Using Refundable Tax Credits to Help Low-income Taxpayers: What Do We Know, and What Can We Learn From Other Countries?

by

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Abstract

One of the central functions of modern governments is to redistribute income from those who are rewarded by free markets to those who are not. Historically, most of that redistribution was achieved through traditional welfare programs. In recent decades, many developed nations have shifted towards using refundable tax credits in their income tax systems to make welfare transfers to low-income families and individuals. In particular, this article focuses on how the United States, Canada, the United Kingdom, and Australia now use their tax systems to provide benefits to low-income families and individuals.

At the outset, Part I of this article provides an overview of income, inequality, and redistribution in various countries. Part II then provides a detailed examination of how the U.S. income tax system uses refundable tax credits to help low-income workers and their families. Next, Part III shows how redistribution is achieved in the income tax systems of Canada, the United Kingdom, Australia, and some other developed nations. Finally, Part IV discusses some of the problems with using tax credits for redistribution and the best approaches for dealing with those problems.
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by Jonathan Barry Forman*

One of the central functions of modern governments is to redistribute income from those who are rewarded by free markets to those who are not. Historically, most of that redistribution was achieved through traditional welfare programs. In recent decades, however, many developed nations have shifted towards using refundable tax credits in their income tax systems to make welfare transfers to low-income families and individuals. In particular, this article focuses on how the United States, Canada, the United Kingdom, and Australia now use their tax systems to provide benefits to low-income families and individuals.

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of the problems with using tax credits for redistribution and the best approaches for dealing with those problems.

I. INCOME, INEQUALITY, AND REDISTRIBUTION IN VARIOUS COUNTRIES

In contemporary welfare states, economic rewards are determined by a combination of market forces and government policies. Markets arise automatically from the economic interactions among people and institutions. Here and there, government policies intervene to influence the operations of those markets and to shape the outcomes that result from market transactions.

Needless to say, policymakers cannot do much about market forces per se. But they do influence market outcomes through a combination of regulation, spending, and taxation. Government regulation defines and limits the range of markets, and so influences the shape of the initial distribution of economic resources. Government taxes and spending also have a significant impact on the distribution of economic resources. Most clearly, government taxes and transfers are the primary tools for the redistribution of economic resources and the mitigation of economic inequality.

A. AN OVERVIEW OF INCOME INEQUALITY AND REDISTRIBUTION

This section looks at income, inequality, and redistribution in various developed nations. At the outset, Table 1 shows various measures of income inequality and redistribution in the Organisation for Economic Co-Operation and Development (OECD) countries.¹ For example, consider the United States. One common way to measure inequality is to compare the income of households at various positions in the income distribution. At the outset, column 2 shows that

¹ See also Brian W. Cashell, Inequality in the Distribution of Income: Trends and International Comparisons (Congressional Research Service, Report for Congress No. RL32639, updated October 20, 2008).
the ratio of the income of a household in the 90th percentile of household income in the United States is 5.8 times as much as the income of a household in the 10th percentile.
### Table 1. Inequality and Redistribution in OECD Nations

<table>
<thead>
<tr>
<th>Country</th>
<th>90/10 Ratio</th>
<th>Gini Before</th>
<th>Gini After</th>
<th>Poverty Before (50% of median income)</th>
<th>Poverty After (50% of median income)</th>
<th>Tax-to-GDP Ratio</th>
<th>Social Spending-to-GDP Ratio</th>
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<tr>
<td>Australia</td>
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<td>28.6</td>
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<td>23.1</td>
<td>6.6</td>
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<tr>
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</tr>
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<td>11.0</td>
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<td>29.4</td>
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<td>18.0</td>
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<td>Turkey</td>
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<td>17.5</td>
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<td>37.1</td>
<td>21.3</td>
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<td>0.46</td>
<td>0.38</td>
<td>26.3</td>
<td>17.1</td>
<td>28.0</td>
<td>15.9</td>
</tr>
<tr>
<td>OECD Total</td>
<td>..</td>
<td>0.45</td>
<td>0.31</td>
<td>26.4</td>
<td>10.6</td>
<td>35.9</td>
<td>20.5</td>
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</tbody>
</table>

Source: ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, GROWING UNEQUAL? INCOME DISTRIBUTION AND POVERTY IN OECD COUNTRIES (2008), various tables, [http://www.oecd.org/document/53/0,3343,en_2649_33933_41460917_1_1_1_1,00.html](http://www.oecd.org/document/53/0,3343,en_2649_33933_41460917_1_1_1_1,00.html).
Another popular measure of income inequality is the Gini index. Basically, the Gini index is a mathematical measure of income inequality that can range from 0, indicating perfect equality (where everyone has the same income), to 1.0, indicating perfect inequality (where one person has all the income and the rest have none). According to column 3 of Table 1, the Gini index for the distribution of household income in the United States before taxes and transfers was a sizeable 0.46 in the mid2000s. Column 4 shows that after taxes and transfers, the Gini index fell to 0.38.²

Along the same lines, column 5 shows that before taxes and transfers, 26.3 percent of American households were poor (defined as having incomes of less than 50 percent of the median household income in the mid2000s). Column 6 shows that after taxes and transfers, 17.1 percent were poor. Finally, column 7 shows that taxes took just 28 percent of gross domestic product (GDP) in the United States (in 2006), and column 8 shows that the United States spent about 15.9 percent of gross domestic product on social spending (in 2006).³

By contrast, countries like Sweden start out with less inequality and end up with far less inequality and poverty than in the United States. Sweden’s 90/10 household income ratio was just 2.8, but its Gini index before taxes and transfers was a pretty sizeable 0.43 and its poverty level before taxes was 26.7 percent. On the other hand, Sweden has higher taxes (49.3 percent

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³ Readers need to be a little cautious in interpreting comparative tax and spending levels, as these do not take into account of the relative size of government deficits and their public debts. For example, in 2009, Japan’s public debt was estimated to be 189.30 percent of its gross domestic product in 2009, compared with 75.40 percent for Canada, 68.10 percent for the United Kingdom, 52.90 for the United States, and just 17.60 percent for Australia. Central Intelligence Agency, The World Factbook, Country Comparisons: Public Debt, [https://www.cia.gov/library/publications/the-world-factbook/rankorder/2186rank.html](https://www.cia.gov/library/publications/the-world-factbook/rankorder/2186rank.html) (last checked August 16, 2010). See also Douglas W. Elmendorf, Director, Congressional Budget Office, Fiscal Policy Choices 13
of GDP) and higher social spending (29.4 percent of GDP) and ends up with less inequality after taxes and transfers (0.23 Gini index) and less poverty (5.3 percent). All in all, “the effect of government redistribution in lowering income inequality is largest in the Nordic countries and lowest in Korea and the United States.”

Less developed nations like Mexico and Turkey tend to have higher than average levels of inequality and poverty both before and after taxes and transfers.

B. TAXES AND TRANSFERS

A significant portion of poverty reduction in OECD countries takes the form of family cash benefits—child-related cash transfers to families. These family benefit schemes can take the form of child allowances for families or refundable tax credits. Many countries provide universal family cash benefits, and some provide additional benefits to low-income families. Pertinent here, Australia, Canada, the United Kingdom, New Zealand, and Germany use refundable tax credits to make cash transfers to families. The United States also uses tax credits

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to provide benefits to low-income families, but these are conditional on having earned income. Such in-work tax credits are becoming increasingly popular.6

Table 2 summarizes the effect of government transfers made to the poorest households in various countries and the taxes collected from those households. Here, the United States only transfers about 2.3 percent of household income to the poorest 20 percent of households. Fortunately, the United States has a fairly progressive tax system—and this initially surprised me.7 The United States collects just 0.4 percent of household income from the poorest 20 percent of taxpayers. All in all, however, net transfers to the poor are pretty low in the United States—just 1.9 percent of household income is redistributed to the poorest Americans, compared to a 4.2 percent average for 23 OECD countries.8

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7 Based on a different table, the OECD concluded that the tax systems of Italy, Germany, Australia, the United States, Denmark, Ireland, and the Netherlands achieve the largest reductions in income inequality, while the tax systems of Japan, Korea, and Switzerland achieve the smallest reductions. ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, GROWING UNEQUAL? INCOME DISTRIBUTION AND POVERTY IN OECD COUNTRIES, supra note 4, at 113-15 (table 4.6 and accompanying text).

8 As more fully explained in Part II, infra, presumably redistribution to the poor has increased somewhat since the passage of the American Recovery and Reinvestment Act of 2009 (ARRA), Public Law No. 111-5.
<table>
<thead>
<tr>
<th>Country</th>
<th>Transfers to lowest quintile</th>
<th>Taxes from lowest quintile</th>
<th>Net transfers to lowest quintile</th>
</tr>
</thead>
<tbody>
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<td>Australia</td>
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<td>Austria</td>
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In short, developed countries rely on different methods of redistribution. Countries with low levels of inequality (such as the Nordic countries, Germany, Belgium, and the Netherlands) tend to rely heavily on social welfare programs for redistribution. On the other hand, countries

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with high levels of inequality (Australia, Canada, and the United States) rely more heavily on
taxes.

Most developed countries operate pretty substantial social welfare systems that are
financed largely by three taxes that primarily burden labor income: income taxes, payroll taxes,
and consumption taxes. Income taxes typically have large exemptions and progressive tax
rates. On the other hand, payroll taxes tend to be regressive as they typically have no
exemptions and flat rates up to an earnings cap. Consumption taxes tend to be regressive or, at
best, proportional as they typically have flat rates and a broad base (one that includes elderly
retirees as well as workers).

In a recent book, Achim Kemmerling argues that “the real question in contemporary
welfare states is not whether, but how welfare is financed.” He used longitudinal data from the
OECD to develop decades of tax-to-GDP ratios for various countries’ income, payroll, and
consumption taxes. Table 3 shows similar tax-to-GDP ratios for 2007.

10 ACHIM KEMMERLING, TAXING THE WORKING POOR: THE POLITICAL ORIGINS AND ECONOMIC CONSEQUENCES OF TAXING LOW WAGES 3 (2009); see also Jonathan Barry Forman, Taxing the Working Poor: The Political Origins and Economic Consequences of Taxing Low Wages (by Achim Kemmerling), 31(1) Comparative Labor Law and Policy Journal 211-15 (Fall 2009). Through most of the nineteenth century, labor earned subsistence wages, and, therefore, most of the burden of taxation fell on capital. As real wages have increased since that time, capital was able to shift most of the burden of taxation onto labor. Consequently, most of the revenue needed to finance contemporary welfare states now comes from three taxes that primarily burden labor income: income taxes, payroll taxes, and consumption taxes. See also Herwig Immervol, Minimum Wages, Minimum Labour Costs and the Tax Treatment of Low-Wage Employment (Organisation for Economic Co-Operation and Development, OECD Social, Employment and Migration Working Paper No. 46, 2007) (showing minimum wages and payroll taxes for full-time workers at different wage levels); ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD FACTBOOK 2009; ECONOMIC, ENVIRONMENTAL AND SOCIAL STATISTICS 238-39 (2009) (showing taxes on the average worker); Organisation for Economic Co-Operation and Development, Taxing Working Families: A Distributional Analysis (OECD Tax Policy Study No. 12, 2005).

