

## **Revenue Analysis of a Proposal to Phase-in the Earned Income Credit for Residents of Puerto Rico**

**Proposed Changes** – The proposed legislative changes would extend the earned income credit (EIC) to residents of Puerto Rico. The proposal is effective for tax years beginning after December 31, 2011.

This proposal would limit the total EIC received by a Puerto Rican tax return filer to the amount received by an equivalent tax return filer in the United States.

An “equivalent tax return filer” in the United States is a filer with the same earned income and family structure as the tax return filer in Puerto Rico. This would mean that credits payable to Puerto Rico residents would be reduced by the Federal income tax liability (if any) of the equivalent filer in the states. As a result, tax return filers in Puerto Rico and the equivalent filers in the states would have the same net income after Federal income and payroll taxes and the EIC. The proposal would phase-in the EIC as shown in Table 1.

<b>Table 1 – Proposed Applicable Percentage of the EIC for Residents of Puerto Rico</b>	
<b>Tax Year</b>	<b>Applicable Percentage</b>
2012	20
2013	40
2014	60
2015	80
2016 and thereafter	100

**Current Law** – Under current law, a refundable earned income credit is available to certain low-income taxpayers. Generally, the taxpayer must have earned income with adjusted gross (AGI) income below certain thresholds.<sup>1</sup>

For eligible taxpayers, the credit amount is determined by multiplying the individuals’ earned income by the applicable credit percentage. For 2010, the maximum earned income amount (at which the credit reaches the maximum value) for taxpayers with one qualifying child is \$8,970, with two or more qualifying children is \$12,590, and with no qualifying children, \$5,980. At higher levels of earned income, the limitation amount reduces the credit, determined by multiplying the applicable phaseout percentage by the amount that the individual’s adjusted gross income (AGI) (or earned income if greater) exceeds a phaseout amount.

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<sup>1</sup> Taxpayers must have a valid social security number, may not file as a married taxpayer filing separately, may not have foreign source income, and must be a U.S. citizen or resident alien.

**Behavioral Response** – It is important to consider the behavioral response of offering a program that provides a significant benefit, but requires significant paperwork and information sharing. Early experience in the United States with the EIC indicates that (1) those eligible for the credit often did not claim the credit and (2) those that claimed the credit often did not claim the full amount to which they were entitled.

Puerto Rico presents unique challenges, because individuals would have to file a Federal income tax return to claim the benefits from either or both the EIC. While doing so would provide significant benefits to the household, the take up rate is likely to be slow and gradual.<sup>2</sup> The estimates in Table 1 assume a gradual (5 percent per year) increase in the eligible population claiming the EIC. Further, during ten-year budget period (approximately mid-way), there is an additional increase in the eligible population to reflect the potential for government programs to educate and inform taxpayers of the availability of the credit. This is consistent with actual EIC experience.

