

# Tax Policy Center

Urban Institute and Brookings Institution

## MEASURING INCOME FOR DISTRIBUTIONAL ANALYSIS

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### ABSTRACT

This document describes the income measure the Tax Policy Center (TPC) uses to analyze the distribution of federal taxes. TPC's income measure, which we call "expanded cash income" (ECI), is a broad measure of pre-tax income. We use it both to rank tax units in distribution tables and to calculate effective tax rates. ECI equals federal adjusted gross income (AGI) plus various income sources that are either excluded or deducted from AGI, including 1) excluded health, retirement, and other employee fringe benefits, 2) tax-exempt interest, 3) non-taxable pension and retirement income, 4) above-the-line adjustments, 5) cash and cash-like transfer payments, and 6) the employer share of payroll taxes and imputed corporate income tax liability. Compared to narrower measures of income—such as AGI or cash income (the income measure used previously by TPC)—ECI provides a more accurate ranking of taxpayers into income groups and better estimates of the overall burden of the federal tax system and the effect of tax policy changes.

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## MEASURING INCOME FOR DISTRIBUTIONAL ANALYSIS

This document describes the income measure the Tax Policy Center (TPC) uses to analyze the distribution of federal taxes. The appropriate measurement of income is important in distributional analysis for several reasons:

1. Ranking taxpayers. Standard distributional tables rank taxpayers based on annual income as a proxy for their economic status and ability to pay taxes.
2. Measuring tax burdens. The overall burden of the tax system (excluding indirect economic costs) can be summarized in the effective tax rate (ETR), the amount of taxes paid measured as a percentage of income.
3. Evaluating the effects of tax policy changes. Changes in taxes are often shown as a percentage of pre-tax income or as a percentage change in after-tax income.

Conceptually, the income measure used to evaluate tax policy should closely align with a comprehensive definition that corresponds with a taxpayer's economic well-being before the effect of any tax policies.<sup>1</sup> An income measure that understates economic income overstates effective tax rates and the burden of tax policy changes, measured either as the change in ETR or the percentage change in after-tax income. If omitted sources of income vary across households, taxpayers may be incorrectly ranked and calculated tax burdens will not accurately reflect the true distribution, either within or across income groups.

In the initial versions of the tax model, TPC used adjusted gross income (AGI) as the income classifier because it was readily available on income tax returns. But AGI has serious deficiencies. It is far from comprehensive—causing many households to be mischaracterized—and its definition can change with changes in tax law. Beginning in 2004, most TPC tables reported tax burdens relative to cash income, a broader measure of income equal to AGI plus 1) above-the-line adjustments, 2) employee contributions to tax-preferred retirement accounts, 3) tax-exempt interest, 4) nontaxable Social Security and pension income, 5) cash transfers, 6) the employer share of payroll taxes and 7) imputed corporate tax liability.

Our new income measure is broader than cash income. The new measure, which we call “expanded cash income” or ECI, equals cash income plus 1) tax-exempt employee and employer contributions to health insurance and other fringe benefits, 2) employer contributions to tax-preferred retirement accounts, 3) income earned within retirement accounts, and 4) food stamps. Table 1 offers a detailed comparison of AGI, cash income, and ECI.

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<sup>1</sup> Many annual economic income measures are based on the Haig-Simons definition of income—equal to current consumption plus the change in net wealth. However, data limitations and administrative constraints on the tax system (e.g., difficulty in including in the tax base the imputed rent on owner-occupied housing and capital gains on an accrual basis) make a full construction of Haig-Simons income problematic.

The primary motivation for adopting this broader income measure is to characterize differences in the economic status of individual taxpayers more completely and accurately. By construction, income concepts that closely align with current tax rules—such as AGI—understate the relative economic well-being of taxpayers who benefit most from some major tax preferences. This is especially important in the context of evaluating more comprehensive tax reform proposals that contemplate taxing income sources that are not included in narrower measures (e.g., proposals to tax some or all employer contributions to health insurance or to reduce the amount of tax-free income earned within qualified retirement plans by placing tighter limits on contributions).



