for any change in the EITC; its estimates may be different.

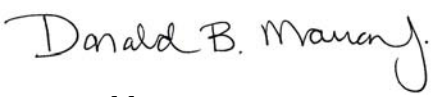
As discussed more fully in the attachment to this letter, the major findings of the analysis are these:

- On the basis of data from the March 2005 CPS, about 18 percent of the 12 million workers who were paid an hourly wage rate between the federal minimum wage of $5.15 and $7.24 were in families that had a total cash income below the federal poverty threshold in 2004. Had all of the workers in that wage range, instead, received $7.25 per hour, they would have gotten about $11 billion in additional wages in that year. About 15 percent of those additional wages ($1.6 billion) would have been received by workers in poor families.

- As requested, CBO examined the potential effects of hypothetical expansions in the EITC that would have provided additional payments to workers in poor families similar to the amount of additional earnings poor workers would have received by increasing the minimum wage rate to $7.25 per hour. One option was to increase the subsidy rate for childless workers by 50 percent. Another option was to increase the subsidy rate for workers with three or more children by 25 percent. On the basis of data from the CPS, combining those options would have increased total EITC payments by roughly $2.4 billion in 2004, with workers in poor families receiving $1.4 billion of that total.

The analysis was prepared by Molly Dahl, Tom DeLeire, and Ralph Smith of CBO's Health and Human Resources Division and Ed Harris of CBO's Tax Analysis Division. If you or your staff have any questions or would like further details, please feel free to call me at (202) 226-2700 or Ralph Smith at (202) 226-2659.

Sincerely,



Donald B. Marron
Acting Director

Attachment

cc: Honorable Max Baucus
Ranking Democratic Member*
Senate Committee on Finance

Honorable Mike Enzi
Chairman
Senate Committee on Health, Education,
Labor and Pensions

Honorable Edward M. Kennedy
Ranking Democratic Member*

Honorable Judd Gregg
Chairman
Senate Committee on the Budget

Honorable Kent Conrad
Ranking Democratic Member*

Honorable Charles B. Rangel
Chairman
House Committee on Ways and Means

Honorable Jim McCrery
Ranking Member

Honorable George Miller
Chairman
House Committee on Education and Labor

Honorable Howard P. “Buck” McKeon
Ranking Member

Honorable John M. Spratt Jr.
Chairman
House Committee on the Budget

Honorable Paul Ryan
Ranking Member

*Chairman-designate for the 110th Congress

Response to a Request by Senator Grassley About the Effects of Increasing the Federal Minimum Wage Versus Expanding the Earned Income Tax Credit

In response to a request from Senator Grassley, the Congressional Budget Office (CBO) used data from the Current Population Survey (CPS) to analyze the distributional effects of a hypothetical increase in the federal minimum wage rate and of several hypothetical expansions in the earned income tax credit (EITC). Although use of the CPS allows the production of results consistent with official poverty measures, the CPS is known to be inaccurate for measuring the EITC. CBO's estimates for a particular policy change could either understate or overstate the true cost of an expansion of the EITC, depending on how information available in the CPS differs from what taxpayers reported on their tax forms. CBO simulated the impacts of the hypothetical policy options as if they were in effect in 2004 and did not incorporate any effect on employment levels or the number of hours worked. The results are not estimates of the effects of implementing those options in future years.

Furthermore, this analysis is not a cost estimate. For proposals that would amend the Internal Revenue Code, including changes in the EITC, official cost estimates are provided by the Joint Committee on Taxation; its estimates may differ from those presented here.

Methodology

CBO identified workers who would have been affected by a hypothetical increase in the federal minimum wage rate from $5.15 per hour to $7.25 per hour in 2004 as those who reported in the March 2005 CPS that they were paid on an hourly basis and whose wage rate was between $5.15 and $7.24 at the time of the survey. Also included were workers who reported that they were paid $5.00 per hour, under the assumption that most of them were actually paid $5.15 but had rounded their survey response.

To estimate the impact of the hypothetical wage rate increase on the family income of workers, CBO assumed that all hourly workers whose wage rate was between $5.15 and $7.24 per hour would have been paid exactly $7.25 per hour had the hypothetical minimum wage rate been in effect. CBO further assumed that workers whose wage rate was $7.25 or higher would have been unaffected by the hypothetical increase in the minimum wage. For this tabulation, CBO assumed that no changes in employment or hours would have resulted from the higher minimum wage rate.[1] The earnings gain attributed to the hypothetical increase in the minimum wage was calculated simply by multiplying the increase

1. The economics literature includes numerous studies on the employment effects of increases in the minimum wage, which indicate a wide range of potential impacts.

in the wage rate by the total number of hours that CBO estimated the affected people worked in 2004.

