RESEARCH REPORT

A Work Tax Credit That Supports Puerto Rico’s Working Families

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Executive Summary

Puerto Rico's lawmakers enacted a work tax credit (WC) in 2006 to offset the regressive nature of the commonwealth's sales and use taxes that were established in that same year. In addition to helping offset sales tax regressivity, refundable tax credits tied to work such as the WC have been found to reduce hardship and stimulate employment among low wage workers. In 2013, the WC delivered benefits to 45 percent of all tax filers at a cost of $124 million. In 2014, as Puerto Rico slid into its deepest fiscal crisis in recent history, lawmakers eliminated the credit. Cost-saving measures to solve the fiscal crisis trumped thoughtful analysis of how the WC program worked, how it could be improved, and how it relates to other to broader economic goals.

This study assesses the experience with the WC that was in effect from 2007 to 2013 and suggests elements for a possible redesign that are consistent with the goals of rewarding and stimulating work, reducing hardship, strengthening the tax base and offsetting regressivity. Recommendations for a redesigned WC tax program included in this report are the first step in crafting a tax credit that supports Puerto Rico's working families. The main findings and recommendations of this report are the following:

- The employment level of Puerto Rican households is low; only 54 percent of Puerto Rican households had workers with wages between 2010 and 2012.

- Among households with dependent children and working-age heads, 30 percent had incomes between $10,000 and $25,000; and among those with wages, 29 percent received benefits from the Nutritional Assistance Program.

- The share of income taxes paid by families with incomes under $30,000 dropped from 23 percent in 2000 to 3 percent in 2012. The average income tax bill for these units was $81 in 2012.

- The WC brought families into the tax system. In the year it was introduced, the number of tax units within the income limits of the WC grew by 6 percent—more than the growth in tax filing units with higher income.

- Because of its small amount—$450 at its maximum—the WC made only a small dent in raising the earnings of families, but because of its broad coverage, many people received the credit. In 2012, 469,258 tax returns, or 45 percent of all tax returns, claimed the WC.
As stated in the law that created the WC, the credit was “similar to the earned income tax credit [EITC] in the United States.” However, on closer inspection, the credits were quite different. One notable difference between Puerto Rico’s WC and the federal EITC is that Puerto Rico’s income eligibility limits were based on individual earnings whereas the federal credit was based on tax-unit earnings. In addition, contrary to the federal EITC, the WC did not differentiate among claimants by filing status, presence of dependents, or age of the tax filers.

Although two minimum wage increases and various changes in the credit amount occurred after the introduction of the WC, the income level at which the credit reached its maximum remained at $10,000 for the seven years the program was in existence.

A family-centered work tax credit program that targets families with children, headed by working-age persons, with income eligibility limits between $7,500 and $25,000 could benefit working families. This design is consistent with the goals of rewarding and encouraging work and offsetting sales tax regressivity. Although tax units identical to those that will claim the credit cannot be re-created with the available data, it is estimated that this redesigned credit could benefit from 119,000 to 128,000 families.

If such a credit reaches it maximum at incomes between $15,000 and $16,000, simulations with phase-in rates of 4 to 12 percent of income show that the cost of the program would be between $60 million and $278 million, depending on the rate at which the credit reaches it maximum and the rate at which it declines after reaching the maximum.

Any WC program enacted should incorporate flexibility in its design and application to accommodate changing fiscal circumstances, expansion to additional population groups, or expansion of benefits.

Tax reform discussions in Puerto Rico point toward adoption of a value-added tax, elimination of income taxes for the vast majority of Puerto Ricans, and refunding at least part of the value-added tax to certain families. Enactment of a tax reform with these features does not render mute the WC because this credit does more than offsetting consumption tax regressivity. It reduces hardship, promotes employment and lightens the tax burden of payroll taxes on low and middle income working families.

In a value-added tax system with refunds and limited income taxes, policy makers would have to design mechanisms to deliver the WC to qualifying families. Possible mechanisms are: (1) payroll checks; (2) simplified income tax returns; (3) the system Puerto Rico’s government
utilized to implement in the Making Work Pay program in 2009 and 2010; and (4) a new refund mechanism that might be developed under a value-added tax system.
A Work Tax Credit That Supports Puerto Rico’s Working Families

Introduction

Through the decades, Puerto Rican families have struggled to make ends meet. In 2000, half of all Puerto Rican households lived in poverty. Since 2005, poverty rates have fluctuated between 45 and 46 percent. Consistently, over the past three decades, about a third of Puerto Rico’s population has received benefits from the Nutritional Assistance Program (NAP).

The economic difficulties of Puerto Rican families have intensified during the past decade, particularly after 2007, as payroll employment declined and the fiscal situation of the government deteriorated. Currently, Puerto Rico is confronting its deepest and longest economic downturn since World War II. Thousands have left the island in search of economic opportunity elsewhere.

The government of Puerto Rico has made efforts to lighten the load of working families through tax credits and deductions. Between 2002 and 2010, the credit for salaried taxpayers (crédito para contribuyentes asalariados) eliminated the income tax liability of tax units whose only income were wages and salaries and with adjusted gross income up to $10,000. This credit was eliminated in 2011 and replaced by the special deduction for certain individuals (deducción especial para ciertos individuos), which effectively eliminated the tax liability of tax units with adjusted gross income (AGI) of up to $20,000. Another example is the Work Credit (WC) which was in place from 2007 to 2013.

The WC is a version of the federal earned income tax credit (EITC) designed by Puerto Rico’s legislature. In 2013, the WC provided a refundable credit to workers with wages of up to $27,500. Workers with wages of $10,000 could claim the maximum amount of $450. In 2012, $124 million in credits was awarded, the overwhelming majority as refunds. The WC was eliminated in 2014 as Puerto Rico’s government looked to generate more tax revenue to confront the fiscal crisis.

At the federal level, the EITC has been effective in reducing hardship and stimulating work among lower-income people (Eissa and Hoynes 2006; Greenstein 2005; Marxuach and Lamba-Nieves 2014; Meyer 2002). As an example of the benefits of this credit, in 2013 a family with two qualifying children could receive a tax credit of up to $5,372 if it met the income eligibility limits. The credit is fully refundable: any excess beyond a family’s income tax liability is paid as a tax refund. At its inception as a
temporary credit through the Tax Reduction Act of 1975, the EITC was seen as a way to offset the burden of payroll taxes on low-income families (Holt 2006). Residents of Puerto Rico pay Social Security and Medicare payroll taxes but do not pay federal income taxes on Puerto Rico source income and therefore cannot claim the federal EITC.

Although in the short run the WC may have appeared to exacerbate the fiscal crisis, it is consistent with long-standing government economic goals, such as strengthening the tax base, promoting employment, and reducing informal labor-market activity. The WC has been a salve to lower- and middle-income families when employment conditions deteriorate and become more unstable. It helps reduce the regressivity of sales taxes and the burden of payroll taxes on low- and middle-income families. In addition, the WC puts money in the pockets of these families, where it will generate spending and stimulate economic activity.