**Table 1**  
**Components of Adjusted Gross Income, Cash Income, and Expanded Cash Income**

Source of Income	Included in:		
	AGI	Cash Income	ECI
<i>Compensation</i>			
Wages and salaries	X	X	X
Employee contributions to retirement plans		X	X
Employer contributions to retirement plans			X
DB pension accruals			X
Employer-paid fringe benefits			X
Employer's share of payroll taxes		X	X
<i>Self-Employment and Flow-Through Income</i>			
Business/Farm income or loss (Schedules C & F)	X	X	X
Rents, royalties, and income from trusts	X	X	X
Partnership income or loss	X	X	X
S corporation income or loss	X	X	X
<i>Investment Income</i>			
Taxable interest	X	X	X
Tax-exempt interest		X	X
Dividends	X	X	X
Net capital gains	X	X	X
Inside buildup within DC retirement plans			X
<i>Retirement Income</i>			
Taxable IRA distributions	X	X	X
Taxable pension distributions	X	X	X
Nontaxable pension distributions		X	X
<i>Other Taxable Income</i> <sup>1</sup>	X	X	X
<i>Transfer Payments</i>			
Taxable Social Security benefits	X	X	X
Nontaxable Social Security benefits		X	X
Unemployment compensation	X	X	X
Supplemental Social Security (SSI)		X	X
Temporary Assistance for Needy Families (TANF)		X	X
SNAP benefits (formerly food stamps)			X
Other transfer payments <sup>2</sup>		X	X
<i>Corporate Income Tax Liability</i>		X	X

(1) Includes alimony received and other sources of income reported on individual tax returns.

(2) Includes disability insurance, child support, workers' compensation, energy assistance, and veteran benefits.

## Components of Expanded Cash Income

The components of TPC's expanded cash income measure include:

### Compensation

The primary source of income for most taxpayers is current compensation for labor services, which is comprised of:

*Taxable wages and salaries.* Wages and salaries reported on federal tax returns exclude employee and employer contributions to qualified retirement plans, employer contributions to health insurance premiums (and the employee portion if paid through a Section 125 cafeteria plan), and certain other employee fringe benefits (e.g., flexible spending accounts).

*Employee contributions to retirement plans.* Employees may contribute a portion of current wages to qualifying defined contribution (DC) retirement plans (such as 401(k) and 403(b) plans). These contributions are included in wages subject to payroll taxes, but (except for contributions to Roth plans) are excluded from taxable income.

*Employer contributions to retirement plans.* Employer contributions to defined contribution retirement accounts are excluded from both taxable income and the wage base for payroll taxes.

*Defined benefit pension accruals.* The annual increase in the present discounted value of future defined benefit (DB) pension benefits associated with an additional year of service is excluded from both taxable income and the wage base for payroll taxes.

*Employer contributions for health insurance and other fringe benefits.* Health insurance premiums paid by employers (and by employees with pre-tax wages) and other fringe benefits offered under Section 125 cafeteria plans are excluded from both taxable income and the wage base for payroll taxes.

*Employer share of payroll taxes.* Employer paid payroll taxes are part of pretax employee compensation.

### Self-Employment and Flow-Through Income

Certain business and other income is passed through to and reported by taxpayers on their individual tax returns. This includes 1) net income from a business or profession operated by a single person (reported on Schedule C), 2) net income from a farm (Schedule F), 3) net income from a partnership or S corporation (Schedule E, Part II), and 4) other flow-through income such as rents, royalties, and income from estates and trusts (Schedule E).

### Investment Income

Investment income includes both taxable and tax-exempt interest, dividends, and net realized capital gains. Consistent with their tax treatment, capital gains are measured on a realization basis (i.e., when the asset is sold) and net losses are included only to the extent the tax system allows them.<sup>2</sup> In addition, ECI includes the annual return on assets held in defined contribution retirement accounts (see discussion below).

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<sup>2</sup> Losses that are carried forward are reflected in AGI (and ECI) in the year they are used.

### Retirement Income

Current retirement income includes taxable distributions from individual retirement accounts (IRAs) and both taxable and nontaxable distributions from defined benefit pensions and defined contribution retirement accounts.<sup>3</sup>

### Other Taxable Income

ECI includes all other sources of income reported on individual tax returns and included in AGI.

### Transfer Payments

Transfer payments consist of Social Security benefits (some of which are included in AGI), unemployment benefits (which are included in AGI), and the following nontaxable cash or cash-equivalent benefits: 1) Supplemental Social Security (SSI), 2) Temporary Assistance for Needy Families (TANF), 3) Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), 4) disability insurance, 5) child support, 6) workers' compensation, 7) energy assistance, and 8) veteran's benefits. Social Security benefits account for roughly 80 percent of total transfer payments included in ECI. Medicare, Medicaid, and other in-kind benefits are not included in ECI.

### Corporate Income Tax Liability

ECI is a pre-tax income concept, so it includes imputed corporate income tax liability. TPC allocates 60 percent of the corporate income tax burden in proportion to ownership of corporate equity (i.e., shareholders), 20 percent in proportion to all capital, and 20 percent in proportion to labor income. See Nunns (2012) for a thorough discussion of TPC's assumptions regarding the incidence of the corporate income tax.