A limitation of this analysis is that the estimates are based on wage rates reported for March 2005 and income reported for 2004 and, therefore, do not reflect changes that have occurred since then or that will occur before future changes in the federal minimum wage, if enacted, would be implemented. For example, increases in state minimum wage rates and other changes in the labor market have already lessened the potential impact of raising the federal minimum wage rate.

CBO used information on family size and both before-tax cash family income and after-tax income, including certain noncash sources of income, in 2004 to place the affected workers into income categories relative to the poverty thresholds.[2]

As requested, CBO also examined different ways of expanding the EITC to achieve similar income gains for workers in otherwise-poor families. Note that the CPS does not contain all of the information necessary to compute the EITC, limiting the accuracy of CBO's estimates. For example, using the CPS, CBO estimates that taxpayers received about $29 billion in EITC in 2004, when they actually received about $40 billion.

Estimates of the Effects of a Hypothetical Increase in the Minimum Wage in 2004

Table 1 provides CBO's estimates of the number of workers paid on an hourly basis in March 2005 who received a wage rate below $5.00, between that rate and $7.24, and at or above $7.25.[3] It shows that 11.6 million workers reported that they received a wage rate in the affected range.[4] Table 1 also provides a cross-tabulation by income-to-poverty ratio, based on the family cash income of those

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2. In 2004, the average poverty threshold for a family of three was $15,067 and for a family of four was $19,307. The poverty thresholds vary by family size and composition and are defined in Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, Current Population Reports, P60-229 (August 2005). The basis for the official poverty rate is before-tax cash family income, or money income (MI). The alternative poverty measure used here is based on after-tax income and includes certain noncash sources of income. The measure includes MI minus federal and state income taxes, minus payroll taxes, plus realized capital gains or losses, plus the value of employer-provided health benefits and noncash transfers, including Medicare benefits, Medicaid benefits, food stamps, rent subsidies, and free and reduced-price school lunches (MI-Tx+NC). Both measures are as defined in Bureau of the Census, *Alternative Income Estimates in the United States: 2003*, Current Population Reports, P60-228 (June 2005).

3 CBO assumed that most workers who were paid a wage rate below $5.00 would be unaffected by an increase in the minimum wage rate. Those workers could be tipped workers, such as waiters or waitresses, teenagers earning a training wage, or workers not covered by the federal minimum wage.

4. CBO estimated that in October 2006, 8.4 million workers had an hourly wage rate in the affected range. See Congressional Budget Office, *Potential Effects on Government Revenues and Outlays from an Increase in the Federal Minimum Wage* (December 29, 2006).

workers in 2004, as reported by the Census Bureau. It shows that 18.5 percent (2.1 million) of the workers who received a wage rate in the relevant range in March 2005 were living in families that were poor in 2004.[5]

Table 2 repeats the information from Table 1 but uses an after-tax measure of income that also includes the value of certain noncash sources of income. In the placement of people into income-to-poverty categories, the poverty thresholds themselves remain unchanged. On the basis of this alternative measure of income, a smaller portion of the workers in the relevant wage range were counted as poor (14.4 percent, rather than 18.5 percent).

Tables 3 provides CBO's estimates of the income gains that would have resulted from raising the wage rates of everyone who reported that they were paid between $5.00 and $7.24 per hour up to an hourly rate of $7.25. For those figures, CBO simply added its estimates of the gains in earnings from the wage rate increase to estimates of families' cash income. CBO estimates that $1.6 billion (15 percent) of the $11 billion in increased earnings that resulted from the higher wage rate would have been received by workers who were in families with money income below the official poverty threshold in 2004.

Estimates of the Effects of Hypothetical Increases in the EITC in 2004

Table 4 provides CBO's estimates of the distributional income effects of the changes in the EITC specified in the request. Again, the estimates are based on the CPS, not tax statistics, and do not take into account the many intricacies of actual tax provisions or the ways that people might alter their behavior in response to changes in the EITC. The Joint Committee on Taxation provides the official estimates of the potential effects of changes in the EITC.

