

# Raising the Minimum Wage and Redesigning the EITC

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January 30, 2014

## Executive Summary

Proposals to increase the minimum wage at the federal, state, and local levels are currently receiving a lot of attention. Workers from Seattle to Washington, D.C. have been promised a raise.

Advocates for an increase point to the failure of the minimum wage to keep pace with inflation or with average wages in the economy as a whole. A single parent with two children earns less than \$15,000 a year working full-time on a minimum-wage job: hardly enough to support her family, especially after deducting payroll taxes and work-related expenses such as child care. Whatever her level of effort, she will end up poor and probably dependent on government benefits to survive.

While a higher minimum wage will help to boost earnings, critics worry about its effects on hiring, arguing that employers will create fewer jobs if they have to pay higher wages. Although past increases do not appear to have adversely affected employment, there is no denying the risk that much larger increases might pose to the least skilled workers. Raising the minimum from its current \$7.25 to \$15.00 per hour, as some have advocated, would more than double the cost to an employer and likely have some impact on hiring. In addition, a higher minimum isn't well targeted on just the poor. Many of the people who would benefit from a higher minimum are secondary workers from more advantaged families. About two-thirds of current minimum-wage earners live above 200 percent of the federal poverty line. Only about a fifth are poor.

If we are really worried about families at the bottom, a better way to improve their lot is to increase the Earned Income Tax Credit (EITC) since it is well-targeted on those who most need assistance, and will not significantly affect employers.

That said, any increase in the generosity of the EITC could cost billions of dollars—unlikely to be approved in today's fiscally constrained environment. Moreover, as currently designed, although it clearly encourages work, it may discourage marriage or encourage unwed childbearing.<sup>1</sup>

A better way to boost earnings is to combine the best elements of each policy, allowing them to work in tandem to reduce poverty and inequality. Specifically, we recommend the following hybrid policy:

- Raise the minimum wage to \$10.10 and index it for inflation;

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<sup>1</sup> Empirical evidence for the last two effects is lacking, but they remain a concern.

- Provide a more generous EITC to families with young children (and somewhat less to large families);
- Expand benefits to young childless individuals;
- Eliminate the marriage penalty for most households by basing credits on personal instead of family income;
- Impose a work requirement for childless workers (and a less stringent one for second earners) and restrict eligibility for these two groups to households at or below 200 percent of the federal poverty line.

On January 10, 2014, we released a policy brief entitled “A No-Cost Proposal to Reduce Poverty and Inequality.” This paper updates that analysis by incorporating some largely technical corrections and some modest shifts in the design of the EITC. The basic conclusion of the earlier analysis – that it is possible to reduce poverty at no cost to the government—has not changed.<sup>2</sup>

This revised proposal reduces the poverty rate by about 4 percent, lifting nearly 1.8 million people out of poverty. Its anti-poverty effectiveness would be enhanced over the longer run if the new plan encourages work and marriage, or reduces unwed childbearing (current research suggests it will increase employment, but any effects on marriage or childbearing are hypothetical at this stage). The effects will also be larger to the extent that an increase in the minimum wage has a ripple effect on wages just above the new minimum. Perhaps more importantly, because we make a series of conservative assumptions regarding marginal tax rates, the results reported in this paper likely underestimate the true poverty reductions that would be generated from raising the minimum wage.

Implementing both policies makes good fiscal sense, too. We estimate that enacting our proposed EITC reforms would, by itself, add approximately \$10 billion to the current EITC budget. But raising the minimum wage in addition to implementing our proposed EITC plan would reduce total government expenditures by approximately \$11 billion, meaning that, on net, our proposal is predicted to reduce government expenditures by about \$1 billion a year. While we have crudely modeled the tax increases and reductions in means-tested government benefits that would arise with higher wages in the private sector, we have made a series of assumptions that likely make our cost-savings projections as well as our poverty reduction estimates conservative.

Over the longer term, any solution to the plight of these families must involve improving the U.S. education and training system along with reversing the rise of single parent families, as we argued in an earlier paper, “Strategies for Assisting Low-Income Families.” However, long before those goals are achieved, the policies that would most help such families are, first, a return to full employment, and

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<sup>2</sup> Compared to our original analysis, the EITC parameters are slightly more generous, the estimated cost savings are larger (because we include more offsets), and the effects of the minimum wage are smaller (because we do not include subminimum wage workers in our analysis). All of these assumptions make our estimates of the poverty-reducing or cost-reducing effects more conservative than they might otherwise be. For details, see the remainder of this paper.

second, boosting the earnings of those with jobs. Our earlier paper showed that the most effective policy for improving the incomes of the struggling working class would be to reduce the unemployment rate to 5.4 percent, a commonly used benchmark of a full employment economy. Now that the economy seems to be on the road to recovery, we need to also focus on making work pay.

## Background

There is no easy fix to the complex problems plaguing America's struggling working families. Improving the U.S. education system will take time and will do little to help the plight of current low-wage workers. Reversing the rise of single parenthood and fragile families may be an even harder task, and one that will not likely be accomplished in the near future.

In the short-to-intermediate term then, we will need to rely on strong make-work-pay policies to support low-wage workers and their families. Two such policies that have gained increasing attention in recent years are the EITC and the minimum wage.

### **The Earned Income Tax Credit**

Created in 1975 with the dual purposes of promoting work and improving the lives of poor children, the Earned Income Tax Credit (EITC) is a refundable tax credit that subsidizes the earnings of low-income households.<sup>3</sup> EITC benefits vary according to the filing status of a taxpayer (single or married), the number of dependents claimed by the filer (childless, one child, two children, or three or more children), and total household earnings. Reflecting the program's goal of reducing child poverty, families with more dependents receive larger EITC benefits. The credit gap is particularly stark between workers with and without dependents. In 2013, for instance, the maximum credit available to single parents with one child was nearly seven times larger than that of childless single tax filers.

Although less impressive, differences in credit amounts also exist by marital status and family size. Specifically, benefits are extended for married couples in order to help mitigate marriage disincentives embedded in the EITC. Because tax credits are calculated based on household earnings, marriage will cause some workers to lose their EITC benefits.<sup>4</sup> In a similar vein, since larger families are eligible for

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<sup>3</sup> By "refundable," we mean that all qualifying families receive the full credit amount to which they are entitled, regardless of their tax liabilities. Hence, if a family's EITC amount exceeds its current tax liability, the family will receive the remainder of its credit (i.e., EITC minus tax liability) in the form of an annual government check.

<sup>4</sup> In many cases, these EITC marriage penalties can be quite substantial. To illustrate, consider the following hypothetical example. Suppose that a single mother of two children and her partner each earn \$14,500 – the annual earnings of a full-time (2,000 hours a year) minimum-wage (\$7.25 per hour) worker. According to 2013 EITC parameters, if the mother files separately from her partner, she is eligible to receive \$5,372 in refundable credit. If, however, she files jointly with her partner, she only receives \$4,081 – a 24 percent reduction in EITC benefits. In fact, to remain at her pre-marriage EITC benefit level, this hypothetical single mother would not be able to marry a person whose annual earnings exceeded \$8,370.

more credit amount, the EITC may perversely encourage parents to have more children. Despite the existence of these marriage and fertility incentives, the best empirical research finds no evidence of the EITC influencing either marital or childbearing outcomes (Meyer, 2010).

Instead, the EITC's biggest effects have been on employment and poverty, especially among single mothers. Meyer and Rosenbaum (2001), for instance, estimate that the expansion of the EITC during the early 1990s increased the employment of single mothers by 7 percentage points, and they attribute roughly 60% of the increase in the single mother employment rate from 1984 to 1996 to changes in the EITC schedules.<sup>5</sup> Research has also shown the EITC to be an incredibly well-targeted anti-poverty program. For example, the tax credit lifted approximately 7 million individuals out of poverty (over 3 million of whom were children) (Maag and Carasso, 2013) in 2009, and reduced poverty and child poverty rates by roughly 10 and 16 percent, respectively, in 2007 (Meyer, 2010).

In contrast, the program has done little to change the economic circumstances (or employment incentives) of workers without children. In 2007, for instance, about 5 percent of all EITC benefits were received by individuals with no qualifying dependent (Meyer, 2010). As a result, little is known about the effects of the EITC on the labor supply of low-income childless workers and noncustodial parents, many of whom are either ineligible for EITC benefits or receive far smaller credit amounts than workers with children. Recent research, however, suggests that the EITC—by stimulating labor supply and driving down wages—may actually hurt the earnings prospects of low-wage workers who do not qualify for (or enroll in) the EITC. More specifically, while the EITC benefits received by workers with dependents more than offset any wage reductions caused by an EITC-induced increase in labor supply, low-income individuals with no dependents only experience the negative labor-supply shock to their earnings.<sup>6</sup> Even single tax filers who qualify for the EITC may experience a loss in earnings, since their low EITC benefits may not be enough to compensate for the reductions in their wages (Schmitt, 2012).

### **The Federal Minimum Wage**

The minimum wage is another important policy lever for supporting low-skilled workers and their families. First established in 1938 at 25 cents an hour, the federal wage floor has been raised on 22 separate occasions and, after its most recent increase in 2009, currently stands at \$7.25 an hour (Elwell, 2013). Despite its rise in nominal dollars, the minimum wage—which is not indexed to the price level—has fallen behind inflation. Between the late 1960s and today, the purchasing power of the minimum

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<sup>5</sup> Similar positive employment effects have been found by a number of other studies (Hotz and Schol, 2003; Chetty et al., forthcoming). While it is possible that the EITC might cause some workers to reduce the number of hours they work, this concern has not been upheld by the empirical literature (Hungerford and Thiess, 2013; Hotz and Scholz, 2003).