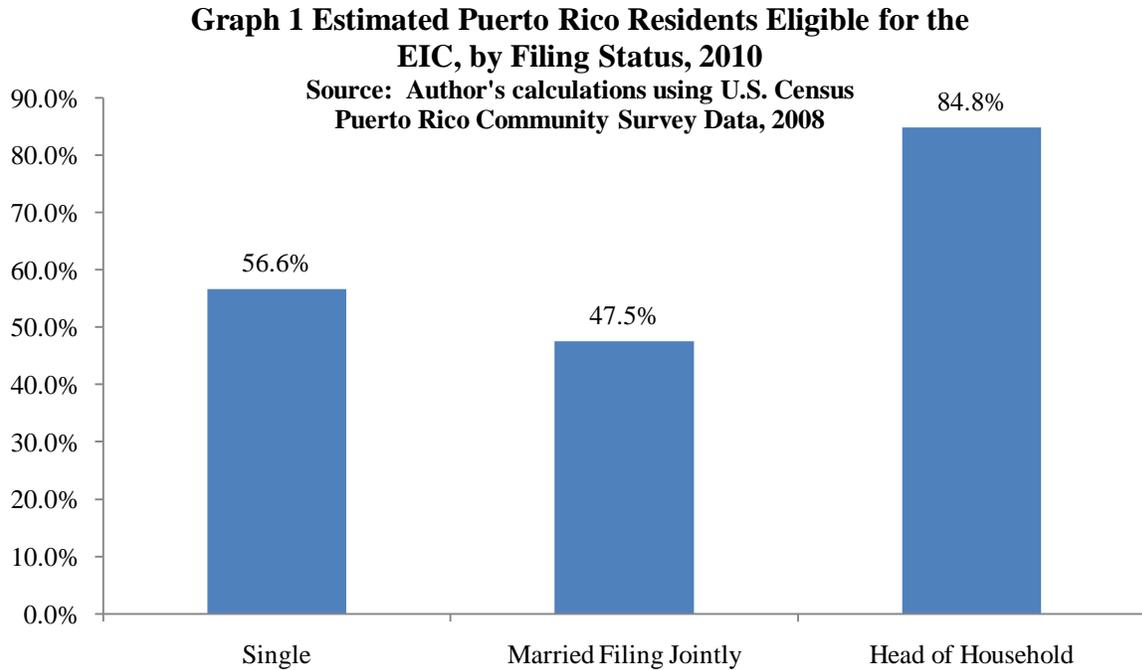
Table 2 provides the estimated revenue effect of extending the EIC to Puerto Rico residents assuming the applicable percentages in the proposed legislation.

<b>Table 2 – Estimated Revenue Effect of the Earned Income Credit</b> (Assumes an Estimated Learning Curve) (amounts in millions of dollars)												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
<b>Proposed Equitable EIC</b>												
<b>Proposed EIC</b>	–	-90	-210	-380	-570	-900	-990	-1,080	-1,180	-1,270	-1,350	<b>-8,020</b>
Details may not add due to rounding. Revised estimates reflect current population growth statistics for Puerto Rico, from the Puerto Rico Planning Board, Program of Economic and Social Planning, Subprogram of Economic Analysis.												

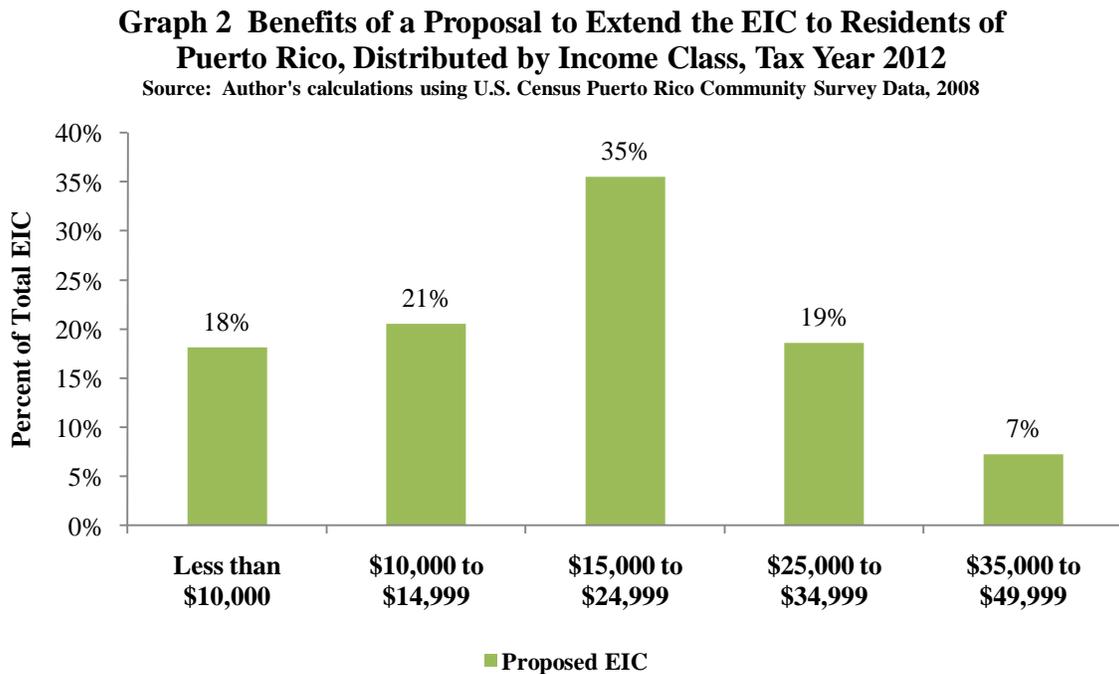
<sup>2</sup> A reasonable estimate of the first-year participation is approximately 25 percent.