Besides the benefits the WC can bring to families and its short-run spending effect, it can advance other policy objectives of the government of Puerto Rico. The WC encourages people to file income taxes, thereby bringing more people into the pool of filers in a fiscal system noted for tax evasion (Toledo and Camacho 2001). It may also be a useful strategy to reduce the informal economy (CB Online Staff 2014; Enchauteegui 2007). The WC can stimulate formal employment because to claim the credit, workers must show evidence of income. Finally, in an economy with low employment and high dependence on government assistance, the WC can stimulate work and reduce dependence on government aid. A 2003 study concluded that a WC that would increase the effective wage rate by 15 percent could increase the labor force participation rate by 1 percentage point, not a small effect given that Puerto Rico’s labor force participation rate has been declining for more than three decades (Enchauteegui 2004). Even in an economy with a labor surplus, like that of Puerto Rico, the WC can act on the margin to make employment more attractive. In short, the WC sends the message that Puerto Rico values work, and the value of work is compensated through a refundable tax credit.

This document analyzes the experience with the WC in the context of the economic and demographic characteristics of Puerto Rican households and the tax burden of low- and middle-income tax units. It discusses the main elements of a possible WC redesign that gives a respite to working families and is consistent with long-term economic goals, while at the same time being responsive to the critical fiscal situation confronting Puerto Rico. It also inserts the WC within the tax reform currently being discussed in Puerto Rico.

The analysis demonstrates that the WC program implemented in Puerto Rico between 2007 and 2013 provided a small benefit to families but reached a broad swath of the population. At its maximum
amount, the WC represented only 5 percent of a family’s income. However, its broad coverage resulted in 45 percent of all tax-filing units claiming the credit, including claims by high-income families.

After analyzing the 2007–13 experience with the WC, the income of Puerto Rican households, and the tax burden of low- and middle-income families, this report suggests a redesign of the WC that is centered on providing relief to families with children and with a demonstrated work commitment. Such a redesign could be seen as a first step toward a new WC program that could be expanded in later years to include other working groups.

Data and Approach

The data used in this analysis come from the Puerto Rico Community Survey (PRCS) three-year estimates for 2010–12. The three-year PRCS provides large sample sizes, thus allowing for a more precise focus on segments of the population and those within certain income groups. These data are weighted to represent the average economic and demographic characteristics during the effective years. This analysis also uses published data from the Puerto Rico Department of the Treasury (Departamento de Hacienda). The department publishes tables with yearly data on the tax liability, number of tax filers, and net income subject to taxes by AGI. It also publishes data on WC claims and dollar amount of the claims. The most recent data available as of the writing of this paper were for the 2012 tax year.

Given the possibility that some wage income is underreported in the PRCS, this analysis also presents wage data from the Occupational Employment Survey (OES), a survey of employers about wages and workers by occupation. This survey is conducted under a cooperative agreement of states and territories with the US Bureau of Labor Statistics.

The PRCS and published Department of the Treasury data have limitations. For instance, household and tax units are not the same, and the tax data cannot be cross-tabulated to obtain more information about taxpayers. Despite these limitations, the data can inform the analysis of Puerto Rico’s experience with the WC and aid in suggesting a possible redesign.

Economic and demographic characteristics of households are examined in this paper, as are data about the number of WC tax filers, the amount claimed, and the taxes paid by low- and middle-income families. The approach followed is to identify patterns on the basis of tax filers’ household income and demographic characteristics that highlight the weaknesses and strengths of the WC between 2007 and 2012 and inform a possible redesign of the program to better achieve its goals.
The paper describes the main elements that a WC should include and gives examples of possible designs with their estimated effects on government revenues.

Economic and Demographic Characteristics of Puerto Rican Households

To provide context to the WC program, I begin by examining the income levels and demographic characteristics of Puerto Rican households (see table 1).

The average number of households between 2010 and 2012 was 1.2 million, with an average of 2.6 persons per household. A person under the age of 65 headed almost three-quarters (72 percent) of all households. Married couples and female-headed families accounted for 65 percent of all households.

The income of Puerto Rican households is low, especially wage income, and the poverty rate is high. The household poverty rate using the federal guidelines was 45 percent in the period under study. The median income was $19,000, and the median wage income was $2,373. The reason the income of Puerto Rican families is so low—wage income, in particular—is that 46 percent of households do not have wage and salary workers, reflecting the employment problem in Puerto Rico and highlighting the potential that policies such as the WC could have to stimulate employment.

Puerto Rican households are concentrated at very low levels of income. Three-quarters of households have incomes below $38,000. This fact provides a glimpse of possible income bands for a work credit. Even a relatively low income limit of $30,000 would cover a significant share of households and tax-filing units. The balance between the income limits for a work credit and its fiscal impact is delicate and one that affects the work credit’s feasibility.

An important factor in determining tax owed is the number of dependents or qualifying children. The Puerto Rican tax code is quite liberal in its definition of dependents. A person can be claimed as a dependent child if the tax filer provides half or more of that person’s support and the dependent is under age 21. A person can be claimed as a dependent up to age 25 if he or she is attending school and the tax filer provides at least half that person’s support. A qualifying child need not be the biological or adopted child of the tax filer nor must he or she reside with the taxpayer. A dependent’s income normally must be below $2,500, but it can be up to $7,500 if the dependent is a college student and the child of the head of the household. Parents of the tax filer, elderly persons, and adults with disabilities can also be claimed as dependents if the 50 percent support condition is met.
I approximated the definition of dependents as it concerned children under 21 or students up to age 25 at the household level, finding that 36 percent of all households are headed by a working-age person and have resident dependents.\(^5\) By further limiting the definition to those with wage and salary income, I found that only 26 percent fall into this category.

**TABLE 1**

**Economic and Demographic Characteristics of Households**

*Puerto Rico, 2010–12*

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Number of households</th>
<th>Percent of all households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of households</td>
<td>1,239,115</td>
<td></td>
</tr>
<tr>
<td>Average number of persons per household</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Number of households headed by person age 64 or younger</td>
<td>891,107</td>
<td>72</td>
</tr>
<tr>
<td>Number of married couple households</td>
<td>513,493</td>
<td>41</td>
</tr>
<tr>
<td>Number of female householders, family, not living alone</td>
<td>302,137</td>
<td>24</td>
</tr>
<tr>
<td>Number of households with dependent children (ages 0–21 or age 26 if in school), household head under age 65</td>
<td>445,668</td>
<td>36</td>
</tr>
</tbody>
</table>

**Economic characteristics**

<table>
<thead>
<tr>
<th>Economic characteristics</th>
<th>Number of households</th>
<th>Percent of all households</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th percentile household income ($)</td>
<td>8,400</td>
<td></td>
</tr>
<tr>
<td>Median household income ($)</td>
<td>19,000</td>
<td></td>
</tr>
<tr>
<td>75th percentile household income ($)</td>
<td>37,755</td>
<td></td>
</tr>
<tr>
<td>Median household wage income, all households ($)</td>
<td>2,373</td>
<td></td>
</tr>
<tr>
<td>Percent under the federal poverty level</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Number of households with no wage workers</td>
<td>564,822</td>
<td>46</td>
</tr>
<tr>
<td>Number of households with dependent children and with wage and salary income, household head under age 65</td>
<td>325,980</td>
<td>26</td>
</tr>
<tr>
<td>Median income ($)</td>
<td>31,153</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** Tabulations by the author based on PRCS three-year data 2010–12. PRCS downloaded from IPUMS database (Ruggles et al. 2010).