<sup>6</sup> Leigh (2010), for instance, estimates that a 10 percent increase in EITC generosity is correlated with a 5 percent decline in the wages received by high school dropouts, and a 2 percent decline in the wages of individuals who only have a high school degree. Similarly, Rothstein (2010) finds evidence that low-income workers who are EITC-ineligible experience wage declines.

wage has declined by approximately 20 percent, while the wage differential between minimum-wage workers and the average American earner has grown substantially (Cooper and Hall, 2013).

Many cities and states have responded by raising local minimum wages. And at the federal level, some politicians have begun to push for another hike in the national pay floor. In his 2013 State of the Union Address, for example, President Obama called upon Congress to raise the pay floor to \$9 an hour and index it to inflation.<sup>7</sup> More ambitiously still, Senator Harkin and Representative Miller have put forward the Fair Minimum Wage Act, a bill that would lift the minimum wage to \$10.10 an hour, index it to the price level, and increase the minimum cash wage for tipped workers to 70 percent of the regular minimum wage.<sup>8</sup>

While a recent Gallup poll shows that 71 percent of Americans support a higher minimum wage (Saad, 2013), raising the minimum wage is a hotly contested policy proposal. We briefly address two of the biggest criticisms laid against the minimum wage, namely that: (1) the minimum wage kills jobs (Kennedy, 2013); and (2) the minimum wage is poorly targeted (Sherk, 2013).

### ***Does the Minimum Wage Reduce Employment?***

The short answer: not really. Hundreds of research articles have been published on the effects of raising the minimum wage on the employment of teens and low-skilled laborers. While estimates can vary widely between individual studies, the literature as a whole favors the view that modest increases in the minimum wage have little effect on the employment of low-wage workers.<sup>9</sup> For instance, several recent meta-analyses—which use statistical techniques to combine and analyze the results of different minimum-wage studies—conclude that minimum-wage hikes yield small and statistically insignificant employment effects.<sup>10</sup>

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<sup>7</sup> For President Obama’s 2013 State of the Union Address, see: <http://www.whitehouse.gov/the-press-office/2013/02/12/remarks-president-state-union-address>.

<sup>8</sup> For more details on this proposal, see: <http://democrats.edworkforce.house.gov/issue/fair-minimum-wage-act>.

<sup>9</sup> For a recent overview of the minimum wage literature, see Schmitt (2013).

<sup>10</sup> See, for instance, Doucouliagos and Stanley (2009). Not all surveys of the literature arrive at this conclusion. For instance, Neumark and Wascher (2007), in their qualitative review of the evidence, write: “In our view, the preponderance of evidence points to disemployment effects [of the minimum wage]” (p. 121). Schmitt (2013), however, has criticized their review for its “subjectivity” and lack of relevancy to the United States, noting that “only 52 of the 102 studies reviewed by Neumark and Wascher analyzed U.S. data” (p. 6). Moreover, Neumark and Wascher’s literature review places substantial weight on “longer panel studies that incorporate both state and time variation in minimum wages [and that] tend [to], on the whole, find negative and statistically significant employment effects from minimum wage increases” (p. 121). Dube et al. (2010), however, show that the negative employment effects found in these types of studies may be driven by unobserved heterogeneity in employment growth among less-skilled workers. This finding is confirmed by Sylvia et al. (2010), who show using CPS data that not accounting for heterogeneous employment patterns causes panel study analyses to overstate the negative employment effects of raising the minimum wage.

There exist a number of hypotheses for why minimum wage increases appear to have marginal effects on employment, although no consensus has emerged as to which are correct and most relevant.<sup>11</sup> Some of the more prominent theories include:

1. Firms respond to higher minimum wages by cutting back on hours worked, or increasing wages for higher-skilled workers, rather than shedding personnel.<sup>12</sup>
2. Employers pass the costs of the minimum wage onto consumers.
3. Employment levels remain the same, but the composition of the low-wage work force changes as firms respond to a minimum-wage increase by hiring higher-quality low-wage workers.<sup>13</sup>
4. Higher minimum wages lower the turnover rate in low-wage occupations and therefore reduce the costs that firms incur from turnovers.<sup>14</sup>
5. Firms simply absorb the higher labor costs, meaning that increases in the minimum wage translate into lower company profits.<sup>15</sup>

The second hypothesis is particularly worrisome because price inflation may disproportionately hurt low-income consumers. Since minimum-wage workers are concentrated in food and food-service industries,<sup>16</sup> and since poorer households tend to spend a larger share of their disposable income on food than more affluent families, the passage of minimum-wage costs onto consumers may any minimum-wage welfare gains.

Prior research, however, suggests that the inflationary effects of the minimum wage are relatively small. For example, Lemos (2004), in her extensive survey of the literature, finds that the impact of a 10 percent increase in the minimum wage raises food prices by no more than 4 percent and overall prices

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<sup>11</sup> For a detailed overview of existing theories on how the minimum wage changes the behaviors of firms and low-wage workers, see Schmitt (2013).

<sup>12</sup> Although few studies find support for such a response (Sylvia et al., 2010), the literature on the hour-effects of the minimum wage remains relatively sparse and a consensus has yet to emerge (Neumark and Wascher, 2007).

<sup>13</sup> Few studies have empirically tested this hypothesis, and the analyses that do exist have produced mixed results.

<sup>14</sup> This line of research remains underdeveloped and inconclusive. There is some evidence, however, that turnover rates in low-skilled occupations decline after minimum-wage increases (Dube et al., 2012).

<sup>15</sup> Evidence on the effects of the minimum wage on firm profits is limited (Card and Krueger, 1995; Schmitt, 2013).

<sup>16</sup> In 2012, approximately 44 percent of minimum-wage workers were employed in food preparation and food service industries (U.S. Bureau of Labor Statistics, 2013(a)).

by no more than 0.4 percent. Such small inflationary effects are perhaps unsurprising, given that the costs of a minimum-wage hike tend to be quite small relative to the sales revenues of affected firms.<sup>17</sup>

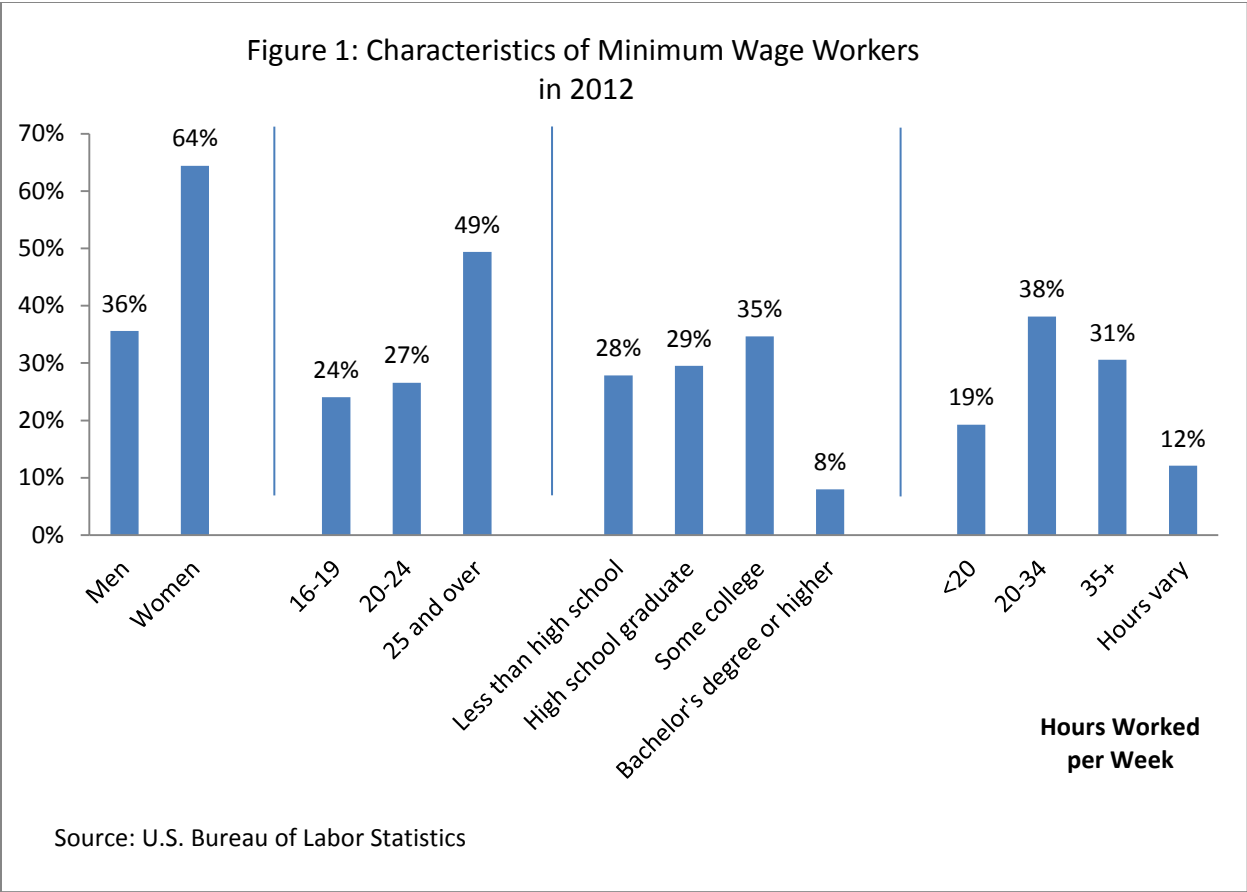
Even in the extreme case where all minimum-wage-related costs are passed through to the consumer, poor households still tend to come out on top. MaCurdy and McIntyre (2001), for example, find that families in the bottom quintile of the income distribution would gain \$112 if the 1996 minimum wage were raised from \$4.25 to \$5.75, and if consumers paid for 100 percent of this minimum-wage hike. This is largely because high-income households consume more on average than poor families, meaning that the affluent bear the bulk of the minimum-wage-induced inflationary costs. Importantly, however, a higher minimum wage also transfers income from poor families without minimum-wage workers to poor families with minimum-wage workers. In fact, according to MaCurdy's and McIntyre's "worst case" price scenario, bottom-quintile households without low-wage workers lose \$127 on average due to minimum-wage inflation, while the net gain for bottom-quintile households with low-wage workers is \$802.