## Benefits of the Earned Income Credit

Graph 1 displays the percentage of returns by filing status that are eligible to receive some portion of the EIC, based on this analysis.



Graph 2 distributes by income class the estimated benefits of the EIC to residents of Puerto Rico.



## APPENDIX A

**Methodology** – The following sections document the procedures and data sources that support the revenue estimates of making residents of Puerto Rico eligible for the earned income credit (EIC). To estimate the revenue effect of this credit, it is necessary to create tax-filing units that reflect the family size and composition. To determine the unit’s eligibility for the credits, it is necessary to distribute by income the tax-filing units. After determining eligibility, it is necessary to build a tax calculator that estimates the average tax benefits by filing status and income.<sup>3</sup>

### I. Creating Tax Units

Transforming household and family units into tax units for Federal income tax purposes is a non-trivial task. Quite often, classification issues arise due to complex eligibility rules (e.g., earned income credit) and child custody arrangements. These issues can result in tax filing outcomes that are very different from family and household arrangements observed in the Census data files. One example of such family arrangements includes multiple generations living in one household. In this case, it is important to know the relationship of the householders as well as the family members responsible for the financial support.

A micro data file that would allow detailed study and creation of tax units is not available for this analysis. For purposes of this analysis, the estimated tax units rely on data from the U.S. Census Bureau, 2008 Puerto Rico Community Surveys and the Puerto Rico Planning Board, Office of the Census. The Community Survey provides demographic statistics by type of household. The Puerto Rico Planning Board provides the population targets as well as the historical population growth rate.

In addition, it is important to note that creating tax-filing units for this analysis differs somewhat from the traditional approach, because residents of Puerto Rico are not liable for individual income tax on Puerto Rico source income. Distributing households by income and filing status mimics the Federal income tax system, with one important distinction – non-filers.

Under the Federal individual income tax system, many taxpayers earn incomes below the filing threshold and do not even file an income tax return (regardless of potential unclaimed tax benefits). This analysis did not exclude individuals as non-filers due to low-income amounts (income amounts that typically would make the individual a non-filer). Instead, the analysis incorporates into the estimate a ‘learning curve’ as a behavioral response. The learning curve, described below, incorporates a gradual take-up rate for the credits, as the general population becomes educated with the programs and comfortable with filing a Federal income tax return.

This analysis includes an adjustment for individuals that earn cash wages or participate in the informal economy and may not fully report their income. However, Census data is likely to have

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<sup>3</sup> In the absence of a micro data file, it is necessary to estimate the average tax benefit by filing status and income. Targeting the tax-filing units (by family size and composition) to aggregate demographic statistics maintains the bounds of the estimates. The aggregate average tax benefits will remain consistent with the population statistics.

some degree of underreporting, as certain individuals tend to understate their income in survey responses. As a result, it was necessary to moderate the adjustment for the informal economy or cash wages for this potential underreporting behavior.

**Unit of Observation** – the Community Survey contains records on households, families and individuals that form the basis for the corresponding tax-filing units. Table 3 provides the unadjusted household statistics. To reflect the presence of dependent children, it is necessary to adjust these figures. Further, the adjustments exclude certain individuals that are over the age of 65 (in cases where the individual is not the head of household for tax filing purposes) who rely on retirement or social security income.

For purposes of this analysis, constructing the tax-filing units assumed that single parent households would file as head of households, married-couple households would file as married filing jointly, and non-family households would file as a single filer.