Only households with wage income may benefit from the WC, therefore, figure 1 shows the distribution of households with dependents that are headed by a working-age individual, according to total annual income. Among these households, 48 percent have incomes at or below $30,000. The bulk (30 percent) have annual wages between $10,000 and $25,000, suggesting this income range as important in the WC design.
FIGURE 1
Distribution of Households with Dependent Children by Annual Income
Head of household under age 65, Puerto Rico, 2010–12

Sources: Tabulations by the author based on PRCS three-year data 2010–12. PRCS downloaded from IPUMS database (Ruggles et al. 2010).
Note: Only wages and salaries greater than $100 are shown.

Not all the income shown in figure 1 comes from wages. Figure 2 shows income sources for households with dependents, a working-age head, and a wage income. The data points correspond to the percentage of households with the specified type of income. Figure 2 also lists the mean income for each source for all households, not only those that receive the income source.

Because this analysis is restricted to households with workers, 100 percent of these households receive wages, and the figure shows only the other sources of income. The average household in this group earned $36,422 in annual wages.

The high percentage with Social Security income (12 percent) stands out, given that these figures exclude households headed by elderly persons. The average household, including those with and without Social Security, received an annual amount of $1,119 in Social Security payments. This Social Security income is likely from Social Security Disability Insurance, which is quite widespread in Puerto Rico (Burtless and Sotomayor 2006). Also notable is the high share of families reporting “other” income—24 percent—with an average of $1,320. No further information is available on what these
other sources of income are, but they could include child support payments, unemployment insurance, transfers from family members, and emergency assistance from the government.

**FIGURE 2**

Share with Income Source and Mean Income by Source

*Households with dependent children, head of household under 65, with wage income, Puerto Rico, 2010–12*

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Share</th>
<th>Mean Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAP</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>24%,</td>
<td>$1,320</td>
</tr>
<tr>
<td>Social Security</td>
<td>12%,</td>
<td>$1,119</td>
</tr>
<tr>
<td>Business</td>
<td>8%,</td>
<td>$1,679</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>3%,</td>
<td>$81</td>
</tr>
<tr>
<td>Retirement</td>
<td>4%,</td>
<td>$523</td>
</tr>
<tr>
<td>Investment/Rental</td>
<td>2%,</td>
<td>$506</td>
</tr>
</tbody>
</table>

**Sources:** Tabulations by the author based on PRCS three-year data 2010–12. PRCS downloaded from IPUMS database (Ruggles et al. 2010).

**Note:** Mean income by source is calculated on all households—with and without the specified income source. NAP refers to Nutritional Assistance Program. NAP has no income amount.

As shown in figure 2, 29 percent of households headed by a nonelderly worker, with dependent children, and some wage income receive NAP assistance, showing the high reliance on such assistance even by households with workers. NAP is the largest government assistance program in Puerto Rico. It is implemented under the block grant for Nutrition Assistance for Puerto Rico from the US Department of Agriculture and is similar, although not identical, to the Supplemental Nutritional Assistance Program in the United States. In 2013, the block grant amount was $2 billion. The amount received by households is not available in the PRCS and is not part of the household income reported in figure 2.

To provide an idea of the benefits families could receive from NAP, table 2 shows the benefits for different family sizes and income limits. The monthly income amounts were multiplied by 12 to show annual income, but program eligibility is determined on a monthly income basis. A family of four could
receive NAP as long as its annual income remained no higher than $8,556. The maximum benefit amount for such a family is $4,920, and if the family’s income was $8,556, the benefits would be $2,364.

The extent to which NAP may be producing disincentives to work has not been rigorously examined. No appropriate data to answer this question are available. But the high reliance on NAP benefits makes evident the need for programs such as the WC, which increase the relative value of work.

**TABLE 2**

**Income Eligibility and Benefits under the Nutritional Assistance Program**

*Puerto Rico, 2013*

<table>
<thead>
<tr>
<th>Household size</th>
<th>Maximum income level ($ per year)</th>
<th>Maximum benefits ($ per year)</th>
<th>Benefits at maximum income ($ per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,796</td>
<td>1,344</td>
<td>516</td>
</tr>
<tr>
<td>2</td>
<td>5,592</td>
<td>2,592</td>
<td>924</td>
</tr>
<tr>
<td>3</td>
<td>7,188</td>
<td>3,780</td>
<td>1,632</td>
</tr>
<tr>
<td>4</td>
<td>8,556</td>
<td>4,920</td>
<td>2,364</td>
</tr>
<tr>
<td>5</td>
<td>9,912</td>
<td>5,988</td>
<td>3,024</td>
</tr>
<tr>
<td>6</td>
<td>11,316</td>
<td>7,188</td>
<td>3,804</td>
</tr>
<tr>
<td>7</td>
<td>12,708</td>
<td>8,148</td>
<td>4,344</td>
</tr>
</tbody>
</table>

*Sources:* Benefits.gov, Nutrition Assistance for Puerto Rico, http://www.benefits.gov/benefits/benefit-details/363, and benefit tables provided by Puerto Rico’s Department of the Family to the Center for a New Economy.

Incomes in the PRCS are self-reported, raising the possibility that some income, especially from informal work, may be underreported. The informal economy has preoccupied Puerto Rican policymakers for a long time and was part of the motivation for establishing a sales tax in 2006. Table 3 shows mean hourly wages and annual wages reported by employers in the OES, a mailed employer survey conducted twice a year (in May and November) to collect information on number of workers by occupation and pay. These data are collected for wage and salaried workers in nonfarm occupations. The self-employed are excluded from the survey. The sample frame is the Quarterly Census of Employment and Wages, where employers report quarterly employment and unemployment insurance payments. In 2011, the sample size was 2,857 (Departamento del Trabajo y Recursos Humanos 2011). Table 3 shows data for May 2010 through 2013.
The mean hourly wage for all occupations was between $12.93 and $13.13, and mean annual wages were approximately $27,000. For comparison purposes, table 3 also shows mean annual wages of salaried workers, excluding agricultural workers, in the PRCS. Wages from the PRCS are $4,000 lower than those reported in the OES. Possibly the OES captures mostly formal workers whereas many informal workers with low wages are captured by the PRCS.

This finding suggests another rationale for WC tax policies in Puerto Rico: stimulating work in the formal sector, because such activity could lead to better wages.