Compensation is the largest source of income for all but the highest income group, accounting for roughly two-thirds of total ECI (Figure 1).<sup>4</sup> Transfer payments are an important income source for the bottom quintiles, but provide smaller shares of income for higher income groups. Business and investment income represent less than 10 percent of ECI for taxpayers in the bottom 80 percent of the income distribution, but more than 50 percent of income for taxpayers in the top 1 percent. Retirement income remains fairly constant as a share of income throughout most of the income distribution, accounting for slightly less than 10 percent of ECI for taxpayers between the 20<sup>th</sup> and 95<sup>th</sup> percentiles.

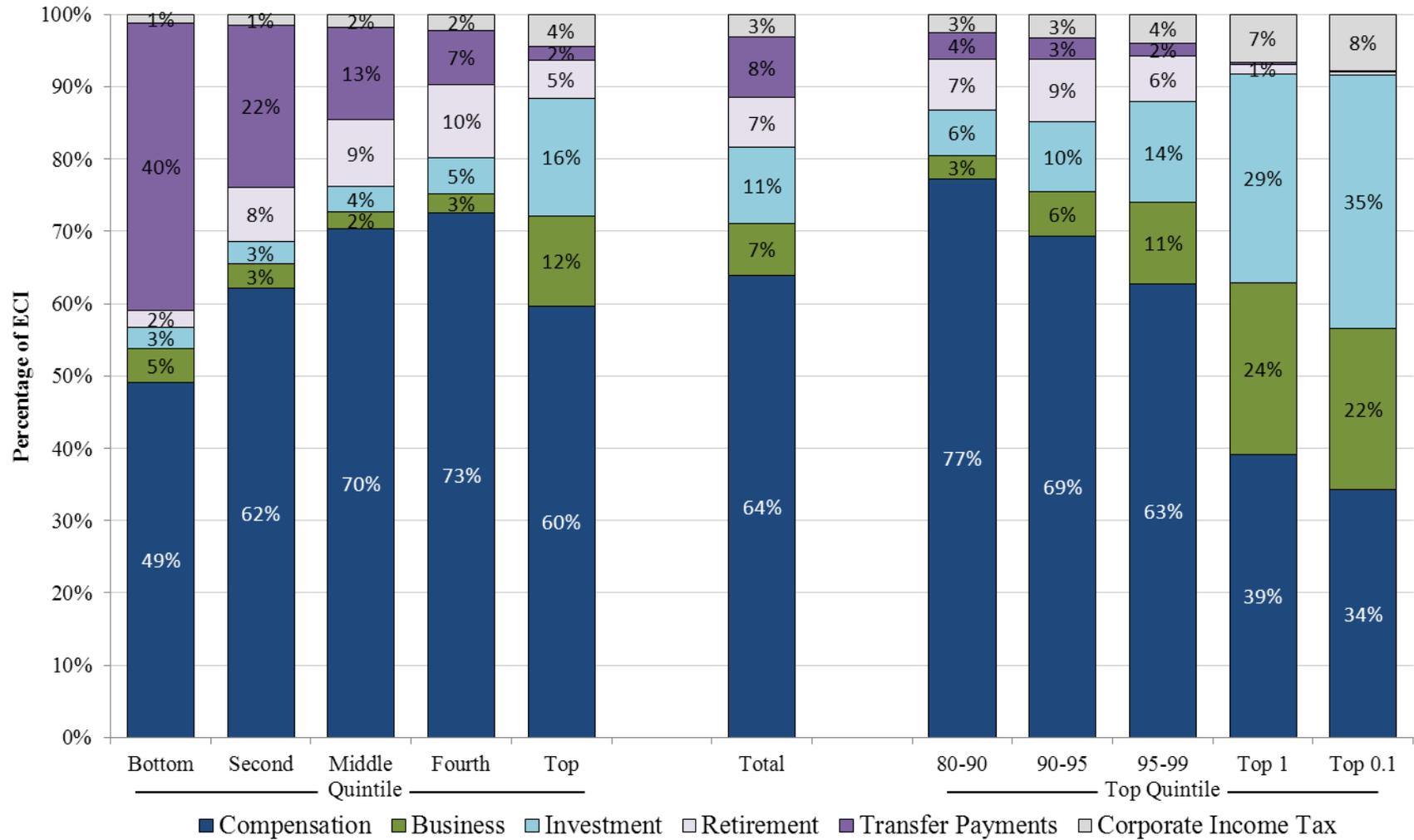
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<sup>3</sup> Nontaxable distributions reported on tax returns include some lump-sum transfers that should not be included in income (e.g., rollovers from a qualified employer plan to an IRA). TPC adjusts reported pension income to exclude such amounts.

<sup>4</sup> Appendix Tables A1 and A2 provide more detail on individual income sources and their distribution among income groups.