### ***Is the Minimum Wage Poorly Targeted?***

Minimum-wage workers are a diverse group. Nearly two thirds of workers who earn \$7.25 or less an hour are women, and about half are over the age of 25 (Figure 1). Contrary to the popular stereotypes of minimum-wage earners as teenage part-time workers (Harbin, 2011), only a fifth work less than 20 hours a week and more than 70 percent have graduated from high school.

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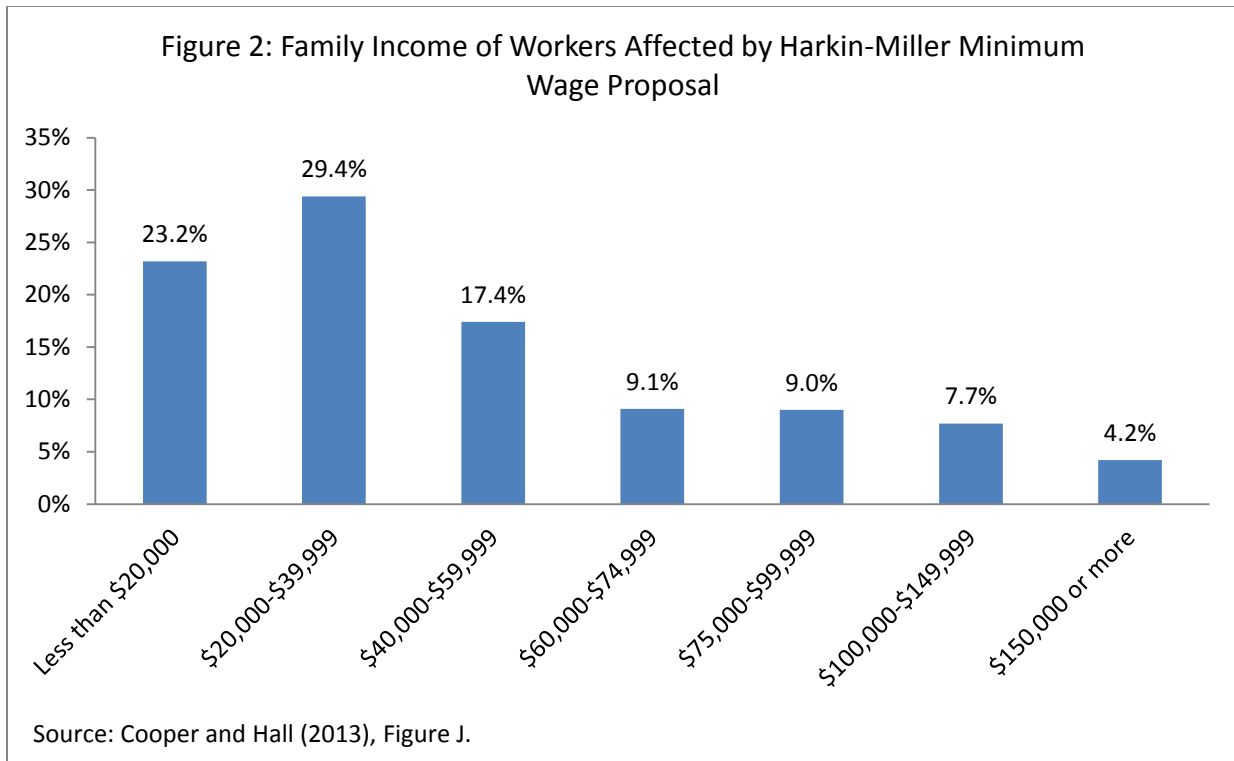
<sup>17</sup> A number of studies have estimated the costs of a minimum-wage hike as a percentage of sales revenue in order to estimate the amount by which firms in a specific industry would need to raise prices in order to cover the additional labor costs (Pollin et al., 2004). Included in their calculations of the minimum-wage costs are (1) the costs of paying minimum-wage workers a higher wage, (2) the costs of raising the wages of those workers who are paid just above the minimum wage (i.e., minimum-wage ripple-effect costs), and (3) the costs resulting from the higher payroll taxes that employers must now pay. Estimates of cost-to-sales ratios for different state-specific minimum-wage hikes range from 0.69 percent (for the Floridian restaurant industry following a 19% increase in the state's minimum wage) to as much as 8.3 percent (for Santa Monica's hotel industry following an 85% increase in the minimum wage) (Wicks-Lim and Thompson, 2010).



The benefits of a higher minimum wage would also largely accrue to low- and moderate-income households. Analyses of the Harkin and Miller proposal, for instance, show that nearly a quarter of workers who would benefit from raising the minimum wage to \$10.10 an hour have family incomes of less than \$20,000, while 70 percent live with family incomes of less than \$60,000 (Figure 2). That being said, the minimum wage is less focused on poor families than is the EITC. For instance, the Urban-Brookings Tax Policy Center (2013) estimates that, in 2015, 42 percent of all EITC benefits will go to tax filers with cash incomes of less than \$20,000, and 91 percent will go to tax filers with less than \$40,000 in cash income.<sup>18</sup>

<sup>18</sup> Cash income is a more expansive measure of household resources than family income. The Tax Policy Center calculates cash income as adjusted gross income plus “(1) above-the-line adjustments, (2) employee contributions to tax-preferred retirement accounts, (3) tax-exempt interest, (4) nontaxable Social Security and pension income, (5) cash transfers, (6) the employer share of payroll taxes, and (7) imputed corporate tax liability” (Tax Policy Center, 2013).





## **EITC Reform, Minimum-Wage Reform, and a Hybrid Proposal**

In this section, we first look at the likely impact of either restructuring the EITC or raising the federal minimum wage. As discussed in greater detail below, our EITC proposal would address many shortcomings of the current program, including reducing marriage disincentives and incentives to have more children, while also increasing EITC generosity for young childless workers. However, it would decrease benefits for larger families. A \$10.10 minimum wage would boost earnings and provide important support to poor households, but it is not optimally targeted and risks disemployment effects. We then discuss a hybrid approach, which would mitigate the drawbacks of either individual proposal. In tandem, these two policy changes would significantly improve the lives of America’s working poor families at no cost to the government.

### **Building a Better EITC**

In recent years, a number of innovative ideas have been proposed to rectify certain shortcomings of the EITC. These include expanding benefits for childless workers and noncustodial parents (Edelman et al., 2009; Berlin, 2007); eliminating marriage penalties by calculating credit amounts based on personal earnings, as opposed to household earnings (Berlin, 2007); and augmenting benefits for families with children (Sawhill and Thomas, 2001). Others have proposed making permanent the American Recovery and Reform Act (ARRA)’s temporary expansions to the EITC, which include boosting EITC benefits for

families with 3 or more children and expanding the EITC phase-out starting point for married couples (Marr et al., 2013). (These expansions are set to expire in 2017.)

Building upon and adding to this existing body of work, we propose a series of EITC reforms that are designed to achieve four main objectives: (1) reduce early childhood poverty; (2) mitigate marriage penalties; (3) strengthen work incentives for young workers without dependents; and (4) be close to budget-neutral. Bearing those goals in mind, our plan for a better EITC calls for the following changes:

- Create a worker credit and a family credit, both of which would be calculated using individual (as opposed to household) earnings. Using personal earnings to calculate EITC benefits has been shown to reduce the severity and prevalence of marriage penalties (Carasso et al., 2008). Our plan therefore calls for two separate credits: (1) a “worker credit” that applies to workers without dependents and lower-earning spouses in families with children, and (2) a larger “family credit” that applies to the primary (largest) earner in a family with children.
- Increase EITC generosity for workers without children. As underscored in Edelman et al. (2010), current EITC eligibility for childless workers is quite restricted.<sup>19</sup> We therefore propose both raising the maximum benefit and expanding the eligibility range for childless workers. More specifically, we design our worker’s credit such that:
  - Workers receive maximum credit after earning \$6,370 (the maximum-credit threshold for childless workers in 2013);
  - The maximum credit is equal to \$1,625 (or about 50% of the maximum benefit for single tax filers with one dependent in 2013);
  - Benefits begin phasing out after \$14,500 (the amount that a full-time (2,000 hours a year) minimum-wage (\$7.25 an hour) worker earns in a year);<sup>20</sup> and
  - Benefits are phased out completely once personal earnings reach \$22,980 (or 200 percent of the federal poverty line for a one person household in 2013).<sup>21</sup>
- Create separate EITC tiers for primary earners of families with young children. Instead of basing EITC generosity on family size, our family credit would seek to concentrate benefits among families with young children, since research has shown that the effects of family income on later

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<sup>19</sup> In 2013, benefits for unmarried childless workers phase out completely once household earnings reach \$14,340, meaning that a full-time (2,000 hours a year) minimum-wage (\$7.25 an hour) worker would not qualify for any EITC support.

<sup>20</sup> There is an argument for extending the phase-out threshold to an income level that matches full-time earnings at the higher minimum wage, and we may do so if there is sufficient interest in this plan.