11 KEMMERLING, supra note 10, at 1.
Table 3. Country comparisons of tax-to-GDP, 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>Income Taxes</th>
<th>Payroll taxes</th>
<th>Consumption Taxes</th>
<th>Total Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>18.4</td>
<td>..</td>
<td>8.2</td>
<td>30.8</td>
</tr>
<tr>
<td>Austria</td>
<td>12.7</td>
<td>14.2</td>
<td>11.7</td>
<td>42.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>16.5</td>
<td>13.6</td>
<td>11.0</td>
<td>43.9</td>
</tr>
<tr>
<td>Canada</td>
<td>16.6</td>
<td>4.8</td>
<td>7.9</td>
<td>33.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>9.4</td>
<td>16.2</td>
<td>11.1</td>
<td>37.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>29.0</td>
<td>1.0</td>
<td>16.3</td>
<td>48.7</td>
</tr>
<tr>
<td>Finland</td>
<td>16.9</td>
<td>11.9</td>
<td>12.9</td>
<td>43.0</td>
</tr>
<tr>
<td>France</td>
<td>10.4</td>
<td>16.1</td>
<td>10.7</td>
<td>43.5</td>
</tr>
<tr>
<td>Germany</td>
<td>11.3</td>
<td>13.2</td>
<td>10.6</td>
<td>36.2</td>
</tr>
<tr>
<td>Greece</td>
<td>7.5</td>
<td>11.7</td>
<td>11.4</td>
<td>32.0</td>
</tr>
<tr>
<td>Hungary</td>
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<td>14.9</td>
<td>39.5</td>
</tr>
<tr>
<td>Iceland</td>
<td>18.5</td>
<td>3.1</td>
<td>16.5</td>
<td>40.9</td>
</tr>
<tr>
<td>Ireland</td>
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<td>4.7</td>
<td>11.1</td>
<td>30.8</td>
</tr>
<tr>
<td>Italy</td>
<td>14.7</td>
<td>13.0</td>
<td>11.0</td>
<td>43.5</td>
</tr>
<tr>
<td>Japan</td>
<td>10.3</td>
<td>10.3</td>
<td>5.1</td>
<td>28.3</td>
</tr>
<tr>
<td>Korea</td>
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<td>5.5</td>
<td>8.3</td>
<td>26.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>12.8</td>
<td>10.2</td>
<td>9.9</td>
<td>36.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>5.0</td>
<td>2.8</td>
<td>9.5</td>
<td>18.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10.9</td>
<td>13.6</td>
<td>11.2</td>
<td>37.5</td>
</tr>
<tr>
<td>New Zealand</td>
<td>22.5</td>
<td>..</td>
<td>11.3</td>
<td>35.7</td>
</tr>
<tr>
<td>Norway</td>
<td>21.0</td>
<td>9.1</td>
<td>12.4</td>
<td>43.6</td>
</tr>
<tr>
<td>Poland</td>
<td>8.0</td>
<td>12.0</td>
<td>13.3</td>
<td>34.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>9.4</td>
<td>11.7</td>
<td>13.7</td>
<td>36.4</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>5.8</td>
<td>11.7</td>
<td>11.3</td>
<td>29.4</td>
</tr>
<tr>
<td>Spain</td>
<td>12.4</td>
<td>12.1</td>
<td>9.5</td>
<td>37.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>18.7</td>
<td>12.6</td>
<td>12.9</td>
<td>48.3</td>
</tr>
<tr>
<td>Switzerland</td>
<td>13.2</td>
<td>6.7</td>
<td>6.5</td>
<td>28.9</td>
</tr>
<tr>
<td>Turkey</td>
<td>5.6</td>
<td>5.1</td>
<td>11.3</td>
<td>23.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>14.3</td>
<td>6.6</td>
<td>10.5</td>
<td>36.1</td>
</tr>
<tr>
<td>United States</td>
<td>13.9</td>
<td>6.6</td>
<td>4.7</td>
<td>28.3</td>
</tr>
<tr>
<td>OECD Total</td>
<td>13.2</td>
<td>9.1</td>
<td>10.9</td>
<td>35.8</td>
</tr>
</tbody>
</table>

Source: Organisation for Economic Co-Operation and Development, Tax revenue statistics, tables O.1, O.2, O.3, and O.5, [http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_1,00.html#trs](http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_1,00.html#trs) (last checked August 11, 2010).

Note: “Income taxes” includes taxes on income, profits, and capital gains as percentage of GDP. “Payroll taxes” refers to social security contributions as a percentage of GDP. “Consumption taxes” refers to taxes on goods and services as a percentage of GDP. “Total taxes” also includes taxes on property, net wealth, estate, inheritance and gift taxes, and certain other taxes—averaging 1.9 percent of GDP—but not shown here.
Not surprisingly, Kemmerling found that the overall tax-to-GDP ratios in OECD countries have risen considerably in the last 40 years.\textsuperscript{12} At the same time, payroll taxes and consumption tax revenues have grown much faster than income taxes in most countries.\textsuperscript{13} All in all, there has been “a remarkable shift away from income taxation” in recent years.\textsuperscript{14}

As Table 3 shows, countries still differ in the mix of taxes that they use for public finance, with some countries relying on the income tax as their most important source of revenue and other countries relying on payroll taxes or consumption taxes. Broadly speaking, the Scandinavian welfare states have a high overall tax rate and high rates of income taxation. ‘Bismarckian’ continental European welfare states have high levels of payroll taxation (social security contributions). Anglo-Saxon (‘Beveridge’) welfare states also rely heavily on income taxes to pay for social welfare benefits; these states also typically provide tax subsidies for targeted employees (e.g., the U.S. earned income tax credit). For the newly independent states of Eastern Europe, consumption taxes seem to be an important source of revenue.\textsuperscript{15}

Kemmerling focused on how the relative mix of income, payroll, and consumption taxes affect labor markets.\textsuperscript{16} He found that the shift away from progressive income taxation has

\textsuperscript{12} Id. at 16. See also Organization for Economic Co-operation and Development, OECD Tax Database, at Tax revenue statistics, table O.1 (Total tax revenue as percentage of GDP), http://www.oecd.org/document/60/0,3343,en_2649_34533_1942460_1_1_1_1,00.html#trs (last checked August 11, 2010). Kemmerling also notes that there has been a broad convergence in the level of social spending among the OECD countries KEMMERLING, supra note 10, at 13.

\textsuperscript{13} KEMMERLING, supra note 10, at 16. Payroll taxes nearly doubled from 1965 to 2002, and consumption taxes increased by more than 20 percent from the 1980s to the 1990s. Id. at 18-19.

\textsuperscript{14} Id. at 23. It would seem that the sheer magnitude of the revenues needed for modern welfare states have pushed them towards payroll and consumption taxation. International competition may also be responsible for some of the recent trend away from progressive income taxation and towards consumption taxes. Id. at 117.

\textsuperscript{15} Kemmerling also notes that each country’s mix of taxes is “highly persistent” and that “it is politically costly and cumbersome to change the tax mix.” Id. at 18, 19.

\textsuperscript{16} See also Lee Ohanian, Andrea Raffo, and Richard Rogerson, Long-term changes in labor supply and taxes: Evidence from OECD countries, 1956-2004, 55(8) JOURNAL OF MONETARY ECONOMICS 1353 (November 2008) (finding that taxes can account for much of the variation in hours worked both over time and across countries);
resulted in a high tax burden and high marginal tax rates that have hurt low-wage workers. Generally speaking, low-skilled workers do best under income taxes which—because of large exemptions—they do not have to pay; and one of Kennerling’s principal findings is that countries with higher tax burdens on low-skilled workers have lower employment levels and higher unemployment rates. He explains that “it is not the tax burden, but the tax (and transfer) structure that affects the performance of a labor market.”

Pertinent here, earnings subsidies, like the earned income tax credit in the United States, can increase the work effort of participants, at least in the phase-in range of the subsidy. Moreover, an earnings subsidy can increase employment opportunities for low-wage workers. By increasing the compensation paid to low-wage workers at no cost to employers, an earnings subsidy can increase the demand for low-wage labor. Earnings subsidies can also cost less to administer than means-tested transfer programs and can be more effective in reaching targeted beneficiaries.


17 KEMMERLING, supra note 10, at 120. Kemmerling’s real contribution comes from his focus on the political conflicts that have arisen among employees and from his analysis as to why trade unions and left-of-center parties have become a lot less supportive of progressive (income) taxation. His research suggests that “in countries where unions are strong and include a large and representative part of the low-wage sector, unions will take interests of low-wage workers into consideration” and will favor a tax mix with relatively more progressive income taxes. Id. at 121. On the other hand, “in countries where there is a huge gap between bargaining coverage and union density, tax progressivity is markedly lower.” Id. at 122.

II. TAXES AND WELFARE IN THE UNITED STATES

Ultimately, the tax and transfer structure of a country depends on the kinds of taxes that it utilizes to raise revenue, on the rate structures inherent in those taxes (including those associated with any tax credits), and on the nature of its welfare system. This Part looks in detail at the tax, tax credit, and welfare systems in the United States. Part III then takes a more cursory look at the tax and tax credit systems of some other developed countries, and, finally, Part IV discusses the best approaches for using refundable tax credits as a redistributive tool.

A. TAXES

The U.S. federal government raises virtually all of its revenue from the individual income tax, Social Security and Medicare payroll taxes, the corporate income tax, estate and gift taxes, and excise taxes on selected goods and services. State and local governments raise most of their revenue from income taxes, sales taxes, and property taxes. All in all, taxes take about 30 percent of the United States gross domestic product (GDP), and federal taxes take about two-thirds of that.19

1. The Income Tax on Individuals

The largest of the federal taxes is the income tax imposed on individuals. The federal income tax is imposed on a taxpayer’s taxable income.20 Taxpayers file returns as unmarried individuals, heads of household, married couples filing joint returns, or married couples filing separate returns.

20 INTERNAL REVENUE CODE (I.R.C.) §§ 1, 63.
As a starting point, taxpayers first determine the amount of their gross income.\textsuperscript{21} Gross income includes all income from whatever source derived, including (but not limited to) the wages, salaries, tips, gains, dividends, interest, rents, and royalties received by taxpayers during the taxable year.