**Figure 1**  
Sources of Expanded Cash Income by Percentile, 2015



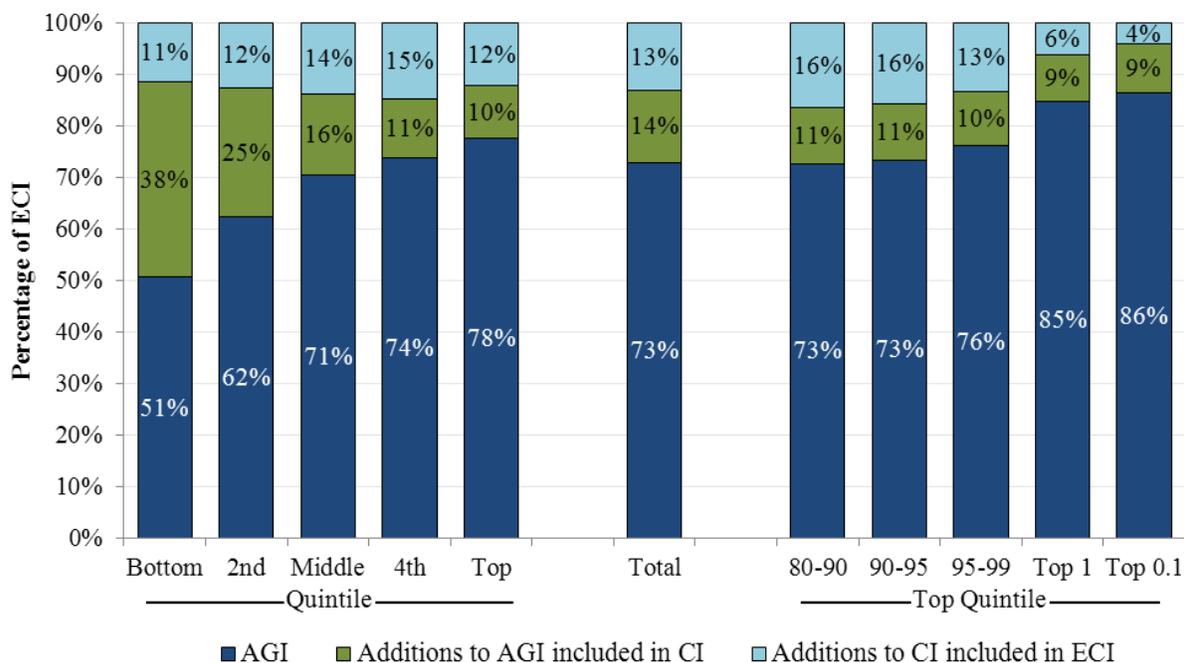
Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-1)

## Comparisons with Alternative Income Measures

The data tables and reports published by the Internal Revenue Service’s Statistics of Income Division (SOI) generally use AGI to classify taxpayers into income groups. Since the components of AGI are reported on tax returns, measurement of AGI is straightforward and accurate. Overall, AGI accounts for roughly three-fourths of ECI, although that ranges from just over 50 percent in the bottom quintile (due to that group’s disproportionate amount of untaxed Social Security and other transfer income as a share of ECI) to 85 percent in the top 1 percent of the income distribution (Figure 2).



**Figure 2**  
**Adjusted Gross Income, Cash Income, and Expanded Cash Income by Percentile, 2015**



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-1)

### Additions to Adjusted Gross Income included in Cash Income

Cash income (the income measure used previously by TPC) adds various other income sources reported on tax returns, but excluded from AGI, plus some income sources that must be imputed onto the tax data.<sup>5</sup> Cash income is equal to AGI plus:

- a) above-the-line adjustments to gross income
- b) tax-exempt interest
- c) nontaxable Social Security benefits
- d) nontaxable pension distributions

<sup>5</sup> See <http://www.taxpolicycenter.org/taxtopics/Model-Related-Resources-and-FAQs.cfm> for more detailed information on the TPC microsimulation model and the methods used to impute income sources not reported in publicly available tax data.

- e) employee contributions to tax-preferred retirement plans
- f) other cash government transfer payments (excluding SNAP)
- g) employer's share of payroll taxes
- h) imputed corporate tax liability