<sup>21</sup> Thus, under our new plan, workers without dependents and lower-earning spouses of families with children experience an EITC phase-in rate of about 25.5 percent and a phase-out rate of about 19.2 percent.

child outcomes are particularly pronounced in the early years of life.<sup>22</sup> More specifically, EITC benefits for primary earners (AKA, the family credit) would be based on the age of the youngest child in the family and would be differentiated into three credit tiers:

- Older child tier: Those whose youngest child is age 6 or older would receive 110 percent of the credit amount currently received by single tax filers with one dependent;<sup>23</sup>
  - Toddler tier: Those whose youngest child is 3-5 years old would receive 130 percent of the older child tier;
  - Newborn tier: Those whose youngest child is age 0 to 2 would receive 150 percent of the toddler tier.<sup>24</sup>
- Expand EITC eligibility to include childless workers in their early twenties. We lower the age eligibility threshold for workers without dependents from 25 to 21. This decision is motivated by research that underscores (1) the importance of having a strong start in the labor market,<sup>25</sup> and (2) the low levels of labor force activity among low-income young men, many of whom will

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<sup>22</sup> Economists, developmental psychologists, and neuroscientists have long stressed the importance of early childhood to long-term cognitive and social development. Brain development is a cumulative process that builds upon earlier neural foundations (Bales et al., 2007). Because many of the brain's most basic and critical neural pathways are formed in the first years of life (when the brain is most sensitive to the surrounding environment), experiences that negatively impact early brain development can have long-lasting implications for brain functioning (Center on the Developing Child, 2013). This, in combination with the fact that the brain's capacity for change decreases with age, have led many to argue that earlier interventions will be more effective at improving long-term cognitive and social development than remediation later in life (Cunha et al., 2010; Reeves and Howard, 2013). A growing body of empirical evidence also supports the focus on early childhood. Results from the Abecedarian Program and the Perry Preschool Experiment showed that many of the benefits of early childhood investment carried over into adulthood (Heckman and Masterov, 2007). More recent non-experimental work generally reaffirms the formative importance of a child's first years. Gaps in school readiness tend to translate into gaps in school achievement (Sawhill et al., 2012; Duncan et al., 2010), and fewer than half of children living in poverty at 9 months are school-ready at age 5, as compared to 75 percent of children that are above 185 percent of the poverty line (Isaacs and Magnuson, 2011). Moreover, association between child poverty and a child's earnings as an adult appears to be strongest in early childhood (Duncan et al., 2010), adding support to the idea that intervening early may be more effective (and more cost effective) than intervening in the later years of child's life.

<sup>23</sup> Under the current EITC system, workers can also claim as dependents children who are either (1) over the age of 18, and permanently and totally disabled, or (2) children who are between the ages of 18 and 24 and who are full-time students. In simulations of our proposed EITC, we treat these dependents as "older children."

<sup>24</sup> Equivalently, the newborn tier and the toddler tier are equal to about 206 percent and 138 percent of the current EITC schedule for single tax filers with one dependent, respectively. We envisage phasing in any changes to the EITC slowly since there would be some existing families that would lose benefits under our plan.

<sup>25</sup> A weak start in the labor force has long term consequences for earnings and employment. In general, bouts of unemployment tend to depress future labor market outcomes; the "scarring" effects of youth unemployment, however, are particularly pronounced (Caliendo et al., 2011). One U.S. study, for instance, found that six months of unemployment at age 22 lowered wages by 8 percent at age 23, and continued to adversely affect earnings over the next eight to nine years (Mroz and Savage, 2006). Moreover, these persistent earnings penalties tend to hit less-skilled youth the hardest (Burgess et al., 2003), suggesting that early career unemployment reduces economic mobility.

eventually become fathers.<sup>26</sup> However, in order to offset the costs of providing these workers with more generous EITC benefits, our proposed EITC also lowers the upper-bound age for EITC eligibility to 39.

- Strengthen the work requirements for EITC eligibility. In order to incentivize full-time employment, we propose conditioning EITC eligibility for childless workers and lower-earning spouses on hours worked in a year. In particular, EITC eligibility for workers without dependents would be conditional upon working at least 1,500 hours a year, which is roughly equivalent to working full time (40 hours a week) for three-quarters of the year. This relatively strict work requirement not only incentivizes full-time employment, but also seeks to ensure that our more generous childless-worker tax credit goes to hard-working individuals who are truly struggling to make ends meet. Recognizing the existence of important tradeoffs between work and parenting, we propose less stringent work requirements for lower-earning spouses in families with children: 1,000 hours a year, which is equivalent to working full-time for half a year. We do not impose any work requirements on single parents or one-earner families with dependents.<sup>27</sup>
- Restrict eligibility for worker credits to earners in households that are at or below 200 percent of the federal poverty line. Basing EITC benefits on personal earnings tends to increase EITC eligibility up the household income scale. Thus, to ensure that the EITC continues to target lower-income households, our plan restricts the worker credits to childless workers and lower-earning spouses living at or below 200 percent of the federal poverty line. While such a restriction on household income does reintroduce some marriage disincentives into the EITC (particularly for higher-earning EITC beneficiaries),<sup>28</sup> it was necessary to hold down the total costs of our proposal.<sup>29</sup>

Ultimately then, our plan—which is visually summarized in Figure 3—prioritizes full-time work over part-time employment, young children over big families, and young single adults over older childless workers. While we recognize that such tradeoffs are not ideal, we believe that the above expansions and reallocations of funds represent budget-feasible improvements to the current EITC.

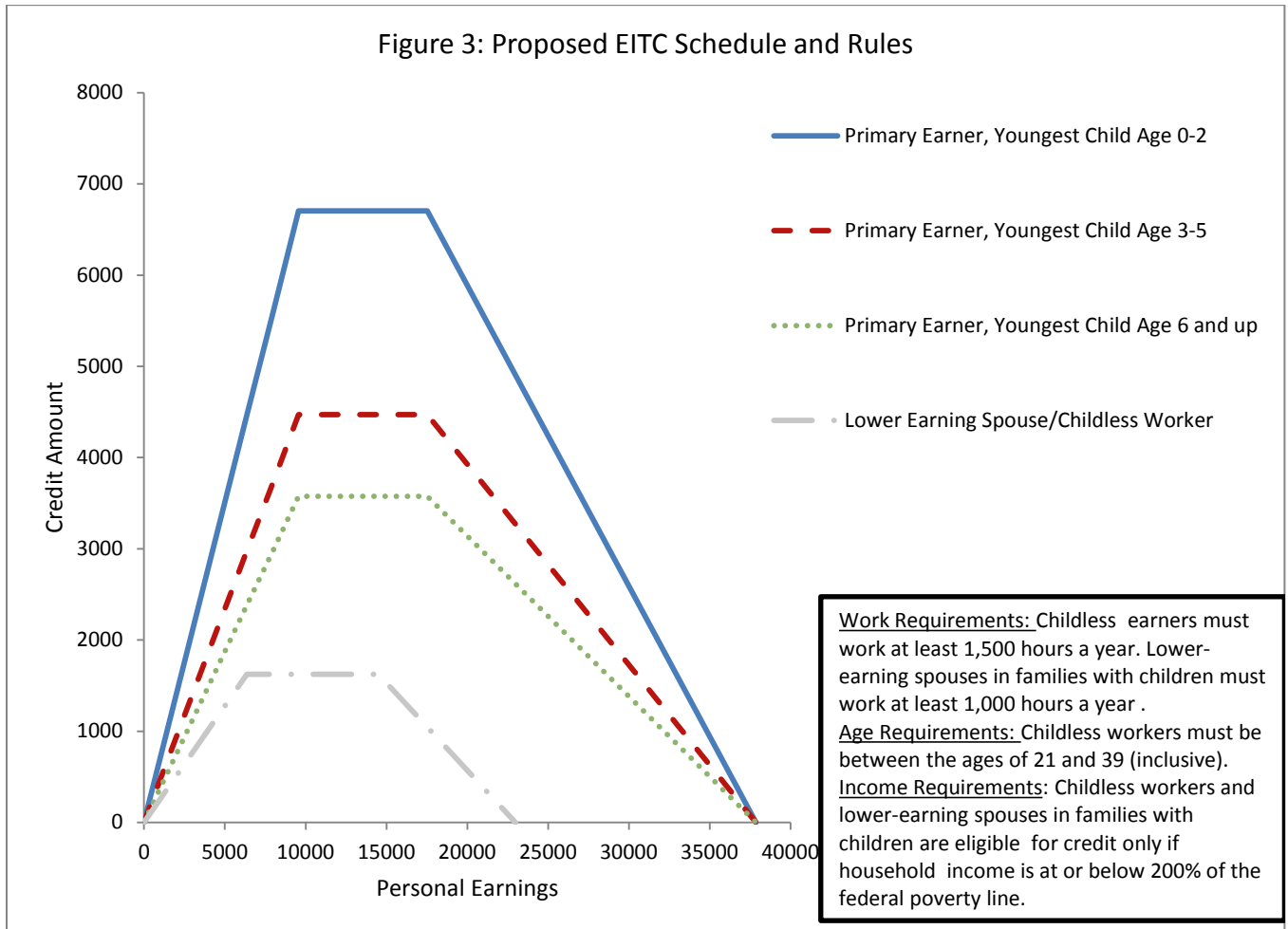
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<sup>26</sup> Labor force participation rates among male high school dropouts and men with only high school degrees have declined sharply since the late 1970s (Juhn and Potter, 2006), and unemployment rates for men without a high school degree stood at 11.6 percent in 2012 – roughly 43 percent higher than the national average (U.S. Bureau of Labor Statistics, 2013 (b)). For a good overview of the labor market obstacles facing low-income young men, see Carasso et al. (2008).

<sup>27</sup> Hours requirements are administratively difficult to monitor but it should be possible to translate these into income thresholds if that is a serious issue.

<sup>28</sup> For example, a childless man who earned \$20,000 in 2013 would be eligible for \$571 in tax credit under our proposed EITC. If, however, this man married a single mother of two children who earned at least \$20,000 a year, he would lose all of his EITC benefits.

<sup>29</sup> In our proposed EITC, we also maintain the eligibility restrictions on income from investments. In 2013, for example, households with more than \$3,300 in investment income were not eligible for EITC benefits.