From gross income, taxpayers subtract certain deductions to get to taxable income. Most taxpayers simply claim a standard deduction and personal exemptions. Many taxpayers, however, claim certain itemized deductions in lieu of the standard deduction. Also, certain other deductions are allowed without regard to whether the taxpayer chooses to itemize.

Each year, the U.S. Department of Treasury indexes the standard deduction amounts, the personal exemption amounts, and the income tax rate tables to reflect the prior year’s change in the Consumer Price Index.\textsuperscript{22} Table 4 shows the basic standard deductions, personal exemptions, and simple income tax thresholds for various taxpayers in calendar year 2010. For example, a married couple with two children can claim a standard deduction of $11,400 and four $3,650 personal exemptions. Consequently, the couple will not have any taxable income unless its gross income exceeds $26,000.

\textsuperscript{21} I.R.C. § 61.

\textsuperscript{22} Revenue Procedure 2009-50, 2009-45 INTERNAL REVENUE BULLETIN 617. For 2010, the basic standard deduction amounts are $11,400 for married couples filing jointly and surviving spouses, $8,400 for heads of households, and $5,700 for unmarried individuals and married individuals filing separately. Aged or blind individuals generally are entitled to claim additional standard deduction amounts of $1,100, except that aged or blind unmarried individuals can claim additional standard deduction amounts of $1,400. The personal exemption amount is $3,650.
Table 4. Standard Deductions, Personal Exemptions, Simple Income Tax Thresholds, and Tax Rate Schedules for Various Taxpayers, 2010

<table>
<thead>
<tr>
<th></th>
<th>Unmarried individuals</th>
<th>Heads of household with one child</th>
<th>Married couples filing joint returns with two children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard deduction</td>
<td>$5,700</td>
<td>$8,400</td>
<td>$11,400</td>
</tr>
<tr>
<td>Personal exemptions</td>
<td>$3,650</td>
<td>$7,300 (2 × $3,650)</td>
<td>$14,600 (4 × $3,650)</td>
</tr>
<tr>
<td>Simple income tax</td>
<td>$9,350</td>
<td>$15,700</td>
<td>$26,000</td>
</tr>
<tr>
<td>Tax rate (imposed on</td>
<td></td>
<td>Rate bracket</td>
<td></td>
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<tr>
<td>taxable income)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>$0 to $8,375</td>
<td>$0 to $11,950</td>
<td>$0 to $16,750</td>
</tr>
<tr>
<td>15</td>
<td>$8,375 to $34,000</td>
<td>$11,950 to $45,550</td>
<td>$16,750 to $68,000</td>
</tr>
<tr>
<td>25</td>
<td>$34,000 to $82,400</td>
<td>$45,550 to $117,650</td>
<td>$68,000 to $137,300</td>
</tr>
<tr>
<td>28</td>
<td>$82,400 to $171,850</td>
<td>$117,650 to $190,550</td>
<td>$137,300 to $209,250</td>
</tr>
<tr>
<td>33</td>
<td>$171,850 to $373,650</td>
<td>$190,550 to $33,650</td>
<td>$209,250 to $373,650</td>
</tr>
<tr>
<td>35</td>
<td>Over $373,650</td>
<td>Over $373,650</td>
<td>Over $373,650</td>
</tr>
</tbody>
</table>


Table 4 also shows the tax rate schedules for 2010. For a taxpayer with gross income in excess of her simple income tax threshold, her regular tax liability will be determined by applying the 10, 15, 25, 28, 33, and 35 percent rates to taxable income. The maximum tax rate on dividends and net long-term capital gains, however, is just 15 percent.\(^{23}\)

The amount that a taxpayer must actually pay (or, alternatively, will receive as a refund) is equal to the taxpayer’s income tax liability minus her allowable tax credits. Pertinent here, certain taxpayers are entitled to claim the refundable earned income tax credit, the partially refundable child tax credit, the nonrefundable dependent care credit, and the new refundable making work pay tax credit.\(^{24}\)

\(^{23}\) I.R.C. § 1(h). In addition, the maximum tax rate on capital gains and dividends received by moderate-income taxpayers (those in the 10 and 15 percent income brackets) is 0 percent in 2010.

\(^{24}\) More than 40 states and numerous local governments also levy income taxes on individuals. These state income taxes are typically imposed on a variation of federal taxable income, albeit at lower rates. In 2010, for example, the tax rates in Oklahoma range from 0.5 percent to 5.5 percent. Tax Foundation, Tax Data: State Individual Income Tax Rates, 2000-2010 (March 25, 2010), [http://www.taxfoundation.org/taxdata/show/228.html](http://www.taxfoundation.org/taxdata/show/228.html).
a. The earned income tax credit

The earned income tax credit is a refundable tax credit available to certain low- and moderate-income workers.\textsuperscript{25} In 2010, for example, a family with three or more qualifying children is entitled to claim an earned income tax credit of up to $5,666. The credit is computed as 45 percent of the first $12,590 of earned income. For married couples filing joint returns, the maximum credit is reduced by 21.06 percent of earned income (or adjusted gross income, if greater) in excess of $21,460 and is entirely phased out at $48,362 of income.\textsuperscript{26} For heads of household, the maximum credit phases out over the range from $16,450 to $43,352.

Similarly, a family with two qualifying children is entitled to claim an earned income tax credit of up to $5,036.\textsuperscript{27} A family with one child is entitled to an earned income credit of up to $3,050.\textsuperscript{28} Finally, childless individuals between the ages of 25 and 65 are entitled to an earned income credit of up to $457.\textsuperscript{29}

b. The child tax credit

Taxpayers with children under the age of 17 can claim a tax credit of up to $1,000 per child.\textsuperscript{30} The child tax credit is first applied to offset a taxpayer’s income tax liability (if any),

\textsuperscript{25} I.R.C. § 32 (as modified by ARRA § 1002).
\textsuperscript{26} Revenue Procedure 2009-50, supra note 22.
\textsuperscript{27} The credit is computed as 40 percent of the first $12,590 of earned income. For married couples filing joint returns, the maximum credit is reduced by 21.06 percent of earned income (or adjusted gross income, if greater) in excess of $21,460 and is entirely phased out at $45,373 of income. For heads of household, the maximum credit phases out over the range from $16,450 to $40,363.
\textsuperscript{28} The credit is computed as 34 percent of the first $8,970 of earned income. For married couples filing joint returns, the maximum credit is reduced by 15.98 percent of earned income (or adjusted gross income, if greater) in excess of $21,460 and is entirely phased out at $40,545 of income. For heads of household, the maximum credit phases out over the range from $16,450 to $35,535.
\textsuperscript{29} The credit is computed as 7.65 percent of the first $5,980 of earned income. For married couples filing joint returns, the maximum credit is reduced by 7.65 percent of earned income (or adjusted gross income, if greater) in excess of $12,490 and is entirely phased out at $18,470 of income. For heads of household and single individuals, the maximum credit phases out over the range from $7,480 to $13,460.
\textsuperscript{30} I.R.C. § 24 (as modified by ARRA § 1003).
and, for taxpayers with earned income in excess of $3,000 in 2010, a portion of the credit is refundable: the credit is refundable to the extent of 15 percent of the taxpayer’s earned income in excess of $3,000. These child tax credits are phased out once the taxpayer’s adjusted gross income reaches $110,000 for married couples filing joint returns, $55,000 for married couples filing separately, and $75,000 for all other taxpayers.

c. The making work pay tax credit
The new making work pay tax credit is a refundable credit computed as 6.2 percent of earned income, up to a maximum credit of $400 per individual ($800 per couple). Of note, couples can claim the full $800 credit even if only one spouse works. These making work pay tax credits are phased out once the taxpayer’s modified adjusted gross income exceeds $150,000 for married couples filing joint returns and $75,000 for other taxpayers.

d. The dependent care credit
The federal income tax system also provides a nonrefundable dependent care credit to certain taxpayers who incur employment-related expenses to care for children under the age of 13. A taxpayer can claim a tax credit of up to $1,050 (35 percent of $3,000) a year for one qualifying child, or up to $2,100 (35 percent of $6,000) a year for two or more qualifying children. The credit is reduced for taxpayers whose adjusted gross income exceeds $15,000 until it levels off at $600 (20 percent of $3,000) for one qualifying child and $1,200 (20 percent of $6,000 for two or more qualifying children for taxpayers with adjusted gross income over $45,000. Perhaps the biggest limitation is that the dependent care credit is not refundable. That

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31 I.R.C. § 36A (added by ARRA § 1001).
means that the dependent care credit is of no value to those low-income Americans who are exempt from income taxation.

e. Other tax credits

There are numerous other refundable and nonrefundable tax credits. For example, some first-time homebuyers in 2009 and 2010 could get a refundable credit of up to $8,000,\textsuperscript{33} students can get a partially refundable education tax credit,\textsuperscript{34} and homeowners can get a tax credit for installing energy efficient windows, doors, or insulation.\textsuperscript{35}

2. Social Security and Medicare Payroll Taxes

Social Security and Medicare payroll taxes are levied on earnings in employment and self-employment covered by Social Security, with portions of the total tax allocated by law to the Old-Age and Survivors Insurance trust fund (OASI), the Disability Insurance trust fund (DI), and the Medicare Hospital Insurance trust fund.\textsuperscript{36} For 2010, employees pay Social Security and Medicare payroll taxes of 7.65 percent on the first $106,800 of wages and 1.45 percent of wages over $106,800.\textsuperscript{37} The lion’s share of these payroll taxes is used to finance the OASI program (5.3 percent of wages), and the rest pay for DI (0.9 percent) and Medicare (1.45 percent).\textsuperscript{38}

Employers pay a matching payroll tax of 7.65 percent of up to $106,800 of wages and 1.45 percent of wages over $106,800 for each covered employee.\textsuperscript{39} Employees are not allowed

\textsuperscript{33} I.R.C. § 36 (as expanded by ARRA § 1006).
\textsuperscript{34} I.R.C. § 25A (as expanded by ARRA § 1004) (now called the “American Opportunity education tax credit”).
\textsuperscript{35} I.R.C. § 25C (added by ARRA § 1121).
\textsuperscript{36} I.R.C. §§ 1401, 3101, 3111.
\textsuperscript{37} Social Security Administration, Office of the Commissioner, Cost-of-Living Increase and Other Determinations for 2010, 74 FEDERAL REGISTER 55,614-18 (October 28, 2009).
\textsuperscript{39} I.R.C. § 275(a)(1)(A), 3502(a); Treasury Regulations § 1.164-2(a).
to deduct their portion of payroll taxes for income tax purposes. On the other hand, the employer’s portion of payroll taxes is excluded from the employee’s income for income tax purposes.40