**TABLE 3**

Mean Wages from OES and PRCS

<table>
<thead>
<tr>
<th>Data and year</th>
<th>Mean hourly wage ($)</th>
<th>Mean annual wages ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From OES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2010</td>
<td>12.93</td>
<td>26,870</td>
</tr>
<tr>
<td>May 2011</td>
<td>13.07</td>
<td>27,190</td>
</tr>
<tr>
<td>May 2012</td>
<td>13.12</td>
<td>27,280</td>
</tr>
<tr>
<td>May 2013</td>
<td>13.13</td>
<td>27,310</td>
</tr>
<tr>
<td>From PRCS 2010–12</td>
<td></td>
<td>23,269</td>
</tr>
</tbody>
</table>


**Note:** PRCS tabulations exclude workers in agricultural occupations.

The Tax Burden of Puerto Rico’s Low- and Middle-Income Families

Table 4 shows the tax rates in 2013 by net taxable income (NTI). NTI refers to income after deductions and exemptions have been subtracted from AGI. Tax units with NTI of less than $9,000 owed no personal income taxes. Units with NTI from $9,000 to $25,000 owed 7 percent of taxable income in excess of $9,000. As NTI increases, the tax rate goes up from 7 percent to 33 percent. A tax unit with NTI of $30,000 in 2013 owed $1,820 in taxes ($1,120 + 0.14 × $5,000).
### TABLE 4
**Tax Rates by Net Taxable Income**
*Puerto Rico, 2013*

<table>
<thead>
<tr>
<th>Net income subject to taxes</th>
<th>Taxes to be paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $9,000</td>
<td>0</td>
</tr>
<tr>
<td>$9,000 to $24,999</td>
<td>7% of the excess over $9,000</td>
</tr>
<tr>
<td></td>
<td>$1,120 + 14% of the excess over $9,000</td>
</tr>
<tr>
<td>$25,000 to $41,499</td>
<td>$25,000</td>
</tr>
<tr>
<td></td>
<td>$3,430 + 25% of the excess over $25,000</td>
</tr>
<tr>
<td>$41,500 to $61,499</td>
<td>$41,500</td>
</tr>
<tr>
<td></td>
<td>$8,430 + 33% of the excess over $41,500</td>
</tr>
<tr>
<td>$61,500 or more</td>
<td>$61,500</td>
</tr>
</tbody>
</table>

*Source:* Folleto de Instrucciones, Planilla de Contribuciones sobre Ingresos de Individuos 2013, Departamento de Hacienda, Estado Libre Asociado de Puerto Rico.

In addition to the personal and dependent exemptions and an assorted array of deductions (mortgage payment, retirement and educational accounts, and interest on student loans, among others), workers with wages of up to $27,500 could get a work credit of up to $450 in 2013. The WC reached its maximum at $10,000 of income.

Those with AGI at or below $38,772 could also get the special deduction for certain individuals. In 2013 the top amount of $5,350 was given to tax units with AGI of up to $20,000. This deduction reduced NTI and effectively eliminated the tax liability of tax units with AGI of up to $20,000. The special deduction was introduced in tax year 2011 and replaced the credit for salaried workers, which had been in place since 2002. The credit for salaried workers eliminated the tax liability for tax units with AGI of up to $10,000 whose only source of income was wages. The special deduction was $9,350 in 2011 and $7,850 in 2012. In tax year 2012, NTI was reduced by more than $5 billion because of claims under this deduction by 754,000 tax units.\(^7\)

The special deduction affects families with income levels similar to those eligible for the WC. Because the deduction reduces NTI and hence taxes owed, more WC claimants end up getting a refund. Yet, unlike the WC, the deduction is not tied to any behavioral goal. In addition, because the special deduction is flat for income at or below $20,000, it benefits more families with higher tax bills.

To gauge the tax burden of low- and middle-income families, I analyze published data from the Puerto Rico Department of the Treasury. Figure 3 shows the average tax liability (taxes assessed after deductions have been applied but before credits) for families with AGI of up to $30,000. The tax liability...
of tax filers with AGI of up to $30,000 has declined substantially since 2000. In 2012, these households had on average a tax liability of $81 in income taxes. The share of the aggregate tax liability attributed to these tax filers has declined from 23 percent in 2000 to 3 percent in 2012 (figure 4). The sharp decline after 2010 may be related to the special deduction. In addition, the income eligibility limit and the WC increased after 2010.

FIGURE 3
Average Tax Liability for Tax Units with Adjusted Gross Income of up to $30,000
Puerto Rico, 2000-12

Source: Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas. Número de Planillas por Ingreso Bruto Ajustado y Contribución Determinada.

Notes: The average is the tax liability of all tax units combined, tax divided by the total number of tax filers. Tax liability is calculated before credits.
FIGURE 4
Share of the Aggregate Tax Liability Accounted for by Tax Units with Adjusted Gross Income of up to $30,000
Puerto Rico, 2012

Source: Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, Número de Planillas por Ingreso Bruto Contribución Determinada.
Note: Tax liability is calculated before credits.

To add context to these figures, table 5 shows the tax liability before and after the Work Credit for 12 prototypical families in 2013. A negative tax liability after the credit means that a refund was issued. All these families had two children and only one worker. For simplicity, I assume that all the income of these families was from work and that the only deductions these families claimed are the personal and dependent deductions.

In 2013, a married couple tax unit with AGI of $15,000 that included one worker and two children received $5,000 in dependent exemptions ($2,500 for each child), $7,000 in personal exemptions, and the special deduction of $5,350. The tax liability before the credit was zero, and on applying the WC, the family received a tax refund of $450. A similar family—but with AGI of $20,000—owed no income taxes and received a refund of $250. For both families, the refund was issued because of the WC. A single parent with income up to $20,000 would have also received a refund of $250. As shown in table 5, the prototypical families started paying taxes after reaching an income level of $25,000. A married couple with income of $30,000 paid $431 in taxes, and a single parent at the same level of income paid $676.
This exercise also shows the difference between a policy that eliminates the taxes of lower- and middle-income families and a policy that provides a refundable credit such as the WC. The refundable credit, even if small, helps reduce hardship and the refund is an extra boost to work.

This exercise also shows how the special deduction and the WC worked together. The special deduction reduced the tax obligation of thousands of families—mainly those in the income range of the WC—and resulted in more refunds through the WC program.

TABLE 5
Tax Scenarios for Prototypical Families

In dollars, 2013

<table>
<thead>
<tr>
<th>AGI</th>
<th>Special deduction</th>
<th>Dependent exemption</th>
<th>Personal exemption</th>
<th>Total deductions</th>
<th>Net income subject to tax before the work credit</th>
<th>Work credit</th>
<th>Work credit after the work credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married, 1 worker, 2 children, not elderly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000</td>
<td>5,350</td>
<td>5,000</td>
<td>7,000</td>
<td>17,350</td>
<td>-7,350</td>
<td>0</td>
<td>450</td>
</tr>
<tr>
<td>15,000</td>
<td>5,350</td>
<td>5,000</td>
<td>7,000</td>
<td>17,350</td>
<td>-2,350</td>
<td>0</td>
<td>350</td>
</tr>
<tr>
<td>20,000</td>
<td>5,350</td>
<td>5,000</td>
<td>7,000</td>
<td>17,350</td>
<td>2,650</td>
<td>0</td>
<td>250</td>
</tr>
<tr>
<td>25,000</td>
<td>1,425</td>
<td>5,000</td>
<td>7,000</td>
<td>13,425</td>
<td>11,575</td>
<td>180</td>
<td>30</td>
</tr>
<tr>
<td>30,000</td>
<td>2,850</td>
<td>5,000</td>
<td>7,000</td>
<td>14,850</td>
<td>15,150</td>
<td>431</td>
<td>431</td>
</tr>
<tr>
<td>35,000</td>
<td>4,275</td>
<td>5,000</td>
<td>7,000</td>
<td>16,275</td>
<td>18,725</td>
<td>681</td>
<td>681</td>
</tr>
</tbody>
</table>