To assess the costs and effects of our EITC proposal, we use 2011 data from the March Census Population Survey (CPS) to simulate three versions of the EITC, namely: (1) the current EITC program; (2) the current EITC program without the temporary ARRA expansions;<sup>30</sup> and (3) our newly proposed EITC.<sup>31</sup>

<sup>30</sup> More specifically, the ARRA increased EITC benefits for families with three or more children and extended the income level at which EITC benefits begin to phase out for married couples. These provisions are set to expire in 2017.

We view version (2) as our baseline EITC scenario because it encapsulates all of the permanent features of the current EITC.<sup>32</sup> We simulate scenario (1) in order to show the effects of making permanent the temporary ARRA expansions of the EITC and to provide a viable alternative policy to our EITC proposal.<sup>33</sup>

Importantly, our simulations do not take into account any changes in labor supply that might arise from a restructuring of the EITC; rather, household credit amounts are computed by applying the schedules and eligibility rules under each EITC scenario to the annual hours worked and annual earnings reported by CPS respondents.<sup>34</sup> Total program costs are then calculated by aggregating EITC benefits across households. However, because the CPS tends to undercount EITC benefits (Meyer et al., 2009), we use

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<sup>31</sup> We use 2011 EITC parameters to simulate all three EITC scenarios. Thus, in the case of scenario (2), we employ the EITC parameters that were effective in 2011, but eliminate the third tier for families with three or more children and reduce the married-couple extensions from \$5,080 more than single tax filers to \$3,000 more than single tax filers. Similarly, the parameters for our EITC proposal – i.e., scenario (3) – are derived from 2011 EITC parameters and 2011 federal poverty thresholds. The only exceptions to this rule are our proposed EITC parameters for childless workers and lower earning spouses in families with children. Specifically, we use the exact parameters discussed in the main text of this report to impute credits to lower-earning spouses in families with children and workers without dependents. We do this because, while the family credits are simple multiples of existing EITC schedules and can therefore be easily translated into their 2011 counterparts, our new worker credit is constructed using the current minimum wage, which has not been adjusted for inflation. For the sake of simplicity then, our simulations do not make any inflationary adjustments to the proposed EITC parameters for childless workers and lower earnings spouses.

<sup>32</sup> Relevantly, our estimates of the poverty reductions associated with the ARRA expansions of the EITC align closely with other published simulations. For example, Marr et al. (2013) estimate that the ARRA expansions of the EITC lifted approximately 500,000 people out of poverty in 2011 and that the EITC in its entirety lifted about 3.1 million children out of poverty. Our simulations place these poverty reductions at about 510,000 people and 3.1 million children, respectively.

<sup>33</sup> Note, for example, that President Obama's 2013 Budget Proposal includes making the ARRA expansions of the EITC a permanent addition to the tax credit program.

<sup>34</sup> More specifically, we first use 2011 EITC parameters and rules to impute EITC benefits to families in our CPS sample. We rely on the Census Bureau's definitions of family type (e.g., primary families, related subfamilies, unrelated subfamilies, unrelated individuals) to identify distinct tax units. Our simulated EITC cost estimates (\$42 billion in 2011) closely match the EITC cost estimates produced by the Census Bureau (\$43 billion in 2011), despite the fact that the Census Bureau uses a different imputation methodology. To simulate our baseline version of the EITC (i.e., version 2), we then eliminate the third EITC tier for families with three or more children, reduce EITC phase-out extensions for married couples back to pre-ARRA levels, and impute a new set of EITC benefits using these modified parameters. Finally, to calculate benefits under our proposed EITC program, we impute credits to individual workers based on reported personal earnings and then aggregate credits across working members in a family.

EITC cost estimates produced by the Internal Revenue Service (IRS) to scale up our CPS-based cost estimates.<sup>35</sup>

To calculate supplemental poverty measure (SPM) poverty rates under each of our EITC scenarios, we link 2011 data from the U.S. Census Bureau’s SPM Public Use Research Files to our sample of CPS households. This published dataset contains data on the various components of the SPM poverty equation for each household in our CPS sample, thereby allowing us to easily recalculate SPM poverty rates under different parameterizations of the EITC.<sup>36</sup>

As illustrated in Figure 4, implementing our EITC proposal would produce modest but meaningful reductions in poverty, especially among those individuals and households that experience the highest poverty rates.<sup>37</sup> Overall poverty is predicted to fall by about 2 percent from pre-ARRA levels (1 percent from current levels), while early childhood poverty declines by more than 6 percent from its pre-ARRA rate of 21.1 percent (4.5 percent from current levels). For single parents, who experience a pre-ARRA poverty rate of 31.5 percent, poverty is expected to drop by nearly a percentage point (or by about 3 percent). While these reductions may seem small, they translate into over 320,000 young children and nearly 120,000 single-parent households being lifted out of poverty (relative to pre-ARRA numbers). Under our proposal, poverty among prime-age adults and childless workers would also drop from pre-ARRA levels by about 3 and 1 percent, respectively.

While our EITC proposal has the benefits of removing significant marriage disincentives, encouraging work among young childless workers, and targeting early childhood poverty, it also has some drawbacks.

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<sup>35</sup> The Internal Revenue Services (2012) estimates that nearly \$62 billion of EITC benefits were distributed in 2011. In contrast, CPS-based estimates place this figure at about \$43 billion. Assuming that the CPS correctly matches the distribution of credits across household types, we can use the following equation to appropriately scale up cost estimates for our three versions of the EITC:

$$Cost_{j\_Final} = \left( \frac{Cost_j}{Cost_1} \right) * Cost_{IRS},$$

Where  $Cost_{j\_Final}$  is the final (scaled-up) cost of EITC version j;  $Cost_j$  is the estimated cost of EITC version j using the CPS;  $Cost_1$  is the estimated cost of current EITC program (aka, the EITC version 1) using the CPS; and  $Cost_{IRS}$  is the IRS-estimated cost of the current EITC program (aka, \$62 billion).

<sup>36</sup> Importantly, the SPM research files contain the Census Bureau’s imputed EITC values for each household. We can therefore recalculate SPM poverty rates for different EITC parameterizations by replacing the Census Bureau’s EITC values with our own imputed EITC benefits. Note that we conduct this computation for all three EITC scenarios, including the “current EITC version” (aka, scenario 1). Importantly, the SPM poverty rates that we simulate under the current EITC program are almost identical to the 2011 SPM poverty rates published by the U.S. Census Bureau (Short, 2012). For a detailed overview of the methodology used to calculate SPM poverty components and poverty rates, see Short (2013).

<sup>37</sup> For household units, we use the Census Bureau’s “SPM unit,” which the Census Bureau defines to be: “All related individuals who live at the same address, including any coresident unrelated children who are cared for by the family (such as foster children) and any cohabitators and their relatives” (Short, 2012). Note then that our definition of household differs from the definition of “tax units” that we used to impute current EITC benefits. Specifically, recall that primary families and related subfamilies living at the same address constitute distinct “tax units,” as do unrelated cohabitators and their relatives.

Due to the trade-offs that we had to make in designing a budget-conscious proposal, not everyone is a winner under our new plan. Specifically, because this proposal shifts funds from older children to younger children, our preferred EITC is expected to increase poverty rates among children aged 6 to 18 by about half a percent from pre-ARRA levels (and by about 2.5 percent from current levels). Furthermore, while poverty rates for one-child families are about 7 percent lower under our proposed EITC than under a pre-ARRA EITC, they are 1 percent higher for families with two children.<sup>38</sup>

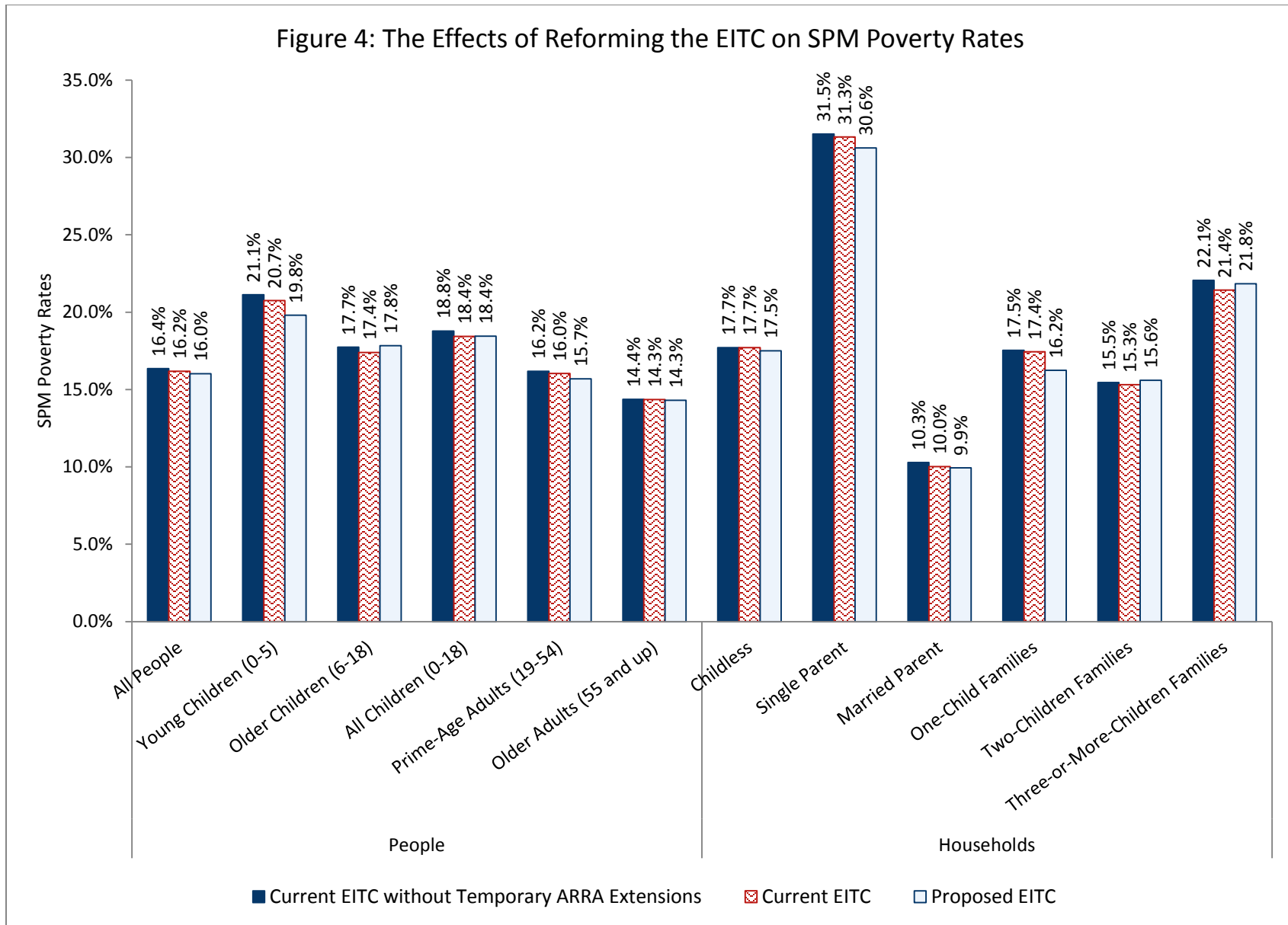
We estimate that enacting our proposed EITC reforms would add approximately \$10 billion to the current EITC budget (\$16 billion more than the cost of a pre-ARRA EITC). As we discuss in detail later on, both the drawbacks to larger families and those with older children and the additional costs would be offset by implementing the EITC changes in conjunction with a higher minimum wage.