Similarly, self-employed workers pay an equivalent Social Security tax of 15.3 percent on the first $106,800 of self-employment earnings and 2.9 percent of self-employment earnings over that amount. To put self-employed individuals in an approximately equivalent position as employees, self-employed individuals can deduct half these taxes for both payroll and income tax purposes.41

3. Poverty Levels and Federal Tax Thresholds

The best way to understand how the U.S. income tax system uses refundable tax credits to help low-income workers and their families is to consider how the income tax system affects the income of various low-income family units.42

a. Poverty levels and net federal tax thresholds

At the outset, Table 5 compares the 2010 federal tax thresholds and poverty income guidelines for selected households.43 Consider a family of four consisting of a married couple

41 I.R.C. §§ 164(f), 1402(a)(12).
42 This section updates Jonathan Barry Forman, 2009 Poverty Levels and Federal Tax Thresholds, 124 TAX NOTES 171 (July 13, 2009).
43 The table reflects the assumptions that all family income consists of wages earned by a single worker, that all family members are under age 65 and not blind, that all family units are eligible for the earned income and making work pay tax credits, and that all children qualify for the child tax credit. Also, as a simplifying assumption, only the employee’s portion of Social Security and Medicare payroll taxes is considered. In that regard, most economists believe that households do bear the burden of payroll taxes paid by their employers, and, a complete analysis of tax burdens would also consider the incidence of corporate income taxes, excise taxes, etc. See, e.g., Congressional Budget Office, Effective Tax Rates: Comparing Annual and Multiyear Measures (2005), at 3 (box 1), http://www.cbo.gov/ftpdocs/60xx/doc6051/01-06-LongitudinalTaxRates.pdf.
and two children. Row 1 shows that this family unit’s poverty income guideline for 2010 is $22,050.\textsuperscript{44} Row 2 again shows that this family’s simple income tax threshold is $26,000.\textsuperscript{45}

Table 5. Poverty Levels and Net Federal Tax Thresholds in 2010, for Selected Households

<table>
<thead>
<tr>
<th></th>
<th>Unmarried individual</th>
<th>Single parent with one child</th>
<th>Married couple with two children</th>
<th>Married couple with three children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poverty levels</td>
<td>$10,830</td>
<td>$14,570</td>
<td>$22,050</td>
<td>$25,790</td>
</tr>
<tr>
<td>2. Simple income tax threshold (before credits)</td>
<td>$9,350</td>
<td>$15,700</td>
<td>$26,000</td>
<td>$29,650</td>
</tr>
<tr>
<td>3. Income tax threshold after the earned income, making work pay, and child tax credits</td>
<td>$13,395</td>
<td>$32,380</td>
<td>$50,250</td>
<td>$60,567</td>
</tr>
<tr>
<td>4. Employee Social Security and Medicare payroll tax threshold</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>5. Combined income and payroll tax threshold (i.e., net federal tax threshold)</td>
<td>$9,348</td>
<td>$25,717</td>
<td>$38,635</td>
<td>$43,788</td>
</tr>
</tbody>
</table>

Row 3 shows each family unit’s income tax threshold after taking into account the effects of the earned income credit, the making work pay tax credit and the child tax credit. For example, for 2010, a typical married couple with two young children can claim an earned income tax credit of up to $5,036, a making work pay tax credit of up to $800, and two child tax credits worth up to $1,000 per child. Consequently, taking into account the earned income, making work pay, and child tax credits, a typical married couple with one worker and two children will not actually owe any income tax until the couple’s income exceeds $50,250.\textsuperscript{46}

\textsuperscript{44} Department of Health and Human Services, Office of the Secretary, Delayed Annual Update of the HHS Poverty Guidelines for the Remainder of 2010, 75 FEDERAL REGISTER 45,628 (August 3, 2010).

\textsuperscript{45} See supra Table 4 and accompanying text.

\textsuperscript{46} Each computation in Row 3 involved determining the appropriate equation for computing each family unit’s income tax liability after its earned income, making work pay, and child tax credits and solving for the income level at which that income tax liability is equal to zero. For example, for 2010, for a married couple with one worker, two
On the other hand, because the payroll tax system has no standard deductions or personal exemptions, family units must pay Social Security and Medicare payroll taxes starting with their first dollar of earned income. Hence, Row 4 shows that zero is the payroll tax threshold for all family units.

Finally, Row 5 shows the combined income and payroll tax threshold (i.e., net federal tax threshold) for various family units. Each threshold occurs at the income level at which the taxpayer’s preliminary income tax liability plus employee payroll tax liability minus income tax credits equals zero. For example, a typical married couple with one worker and two children will not actually have a net federal tax liability for 2010 unless its income exceeds $38,635.47.

b. Federal taxes at the poverty level

Table 6 shows the federal tax liabilities of various family units with earnings exactly equal to their respective poverty income guidelines. Again, consider a hypothetical family of four consisting of a married couple with two children. Row 1 again shows that the couple’s poverty income guideline in 2010 is $22,050.

children, and income (I) in excess of the $42,750 level at which the couple enters the 15 percent income tax bracket and in excess of the $45,373 level at which the couple’s earned income tax credit disappears, the couple’s income tax liability (T) can be determined by the following formula:

\[ T = 1,675 + .15 \times (I - 42,750) - 800 - (2 \times 1,000). \]

Setting T equal to zero and solving for I shows that this couple’s income tax threshold after the earned income, making work pay, and child tax credits is $50,250.00.

Each computation in Row 5 involved determining the appropriate equation for computing each family unit’s combined income and employee payroll tax liability after its earned income, making work pay, and child tax credits, and solving for the income level at which that tax liability is equal to zero. For example, for 2010, for a married couple with two children with income (I) in excess of its $26,000 simple income tax threshold and less than the $42,750 level at which the couple enters the 15 percent income tax bracket, the couple’s combined income and employee payroll tax liability (T) can be determined by the following formula:

\[ T = .10 \times (I - 26,000) + .0765 \times I - (5,036 - .2106 \times [I - 21,460]) - 800 - (2 \times 1,000). \]

Setting T equal to zero and solving for I shows that the couple’s combined income and employee payroll tax threshold after the earned income and child tax credits is $38,634.66.
Table 6. Federal Taxes at the Poverty Level in 2010, for Selected Households

<table>
<thead>
<tr>
<th></th>
<th>Unmarried individual</th>
<th>Single parent with one child</th>
<th>Married couple with two children</th>
<th>Married couple with three children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poverty levels</td>
<td>$10,830</td>
<td>$14,570</td>
<td>$22,050</td>
<td>$25,790</td>
</tr>
<tr>
<td>2. Income tax at poverty level (after tax credits)</td>
<td>-$453</td>
<td>-$4,450</td>
<td>-$7,712</td>
<td>-$8,554</td>
</tr>
<tr>
<td>3. Employee Social Security and Medicare payroll tax at poverty level</td>
<td>$829</td>
<td>$1,115</td>
<td>$1,687</td>
<td>$1,973</td>
</tr>
<tr>
<td>4. Combined income and employee payroll tax at poverty level</td>
<td>$376</td>
<td>-$3,335</td>
<td>-$6,025</td>
<td>-$6,581</td>
</tr>
<tr>
<td>5. Combined tax as a percent of income at poverty level</td>
<td>3.5%</td>
<td>-22.9%</td>
<td>-27.3%</td>
<td>-25.5%</td>
</tr>
</tbody>
</table>

Assuming that the couple has exactly that much earned income in 2010, Row 2 shows that the couple will be entitled to an income tax refund of $7,712.\(^{48}\)

Row 3 shows that the couple’s payroll tax liability for 2010 will be $1,687.\(^{49}\) As the couple’s income tax refund in Row 2 will be greater than its payroll tax liability in Row 3, the couple will be entitled to receive a net refund of $6,008 from the federal government, as shown in Row 4.\(^{50}\) Finally, Row 5 expresses the couple’s net federal tax liability as a percentage of

\(^{48}\) Each computation in Row 2 involved determining the appropriate equation for computing each family unit’s income tax at the poverty level after taking into account its earned income, making work pay, and child tax credits. For example, for 2010, for a married couple with two children with income \(I\) less than its $26,000 simple income tax threshold but in excess of the $21,460 level at which the earned income credit begins to phase out, the couple’s income tax refund \(R\) can be determined by the following formula:

\[
R = 5,036 - .2106 \times (I - 21,460) + 800 + 2,000.
\]

Setting \(I\) equal to $22,050 and solving for \(R\) shows the couple will be entitled to an income tax refund of $7,711.75.

\(^{49}\) Each computation in Row 3 involved multiplying the family unit’s poverty-level income times the 7.65 percent employee portion of the Social Security and Medicare payroll tax. For example, a married couple with two children and a poverty-level wages of $22,050 will owe $1,687 in payroll taxes for 2010 ($1,686.83 = 0.0765 \times 22,050).

\(^{50}\) Each computation in Row 4 involved adding the income tax in Row 2 to the payroll tax in Row 3. For example, a married couple with two children and a poverty-level income of $22,050 will receive a refund of $6,025 (-$6,024.92 = -$7,711.75 + $1,686.83).
income: for 2010, the couple will have a net federal tax liability equal to -27.3 percent of its poverty-level income.\footnote{Each computation in Row 5 involved dividing the net tax liability in Row 4 by the poverty-level income in Row 1. For example, a married couple with two children will receive a refund equal to 27.3 percent of its poverty-level income \((-0.2732 = -6,025 \div 22,050)\).}

All in all, hardly any low-income workers will owe federal taxes for 2010. Quite simply, the earned income tax credit, the new making work pay tax credit, and the child tax credit will offset the income and payroll tax liabilities of millions of low-income workers. In fact, these refundable credits will provide significant subsidies to most low-income workers and their families.

Pertinent here, Figure 1 shows how net federal tax liability changes as household income for selected households increases from $0 to $50,000.
B. WELFARE

Dozens of federal transfer programs provide assistance to individuals for retirement, disability, health, education, housing, public assistance, employment, and other needs. The vast majority of these programs transfer cash or in-kind benefits (e.g., food or medical care) directly to individuals. Social welfare analysts generally differentiate between transfer programs that are "means-tested" and those that are not. For programs that are means-tested (e.g., family support, Medicaid, and food stamps), eligibility and benefits depend upon an individual’s need, as measured by the individual’s income and assets. For programs that are not means-tested (e.g., social insurance programs like Social Security and Medicare), eligibility is based on other
criteria such as age and work history. Table 7 shows the federal government’s outlays for the principal federal transfer programs (including refundable tax credits).  