| Single, 1 worker, 2 children, not elderly |
| 10,000 | 5,350             | 5,000               | 3,500              | 13,850           | -3,850                                        | 0           | 450                              |
| 15,000 | 5,350             | 5,000               | 3,500              | 13,850           | 1,150                                         | 0           | 350                              |
| 20,000 | 5,350             | 5,000               | 3,500              | 13,850           | 6,150                                         | 0           | 250                              |
| 25,000 | 1,425             | 5,000               | 3,500              | 9,925            | 15,075                                        | 425         | 150                              |
| 30,000 | 2,850             | 5,000               | 3,500              | 11,350           | 18,650                                        | 676         | 676                              |
| 35,000 | 4,275             | 5,000               | 3,500              | 12,775           | 22,225                                        | 926         | 926                              |

Note: The figures were calculated by using the 2013 income tax instructions for Puerto Rico, assuming the family type in the table.

Table 5 shows only income taxes. Like all Puerto Rican working families, these families would also pay 7 percent in sales and use taxes over a large range of products and services, 6.2 percent in Social Security taxes on wages under $113,700, and 1.45 percent in Medicare taxes. Employers are responsible for withholding 0.9% additional Medicare tax on an individual’s wages in excess of $200,000. Some of these taxes may be seen as regressive, placing a higher burden on lower-income
people. Excluding food and medical expenses from the sales and use taxes reduces some but not all of
the regressivity of those taxes. The regressivity of Social Security taxes is more debatable because
lower-income people get a higher share of their earnings replaced on retirement. However, the
elimination of the tax for incomes at and above $113,700 introduces regressivity because higher-
income people end up paying a lower percentage of their income in Social Security taxes. The
regressivity of payroll taxes was the rationale put forward in the creation of the federal EITC in 1975
(Holt 2006).

Table 6 shows an estimate of the average Social Security, Medicare, and sales and use taxes paid by
households with dependent children, headed by a working-age adult, and with wage income between
$7,500 and $30,000. The lower income limit of $7,500 represents a half-year full-time work
commitment paid at the minimum wage. According to the income eligibility limits in table 2, most of
these workers and their families do not qualify for NAP assistance. In my calculations, I assume that the
sales and use tax is paid on 71 percent of income (no savings assumed) because according to the
National Accounts, 29 percent of all consumption expenditures in Puerto Rico are for food (13 percent)
and medical services (16 percent), which are not subject to sales and use taxes.9 These taxes are applied
over the sample of workers with wages in the PRCS.

The focal households paid an average $2,267 in sales and use, Social Security, and Medicare taxes.
Social Security and Medicare taxes are levied by the federal government. The local government could
reduce sales tax regressivity through local fiscal policies. With the fiscal crisis confronting Puerto Rico,
an eventual increase in the sales and use taxes or an expansion of the products and services to which
those taxes apply cannot be disregarded. If such an increase were to become necessary, policymakers
should consider how tax policies such as the WC could offset the regressive effect of these taxes on
low- and middle-income families.
TABLE 6
Estimated Annual Sales and Payroll Taxes Paid
By households with dependents, working-age head, and wage income between $7,500 and $30,000, Puerto Rico, 2010–12

<table>
<thead>
<tr>
<th>Type of tax</th>
<th>Average annual amount paid</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>$1,114</td>
<td>$465</td>
<td>$1,860</td>
</tr>
<tr>
<td>Medicare</td>
<td>$260</td>
<td>$109</td>
<td>$435</td>
</tr>
<tr>
<td>Sales and use</td>
<td>$893</td>
<td>$373</td>
<td>$1,491</td>
</tr>
<tr>
<td>Total</td>
<td>$2,267</td>
<td>$946</td>
<td>$3,786</td>
</tr>
</tbody>
</table>

Note: The tax rates discussed in the text were applied to the sample of the PRCS 2010–12.

How the Work Credit Worked from 2007 to 2013

The WC (crédito por trabajo) was established in Public Law 177 of July 4, 2006, or in Spanish, the Ley de la Justicia Contributiva de 2006. This public law also approved the sales and use taxes. The law's justification for the WC is the regressivity of the sales tax on “certain economic sectors of our society” and hence “the Legislature incorporates a credit similar to the Earned Income Tax Credit that exists at the federal level in the United States.”

Although the sales tax has remained stable at 7 percent, the WC has gone through four changes since 2007, not counting its elimination in 2014. Table 7 shows the rules applying to the calculation of the WC from 2007 to 2013.

At its inception, the WC peaked when earned income consisting of wage, salaries, and commissions was $10,000, offering a credit of $150 and phasing completely out when income reached $20,000. The parameters changed various times. Figure 5 shows the 2013 design. In 2013, the credit peaked at $450 on earned income of $10,000, phasing out when earned income reached $27,500.
After introduction of the WC in 2007, the minimum wage increased twice: from $5.85 to $6.35 in July 2008 and then to $7.25 in July 2009. Although the maximum income level to be eligible for the WC has increased three times, the income at which the WC is at its maximum has remained at $10,000 since 2007, not reflecting changes in minimum wages nor increases in the income eligibility range.
### TABLE 7
Structure of Puerto Rico's Work Credit, 2007–13

<table>
<thead>
<tr>
<th>Year</th>
<th>Earned Income levels</th>
<th>Rate and maximum</th>
<th>Above $10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>$1 to $20,000</td>
<td>1.5% of earned income up to a maximum of $150. Maximum WC at $10,000 earned income.</td>
<td>$150 − 0.05 × (earned income − $10,000)</td>
</tr>
<tr>
<td></td>
<td>Persons with pension income greater than $2,200 are not eligible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>$1 to $20,000</td>
<td>3% up to a maximum of $300. Maximum WC at $10,000 earned income.</td>
<td>$300 − 0.02 × (earned income − $10,000)</td>
</tr>
<tr>
<td></td>
<td>Persons with other income greater than $2,200 are not eligible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009–10</td>
<td>Same as 2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>$1 to $22,500</td>
<td>3.5% of income up to a maximum of $350. Maximum WC at $10,000 earned income.</td>
<td>$350 − 0.02 × (earned income − $10,000)</td>
</tr>
<tr>
<td></td>
<td>Persons with other income greater than $2,200 are not eligible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$1 to $25,000</td>
<td>4% of income up to a maximum of $400. Maximum WC at $10,000 earned income.</td>
<td>$400 − 0.02 × (earned income − $10,000)</td>
</tr>
<tr>
<td></td>
<td>Persons with other income greater than $2,200 are not eligible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$1 to $27,500</td>
<td>4.5% of income up to a maximum of $450. Maximum WC at $10,000 earned income.</td>
<td>$450 − 0.02 × (earned income − $10,000)</td>
</tr>
<tr>
<td></td>
<td>Persons with other income greater than $2,200 are not eligible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>Eliminated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** “Folleto de Instrucciones Planilla de Contribuciones sobre Ingresos de Individuos” (various years), Departamento de Hacienda, Estado Libre Asociado de Puerto Rico.