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<sup>38</sup> Note that poverty among families with more than two children is lower than pre-ARRA levels because larger families tend to have younger children and our plan substantially boosts EITC credits for families with very young children.



Figure 4: The Effects of Reforming the EITC on SPM Poverty Rates



### **Raising the Minimum Wage to \$10.10 an Hour**

To assess the benefits of lifting the pay floor, we simulate the effects of raising the minimum wage to \$10.10 an hour on household earnings. Our simulations, which are based on the same sample of CPS households used in the EITC simulations, do not take into account changes in labor supply or labor demand that might arise from raising the federal minimum wage; rather, they assume that all wage and salary workers earn at least \$10.10 an hour and hold all else constant.<sup>39</sup> In these simulations, we also assume that the increase in the minimum wage does not affect the small proportion of workers who earn below the current minimum wage.<sup>40</sup> While this assumption is in keeping with prior minimum-wage policy simulations (Sawhill and Thomas, 2001), it should be noted that other minimum-wage proposals that raise both the regular and the tipped minimum wage (e.g., the Harkin/Miller proposal) would likely generate larger effects than those reported in this paper<sup>41</sup>.

Because hourly earnings are not directly observed for the full March CPS sample, we construct an approximate measure of hourly earnings by dividing a person's reported annual earnings by the product of his/her reported hours worked per week and reported weeks worked per year. While this method of computing hourly earnings is relatively common in the literature,<sup>42</sup> an analysis of the CPS Outgoing Rotation Groups (ORG), which directly asks respondents about their hourly wages, suggests that our constructed hourly earnings distribution overstates the prevalence of sub-minimum-wage earners.<sup>43</sup> We

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<sup>39</sup> Our target population – i.e., wage and salary workers who are affected by the \$10.10 minimum wage – is defined as all workers aged 16 and over who (1) have positive annual earnings from wages or salaries, (2) earn between \$7.25 an hour and \$10.10 an hour, and (3) did not have any self-employment earnings in the previous year. The third condition seeks to exclude self-employed individuals from our target population, since people who are self-employed are not likely to benefit from higher minimum wages. However, since some employees may supplement their wages and salaries with self-employed work, our target population likely misses some potential beneficiaries of a higher minimum wage. For each individual in our target population, we then simulate an increase in the minimum wage by multiplying his/her annual hours worked by \$10.10. We then aggregate post-intervention annual earnings across members in each household in order to arrive at a post-intervention household earnings average. As in the case of our EITC simulations, we use SPM units to define households.

<sup>40</sup> In our sample of households, approximately 16.5 percent of wage and salary workers who earn less than \$10.10 an hour are sub-minimum-wage workers (i.e., earning less than \$7.25 an hour).

<sup>41</sup> It is also important to note that these simulations—which rely on 2011 data—do not reflect post-2011 changes in state minimum-wage laws.

<sup>42</sup> See, for example, Sawhill and Thomas (2001) and Rodgers et al. (1993).

<sup>43</sup> Sawhill and Thomas (2001), who derived a CPS measure of hourly earnings using the same method described above, arrived at a similar conclusion when they analyzed data from the Survey of Income and Program Participation (SIPP) – a dataset which, like the CPS ORG, directly asks respondents about their hourly earnings.

take a number of steps to correct this discrepancy.<sup>44</sup> Following these corrections, we find that our CPS earnings distribution replicates both the CPS ORG proportion of sub-minimum-wage earners and the CPS ORG proportion of workers earning between \$7.25 and \$10 per hour. Moreover, we estimate that the average hourly pay among those workers in our CPS sample who earn \$10 an hour or less is only slightly lower than what is estimated using the CPS ORG (\$8.10 an hour versus \$8.26 an hour).<sup>45</sup>

According to our simulations, raising the minimum wage to \$10.10 an hour would have small but important effects on the earnings of low- and moderate-income households (Figure 5). Average household earnings among poor families that are directly impacted by the minimum-wage hike are expected to grow by approximately \$1,800 dollars (a 13 percent increase), while the average affected household living below 200% of the SPM poverty line would see household earnings rise by about \$2,100 (an 8 percent increase).<sup>46</sup>

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<sup>44</sup> Assuming that the direct survey data on hourly earnings is more reliable than our CPS measure, there are two possible reasons for this discrepancy: low-earning respondents could either be (1) underreporting their annual earnings, or (2) over-estimating their annual hours worked. Following the lead of Sawhill and Thomas (2001), we assume that the latter is the primary source of error and correct for this measurement error by first using the CPS ORG to calculate the correct proportion of sub-minimum-wage earners. From the pool of CPS respondents that we estimate to be sub-minimum-wage earners, we therefore randomly select the appropriate number of workers such that, if the earnings of these workers were boosted above the minimum wage, our proportion of sub-minimum-wage workers would be consistent with CPS ORG estimates. Then, because our CPS estimate of the proportion of wage and salary workers earnings less than \$10.10 an hour aligns closely with the CPS-ORG-estimated proportion, these selected CPS respondents are randomly assigned an earnings rate between \$7.25 and \$10 an hour. In keeping with our assumption that these CPS respondents have correctly reported their annual earnings, but incorrectly reported the number of hours they worked, we recalculate their annual hours worked by dividing their original annual earnings by their new hourly earnings (e.g., \$7.25).

<sup>45</sup> Since it appears that we slightly understate the average hourly pay of workers earning less than \$10 an hour, our minimum-wage simulations may slightly overstate the new wages generated from increasing the minimum wage to \$10.10 an hour.

<sup>46</sup> Overall, we estimate that the workers affected by our minimum-wage proposal would receive approximately \$46 billion in additional wages. As a point of comparison, Cooper and Hall (2013) predict that the Harkin/Miller minimum-wage proposal would generate about \$51 billion in increased wages. Note, however, that the Harkin/Miller proposal also calls for increasing the tipped minimum wage from its current value of \$2.13 an hour to 70 percent of the regular minimum wage, while our minimum-wage simulation does not affect any sub-minimum-wage workers. Moreover, these authors model the “spill-over” effects of raising the minimum wage, thereby accounting for the fact that those who earn just above the new minimum wage (e.g., \$10.25 an hour) may also experience an earnings increase as a result of the higher minimum. In contrast, we take a more conservative approach and only estimate the direct effects of a minimum-wage hike.