Table 7. Outlays for the Principal Federal Benefit Programs in the United States (billions of dollars)

<table>
<thead>
<tr>
<th>Program</th>
<th>2009 actual</th>
<th>2015 estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>$678</td>
<td>$893</td>
</tr>
<tr>
<td>Medicare</td>
<td>425</td>
<td>651</td>
</tr>
<tr>
<td>Medicaid</td>
<td>251</td>
<td>336</td>
</tr>
<tr>
<td>Unemployment compensation</td>
<td>119</td>
<td>65</td>
</tr>
<tr>
<td>Supplemental Security Income</td>
<td>41</td>
<td>52</td>
</tr>
<tr>
<td>Earned income tax credit</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>Child tax credit</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>Making work pay tax credit</td>
<td>&lt;1</td>
<td>n/a</td>
</tr>
<tr>
<td>Food assistance</td>
<td>72</td>
<td>89</td>
</tr>
<tr>
<td>Family support</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Housing assistance</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>General retirement and disability</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Federal employee retirement and disability</td>
<td>118</td>
<td>141</td>
</tr>
<tr>
<td>Veterans benefits and services</td>
<td>49</td>
<td>84</td>
</tr>
</tbody>
</table>

Source: Executive Office of the President and Office of Management and Budget, Historical Tables, Budget of the United States Government, Fiscal Year 2011 (2010), Table 8.5.

C. MEASURING THE IMPACT OF TAXES AND TRANSFERS ON POVERTY AND INEQUALITY

Most government operations have only a slight or indirect impact on the distribution of income. Spending on the military and other government operations, for example, probably has relatively little impact on economic inequality. Even among entitlement programs, relatively few programs are means-tested, and only about 10–15 percent of the federal budget is spent for

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52 For more details about the operations of these transfer programs, see, e.g., FORMAN, MAKING AMERICA WORK, supra note 18, at 73-78.
such explicit redistribution. All in all, government tax and transfer policies currently reduce household income inequality by about 20 percent, as shown in Table 8.\textsuperscript{53}

Table 8. Share of Aggregate Household Income in the United States, by Quintiles and the Gini Index, 2005

<table>
<thead>
<tr>
<th>Quintiles</th>
<th>Market income</th>
<th>Disposable income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>1.50</td>
<td>4.42</td>
</tr>
<tr>
<td>Second</td>
<td>7.26</td>
<td>9.86</td>
</tr>
<tr>
<td>Middle</td>
<td>14.00</td>
<td>15.33</td>
</tr>
<tr>
<td>Fourth</td>
<td>23.41</td>
<td>23.11</td>
</tr>
<tr>
<td>Highest</td>
<td>53.83</td>
<td>47.28</td>
</tr>
<tr>
<td>Gini Index</td>
<td>0.493</td>
<td>0.418</td>
</tr>
</tbody>
</table>


There is some dispute about how much the U.S. tax and transfer systems affect poverty levels. Some 39.8 million Americans (13.2 percent) were poor in 2008 using the official estimate of poverty (based on money income) up from 36.5 million in 2006 (12.3 percent).\textsuperscript{54} Based on market income, however, the Census Bureau estimated that 18.5 percent of Americans were poor before taxes and transfers in 2006.\textsuperscript{55} After taxes and transfers, the Census Bureau

\textsuperscript{53} U.S. Census Bureau, The Effects of Government Taxes and Transfers on Income and Poverty: 2005 (Current Population Report No. P60-232, March 2007), table 3. The second column of table 5 shows U.S. Census Bureau’s estimates of the market’s initial distribution of household income before government taxes and transfers, by quintiles of population (“market income”). Before government taxes and transfers, the richest 20 percent American households received 53.83 percent of household income, while the poorest 20 percent received just 1.50 percent. That is a rather unequal distribution of income. The Gini index for the market distribution of household income in the United States in 2005 was a sizeable 0.493.

The third column of table 5 shows the “disposable income” shares that households end up with after government taxes and transfers in the year 2005. Taxes and transfers increased the relative share of income held by the bottom three quintiles at the expense of the share of income held by the top two quintiles, and the Gini index fell to 0.418. Similarly, Table 1, supra, showed a decline in the Gini index of household income inequality in the mid2000s from 0.46 before taxes and transfers to 0.38 after taxes and transfers.

\textsuperscript{54} U.S. Census Bureau, Income, Poverty, and Health Insurance Coverage in the United States: 2008 (P60-236(RV), 2009), table B-1.

\textsuperscript{55} U.S. Census Bureau, Annual Social and Economic (ASEC) Supplement, table RD-REV POV01 (last revised December 31, 2007) (definition of market income), http://pubdb3.census.gov/macro/032007/altpov/newpov01_001.htm.
estimated that just 10.2 percent of Americans had disposable income that left them in poverty that year.

On the other hand, a recent comparative study by the economist Timothy M. Smeeding found that the U.S. tax and transfer systems had more modest effects on poverty.\textsuperscript{56} He estimated that the U.S. tax and transfer systems reduced the poverty rate of two-parent families by just 0.5 percentage points in 2000, from 13.7 to 13.2 percent. That was a mere 3.6 percent reduction in two-parent poverty rates, compared with an average reduction of 44 percent across all 11 high-income countries studied (including the United States).

III. REFUNDABLE TAX CREDITS IN OTHER COUNTRIES

\textit{A. CANADA}

Canada uses its tax system to provide child, child care, and worker benefits.\textsuperscript{57} The Canada Child Tax Benefit (CCTB) is a tax-free monthly payment to families with children under age 18.\textsuperscript{58} The benefit consists of a basic benefit, a National Child Benefit Supplement, and a Child Disability Benefit. Canada is a federal system, and a variety of additional benefits are available from its provincial governments.

From July 2010 through June 2011, the basic benefit is C$112.33 per month for each child under the age of 18, plus an additional C$7.83 per month for the third and each additional child. The basic benefit phases out as family net income exceeds C$40,970.\textsuperscript{59}

The National Child Benefit Supplement (NCBS) amounts are: C$174.00 per month for the first child, C$154.00 per month for the second child, and C$146.50 per month for each additional child. The National Child Benefit Supplements phase out as family net income exceeds C$23,855.\textsuperscript{60}

The Child Disability Benefit (CDB) provides up to C$205.83 per month for each child eligible for the disability amount.\textsuperscript{61}

In addition, the Universal Child Care Benefit (UCCB) pays families a taxable C$100 per month (C$1,200 per year) for children under the age of six to help cover the costs of child care.\textsuperscript{62}

Also, the Working Income Tax Benefit (WITB) is a refundable tax credit for eligible low-income individuals and families.\textsuperscript{63} It consists of a basic amount and a disability supplement. The maximum WITB for 2010 is C$925 for single individuals with no eligible dependents, or C$1,680 for families.\textsuperscript{64} The additional disability supplement for each individual was C$462.50. Eligible individuals or families are also able to apply for WITB advance payments.
Canada also provides a Refundable Medical Expense Supplement for Canadians with disabilities who enter the work force (up to C$1,067 for 2009).\textsuperscript{65}

Canada also has a refundable goods and services tax credit to offset a portion of its national value-added tax and provincial sales taxes. From July 2010 to June 2011, the basic credit is $250 for a taxpayer, plus another $250 for a spouse or common-law partner, and C$131 for each child.\textsuperscript{66} The credit phases out as family net income exceeds C$32,506. The credit is calculated on the prior year’s income and is paid out quarterly.

**B. UNITED KINGDOM**

The United Kingdom uses its tax system to provide child, child care, and worker benefits.\textsuperscript{67} The Child Benefit is a tax-free benefit for each child (under 16) or qualifying young person (16-19 and in school full-time) they are responsible for.\textsuperscript{68} From April 5, 2010 on, the

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\textsuperscript{66} Canada Revenue Agency, GST/HST Credit Including related provincial credits and benefits (2010), \url{http://www.cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-10e.pdf}.


weekly benefit is £20.30 per week for the oldest child and £13.40 per week for other children. Child benefits are paid by the Child Benefit Office of HM Revenue and Customs. Benefits are usually direct deposited into the mother’s bank account every four weeks.

A Child Tax Credit is also available to low-income families. From April 5, 2010 on, the basic family element is £545 per year for each family with responsibility for one or more children, plus £2,300 for each child, but extra amounts are paid for children that are under age one or disabled. The amount of Child Tax Credit depends on circumstances and income, but it is available to those with quite high incomes, including those with incomes of over £50,000 a year.

The Working Tax Credit supplements the earnings of low-income workers. From April 5, 2010 on, the basic working tax credit is £1,920 per year if the taxpayer is 16 or over, works more than 16 hours a week, and is responsible for a child. The Working Tax Credit is also available to individuals without children if they are disabled and work at least 16 hours a week, are over 50 and recently started work, or are over 25 and work at least 30 hours a week. Additional Working Tax Credit amounts are also available for child care. Taxpayers can get up to 80 percent of what they pay for child care, up to a maximum of £140 per week for one child or £240 per week for two or more children. The Working Tax Credit is reduced for those whose income exceeds £6,420 per year.

C. AUSTRALIA

Australia also uses its tax system to provide child and child care benefits, although most benefits are now provided through Family Assistance Offices located in Medicare Offices and

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69 Citizens Advice Bureau, Adviceguide: Benefits – In England: Benefits and tax credits for people in work (2010), [http://www.adviceguide.org.uk/index/life/benefits/benefits_and_tax_credits_for_people_in_work.htm#working_tax_credit](http://www.adviceguide.org.uk/index/life/benefits/benefits_and_tax_credits_for_people_in_work.htm#working_tax_credit); HM Revenue & Customs, Working Tax Credit – Help with the costs
Centrelink Customer Service Centers across the country. The basic family tax benefit Part A is designed to help with the cost of raising dependent children. It is available for dependents under 21 years and for older dependent children, aged 21 to 24 years, who are studying full time.

Table 9 sets forth the maximum rates for the family tax benefit Part A. In general, if family income exceeds A$45,114 per year, the family tax benefit is reduced by 20 percent of the excess until it reaches the base rate in Table 9. Finally, if family income exceeds A$94,316 per year (plus A$3,796 for each family tax benefit after the first), the family tax benefit is reduced by 30 percent of the excess until it reaches zero.

<table>
<thead>
<tr>
<th>Table 9. Family Tax Benefit Part A, as of July 1, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum rates</strong></td>
</tr>
<tr>
<td>For each child</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Aged under 13 years</td>
</tr>
<tr>
<td>Aged 13-15 years</td>
</tr>
<tr>
<td>Aged 16-17</td>
</tr>
<tr>
<td>Aged 18-24</td>
</tr>
<tr>
<td>In an approved care organization aged 0-24 years</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Base rates</strong></td>
</tr>
<tr>
<td>For each child</td>
</tr>
<tr>
<td>Aged under 18 years</td>
</tr>
<tr>
<td>Aged 18-24</td>
</tr>
</tbody>
</table>


---

The family tax benefit Part B provides extra assistance to single-parent families and to two-parent families with one main income where one parent chooses to spend most of her time caring for their children.\(^{71}\) Table 10 shows the maximum rate of family tax benefit Part B. The benefit is reduced if the higher income earner in a couple, or a single parent, has an income of A$150,000 per year or more. For two-parent families, the lower earner can have up to A$4,672 each income year and still receive the maximum benefit.