Additions to Cash Income included in Expanded Cash Income

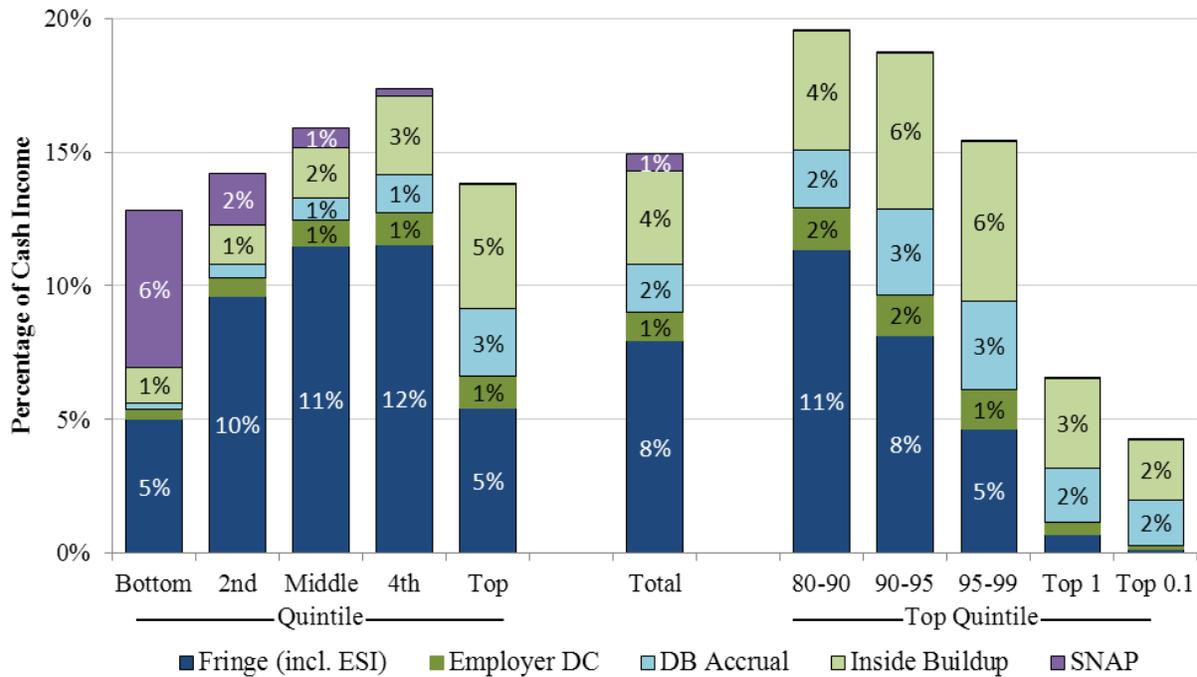
ECI is equal to cash income plus:

- a) excluded employer and employee contributions to health insurance premiums and other nonretirement fringe benefits
- b) employer contributions to tax-preferred retirement plans
- c) defined benefit pension accruals
- d) inside buildup within IRAs and DC retirement accounts
- e) SNAP benefits (formerly food stamps)

Overall, ECI is about 15 percent larger than cash income (Figure 3). More than half of the increase comes from employer-sponsored health insurance (ESI) and other fringe benefits. Income earned within IRAs and DC retirement accounts is more heavily concentrated in the upper part of the income distribution, especially between the 80<sup>th</sup> to 99<sup>th</sup> percentiles. While the addition of SNAP benefits is small overall, it represents a significant increase (6 percent) for the bottom quintile.



**Figure 3**  
**Additions to Cash Income Included in Expanded Cash Income by Percentile, 2015**



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-1)

## Conceptual Issues in the Definition of Expanded Cash Income

### Retirement Savings

Pensions and other forms of tax-preferred savings accounts complicate the measurement and allocation of income to individual taxpayers. Due to differential tax rules, economically similar savings behavior can result in different timing of both reported income and tax payments.

Front-loaded savings accounts (e.g., 401(k)s, 403(b)s, and traditional IRAs) exempt contributions and accumulations (inside buildup), but then tax subsequent distributions. Back-loaded savings accounts (e.g., Roth 401(k)s and Roth IRAs) offer no deduction for contributions, but all subsequent accumulations and distributions are excluded from taxable income. Most saving outside of qualified plans is made from after-tax income (i.e., there is no deduction for contributions) and subsequent accumulations are taxed (although some forms of income, such as capital gains, qualified dividends, and tax-exempt interest receive preferential tax treatment), but distributions from contributions made with after-tax dollars are exempt from tax.<sup>6</sup>

Tax treatment of retirement savings also varies under the payroll tax. Individual contributions are subject to payroll taxes whether saved in a front-loaded or back-loaded account or outside of a qualified retirement plan, and no payroll tax is assessed on distributions. Employer contributions to DC plans (and DB pension plans) are not subject to payroll taxes.

As an illustration, consider how four potential methods of measuring income would affect three otherwise identical taxpayers who wish to save \$100 of pretax compensation. Taxpayer A places the \$100 in a regular taxable account; taxpayer B utilizes a traditional IRA; and taxpayer C contributes to a Roth IRA. Assume that each taxpayer faces a constant tax rate of 25 percent in every year and earns a return on savings equal to the discount rate of 6 percent. Compensation is earned and saved in period  $t = 0$ , earnings accumulate in period  $t = 1$ , and all contributions and earnings are withdrawn in period  $t = 2$ . Income and tax liabilities of the three savers differ markedly under four alternative income concepts (Table 2).