<b>Table 3 – Puerto Rico Community Survey, Unadjusted Household Structure</b> Source: U.S. Census, Puerto Rico Community Family Survey, 2006-2008				
	<b>Single Parent Families</b>	<b>Married-couple families</b>	<b>Non-Family Households</b>	<b>Total All Households</b>
Less than \$10,000	142,846	83,528	150,082	376,455
\$10,000 to \$14,999	43,459	64,294	45,757	153,510
\$15,000 to \$24,999	64,755	102,761	43,011	210,527
\$25,000 to \$34,999	42,367	80,780	25,014	148,161
\$35,000 to \$49,999	32,213	81,879	18,913	133,005
\$50,000 to \$74,999	20,535	73,636	13,117	107,288
\$75,000 to \$99,999	5,284	29,125	4,576	38,984
\$100,000 to \$149,999	3,017	21,431	3,050	27,499
\$150,000 to \$199,999	294	6,045	915	7,254
\$200,000 or more	650	6,594	915	8,159
<b>Total</b>	<b>355,419</b>	<b>550,074</b>	<b>305,349</b>	<b>1,210,842</b>

Table 4 provides data on children and their presence by household structure. Approximately 31 percent of all households have children present. Approximately 25 percent of the Puerto Rican population is 17 years of age or younger.<sup>4</sup> As shown in Table 4, based on the available data, the

<sup>4</sup> See U.S. Census Bureau, 2008 Puerto Rico Community Survey; Table 1283, Selected Social, Economic, Demographic, and Housing Characteristics in Puerto Rico, 2008.

analysis assumes that the vast majority of children reside in households with married couples or single adult as a head of household.<sup>5</sup>

<b>Table 4 – Puerto Rico Community Survey, Selected Statistics Indicating the Presence of Children (under 17 years of age), by Household Structure</b>					
<b>Source: U.S. Census, Puerto Rico Community Family Survey, 2006-2008</b>					
	<b>In married-couple family household</b>	<b>Male Head of household, no wife present</b>	<b>Female Head of household no husband present</b>	<b>Non-Family Households</b>	<b>Total All Households</b>
<b>Number of Children</b>	<b>530,414</b>	<b>67,680</b>	<b>393,144</b>	<b>6,395</b>	<b>997,633</b>
<b>Average Size of Household</b>	<b>3.73</b>	<b>3.80</b>	<b>3.89</b>	<b>n/a</b>	<b>3.79</b>
<b>Adjusted Average Size of Household</b>	<b>4.52</b>	<b>3.73</b>		<b>1.07</b>	<b>n/a</b>
<b>Percent of Households with Children 17 years or younger</b>	<b>38.2%</b>	<b>35.5%</b>	<b>49.3%</b>	<b>n/a</b>	<b>31.1%</b>

After identifying those households with children, it was necessary to adjust the average household size for purposes of determining the weighted average EIC, as described below.<sup>6</sup> In addition, it was necessary to make an additional adjustment to those households where the heads of household are 65 years of age or older.

<sup>5</sup> Approximately 6,400 children were in non-family households, based on information from the Puerto Rico Community Family Survey for 2008.

<sup>6</sup> Generally, the average household size increased

## II. Calculating the Tax Benefits

The following current law provisions support the estimate to extend the EIC to residents of Puerto Rico.

***Earned Income Credit*** – Under current law, a refundable earned income credit is available to certain low-income taxpayers. Generally, the taxpayer must have earned income with adjusted gross (AGI) income below certain thresholds.<sup>7</sup>

For eligible taxpayers, the credit amount is determined by multiplying the individuals' earned income by the applicable credit percentage. For 2010, the maximum earned income amount (at which the credit reaches the maximum value) for taxpayers with one qualifying child is \$8,970, with two or more qualifying children is \$12,590, and with no qualifying children, \$5,980. At higher levels of earned income, the limitation amount reduces the credit, determined by multiplying the applicable phaseout percentage by the amount that the individual's adjusted gross income (AGI) (or earned income if greater) exceeds a phaseout amount.