### Table 10. Family Tax Benefit Part B, as of July 1, 2010

<table>
<thead>
<tr>
<th>Age of youngest child</th>
<th>Per fortnight</th>
<th>Per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 years</td>
<td>A$136.36</td>
<td>A$3,909.15</td>
</tr>
<tr>
<td>5-15 years (or 16-18 years if a full-time student)</td>
<td>A$ 95.06</td>
<td>A$2,832.40</td>
</tr>
</tbody>
</table>


Family tax benefits can be paid fortnightly to a bank or other financial institution, or as an annual lump sum; however, the option of claiming and receiving an annual lump sum payment through the Australian Taxation Office ceased on July 1, 2009.\(^{72}\)

Australia also provides a tax-free baby bonus to families with incomes under A$75,000 in the six months following the birth of a child.\(^{73}\) Effective from July 1, 2010, the baby bonus is A$5,294 per eligible child paid in 13 fortnightly installments. The baby bonus is not paid through the tax system but is instead a non-taxable payment made into a bank account.


\(^{73}\) Australian Government Centrelink, *A guide to Australian Government payments*, supra 70, at 5.
Australia also helps most families pay for child care through an income-tested Child Care Benefit (CCB) (up to A$184.00 for a 50 hour week) or through a Child Care Rebate (50 percent of out-of-pocket child care expenses for approved care, up to A$7,778 for 2009-2010).

Of note, the Australian Government is in the midst of a comprehensive review of its tax and transfer system, and major changes could be enacted in coming years. To be sure, Australian Professors Chris Evans and Richard Krevor note that “Experience suggests that tax reviews rarely lead to successful tax reform,” even as they acknowledge that “Tax Reform in Australia is necessary and overdue.” In that regard, the government’s initial response, in particular its controversial proposal for tax increases on mining companies, almost certainly played a role in the recent resignation of Australian Prime Minister Kevin Rudd of the Labor party and in Australia’s national election on August 21, 2010.

74 Id. at 5-6.
D. OTHER DEVELOPED COUNTRIES

Many other countries also use tax credits to provide benefits for individuals and families.78 For example, since 2001, France has a tax credit for low-wage workers, the “Prime Pour l’Emploi” (PPE).79 The average credit was around €558 in 2003. The Swedish government introduced a nonrefundable in-work credit in 2007 and has extended in several times since.80

IV. PROBLEMS AND BEST APPROACHES

This Part discusses some of the problems with using tax credits for redistribution and the best approaches for dealing with those problems.

A. PROVIDING BENEFITS THROUGH SOCIAL WELFARE OR TAX SYSTEMS

As an initial matter, policymakers need to decide what benefits to provide. The next decision is whether to provide those benefits through a social welfare program or through the tax system. The answer to this question will vary greatly from country to country because of differing economic, cultural, and political concerns—and because of historical accidents.

Social welfare programs can provide both means-tested benefits (like food stamps in the U.S.) or more universal benefits (like social security). Tax systems typically provide benefits in

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78 See, e.g., Organisation for Economic Co-Operation and Development, OECD Family Database, at PF3: Family cash benefits, supra note 5.
the form of tax credits and other so-called “tax expenditures.” These, too, can be “means-tested” by using tax return information about income and family status (like the U.S. earned income tax credit), or they can be relatively universal (like the U.S. personal exemption allowance).

As a practical matter, since tax systems typically work on annual reporting systems, they are simply not capable of providing short-term emergency assistance. Instead, local welfare agencies typically must be the ones to provide that immediate assistance.

On the other hand, nearly universal benefits like family allowances could be provided by either social welfare programs or tax expenditures. Most social security systems are very efficient at providing benefits. For example, in 2009, the U.S. Social Security system paid out more than $557 billion in benefits to more than 42 million Old-Age and Survivors Insurance program beneficiaries, and the administrative expenses for that program came in at just 0.6

Working Sweden out of the crisis (Press release, September 20, 2009),
http://www.sweden.gov.se/sb/d/11760/a/132080.

81 So-called “tax expenditures” are spending programs channeled through the tax system. Under a theoretically pure income tax, individuals would pay tax on the sum of the wages, interest, dividends, and other forms of economic income that they earn. Of course, most income taxes deviate from this pure income tax ideal in a number of ways. In the United States, for example, the Congressional Budget and Impoundment Act of 1974 (Public Law No. 93-344) requires the federal government to keep track of the revenue “lost” as a result of deviations from an ideal income tax through tax expenditure budgets prepared annually by the Office of Management and Budget (OMB) and the Joint Committee on Taxation. See, e.g., EXECUTIVE OFFICE OF THE PRESIDENT AND OFFICE OF MANAGEMENT AND BUDGET, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2011, ANALYTICAL PERSPECTIVES, Chapter 16, Tax Expenditures 207-43 (2010); Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2009-2013 (JCS-1-10, 2010). See also U.S. SENATE COMMITTEE ON THE BUDGET, TAX EXPENDITURES: COMPRENDIUM OF BACKGROUND MATERIALS ON INDIVIDUAL PROVISIONS, S. PRT. NO. 110-667, 110th Cong., 2d Sess. (prepared by the Congressional Research Service, December 2008).

The Congressional Budget and Impoundment Act of 1974 defines tax expenditures as “those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.” Public Law No. 93-344, at § 3(a)(3).

The Congressional Budget Act of 1974 does not, however, actually specify the ideal structure of a tax law, so deciding which provisions are special or preferential is necessarily a matter of judgment, over which there is often much debate. See, e.g., Boris I. Bittker, Accounting for Federal “Tax Subsidies” in the National Budget, 22 NATIONAL TAX JOURNAL 244 (1969); Stanley S. Surrey & William F. Hellmuth, The Tax Expenditure Budget B
percent of total expenditures.\textsuperscript{82} To be sure, the administrative expenses associated with
distributing disability benefits or means-tested benefits, as opposed to universal benefits are
significantly higher. For example, the administrative expenses for the U.S. Social Security
disability program were 2.3 percent of total expenditures in 2009,\textsuperscript{83} meanwhile, the
administrative costs associated with the U.S. Supplemental Nutrition Assistance Program
(SNAP, previously known as food stamps) run around 15.8 percent of benefits issued.\textsuperscript{84}

Of course, taxing authorities are also fairly efficient at dealing with millions of
individuals, at least when it comes to collecting taxes. For example, in fiscal year 2008, the
Internal Revenue Service (IRS) handled more than 250 million tax returns and collected more
than $2.3 trillion in taxes, all while spending an average of just 50 cents for each $100 of
revenue.\textsuperscript{85} Each year, the IRS processes some 142 million individual income tax returns—
claiming more than 282 million personal exemptions.\textsuperscript{86} That puts the IRS in direct contact with
nearly the entire population of the United States (310 million in 2010).\textsuperscript{87} Also of note, 22.3

\textsuperscript{82} BOARD OF TRUSTEES, FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND FEDERAL DISABILITY INSURANCE
TRUST FUNDS, \textit{supra} note 38, at 23, 32, 53.
\textsuperscript{83} Id. at 32.
\textsuperscript{84} Julia Isaacs, \textit{The Costs of Benefit Delivery in the Food Stamp Program: Lessons From a Cross-Program Analysis}
vi, 8 (United States Department of Agriculture Contractor and Cooperator Report No. 29, 2009),
\url{http://www.brookings.edu~/media/Files/rc/reports/2008/03_food_stamp_isaacs/03_food_stamp_isaacs.pdf}.
\textsuperscript{85} INTERNAL REVENUE SERVICE, \textit{DATA BOOK}, 2009 (March 2010), at 4 (table 23), 66 (table 29).
\textsuperscript{86} INTERNAL REVENUE SERVICE, \textit{INDIVIDUAL INCOME TAX RETURNS} 2008 (IRS Publication No. 1304, 2010), at 89
(table 2.3).
\textsuperscript{87} According to the U.S. Census Bureau, the resident population of the United States projected to August 13, 2010,
at 17:21 UTC (EST+5) was 309,980,744. U.S. Census Bureau, \textit{U.S POPClock Projection},
\url{http://www.census.gov/population/www/popclockus.html}.
million individual income tax returns claimed the earned income tax credit for the 2008 tax year, and 26.0 million claimed the child tax credit.\textsuperscript{88}

Dependent care and health care benefits, too, could be provided either through social welfare programs or through tax expenditures. The United States, for example, offers both child care financial assistance for certain low-income families and a more widely utilized dependent care tax credit.\textsuperscript{89}

The United States also uses both appropriations and tax breaks for health care.\textsuperscript{90} In addition to Medicare and Medicaid, the current exclusion for employer contributions for medical insurance premiums and medical care is one of the largest tax expenditure (a $160-billion in Fiscal Year 2010).\textsuperscript{91} Pertinent here, President Barack Obama’s new national health care legislation provides relies heavily on new tax credits to help individuals and small employers pay for health care coverage.\textsuperscript{92}

\textsuperscript{88} INTERNAL REVENUE SERVICE, INDIVIDUAL INCOME TAX RETURNS 2008, supra note 86, 2, at 8-9 (table A).
\textsuperscript{89} FORMAN, MAKING AMERICA WORK, supra note 18, at 170-71.
\textsuperscript{90} Id. at 243-61.
\textsuperscript{91} EXECUTIVE OFFICE OF THE PRESIDENT AND OFFICE OF MANAGEMENT AND BUDGET, supra note 81, at 209, 211 (table 16-1).
All in all, social welfare benefits can be efficiently distributed by either a social welfare agency or a taxing authority. These days, however, the pendulum is swinging towards refundable tax credits and away from social welfare agencies. It turns out that, in many countries, it is easier to enact new tax expenditures than new spending programs. For example, in the United States, new tax credits and other tax expenditures are treated as tax cuts—and everyone likes tax cuts; meanwhile, new welfare programs are always scored as new spending. Not surprisingly, over the past few decades, tax credits and other tax expenditures have grown dramatically as a percentage of the U.S. gross domestic product, and these now represent a very large part of U.S. government spending.