Method 1: Method 1 follows the definition of AGI. Earnings deposited in taxable or back-loaded qualified retirement savings accounts are included in taxable income in the form of wages, while earnings placed in front-loaded qualified accounts (which are deductible from AGI) are excluded. This method also includes the investment income accrued within taxable accounts and taxable distributions from front-loaded accounts. Both the “cash income” measure used by the Office of Tax Analysis (OTA) at the U.S. Department of Treasury (Cronin, DeFilippes, Lin, 2012) and the Joint Committee on Taxation’s “expanded income” measure (JCT, 2012) use this method in the context of retirement saving accounts.

Method 2: Method 2 expands on the income concept in method 1 by including deductible contributions to front-loaded savings accounts in income. TPC’s cash income measure aligns with this income concept, as does the market income definition used by the Congressional Budget Office (CBO, 2012).

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<sup>6</sup> For some non-qualified deferred compensation plans, contributions are exempt, but both the inside buildup and distributions are taxable.

**Method 3:** Method 3 expands on the income concept in method 2 by also including the inside buildup within tax-preferred retirement accounts. Inside buildup in front-loaded accounts is calculated based on a net-of-deferred-tax (rather than nominal) balance, which captures the portion of the income that represents future tax liability, and maintains consistency with the treatment of back-loaded accounts per dollar of compensation. Method 3 was used previously by the U.S. Treasury Department's Office of Tax Analysis (Cronin, 1999) in its definition of Family Economic Income (FEI) and is used in TPC's expanded cash income measure.

**Method 4:** Method 4 expands on the income concept in method 1 by including inside buildup with tax preferred retirement accounts, but does not include contributions to front-loaded accounts.



**Table 2**  
**Income and Tax Paid on \$100 of Savings under Alternative Methods of Assigning**  
**Income from Tax-Preferred Retirement Accounts**

	Income			Tax Paid		
	A: Taxable Account	B: Front Loaded	C: Back Loaded	A: Taxable Account	B: Front Loaded	C: Back Loaded
Method 1: AGI						
t = 0	100.00	0.00	100.00	25.00	0.00	25.00
t = 1	4.50	0.00	0.00	1.13	0.00	0.00
t = 2	4.70	112.36	0.00	1.18	28.09	0.00
Present Value	108.43	100.00	100.00	27.11	25.00	25.00
Method 2: AGI plus Contributions						
t = 0	100.00	100.00	100.00	25.00	0.00	25.00
t = 1	4.50	0.00	0.00	1.13	0.00	0.00
t = 2	4.70	112.36	0.00	1.18	28.09	0.00
Present Value	108.43	200.00	100.00	27.11	25.00	25.00
Method 3: AGI plus Contributions and Inside Buildup						
t = 0	100.00	100.00	100.00	25.00	0.00	25.00
t = 1	4.50	4.50 *	4.50	1.13	0.00	0.00
t = 2	4.70	117.13	4.77	1.18	28.09	0.00
Present Value	108.43	208.49	108.49	27.11	25.00	25.00
Method 4: AGI plus Inside Buildup						
t = 0	100.00	0.00	100.00	25.00	0.00	25.00
t = 1	4.50	4.50 *	4.50	1.13	0.00	0.00
t = 2	4.70	117.13	4.77	1.18	28.09	0.00
Present Value	108.43	108.49	108.49	27.11	25.00	25.00

\* Inside buildup within front-loaded accounts is based on the net-of-deferred-tax (rather than nominal) balance.

In selecting an income concept for the treatment of retirement savings, TPC seeks to balance three competing goals, not all of which can be satisfied with any of the above methodologies:

#### *Consistency in Ranking Taxpayers*

In the initial period, all taxpayers have identical resources and therefore should be ranked equivalently. By excluding deductible contributions, however, methods 1 and 4 understate taxpayer B's income in that period relative to taxpayers A and C. Since methods 1 and 2 do not include the increase in value within the tax preferred accounts, they understate the economic status of taxpayers B and C relative to taxpayer A in each of the subsequent periods. Of course, by including both contributions to and distributions from front-loaded savings accounts, methods 2 and 3 "double count" income for taxpayer B when viewed over the entire life-cycle, since part of the distribution is simply a return of the original contribution.

#### *Life-cycle vs. Snapshot*

The appropriate measurement of income over the life-cycle could be achieved by including inside buildup along with either contributions or distributions (such as in method 4). However, TPC's distribution tables do not measure lifetime burdens, but rather show annual tax burdens for single year "snapshots" of the population. The double counting of retirement contributions in methods 2 and 3 is less of a concern in the cross-section, as the income is being attributed to different cohorts. In addition, it ensures that proposals that alter the tax treatment of retirement savings do not result in a change in tax liability that is not matched by a corresponding income source.

Method 3 introduces an additional source of potential double counting in the cross-section by including both inside buildup and distributions. To partially address the problem, TPC includes only the portion of inside buildup in excess of current taxable distributions, implicitly assuming that distributions are first taken out of current earnings.