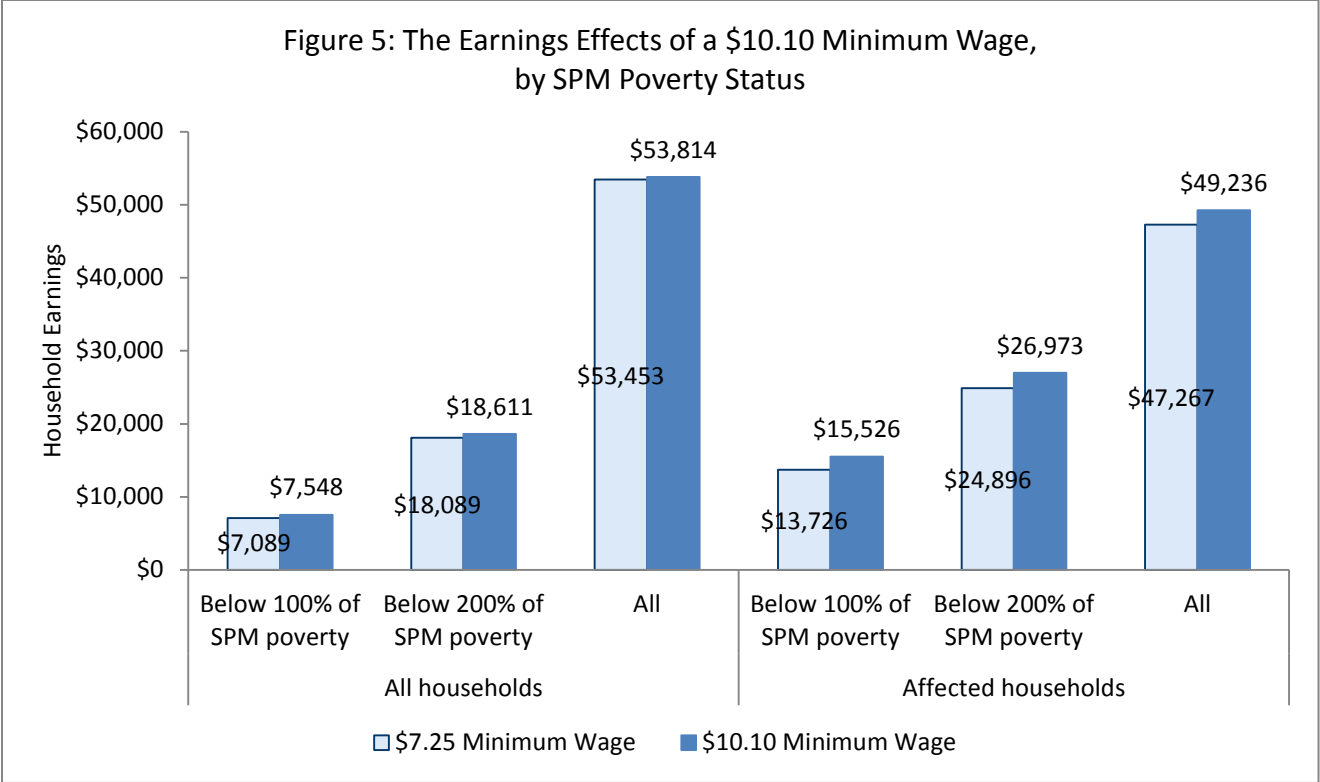
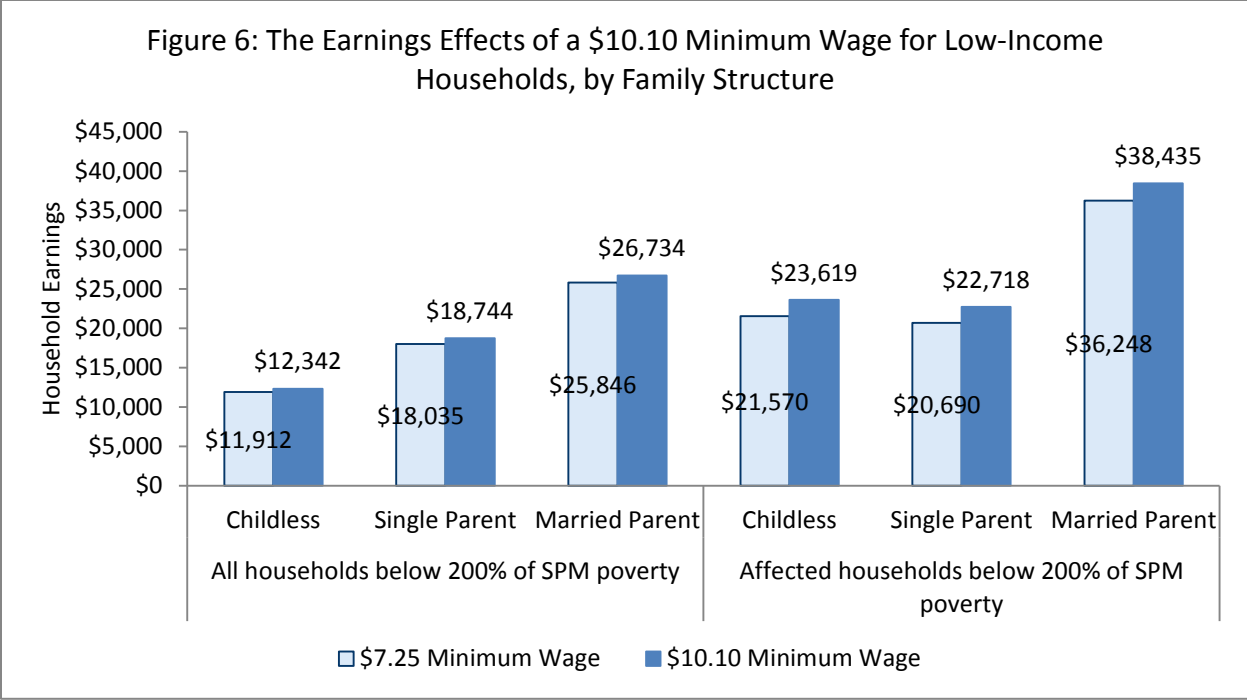


Figure 6 breaks out the earnings effects by family structure for households that are below 200% of the SPM poverty line—a rough comparison group for potential beneficiaries under the current EITC. For single-parent households that are directly affected by the minimum-wage increase, average earnings are expected to rise from \$20,690 to \$22,718, while childless households that are directly affected by a \$10.10 minimum wage would see their earnings rise by about 10 percent on average—or \$2,049. Relevantly, the earnings boost for childless workers is more than four times greater than the maximum earnings supplement that single tax filers with no dependents can receive under the current EITC system.



Of course, simple comparisons between earnings supplements from the EITC and a higher minimum wage ignore an important advantage of the EITC, namely: the tax credit has been shown to boost employment levels, while the minimum wage has small (and potentially negative) effects on labor supply. Moreover, some of the earnings generated from a higher minimum wage would be lost to taxes and the phase-out of means-tested benefits;<sup>47</sup> in contrast, any increase in EITC benefits would be passed in its entirety onto eligible families. That being said, the rough comparisons discussed above do illustrate how increasing the minimum wage could substantially improve the market earnings of many low-income households. Furthermore, it should be stressed that, since our minimum-wage simulations do not alter the earnings of sub-minimum-wage workers (e.g., tipped waiters and waitresses) and do not model positive spillover effects for workers earning just above the new minimum, they likely understate the earnings gains that would arise from implementing \$10.10-minimum-wage proposals that also increase the pay floor for tipped workers (e.g., the Harkin/Miller proposal).

**Reforming the EITC and Raising the Minimum Wage: A Hybrid Approach**

If implemented separately, raising the minimum wage and implementing our EITC reforms would each generate significant benefits for struggling working families. Each policy change, however, also has its limitations. While a \$10.10 minimum wage would provide critical financial support to many low- and

<sup>47</sup> According to recent CBO estimates, the average effective marginal tax rate for low- and moderate-income workers is around 30 percent (Mok et al., 2012). Rates can, however, vary substantially by income level and family type.

moderate-income families, it lacks both the target efficiency and the full-time employment incentives of our EITC reform. Moreover, if raised too much, minimum wages are likely to adversely affect employment. On the other hand, while our proposed EITC reforms would reduce early childhood poverty, incentivize work among young childless workers, and remove key marriage disincentives, it would also cause some groups—namely, older children and larger families—to lose benefits. Avoiding such trade-offs by simply expanding everyone’s benefits could be very costly to the federal budget.

Fortunately, our analyses suggest that the shortcomings of each policy change can be mitigated if the two reforms are jointly implemented. In particular, we simulate the poverty effects of first raising the minimum wage to \$10.10 an hour, and then enacting our EITC changes (Figure 7). These simulations do not take into account changes in labor supply. To account for the fact that some of the new earnings generated from a higher minimum wage will be lost to taxes or offset by reductions in government program benefits, we make adjustments using published estimates of EMTRs for workers at different earnings levels.<sup>48</sup> More specifically, we calculate the share of a minimum-wage increase that is taken home by the average household in earnings group  $j$  ( $\%TakeHome_j$ ) as:

$$\%TakeHome_j = 1 - (EMTR_j - MTR_{EITC_j}),$$

where  $EMTR_j$  is the average effective marginal tax rate for earnings group  $j$  under the current system;  $MTR_{EITC_j}$  is the average contribution of the current EITC to the effective marginal tax rate for earnings group  $j$ ; and  $j$  categorizes households according to household earnings as a percentage of the federal poverty line.<sup>49</sup>

Note then that the quantity  $(EMTR_j - MTR_{EITC_j})$  approximates the average effective marginal tax rate for an earnings group if the current EITC did not exist. We seek to exclude the marginal tax rate contributions of the current EITC because we already model at the individual and household level any changes in EITC benefits that would arise from an increase in the minimum wage.

We rely upon published CBO results for our estimates of  $EMTR_j$  (Mok et al., 2012), and use our own EITC-imputation model to simulate  $MTR_{EITC_j}$ . Importantly, however, Mok et al. (2012) show that, even within earnings groups, there is substantial variation in effective marginal tax rates, especially among poor households. We therefore take a conservative estimation approach and use the 90<sup>th</sup> percentile

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<sup>48</sup>We do not model effective marginal tax rates (EMTRs) at the household or individual level. We do, however, model EITC benefits at the household level, meaning that our simulations capture changes in EITC benefits that result from a minimum-wage hike.

<sup>49</sup> More specifically, we construct 9 household earnings categories: (1) 0-49% of FPL; (2) 50-99% of FPL; (3) 100-149% of FPL; (4) 150-199% of FPL; (5) 200-249% of FPL; (6) 250-299% of FPL; (7) 300-349% of FPL; (8) 350-399% of FPL; and (9): 400% of FPL or more.

effective marginal tax rate of each earnings group in our calculations of  $\%TakeHome_j$ .<sup>50</sup> Put differently, we assume that all households in an earnings group face higher-than-median marginal tax rates, meaning that we probably overestimate the share of a minimum-wage hike that is lost to taxes or the phase-out of means-tested programs.<sup>51</sup> As such, our estimates of the poverty reductions that would result from enacting our hybrid proposal should likely be treated as lower bounds on the true anti-poverty effectiveness of our plan.

We use a similar strategy to approximate the budgetary costs of this hybrid proposal. More specifically, we assume that the share of the minimum-wage increase that *is not* taken home by a household goes to the government in the form of new taxes and reduced expenditures on non-EITC tax credits and means-tested programs.<sup>52</sup> That is, for each earnings group  $j$ , we calculate:

$$\%GovRevenue_j = EMTR_j - MTR_{EITC_j}.$$

As in the case of simulating poverty reductions, we would rather underestimate the government savings generated from a minimum-wage increase than overestimate them. We therefore use Mok et al. (2012)'s 10<sup>th</sup> percentile effective marginal tax rates to simulate the cost savings from a minimum-wage hike.<sup>53</sup> Ultimately, while these marginal-tax-rate adjustments are undoubtedly crude, we expect that our simulations will understate the true poverty-reductions and the amount of government savings that would result from enacting our joint minimum wage/EITC proposal.