B. HIGH MARGINAL TAX RATES

Another problem that policymakers need to be sensitive to is the problem of high marginal tax rates. Particular attention needs to be paid to the coordination of tax systems with other transfer programs as it is the cumulative marginal tax rates on the earnings of low-wage workers that will affect their decisions about labor supply and work effort. So it is not enough

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93 See also David A. Weisbach & Jacob Nussim, The Integration of Tax and Spending Programs, 113 YALE LAW JOURNAL 955 (2004); Peter Haan & Katharina Wrohlich, Optimal Taxation: The Design of Child Related Cash- and In-Kind-Benefits (Bonn, Germany: Institute for the Study of Labor (IZA) Discussion Paper No. 3128, October 2007); Marjorie E. Kornhauser, Cognitive Theory and the Delivery of Welfare Benefits, 40(2) LOYOLA UNIVERSITY CHICAGO LAW JOURNAL 253 (Winter 2009).


96 Work disincentives can be especially large when redistribution “takes the form of paying subsidies to people who are not working.” ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, GROWING UNEQUAL? INCOME DISTRIBUTION AND POVERTY IN OECD COUNTRIES, supra note 4, at 306.
just to keep the tax system’s marginal tax rates low; the cumulative effective marginal rates that result from the combined imposition of taxes and benefit-reductions must be kept low.

For example, in the United States, a 2004 report by the House Committee on Ways and Means identified 85 programs that provide income-tested welfare benefits to low-income families. To keep costs down, virtually every one of these programs phases benefits out as family income increases. Unfortunately, these phase-outs often combine with income and payroll taxes to subject beneficiaries to confiscatory tax rates. See Figure 2.

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97 U.S. House of Representatives, Committee on Ways and Means, 2004 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means (2004), K-10—K-12.
98 Adam Carasso & C. Eugene Steuerle, The True Tax Rates Confronting Families with Children, 109 TAX NOTES 253 (October 10, 2005). At some points between $10,000 and $25,000 of income, the cumulative tax rate on a single parent can even exceed 100 percent. Daniel N. Shaviro, The Minimum Wage, the Earned Income Tax Credit, and Optimal Subsidy Policy, 64(2) UNIVERSITY OF CHICAGO LAW REVIEW 405 (1997). See also Laurence J. Kotlikoff & David Rapson, Does it pay, at the margin, to work and save? Measuring effective marginal tax rates on Americans’ labor supply and saving (National Bureau of Economic Research Working Paper No. 12,533, 2006). See also Poschmann, supra note 57 (discussing high cumulative marginal tax rates in Canada); Bibbee, supra note 63, at 24 (finding that marginal effective tax rates can reach 100 percent for families on social assistance in Canada).
The solution to the problem of high cumulative tax rates is to better integrate a country’s tax and transfer systems.\textsuperscript{99} To be sure, there are tremendous obstacles to achieving coordination, let alone integration, among current social welfare programs and tax provisions. The sheer number of agencies, organizations, and legislative committees involved in administering and overseeing the tax and transfer systems in most countries makes even simple coordination efforts difficult, let alone synchronization and integration efforts. Still, in the short-term, policymakers need to identify overlapping programs and work to achieve better coordination among them. And in the long-run, policymakers should struggle to achieve a fully integrated tax and transfer system.

C. MARRIAGE PENALTIES

The interaction of a country’s tax and transfer system with marriage can also present problems. Because marriage results in a pooling of income by a husband and wife, marriage can often result in “marriage penalties” and “bonuses” that can affect marriage incentives and family well-being. There is probably very little need overall to worry about the occasional marriage bonus for low-income welfare recipients, as marriage is often a way out of poverty. On the other hand, policymakers should be concerned about marriage penalties. Promoting marriage—or, at least, not discouraging it—could help reduce poverty and promote greater economic justice.

In the United States, for example, marriage plays a significant role in both the tax and transfer systems. Within the tax system, some of the largest marriage bonuses and penalties are those associated with the earned income tax credit. In 2010, for example, if a woman with no income and two children marries a childless man with $15,000 of earned income, the couple will get a marriage bonus or more than $7,000, as together they will now be eligible for an earned income tax credit of $5,036, two $1,000 child tax credits, and an $800 making work pay tax credit (up from just $400). On the other hand, if a single father with two children and $15,000 of earnings marries a single mother with two children and $15,000 of earnings, the couple will face a hefty marriage penalty. Before that marriage, each individual could claim a $5,036 earned


101 See also Claude D. Renshaw & Ken Milani, Penalizing Marriage: A Persistent Problem for the Working Poor, TAX NOTES, October 19, 2009, at 329.
income tax credit; but after the marriage, the couple is eligible for a single earned income tax credit of just $3,867.102

Perhaps the best way to solve the problem of marriage penalties and bonuses is to base tax rates, tax credits, and welfare benefits on individual income rather than family income. In the United States, for example, there is generally no marriage penalty associated with the new making work pay tax credit. Single workers can typically a $400 credit, while married couples can typically claim an $800 credit.103

D. ADMINISTRATIVE PROBLEMS

Refundable tax credit regimes also present a variety of administrative problems.

1. Participation, Noncompliance, and Simplification

Taxing authorities want to maximize participation by eligible beneficiaries while minimizing overpayments. The complexity of most refundable tax credit regimes, however, works against achieving either result. Moreover, as collecting taxes is the core mission of taxing authorities, they can find it awkward to instead be called upon to make payments that exceed the amount of taxes owed. In short, both participation and noncompliance are problems for tax credit regimes.104

With respect to participation, for example, the U.S. Government Accounting Office found that some 4.3 million eligible households fail to claim the earned income tax credit in a

102 $3,867.48 = $5,666 - .2106 \times ($30,000 - $21,460).
103 On the other hand, there can be a small marriage bonus. For example, when a single worker marries a nonworker, the making work pay tax credit can increase from $400 before marriage to $800 after marriage. To avoid both marriage penalties and bonuses, the credit should be structured as a $400 per worker credit. High-income couples can also face marriage penalties in the phase-out range for the credit.
typical year. On the other hand, with respect to noncompliance, the U.S. Treasury Inspector General for Taxation Administration estimates that approximately 25 percent of earned income tax credit payments are attributable to overclaims ($10 billion to $12 billion erroneous earned income tax credit payments out of $43.7 billion total claims for the 2006 tax year). Needless to say, even before the American Recovery and Reinvestment Act of 2009 expanded the universe of refundable tax credits, the IRS faced significant challenges in the administration of refundable tax credits. The Act exacerbated those challenges, and it is no wonder that the IRS National Taxpayer Advocate recently highlighted the administrative challenges posed by refundable tax credits in her annual report to the U.S. Congress.

Obviously, simplification of a country’s refundable tax credit regime would greatly improve both participation and compliance. In particular, it would make sense to eliminate

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106 Treasury Inspector General for Taxation Administration, The Earned Income Tax Credit Program Has Made Advances; However, Alternatives to Traditional Compliance Methods Are Needed to Stop Billions of Dollars in Erroneous Payments (Reference Number 2009-40-024, December 31, 2008), at 1, http://www.treas.gov/tigta/auditreports/2009reports/200940024fr.pdf. To be sure, not all overclaims are due to fraud. The earned income tax credit eligibility rules are complicated, and approximately one-third of earned income tax credit claimants each year are intermittent or first-time claimants who, no doubt, have difficulty understanding the complicated eligibility rules. Id. at 2. See also Leslie Book, The IRS’s EITC Compliance Regime: Taxpayers Caught in the Net, 81(2) OREGON LAW REVIEW 351 (Summer 2002); Note, John J. Infranca, The Earned Income Tax Credit as an Incentive to Report: Engaging the Informal Economy through Tax Policy, 83 NEW YORK UNIVERSITY LAW REVIEW 101 (April 2008). To be sure, both refundable tax credits and welfare benefits provide opportunities for fraud. See, e.g., Martin Halla & Friedrich G. Schneider, Taxes and Benefits: Two Distinct Options to Cheat on the State? (Bonn, Germany: Institute for the Study of Labor (IZA) Discussion Paper No. 3536 June 2008).
107 Pertinent here, in 2003, the IRS announced plans to require precertification of certain individuals claiming the earned income tax credit. See, e.g., U.S. General Accounting Office, Earned Income Credit: Qualifying Child Certification Test Appears Justified, but Evaluation Plan Is Incomplete (GAO-03-794, 2003); Christine Scott, The Earned Income Tax Credit (EITC): Legislative Issues 3 (Congressional Research Service, Report for Congress No. RS21477, updated July 17, 2007); Jennifer Bird-Pollan, Who’s Afraid of Redistribution? An Analysis of the Earned Income Tax Credit, 74(2) MISSOURI LAW REVIEW 251, 276-77 (Spring 2009). Under the precertification plan, before filing their returns, certain “higher risk” taxpayers would have been required to prove their relationships with any children they were claiming for the earned income tax credit and the residency of those children. The precertification initiative generated a lot of criticism and never got past the pilot study stage. Marguerite Casey Foundation, The Earned Income Tax Credit: Analysis and Proposals for Reform, 109 TAX NOTES 1669, 1673-74 (December 26, 2005).
complex eligibility requirements and simplify or eliminate the income phase-outs. Simplification of a country’s tax credit regime will probably work best if it is coordinated with simultaneous simplification of the country’s tax system, at least simplification for low- and moderate-income taxpayers.\textsuperscript{109}

In that regard, many analysts suggest moving towards having just two principal types of refundable tax credits: a family tax credit and a worker tax credit.\textsuperscript{110} Elsewhere, I have suggested that we could replace most of the U.S. tax and transfer system with an even simpler system—one with a \textit{per person} tax credit and a \textit{per worker} tax credit, and no phaseouts.\textsuperscript{111} For example, imagine a simple, integrated tax and transfer system with $2,000 per person refundable tax credits, $2,000 per worker refundable earned income credits (computed as 20 percent of the

\begin{footnotesize}
\begin{enumerate}
\item[	extsuperscript{108}] NATIONAL TAXPAYER ADVOCATE, REPORT TO CONGRESS: FISCAL YEAR 2010 OBJECTIVES xix-xxiii (2009); see also Nicole Duarte, Refundable Credits Force IRS to Implement Social Policy, 123 TAX NOTES 988 (May 26, 2009).
\item[	extsuperscript{110}] See, e.g., PRESIDENT’S ADVISORY PANEL ON FEDERAL TAX REFORM, SIMPLE, FAIR, & PRO-GROWTH: PROPOSALS TO FIX AMERICA’S TAX SYSTEM 63-64 (2005) (combining six of the current credits and deductions aimed at families into two credits: a family credit and a work credit); Bird-Pollan, supra note 107, at 281-83; Sam Young, Conversation: Leonard E. Burman, 124 TAX NOTES 325, 327-28 (July 27, 2009). For other recent tax credit reform proposals, see, e.g., SAUL D. HOFFMAN & LAURENCE S. SEIDMAN, HELPING WORKING FAMILIES: THE EARNED INCOME TAX CREDIT (2002); Lily L. Batchelder, Fred T. Goldberg, Jr., & Peter R. Orszag, Efficiency and Tax Incentives: The Case for Refundable Tax Credits, 59 STANFORD LAW REVIEW 23 (2006); Marguerite Casey Foundation, supra note 107; Daniel P. Gitterman, Lucy S. Gorham, & Jessica L. Dorrance, Expanding the EITC for Single Workers and Couples Without Children: Tax Relief for All Low-Wage Workers, 15 GEORGETOWN JOURNAL ON POVERTY LAW & POLICY 245 (Summer 2008); Gordon Berlin, Transforming the EITC to Reduce Poverty and Inequality, PATHWAYS 28 (Stanford Center for the Study of Poverty and Inequality, Winter 2009); Laura Wheaton & Elaine Sorenson, Extending the EITC to Noncustodial Parents: Potential Impacts and Design Considerations (Urban Institute, May 23, 2009), http://www.taxpolicycenter.org/publications/url.cfm?ID=411906.
\end{enumerate}
\end{footnotesize}
first $10,000 of earned income), and two tax rates: 20 percent of the first $50,000 of income and 35 percent on income above $50,000. Assume further that there is no phaseout of either the personal tax credits or the worker credits. To keep tax rates this low, the system would not have many other credits or deductions.