The WC provided only a small bump in the income of eligible workers. As table 8 shows, when wages are $10,000 the WC represents a 4.5 percent increase in wages. Its contribution to wages was much smaller after $10,000.

Although the WC amount was modest, many people benefitted from the credit. To explain the extensiveness of WC, table 9 compares the WC with the EITC. The law that created the WC cites the federal EITC, describing a WC "similar to the EITC that exists at the federal level"; however, comparison of the WC and the EITC shows that these credits are structured very differently.
TABLE 8
Work Credit and Percentage Change in Earnings by Wage Income
2013

<table>
<thead>
<tr>
<th>Wages ($)</th>
<th>Work credit</th>
<th>Change in wages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>450</td>
<td>4.5</td>
</tr>
<tr>
<td>15,000</td>
<td>350</td>
<td>2.3</td>
</tr>
<tr>
<td>20,000</td>
<td>250</td>
<td>1.3</td>
</tr>
<tr>
<td>25,000</td>
<td>100</td>
<td>0.04</td>
</tr>
</tbody>
</table>


The highest income to be eligible for the EITC in the United States is $51,567, very close to the country’s 2013 median household income, which was $52,250 (Noss 2014). Puerto Rico’s top income for WC eligibility in 2013 was $27,500, well above the median household income in Puerto Rico of $19,000.

Another way in which the small WC becomes expansive is by using an individual’s income instead of a tax-filing unit’s income as the base for eligibility calculation, as is done for the federal EITC. For instance, for the Puerto Rican WC, a couple filing jointly with total AGI of $70,000 could get $450 in work credits if one of the partners makes $10,000 and the other $60,000. A couple making $20,000 where both spouses work and each spouse makes $10,000 would have zero tax assessed after deductions and will get a WC refund of $900.
TABLE 9  
**Comparison of Main Features of Puerto Rico’s Tax Credit and the Federal EITC**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Puerto Rico WC</th>
<th>Federal EITC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age range</td>
<td>No age limitations</td>
<td>16 to 64 (with children)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 to 64 (no children)</td>
</tr>
<tr>
<td>Filing status</td>
<td>Any</td>
<td>Any except married filing separately</td>
</tr>
<tr>
<td>Income eligibility range limit in 2013</td>
<td>$1 to $27,500</td>
<td>$1 to $51,567, depending on filing status and number of children</td>
</tr>
<tr>
<td>Calculation of income</td>
<td>Individual worker’s wages, salaries, and commissions</td>
<td>Taxpayer and (if married) spouse’s adjusted gross income</td>
</tr>
<tr>
<td>Number of qualifying children</td>
<td>No restrictions; persons with and without children can be eligible</td>
<td>No restrictions; persons with and without children can be eligible</td>
</tr>
<tr>
<td>Credit increases with the number of children</td>
<td>No</td>
<td>Yes, up to three children</td>
</tr>
<tr>
<td>Variation by filing status</td>
<td>Excluded unless employed by self-incorporated business presenting a W2</td>
<td>Yes; credit phases out at higher income for married couples than for singles</td>
</tr>
<tr>
<td>Self-employed</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
<tr>
<td>Refundable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>


Although households are not exact equivalents to tax-filing units, according to the PRCS more than 800,000 workers had annual wages below $25,000, the top income limit of the WC in 2012, but only about 343,000 households have total household wages in that range. The fact that all workers within the income limits, without regard for age, presence of children, and filing status can get the WC further underscores the extensiveness of Puerto Rico’s WC and indicates how a redesign, instead of its elimination, could better reconcile these fiscal needs with the intended goals of the program.

The number of tax-filing units claiming the WC is shown in figure 6. In 2012, a total of 469,258 tax units claimed the WC. The number of workers getting the WC is larger because within a tax unit more than one worker can meet the WC income requirements. More than twice as many people claimed the
WC in 2012 than in 2007, when the credit was first introduced. Tax units claiming the WC accounted for 45 percent of all tax returns in 2012 (figure 7).

The WC may have brought tax filers into the income tax system. Figure 8 shows the percentage change in all returns and the change in returns with incomes up to $20,000, which was the top income limit for the WC until 2010. Returns spike in 2007, with larger growth for tax returns within the WC income range. The number of tax returns with incomes up to $20,000 grew by nearly 6.0 percent between 2006 and 2007, while the general growth was 4.4 percent.

The total dollar amount claimed by tax filers is shown in figure 9, and the average claim per year is in figure 10. In 2012 the government of Puerto Rico awarded more than $124 million in WC claims. The average WC claimed by tax filing units more than doubled from $91 in 2007 to $265 in 2012.

**FIGURE 6**
**Number of Income Tax Returns Claiming the Work Credit**
*Puerto Rico, 2007–12*

![Graph showing the number of income tax returns claiming the work credit from 2007 to 2012.](image)

*Source:* Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Crédito por Trabajo.”
FIGURE 7
Percentage of All Tax Returns Claiming the Work Credit
Puerto Rico, 2007–12

Source: Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Crédito por Trabajo” and "Número de Planillas."

FIGURE 8
Percentage Change in Number of Tax Returns
All tax filers and those with AGI of up to $20,000, Puerto Rico, 2001–12

Source: Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Número de Planillas.”
No information is readily available about how much of the claims went toward covering the tax liability of the filer and how much was refunded. Likely most went to refunds because 77 percent of all the credit money claimed went to tax units with AGI up to $20,000, and most of those tax units would not have had taxable income. The aggregate credit amount by AGI in 2012 is in figure 11. About $5 million in credits went to tax units with AGI of $5,000 or less and $35 million to units with AGIs between $16,000 and $20,000. About $6 million went to families with AGIs above the earned income eligibility limits of the WC.
FIGURE 10
Average Work Credit Amount Claimed by Tax Filers
Puerto Rico, 2007–12

Note: Calculations by the author based on figures on number of tax returns claiming the WC and amount claimed from Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Crédito por Trabajo.”

FIGURE 11
Aggregate Work Credit Amount (in thousands) by Adjusted Gross Income
Puerto Rico, 2012

Source: Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Número de Planillas and Crédito por Trabajo.”
The average WC per tax unit by AGI is shown in figure 12. Notably, the WC pattern does not increase with income up to the maximum of $10,000 and then decline. Rather the credit peaks at $372 for households with AGIs under $25,000. There is a second peak of $448 for households with incomes between $30,000 and $33,333. Taxpayers with AGIs over $50,000 received as much on average as taxpayers with AGI under $8,000. At AGIs between $8,001 and $10,000, the average credit was $356, well below the maximum of $450.

The anomalies shown in the figure reflect one of the weaknesses of the original WC design: it was not based on a tax unit’s income but on personal earned income, thereby allowing high-income families to benefit from the credit. Of the $124 million in WC in 2012, almost $14 million went to tax units with AGI over $25,000, the maximum individual income limits for the credit.