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<sup>50</sup> Our estimates of 90<sup>th</sup> percentile marginal tax rates, which are based on crude approximations of summary figure 2 in Mok et al. (2012), take into account federal and state individual income taxes, federal payroll taxes, and reductions in benefits from the Supplemental Nutrition Assistance Program (SNAP). Consequently, since Mok and company's simulations do not incorporate other important means-tested programs (e.g., Medicaid and housing assistance), their EMTR estimates are likely conservative. That being said, the fact that we use 90<sup>th</sup> percentile EMTRs to calculate  $\%TakeHome_j$  probably compensates for any such underestimation.

<sup>51</sup> We use the following formula to adjust the new earnings that are generated by a minimum-wage increase. For each household  $h$  in earnings group  $j$ , we compute:

$$\Delta post\_adj\_earnings_{h_j} = \Delta pre\_adj\_earnings_{h_j} * \%TakeHome_j,$$

where  $\Delta post\_adj\_earnings_{h_j}$  is the post-adjusted change in earnings arising from a minimum-wage increase; and  $\Delta pre\_adj\_earnings_{h_j}$  is the change in raw (aka, pre-tax and pre-transfer) earnings. The parameters we use for  $\%TakeHome$  are as follows: (1) 0.51 for 0-49% of FPL; (2) 0.52 for 50-99% of FPL; (3) 0.54 for 100-149% of FPL; (4) 0.44 for 150-199% of FPL; and (5) 0.41 for 200-249% of FPL; (6) 0.42 for 250-299% of FPL; (7) 0.43 for 300-349% of FPL; (8) 0.44 for 350-399% of FPL; and (9): 0.45 for 400% of FPL or more.

<sup>52</sup> Recall that, since we model EITC benefits at the individual and household level, we can directly account for any changes in EITC costs that might arise from a minimum-wage hike.

<sup>53</sup> We use the following formula to calculate the government cost savings that would be generated from raising the minimum wage. For each household  $h$  in earnings group  $j$ , we compute:

$$\Delta govSavings_{h_j} = (\Delta pre\_adj\_earnings_{h_j} * \%govRevenue_j) + \Delta EITC_{h_j},$$

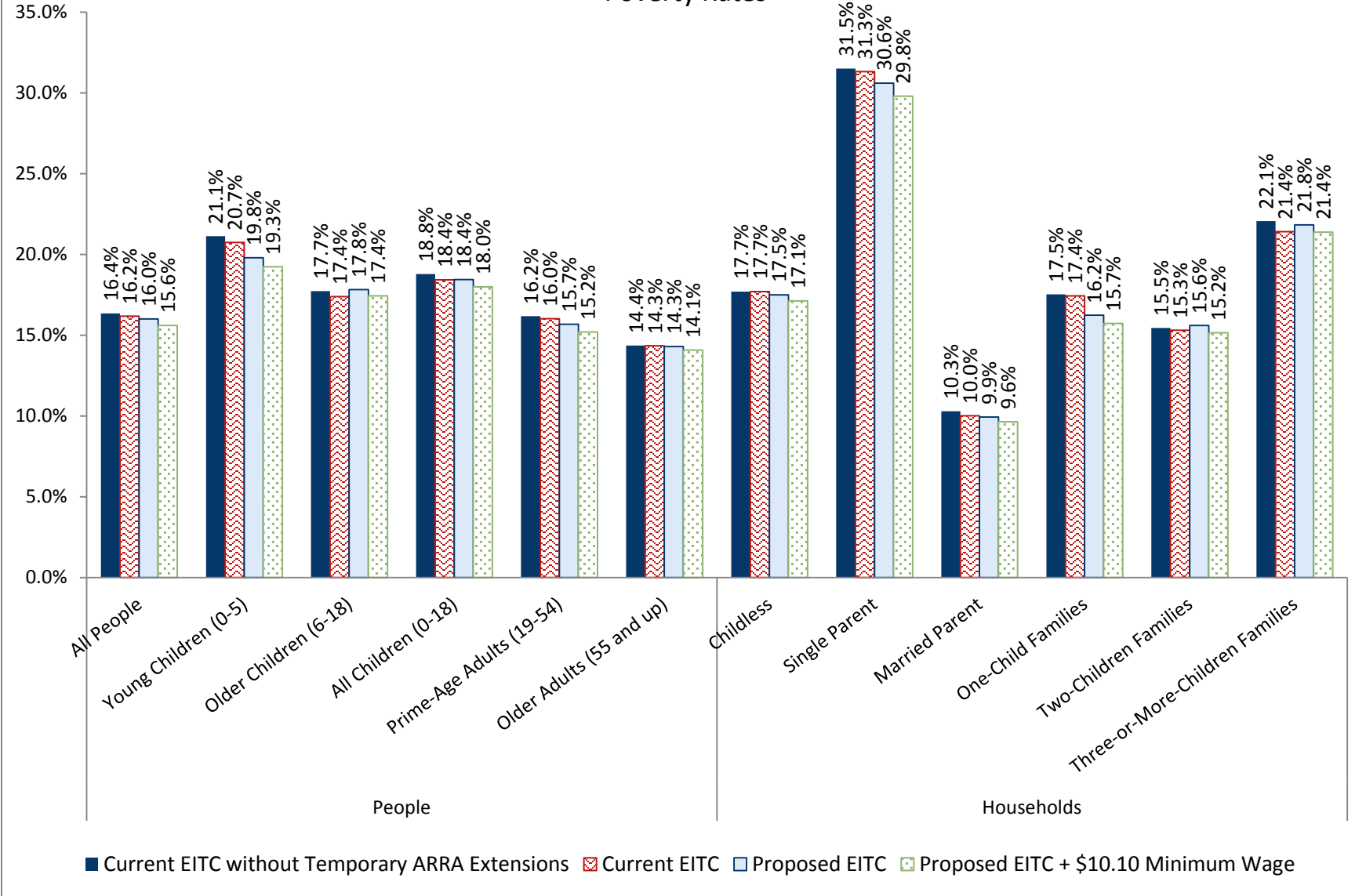
where  $\Delta govSavings_{h_j}$  is the total amount of money the government saves from household  $h$  when the minimum wage is increased to \$10.10 an hour;  $\Delta pre\_adj\_earnings_{h_j}$  is the change in raw (aka, pre-tax and pre-transfer) earnings; and  $\Delta EITC_{h_j}$  is the change in the amount of EITC benefits received by household  $h$ . The parameters we use for  $\%GovRevenue$  are as follows: (1) 0.08 for 0-49% of FPL; (2) 0.12 for 50-99% of FPL; (3) 0.15 for 100-149% of FPL; (4) 0.16 for 150-199% of FPL; and (5) 0.23 for 200-249% of FPL; (6) 0.27 for 250-299% of FPL; (7) 0.27 for 300-349% of FPL; (8) 0.27 for 350-399% of FPL; and (9): 0.27 for 400% of FPL or more.

Figure 7 shows that the combined effects of raising the minimum wage and restructuring the EITC would be substantial, even under our conservative modeling assumptions. Overall poverty rates are expected to decline from their current levels by about 0.6 percentage points (or by about 3.6 percent), and poverty rates for young children and prime-age adults are predicted to fall by 1.5 percentage points (7.2 percent) and 0.8 percentage points (5.2 percent), respectively. Implementing our hybrid approach would also reduce current levels of single-parent poverty by about 1.5 percentage points (4.9 percent) and poverty among childless adults by 0.6 percentage points (3.3 percent). All in all, enacting these policy changes today would lead to about 1.8 million people escaping poverty—more than 340,000 of whom would be children.

Even among groups that are predicted to lose benefits under our EITC proposal, poverty rates would fall because of the minimum-wage hike. For example, implementing our EITC proposal by itself would raise poverty among two-child families from its current level of 15.3 percent to 15.6 percent; adding a \$10.10 minimum wage into the mix, however, would lower it to about 15.2 percent.



Figure 7: The Effects of Raising the Minimum Wage and Reforming the EITC on SPM Poverty Rates



Raising the minimum wage and reforming the EITC in tandem also makes good sense from a fiscal standpoint. In particular, we estimate that the tax revenue and cost savings generated from raising the minimum wage would offset the costs of our EITC reform, and that the government would save at least \$1 billion a year from implementing our hybrid proposal.<sup>54</sup> Ultimately, then, a higher minimum wage in combination with an expanded and reformed EITC has much to recommend it. It would reduce poverty, incentivize work, and encourage marriage. It would do all of these good things without adding a dime to the federal budget, and it could even save money as more people became self-sufficient through work. Although there are many possible variations on this plan that might make sense, and many trade-offs involved, given the currently high rates of poverty and inequality, such proposals deserve a hearing.

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<sup>54</sup> More specifically, we estimate that raising the minimum wage to \$10.10 an hour would reduce the annual costs of our proposed EITC from \$72 billion to \$69 billion, as well as generate approximately \$8 billion in new tax revenue and in cost savings from non-EITC means-tested programs. This \$11 billion in new taxes and reduced program expenditures would offset the \$10 billion cost of implementing our proposed EITC reforms. Note also that the \$3 billion in reduced EITC costs comes largely from shifting workers into the phase-out ranges of our proposed EITC schedules. In particular, we estimate that about 8 percent of households that would receive EITC benefits under our new plan would see their benefits increase as a result of a \$10.10 minimum wage; about 23 percent would see their EITC credit amount decrease; and only about 1 percent would lose their EITC eligibility altogether.

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