Table 11 shows how such an integrated tax and transfer system would work for single parents with two children making from $0 to $200,000, and Figure 3 illustrates how this system would affect those families’ post-tax, post-transfer incomes. For example, a single parent earning $10,000 a year would be entitled to three $2,000 personal tax credits and a $2,000 worker credit. She would owe $2,000 in taxes on her $10,000 of pre-transfer earnings, and that would leave her with a $16,000 disposable income after taxes and transfers.

Table 11. How an Integrated Tax and Transfer System Would Affect a Single Parent with Two Children ($2,000 Personal Tax Credits, $2,000 per Worker Credits, and 20 and 35 Percent Tax Rates)

<table>
<thead>
<tr>
<th>Pre-transfer earnings</th>
<th>Plus personal tax credits</th>
<th>Plus worker credit</th>
<th>Less tax imposed</th>
<th>After-tax income</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$6,000</td>
<td>0</td>
<td>0</td>
<td>$6,000</td>
</tr>
<tr>
<td>$5,000</td>
<td>$6,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$11,000</td>
</tr>
<tr>
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<td>$16,000</td>
</tr>
<tr>
<td>$20,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$4,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>$30,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$6,000</td>
<td>$32,000</td>
</tr>
<tr>
<td>$40,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$8,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>$50,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$10,000</td>
<td>$48,000</td>
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<tr>
<td>$100,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$27,500</td>
<td>$80,500</td>
</tr>
<tr>
<td>$150,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$45,000</td>
<td>$113,000</td>
</tr>
<tr>
<td>$200,000</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$62,500</td>
<td>$145,500</td>
</tr>
</tbody>
</table>

111 FORMAN, MAKING AMERICA WORK, supra note 18, at 286-87.
To be sure, some additional tax credits would probably be needed to help low-wage families. In the United States, for example, it would make sense to expand the current dependent care tax credit and make it refundable. Child care costs are a challenge for low-income parents who are trying to work, and the tax system could be used to reimburse low-income parents for 50 percent or even 80 percent of their child-care costs. Tax credits can also be used to help low-income families pay for health care. In that regard, the Health Coverage Tax Credit already pays up to 80 percent of qualified health insurance premiums for certain displaced workers.

112 Id. at 170-71.
workers, and the President Barack Obama’s new national health care legislation provides new tax credits for individuals and for small businesses.

Ideally, all these refundable tax credits would be paid out on a monthly basis. Each individual would present something like the current IRS Form W-4, Employee’s Withholding Allowance Certificate, to her employer—or to a bank. Employees would then receive advance payment of their credits from their employers in the form of reduced withholding, while other beneficiaries would have their payments directly deposited into their bank accounts.

This comprehensive tax and transfer system would be simpler than the current system, it would encourage low-skilled workers to enter and remain in the workforce, and it would minimize marriage penalties. And it would make it easier to ensure that that low-income families and individuals actually get the benefits they need and without any welfare stigma or loss of privacy.

2. Timing and Timeliness of Payments

Another problem with tax credit regimes has to do with the timing and timeliness of benefit payments. Ideally, a transfer system should provide families with income assistance when they need it, for example, when another child is born or when a family’s earnings decline. Responding to such changes is inherently difficult for tax systems, as they are usually based on annual filing requirements. Full responsiveness would probably require monthly or weekly income-testing.

114 See supra note 92.
115 Whiteford, Mendelson, & Millar, supra note 67, at 21-22.
At the outset, countries need to make decisions about the responsiveness of benefits to changes in family income and status. Generally, this turns on whether benefits are based on current income and family status or on the prior year’s income and family status. In Canada, for example, child tax benefits for the current year are based on the prior year’s income and family status: filing a return thus determines the benefits that are paid periodically throughout the following year. The system has virtually no overpayments and very low compliance costs for beneficiaries, but benefits can be seriously out of date. According to Whiteford, Mendelson, & Millar, “Canadians have accepted the one large trade-off of a lengthy time lag to achieve an extraordinary simple system.”116 On the other hand, in Australia, the United Kingdom, and the United States, tax credits can be adjusted to reflect current circumstances, but that makes these systems more complicated, and many families receive overpayments that must be recovered somehow.

Countries also need to decide how and when to distribute benefits. Payments can be made annually as lump-sum refunds or periodically throughout the year. Pertinent here, the periodic payment of family allowances makes it easier for families to pay their current living expenses. Periodic payments of work-conditioned tax credits also provide better work incentives than lump-sum payments. On the other hand, periodic payment systems are more complicated, especially if annual reconciliation can result in families receiving overpayments that must be recovered.

Australia, the United Kingdom, and Canada all have systems that successfully distribute benefits to most recipients through periodic payments made throughout the year. And, as

116 Id. at 21.
mentioned, the Canadian system largely avoids the problems of overpayments by basing benefits on prior-year income and family status.

For years, the United States also had an advance payment mechanism, but hardly anyone used it.\textsuperscript{117} For example, the U.S. Government Accountability Office found that only about 3 percent of those eligible for advance payment received it during the 2002 through 2004 tax years—about 514,000 out of the 17 million potentially eligible individuals each year.\textsuperscript{118} Moreover, the United States had serious administrative problems with those relatively few families that did use the advance payment mechanism.\textsuperscript{119} In any event, in August of 2010, Congress repealed the advance payment mechanism.\textsuperscript{120} Presumably, revenue considerations were at least as important as administrative considerations as the repeal is projected to generate $1.1 billion in revenue over the next ten years.\textsuperscript{121}

\textsuperscript{117} Steve Holt, \textit{The Earned Income Tax Credit at Age 30: What We Know} 6 (Brookings Institution 2006), \url{http://www.brookings.edu/reports/2006/02childrenfamilies_holt.aspx}.


\textsuperscript{119} In that regard, the U.S. Government Accountability Office found that around 80 percent of earned income tax credit advance payment recipients failed to comply with at least one of the program’s requirements during the years 2002 through 2004. Almost 20 percent that had an invalid Social Security number, and 40 percent failed to file the required tax return. U.S. Government Accountability Office, \textit{Advance Earned Income Tax Credit: Low Use and Small Dollars Paid Impede IRS’s Efforts to Reduce High Noncompliance}, \textit{supra} note 118.

\textsuperscript{120} The Education Jobs and Medicaid Assistance Act of 2010, Public Law No. 111-226, § 219 (2010).

Another problem with tax credit regimes has to do with the complexity of the tax return process needed to claim refundable tax credits. In the United States, for example, almost everybody’s eyes glaze over at the mention of taxes, and more than half of all taxpayers pay someone to prepare their income tax returns, including around 70 percent of earned income tax credit recipients.\textsuperscript{122} Earned income tax credit beneficiaries typically have to pay $100 or more to commercial preparers in order to file returns to get their benefits.

Governments need to make it easier for low-income individuals and families to receive their benefits. Simplifying tax returns and providing free tax preparation software or on-line filing capabilities could help, but, perhaps, governments should actually help low-income individuals and families prepare and file their tax returns, just like welfare offices typically do for welfare beneficiaries.

\textbf{E. OTHER TAX CREDIT DESIGN ISSUES}

\textit{1. Adequacy}

Ultimately, every country needs to decide how much inequality and poverty it will tolerate. As Table 1 showed, before taxes and transfers, virtually all of the OECD countries have significant levels of both income inequality and poverty. Through various mixes of taxes, tax credits, and social welfare programs, every country reduced its levels of inequality and poverty,

but most should strive for even greater reductions. For example, it could make sense to tie the level of refundable tax credits to the poverty level, the minimum wage, and inflation.\footnote{See, e.g., Marguerite Casey Foundation, \textit{supra} note 107, at 1,680.}

2. \textit{Taxation of Benefits}

Another issue for policymakers involves the tax treatment of benefits. For example, some countries include benefits in income for tax purposes, and others do not.\footnote{See, e.g., Organisation for Economic Co-Operation and Development, \textit{Tax treatment of benefits, 2005}, available at \url{http://www.oecd.org/document/3/0,3343,en_2649_34637_39617987_1_1_1_1,00.html}.} In the United States, for example, most welfare benefits are excluded from income.\footnote{See, e.g., Jonathan Barry Forman, \textit{The Income Tax Treatment of Social Welfare Benefits}, 26 \textit{University of Michigan Journal of Law Reform} 785 (1994); Theodore P. Seto & Sande Buhai, \textit{Taxes and Disability: Ability to Pay and the Taxation of Difference}, 154 \textit{University of Pennsylvania Law Review} 1053 (2006); Charlotte Crane, \textit{Government Transfer Payments and Assistance: A Challenge for the Design of Broad-based Tax}, \textit{Southern Methodist University Law Review} 589 (Spring 2006); Robert W. Wood, \textit{Updating General Welfare Exception Authorities}, 123 \textit{Tax Notes} 1443 (June 22, 2009).} If benefits are taxable, policymakers need to be careful to limit the cumulative effective marginal rates that result from the combined imposition of taxes and benefit-reductions.

V. \textbf{CONCLUSION}

In conclusion, I believe that the governments can and should intervene in the free market to reduce inequality and poverty. In the words of James K. Galbraith, “The economy is a managed beast. It was managed in such a way that this was the result. It could have been done differently.”\footnote{\textit{James K. Galbraith, Created Unequal: The Crisis in American Pay} 266 (1998), 167.} Refundable tax credits have proven that they can be powerful tools for reducing inequality and poverty. All in all, however, governments need to simplify their tax credit regimes, simplify the process for claiming those tax credits, and increase their outreach to eligible beneficiaries.