A final point to highlight is that the WC did not have a minimum income limit. Although workers with very low income would get a very low credit, the lack of a lower income limit allows a worker with only sporadic and weak work attachment to get the credit with not much of a work stimulus. Almost 74,000 tax units in 2012 with AGI below $8,000 claimed the WC and received $15 million in credits.

FIGURE 12
Average Work Credit Amount per Tax Filing Unit by Adjusted Gross Income
Puerto Rico, 2012

Note: Calculations by the author based on amount of WC dollars claimed by AGI and number of tax returns claiming the credit by AGI from Departamento de Hacienda, Estado Libre Asociado de Puerto Rico, Estadísticas, “Crédito por Trabajo.”
Main Elements in a Work Credit Redesign

The previous sections examined the income profile of Puerto Rican households, tax burdens, and the experience with the 2007–13 work credit. Information on household income and characteristics suggests the following:

- Almost half of all Puerto Rican households (46 percent) have no wage earners, thus highlighting the need for policies to stimulate employment.

- Of households with dependent children, wage income and a working-age adult, 30 percent have incomes between $10,000 and $25,000, suggesting the need for policies to reduce hardship among working families.

- Households, even those that contain workers, combine income from different sources to make ends meet. Most common is the use of the NAP, which 29 percent of all households with wage income receive.

- A family of three will need an income of over $7,100 to be off the NAP. This suggests that the NAP’s income limits should be considered when designing a WC tax program as a way to encourage work.

Data on taxes by income levels reveal the following:

- The tax burden of families with income up to $30,000, who constitute 80 percent of all tax filers, has declined substantially since 2003. In 2012, these families paid on average of $81 in income taxes and accounted for 3 percent of all income taxes.

- The special deduction worked in combination with the WC by reducing the tax liability before the credit resulting in more WC dollars refunded.

- Although paying little or no income taxes, families with wages between $7,500 and $30,000 paid on average more than $2,000 in sales and use taxes and payroll taxes (Social Security and Medicare) combined.

From the analysis of the WC data, the following can be gathered:

- Over $124 million was claimed in WC in 2012, and 45 percent of all tax units claimed the credit.
Because the WC was based on an individual’s wages, not the wages of the tax unit, high-income families could claim the credit as long as one of the family’s workers had the qualifying income level.

Because the WC did not require a minimum income to qualify, tax units with very low income—and very little demonstrated work commitment—received the credit.

The WC in place between 2007 and 2013 did not target working families. It did not have any age limitation and was not adjusted by number of children or filing status.

The maximum amount of WC changed, but the income level at which the credit reached its maximum has stayed at $10,000 since its inception, even though two minimum wage increases occurred after 2007 and the income eligibility range was expanded.

On the basis of this information, the WC could be redesigned to better alleviate hardship, offset tax regressivity, promote employment, reduce informal labor market activity, and expand the number of tax filers. One alternative is a WC tax program centered on families with children and requiring demonstrated commitment to work. A family-centered WC is in tune with the fiscal constraints facing Puerto Rico, while still preserving the government’s underlying goals. This suggestion can be seen as an initial step in a credit redesign that could be adjusted as fiscal conditions allow. Such a redesign could include the following main elements:

- Concentrate on families with dependents since the regressivity effect of consumption taxes is larger among these families because it affects not only the worker but also his or her children.
- Limit the credit to individuals and married couples filing jointly.
- Limit the credit to units in which the main taxpayer age range is 16 to 64.
- Impose a minimum AGI of $7,500 to show at least half-time work engagement for a year and the income needed to move families out of the NAP.
- Limiting the credit to salaried workers and self-employed who pay Social Security.
- Increase the AGI at which the WC reaches it maximum to $15,000 to reflect changes in the minimum wage.
- Keep the maximum income at the 2012 level of $25,000. Extending the credit to higher income levels may be too expansive to be fiscally feasible.
- Increase the maximum WC or expand the population covered for greater hardship reduction and employment stimulus impact as conditions allow.

- Maintain flexibility in the program design and the tax law to accommodate changing fiscal circumstances, such as making the program more generous and covering more population groups or increasing the top credit if the fiscal situation allows.

To engage discussions about a possible redesign of the WC, table 10 shows three possible WC scenarios, guided by the income data and demographics from the PRCS and the 2007–13 WC experience. In all three scenarios the WC reaches its maximum at incomes of $15,000 to $16,000. In the first scenario, the maximum WC is $600. The rate of 4 percent of the AGI is similar to the now extinct design. In the second and third scenarios’ benefits are higher. These two scenarios are modeled to simulate higher consumption taxes and a credit that could reduce the regressivity of such a higher tax while creating a work incentive. In the second scenario, the phase-in rate is 8 percent and in the third it is 12 percent. Figure 13 present a graphical depiction of the three scenarios.

**TABLE 10**

**Scenarios of Possible Work Credit Designs**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Phase-in range</th>
<th>Plateau</th>
<th>Phase-out range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>Up to $14,999:</td>
<td>$15,000 to $16,000</td>
<td>$16,001 to $25,000</td>
</tr>
<tr>
<td></td>
<td>0.04 × wage income of tax unit</td>
<td>Maximum Work Credit: $600</td>
<td>$600 − 0.015 × (wage income of tax unit−15,500)</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>Up to $14,999:</td>
<td>$15,000 to $16,000</td>
<td>$16,001 to $25,000</td>
</tr>
<tr>
<td></td>
<td>0.08 × wage income of tax unit</td>
<td>Maximum Work Credit: $1,200</td>
<td>$1,240 − 0.02 × (wage income of tax unit−15,550)</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>Up to $14,999:</td>
<td>$15,000 to $16,000</td>
<td>$16,001 to $25,000</td>
</tr>
<tr>
<td></td>
<td>0.12 × wage income of tax unit</td>
<td>Maximum Work Credit: $2,400</td>
<td>$2,460 − 0.03 × (wage income of tax unit−15,550)</td>
</tr>
</tbody>
</table>
It is difficult to determine with the available data the dollar amount that could be claimed in credits under these alternative scenarios because we cannot construct tax units without error with the PRCS data and because under the Puerto Rico tax code, a dependent child need not live with the taxpayer. One approximation is to use the definition for heads of household and their spouse and the definition for dependent children that was developed previously in this paper. In that case, one would use total household wages in applying the WC income limits. Alternatively one can split the household wage income between (1) the main unit, composed of the head of household, the spouse, and children, and (2) other units, composed of other adults in the household that are not considered heads of household or spouses of the head of household but that have children of their own. Estimates are shown in table 11. Scenario 1, where the top credit is $600, could result in approximately $60 million to $65 million in credits. The credit amounts in scenarios 2 and 3 range from approximately $125 million to $279 million. These calculations assume that between 119,000 and 128,000 households could benefit from the credit according to the demographics of Puerto Rican households. All these simulations are based on households with wage and salaried workers.
TABLE 11

Estimates of Work Credits for Families with Adjusted Gross Income between $7,500 and $25,000

Families with dependent children, working-age head

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Using total wage income of households with dependent children; households headed by a working-age person</th>
<th>Separating total household wages between the wages of the main unit (head and spouse, with dependents) and other adults with children, working-age headed households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$60,216,225</td>
<td>$64,691,220</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>$125,658,667</td>
<td>$134,881,540</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>$253,896,773</td>
<td>$278,872,110</td>
</tr>
<tr>
<td>Eligible units</td>
<td>118,983</td>
<td>127,853</td>
</tr>
</tbody>
</table>

Source: Calculations by the author based on PRCS 2010–12 and using the frequencies by annual wages for each wage range between $7,500 and $25,000 in intervals of $500.