Table 5 provides the income phase-out range for the EIC in 2010. The income phase-out ranges provide an indication of the classes of taxpayers that would receive some portion of the credit. The intent of the EIC is to provide an incentive to low-income individuals to earn income. For instance, consider a taxpayer with no qualifying children. The credit reaches the maximum value at \$5,980, but an individual that earns more than that amount continues to receive the EIC (at a rate less than the maximum). The credit continues to be available until their income reaches the end of the phase-out range or \$13,460. The purpose of this structure was to eliminate the 'cliff' that occurs in many phase-out ranges in other tax benefits.<sup>8</sup> The EIC continues to provide benefits as an individual's income rises, but also recognizes that the need for that credit diminishes with the increasing income.

For purposes of the estimate, the EIC amount applied to the return data represents a weighted average amount. For each income class, the midpoint of the income class was the proxy amount for the average income in the class. Then, the analysis identified the EIC amounts that correspond to the number of dependents. The analysis applied individual weights for dependents (0, 1, 2, and 3) (estimated iteratively) to correspond to the average family size provided in the Puerto Rico Community Survey data.<sup>9</sup>

The analysis estimated separate weights for the dependents associated with each filing status category. To obtain the weighted average EIC benefits by filing status, it was necessary to apply the weights to the EIC amount.

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<sup>7</sup> Taxpayers must have a valid social security number, may not file as a married taxpayer filing separately, may not have foreign source income, and must be a U.S. citizen or resident alien.

<sup>8</sup> Many tax benefits in the Internal Revenue Code stop abruptly at a given income amount, creating a penalty to anyone with \$1 of income above that given income amount.

<sup>9</sup> Before calculating the weights, it was necessary to reduce the average family size for the number of adults present in the household.

<b>Table 5 – 2010 Income at which the EIC Begins to Phaseout and Income Amount at which the EIC is Fully Phased Out</b>				
<b>Filing Status</b>	<b>No Children</b>	<b>One Child</b>	<b>Two Children</b>	<b>Three or more Children</b>
<b>Single, Head of Household</b>				
EIC Begins to Phaseout/ EIC Fully Phased out	\$7,480/\$13,460	\$16,450/\$35,535	\$16,450/\$40,363	\$16,450/\$43,352
<b>Married Filing Jointly</b>				
EIC Begins to Phaseout/ EIC Fully Phased out	\$12,490/\$18,470	\$21,460/\$40,545	\$21,460/\$45,373	\$21,460/\$48,362

**Other Adjustments** – One problem with using non-income tax data that distributes Puerto Rico residents by income is the uncertainty regarding the definition of income. In many cases, households may report having income that sustains the household, however for tax purposes (and for EIC qualifying purposes), this income may not be identifiable. In other words, it is unclear that every household reporting income would declare this income on a return. This does not suggest that the income is not legitimate earnings, but rather suggests that many may receive income in cash and lack adequate records to verify such income.

It was necessary to modify the income distribution to reflect the possibility that some taxpayers may have earnings that would not be verifiable and therefore, would make the family ineligible for these benefits.<sup>10</sup>

**Behavioral Response** – It is important to consider the behavioral response of offering a program that provides a significant benefit, but requires significant paperwork and information sharing. Early experience in the United States with the EIC indicates that (1) those eligible for the credit often did not claim the credit and (2) those that claimed the credit often did not claim the full amount to which they were entitled.

Puerto Rico presents unique challenges, because individuals would have to file a Federal income tax return to claim the benefits from the EIC. While doing so would provide significant benefits to the household, the take up rate is likely to be slow and gradual.<sup>11</sup> The estimates in Table 1 assume a gradual (5 percent per year) increase in the eligible population claiming the EIC. Further, during ten-year budget period (approximately mid-way), there is an additional increase in the eligible population to reflect the potential for government programs to educate and inform taxpayers of the availability of the credit. This is consistent with actual EIC experience.

<sup>10</sup> Overtime, it is possible that with the generosity of benefits comes the incentive to report a greater percentage of income or maintain records that would make eligible many of these households that otherwise would not be eligible.

<sup>11</sup> A reasonable estimate of the first-year participation is approximately 25 percent.