In 2004, eligible taxpayers with one qualifying child could claim a credit of 34 percent of their earnings up to $7,660, resulting in a maximum credit of $2,604; the credit phased down at a rate of 15.98 percent of earnings above $14,040 for nonjoint filers and $15,040 for joint filers. For eligible taxpayers with two or more qualifying children, the credit was 40 percent of their earnings up to $10,750, with a maximum credit of $4,300; the phase-out rate was 21.06 percent, beginning at earnings above $14,040 for nonjoint filers and $15,040 for joint filers. Taxpayers between the ages of 25 and 64 with no qualifying children could claim a credit of 7.65 percent of their earnings up to $5,100, resulting in a maximum credit of $390; beginning at earnings above $6,390 for nonjoint filers and $7,390 for joint filers, the credit phased out at a rate of 7.65 percent. All thresholds are higher now. Not only are they indexed for inflation, but the plateau for joint filers was increased by $1,000 in 2005 and is scheduled to increase again in 2008.

5. For the purpose of this analysis, a worker living alone was counted as a one-person family.

The first column of Table 4 shows that, of the estimated $29 billion in EITC received in 2004, about 40 percent ($11 billion) was received by workers in poor families. (As explained, that CPS-based estimate of the total amount of EITC received is much lower than the actual amount that year, $40 billion.)

The second column reports CBO's estimates of the effects of a hypothetical expansion in the EITC in which workers in families with three or more children would be eligible for an additional credit. The subsidy rate for that group was increased from 40 percent to 50 percent, the maximum credit available was increased from $4,300 to $5,375, and the phase-out rate was increased from 21.06 to 26.325 percent, representing a 25 percent increase over the credit available in 2004 to those in families with two or more children. (The difference between the maximum credit available to those in families with three children and those in families with two children is $1,075, as compared with the $1,696 difference in the maximum credit available to those in families with two children and those in families with one child.) Using CPS data, CBO estimates that this expansion would have increased EITC payments to poor families by $1.1 billion.

The third column examines what the results of a hypothetical expansion of the EITC to childless individuals might have been. As requested, the subsidy rate, the maximum credit, and the phase-out rate to workers without children were increased by 50 percent. Under the hypothetical expansion, the maximum credit available to those workers would have been $585, and the subsidy and phase-out rates would have been 11.475 percent. This expansion would have increased EITC payments to poor families by an estimated $0.3 billion.

The fourth column examines the effects of a hypothetical expansion of the EITC in which both the expansion for those in families with three or more children and the expansion for childless individuals discussed above were implemented. Using CPS data, CBO estimates that the combination of the two would have resulted in increasing EITC payments to the poor by $1.4 billion, about 60 percent of the overall increase of $2.4 billion that CBO estimates would have occurred in 2004 if those expansions had been in place at the time.

Table 1.

Distribution of Hourly Workers in March 2005, by Wage in 2005 and Family Cash Income in 2004

Income-to-Poverty Ratio	Hourly Workers, by Wage Rate: Less Than $5 Number (Millions)	Less Than $5 Percent	$5 to Less Than $7.25 Number (Millions)	$5 to Less Than $7.25 Percent	$7.25 and Higher Number (Millions)	$7.25 and Higher Percent	Total Number (Millions)	Total Percent
Less Than 1.0	0.2	20.2	2.1	18.5	3.3	5.2	5.7	7.5
1.0 to Less Than 1.5	0.1	11.6	1.5	12.7	4.3	6.7	5.9	7.7
1.5 to Less Than 2.0	0.1	11.2	1.3	11.1	5.7	8.9	7.1	9.3
2.0 to Less Than 3.0	0.3	21.4	2.1	18.3	12.9	20.3	15.2	20.0
3.0 or More	0.4	35.6	4.6	39.4	37.5	58.9	42.4	55.6
Total	**1.2**	**100.0**	**11.6**	**100.0**	**63.6**	**100.0**	**76.3**	**100.0**

Source: Congressional Budget Office based on data from the Current Population Survey (March 2005).

Notes: Wage is the reported hourly wage in March 2005.

Income is before-tax family cash income in 2004, corresponding to the Census Bureau's definition of money income. Poverty thresholds are based on family size and composition. The definitions of both income and poverty thresholds are those used to determine the official poverty rate and are as defined in Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, Current Population Reports, P60-229 (August 2005).

Table 2.