#### *Alignment of Income and Tax Liability*

Since the income concept is used in the calculation of effective tax rates, it is desirable to align the timing of income with the timing of tax liability as much as possible.<sup>7</sup> By definition, income concepts that align closely to AGI (such as method 1) will accomplish this objective for the purposes of the federal income tax. However, this goal is further complicated by the fact that different rules determine the timing of income and payroll tax liability. For example, front-loaded contributions that are deductible under the income tax are still subject to payroll taxes, so no single method can properly align the timing of income and tax liability across both taxes.

While acknowledging that any method will be imperfect, TPC has adopted method 3—including current contributions, current accumulations, and current distributions—for purposes of defining ECI.

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<sup>7</sup> An alternative approach would be to change the timing of the tax burden to be consistent with the timing of income. For example, one could assign the tax burden on front-loaded (deductible) contributions, equal to the expected future tax liability associated with the current contribution. That approach, however, would lead to an inconsistency between current year tax burden and current year tax revenue.

### Corporate Income Tax

Since TPC includes the corporate income tax in the overall tax burden for distributional analyses, ECI includes imputed corporate tax liability to measure income on a pre-tax basis. TPC distributes the entire corporate tax burden (measured by revenue collected) to U.S. households (Nunns, 2012). Ideally, TPC's income measure would include all the associated after-tax corporate income. Including dividends and (net) capital gains received by individuals partially reflects after-tax corporate income, but ECI cannot fully capture all corporate income, even over very long time horizons, because of factors such as dividends and capital gains earned by foreign shareholders and unrealized capital gains on corporate equity attributable to step-up basis at death or charitable giving. However, many conceptual and practical difficulties arise when trying to a) measure the magnitude of after-tax corporate earnings not otherwise included in ECI, and b) assign that income back to households. Therefore, TPC makes no additional adjustments for corporate income to ECI.

Adopting expanded cash income does have a noticeable indirect effect on the distribution of imputed corporate income tax liability because including inside buildup within tax-preferred retirement accounts alters the distribution of capital income. The inside buildup is less concentrated at the very top end of the income distribution than other forms of realized capital income, most notably capital gains.

### Other Issues

- 1) *Disadvantages of relying on imputed income sources.* A major strength of the TPC microsimulation model is that it is based primarily on a sample of actual tax returns. For income from sources not reported on tax returns, however, TPC must impute from other data sources and thus introduce potential sources of error in the model results.
- 2) *Treatment of means-tested cash transfer payments.* Some agencies (including JCT) view income-based transfer payments as part of the U.S. tax and transfer system and therefore exclude them from the income measure used to rank households. Of course, in that sense, they are very similar to other negative tax programs (e.g., the refundable portion of the earned income tax credit) and should be included (as an addition) in the calculation of after-tax income.
- 3) *Exclusion of major health transfer payments.* TPC does not include the major non-cash government benefits—Medicare and Medicaid. These programs are much harder to value, since they provide in-kind benefits, rather than cash payments. For example, it is not clear whether they should be valued at the average cost to the government or on some other, cash-equivalent basis that better reflects the economic value to the recipient.

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**Table A1**  
**Sources of Expanded Cash Income by Percentile, 2015**