The Work Credit and Puerto Rico’s Tax Reform

The government of Puerto Rico is considering a tax reform as a mechanism to solve the fiscal crisis. A legislative project has not yet emerged, but basic elements of the reform have surfaced in the media. Information surfacing in the media points toward elimination of the Sales and Use Tax and adoption of a value added tax (VAT), along with elimination of income taxes for a large swath of the population, possibly for tax units with incomes up to $75,000. The VAT may apply to a wider consumption base than the current sales and use tax. To reduce the regressivity of consumption taxes, lower income families may be refunded all or part of the money they pay in value added taxes.

Inserting the WC within this possible tax reform is challenging because there is not yet a legislative project. There is not enough detail nor conclusive information about (1) how the value added tax system will work; (2) what will be the tax rate; (3) if there will be a refund of the tax and if so, what families will be refunded the tax and how much; and (4) what tax units will be required to file income tax returns, under the new system. Yet, while the different pieces of the tax reform come together there are opportunities to elucidate ways in which the WC could work within a consumption-based tax system such as VAT and with much reduced income taxes.

Elimination of income taxes for most families in lieu of a VAT and the possible refund of the VAT to lower income families does not render the WC mute. The WC maintains its currency for the following reasons:

- The desirability of the WC need not be tied to the existence of consumption taxes. The WC does more than offset consumption taxes’ regressivity. It was discussed in the prior sections.
that the work credit also promotes employment, increases formal employment, expands the tax base and reduces hardship among low income working families. In the United States, Delaware and Oregon have state-EITC programs and no sales taxes.¹²

- Payroll taxes remain unaltered under the VAT. At 6.2 percent for Social Security and 1.45 for Medicare taxes, there are still incentives to reduce the burden of these taxes on low income working families through a work credit. As shown in Table 6, working families with children and wage income between $7,500 and $30,000, pay over $1,000 in Social Security and Medicare taxes.

- Elimination of income taxes for a large segment of the population under a possible tax reform does not invalidate the WC. During the period that the WC was in existence from (2007 to 2013) most families that received the credit owed none or little taxes and had their credit refunded. By putting money in the pockets of low income families, the refundability of the work credit was a boost to its work-enhancing and hardship-reducing impacts. The state of Washington, for instance has no income taxes, yet it has a refundable earned income credit.¹³

- A clear distinction remains between WC refunds and the possible VAT refunds: VAT refunds reward consumption, the WC rewards work.

The WC can coexist with a VAT system. A challenge for policy makers is to design effective mechanisms by which the credit could be delivered to working families in a small or nonexistent income tax system and/or a VAT system with refundability. Examples of these mechanisms are the following:

- Payroll checks: A WC could be delivered through workers’ paychecks. Various models can be used as guides. One is the federal Advanced EITC (Maag 2009). Until 2011, the federal EITC could be claimed throughout the year in the paycheck instead of claiming it once a year in the tax returns. Another model is the federal program Making Work Pay which was in existence from 2009 through 2010 and delivered benefits to workers through reduced income tax withholdings.¹⁴

- Using the Puerto Rico Making Work Pay system: The Making Work Pay federal program was implemented in Puerto Rico between 2009 and 2010. The federal government transferred to Puerto Rico’s Department of the Treasury 1.2 billion dollars to be delivered in benefits to qualifying workers. Treasury developed a mechanism for employers to report qualifying payroll employees.¹⁵ Close to a billion dollars in benefits were delivered by the Department of the Treasury through checks mailed to thousands of Puerto Rican workers.
Income tax system: The income tax system will not disappear with the value added system. Higher income families may be required to file income tax returns. A work credit could be delivered to lower income working families by the filing of a tax return as the way was done between 2007 and 2013, but with a simplified tax form.

The VAT refund system: The work credit could be delivered to working families through the new refund system developed for the value added tax. This same system may be able to refund a higher work credit to families who work and meet the eligibility criteria developed in this report.

Conclusion

Puerto Rico introduced a work tax credit in 2007 in part to alleviate the regressivity of the sales and use taxes that were enacted in that same year. The WC delivered $124 million in benefits to 469,000 tax units in 2013. The credit was eliminated in the 2015 fiscal year budget to save the government the more than $124 million tax benefits awarded under the program.

My examination of data on the number of tax returns claiming the WC and the amounts claimed, as well as the data on tax filing units and household income and characteristics, suggests that the WC encouraged more people to file tax returns when it was first introduced in 2007. The program also showed considerable growth after 2010 when the income limits increased. My analysis also suggests that Puerto Rico’s WC, although small in dollar amount, was quite extensive in terms of coverage. Families with very low work effort were eligible because the program had no minimum income cutoff. High-income tax units were also able to claim the credit because it was based on individual income and not tax-unit income and a worker with no children could get the same amount as a mother of two with similar income.

In moments of crisis, policymakers commonly undertake crisis management actions that undermine longer-term goals. The WC reduces economic hardship and tax regressivity. It is consistent with the government’s long-term goals of increasing employment and strengthening the tax base. The decision to end the WC program sits precisely at the crossroad of saving money in the short run at the risk of undermining employment and the tax base in the long run. A family-centered WC could be a way to balance the fiscal crisis with the desirability of work tax credits.

A WORK TAX CREDIT THAT SUPPORTS PUERTO RICO’S WORKING FAMILIES
Notes


2. Both the credit for salaried workers and the special deduction in their full amount are available to each partner if they are married and file separately.

3. A companion to this paper by Marxuach and Lamba-Nieves (2014) from the Center for a New Economy reviews the literature on EITC effects on employment.

4. In the Puerto Rican tax code, the dependent is not required to reside with the claimant. My approximation can identify only dependents that reside with the household head. Persons with disabilities and parents can also be claimed as dependents under the Puerto Rican tax code if half their support is provided by the claimant.

5. Ten percent of the population of Puerto Rico ages 30 to 61 collects Social Security, compared with 4 percent in the United States.


11. The Spanish text reads as follows: “la imposición de un impuesto de ventas hace necesario que se considere el efecto regresivo que sobre ciertos sectores económicos de nuestra sociedad pudiera tener dicho impuesto al consumo. Por lo que, esta Asamblea Legislativa incorpora un crédito para los individuos por ingresos devengados similar al ‘Earned Income Tax Credit’ que existe a nivel federal en los Estados Unidos y un crédito compensatorio.”

12. Delaware’s EITC is nonrefundable.

13. The credit was enacted by the state legislature in 2008 but it has not been implemented.


References


About the Author

María E. Enchauste is a senior research associate in the Income and Benefits Policy Center at the Urban Institute. An expert in immigration, Enchauste also studies the working conditions of low-wage workers. Before joining Urban, she served as senior economic advisor to the assistant secretary for policy at the US Department of Labor.