Distribution of Hourly Workers in March 2005, by Wage in 2005 and After-Tax (Post-Transfer) Family Income in 2004

Income-to-Poverty Ratio	Hourly Workers, by Wage Rate: Less than $5 Number (Millions)	Less than $5 Percent	$5 to Less Than $7.25 Number (Millions)	$5 to Less Than $7.25 Percent	$7.25 and Higher Number (Millions)	$7.25 and Higher Percent	Total Number (Millions)	Total Percent
Less Than 1.0	0.2	18.7	1.7	14.4	2.2	3.5	4.1	5.4
1.0 to Less Than 1.5	0.2	13.0	1.4	12.4	3.3	5.1	4.8	6.3
1.5 to Less Than 2.0	0.1	9.7	1.0	8.3	4.7	7.4	5.8	7.6
2.0 to Less Than 3.0	0.2	14.7	2.1	18.0	11.0	17.3	13.3	17.4
3.0 or More	0.5	44.0	5.4	46.9	42.4	66.6	48.3	63.3
Total	**1.2**	**100.0**	**11.6**	**100.0**	**63.6**	**100.0**	**76.3**	**100.0**

Source: Congressional Budget Office based on data from the Current Population Survey (March 2005).

Notes: Wage is the reported hourly wage in March 2005.

Income is after-tax family income, including certain noncash sources of income, in 2004, corresponding to the Census Bureau's definition of money income, minus taxes, plus noncash transfers (MI-Tx+NC)—an alternative measure of income that the bureau has examined. See Bureau of the Census, *Alternative Income Estimates in the United States: 2003*, Current Population Reports, P60-228 (June 2005). Poverty thresholds are based on family size and composition and are as defined in Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, Current Population Reports, P60-229 (August 2005).

Table 3.

Distributional Effects of a Hypothetical $7.25 Minimum Wage in 2004

Income-to-Poverty Ratio	Increased Earnings (Billions of 2004 dollars)	Percent
Less Than 1.0	1.6	15
1.0 to Less Than 1.5	1.6	14
1.5 to Less Than 2.0	1.6	14
2.0 to Less Than 3.0	2.2	20
3.0 or More	4.0	36
Total	**10.9**	**100**

Source: Congressional Budget Office based on data from the Current Population Survey (March 2005).

Note: Income is before-tax family cash income in 2004, corresponding to the Census Bureau's definition of money income. Poverty thresholds are based on family size and composition. The definitions of both income and poverty thresholds are those used to determine the official poverty rate and are as defined in Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, Current Population Reports, P60-229 (August 2005).

Table 4.

The Distribution of the EITC in 2004 Under Alternative Hypothetical Policies, Based on the Current Population Survey

(Billions of 2004 dollars)

Income-to-Poverty Ratio	Base[a]	Increases in EITC Payments		
		Option 1[b]	Option 2[c]	Option 3[d]
Less Than 1.0	11.4	1.1	0.3	1.4
1.0 to Less Than 1.5	8.4	0.5	0.1	0.6
1.5 to Less Than 2.0	4.8	0.2	*	0.2
2.0 to Less Than 3.0	3.0	0.1	0.1	0.1
3.0 or More	1.7	*	0.1	0.1
Total	**29.3**	**1.9**	**0.5**	**2.4**

Source: Congressional Budget Office based on data from the Current Population Survey (March 2005).

Notes: EITC = earned income tax credit.; * = less than 0.1 billion.

Income is before-tax family cash income in 2004, corresponding to the Census Bureau's definition of money income. Poverty thresholds are based on family size and composition. The definitions of both income and poverty thresholds are those used to determine the official poverty rate and are as defined in Bureau of the Census, *Income, Poverty, and Health Insurance Coverage in the United States: 2004*, Current Population Reports, P60-229 (August 2005).

a. CBO's estimates of the EITC received based on information available in the Current Population Survey. The actual EITC (including both the credit used to offset taxes and the refundable portion of the credit) in 2004 was about $40 billion.

b. For this option, the subsidy rate, phase-out rate, and maximum credit for EITC recipients with three or more children were increased by 25 percent.

c. For this option, the subsidy rate, phase-out rate, and maximum credit for EITC recipients with no children were increased by 50 percent.

d. For this option, the subsidy rate, phase out-rate, and maximum credit for EITC recipients with three or more children were increased by 25 percent, and the subsidy rate, phase-out rate, and maximum credit for EITC recipients with no children were increased by 50 percent. This option combines those in columns 2 and 3.