Source of Income	Percentage of Total ECI by Income Percentile <sup>1</sup>										
	Quintile					All	Top Quintile				
	Bottom	Second	Middle	Fourth	Top		80-90	90-95	95-99	Top 1	Top 0.1
<i>Compensation</i>											
Wages and salaries	40.0	47.7	53.2	54.2	45.9	48.8	57.5	51.5	48.1	32.6	29.2
Employee contributions to retirement plans	0.4	0.7	1.1	1.6	1.7	1.5	2.2	2.3	2.4	0.6	0.1
Employer contributions to retirement plans	0.3	0.6	0.8	1.0	1.0	0.9	1.3	1.3	1.3	0.5	0.2
Defined benefit pension accruals	0.2	0.4	0.7	1.2	2.2	1.6	1.8	2.7	2.9	1.9	1.6
Employer-paid health and other fringe benefits	4.4	8.4	9.9	9.8	4.8	6.9	9.5	6.9	4.0	0.6	0.1
Employer's share of payroll taxes	3.0	3.6	4.0	4.1	2.7	3.3	4.3	3.7	2.7	0.9	0.5
<i>Self-Employment and Flow-Through Income</i>											
Business/Farm income or loss (Schedules C & F)	4.6	3.0	1.9	1.8	2.6	2.3	2.1	3.1	4.0	1.7	0.6
Rents, royalties, and income from trusts	0.1	0.2	0.1	0.2	1.1	0.6	0.2	0.6	1.3	2.0	1.7
Partnership income or loss	0.0	0.1	0.1	0.2	3.3	1.6	0.3	1.0	2.6	7.4	5.5
S corporation income or loss	0.0	0.0	0.2	0.4	5.4	2.7	0.6	1.4	3.4	12.6	14.4
<i>Investment Income</i>											
Taxable interest	1.1	1.0	0.7	0.6	0.9	0.9	0.5	0.6	0.8	1.5	1.7
Tax-exempt interest	0.0	0.1	0.1	0.2	0.6	0.4	0.2	0.3	0.6	1.0	1.0
Dividends	0.5	0.7	0.8	1.0	2.5	1.7	1.0	1.4	2.3	4.3	5.0
Net capital gains	0.1	0.1	0.3	0.7	8.1	4.5	1.0	2.4	5.0	18.8	25.1
Inside buildup within DC retirement plans	1.2	1.3	1.6	2.5	4.1	3.1	3.7	4.9	5.2	3.1	2.2
<i>Retirement Income</i>											
Taxable IRA distributions	0.4	1.1	1.5	2.2	1.7	1.7	1.7	2.7	2.5	0.6	0.2
Taxable pension distributions	1.9	6.3	7.5	7.7	3.4	5.1	5.1	5.7	3.6	0.7	0.2
Nontaxable pension distributions	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
<i>Other Taxable Income</i> <sup>2</sup>	0.7	0.7	0.6	0.7	1.4	1.1	0.7	1.0	1.4	2.2	2.5
<i>Transfer Payments</i>											
Taxable Social Security benefits	0.1	0.8	3.2	3.9	1.2	1.9	2.0	1.7	1.2	0.3	0.1
Nontaxable Social Security benefits	26.6	15.2	5.9	1.5	0.2	3.9	0.4	0.3	0.2	0.1	0.0
Unemployment compensation	1.2	0.7	0.4	0.2	0.1	0.3	0.2	0.1	0.0	0.0	0.0
Supplemental Social Security (SSI)	4.0	1.1	0.3	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Temporary Assistance for Needy Families (TANF)	0.5	0.5	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
SNAP benefits (formerly food stamps)	5.2	1.7	0.6	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Other transfer payments <sup>3</sup>	2.2	2.4	2.2	1.4	0.4	1.2	0.9	0.7	0.3	0.0	0.0
<i>Corporate Income Tax Liability</i>	1.1	1.5	1.8	2.2	4.4	3.2	2.6	3.3	4.0	6.6	7.8
<b>Total: Expanded Cash Income</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-1)

(1) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals.

(2) Includes alimony received and other sources of income reported on individual tax returns.

(3) Includes disability, child support, workers' compensation, energy assistance, and veteran benefits.



**Table A2**  
**Distribution of Components of Expanded Cash Income by Percentile, 2015**

Source of Income	Percentage of Total Income Source Earned by Income Percentile <sup>1</sup> :										
	Quintile					All	Top Quintile				
	Bottom	Second	Middle	Fourth	Top		80-90	90-95	95-99	Top 1	Top 0.1
<i>Compensation</i>											
Wages and salaries	3.6	9.0	16.0	22.4	48.6	100.0	15.4	9.7	12.0	11.5	4.9
Employee contributions to retirement plans	1.2	4.6	11.1	21.6	61.1	100.0	20.0	14.6	19.8	6.6	0.7
Employer contributions to retirement plans	1.6	5.9	13.0	22.5	56.6	100.0	18.5	12.5	17.0	8.6	1.3
Defined benefit pension accruals	0.6	2.5	6.8	15.7	74.1	100.0	14.9	15.9	22.4	20.8	8.4
Employer-paid health and other fringe benefits	2.9	11.2	21.0	28.7	35.8	100.0	18.0	9.1	7.1	1.6	0.2
Employer's share of payroll taxes	4.1	10.1	17.8	25.2	42.4	100.0	17.3	10.3	10.3	4.5	1.3
<i>Self-Employment and Flow-Through Income</i>											
Business/Farm income or loss (Schedules C & F)	8.6	11.6	11.8	15.1	57.0	100.0	11.5	12.1	20.6	12.7	2.2
Rents, royalties, and income from trusts	0.8	3.8	2.3	6.7	98.3	100.0	4.2	10.0	26.2	57.8	23.8
Partnership income or loss	0.1	0.5	1.0	2.8	110.4	100.0	2.5	6.1	20.2	81.6	28.6
S corporation income or loss	0.0	0.2	0.9	2.8	105.9	100.0	2.9	5.0	15.7	82.3	44.3
<i>Investment Income</i>											
Taxable interest	5.4	10.2	11.5	14.8	54.5	100.0	6.9	6.7	11.7	29.2	15.9
Tax-exempt interest	0.3	1.6	4.6	10.7	80.3	100.0	6.1	7.0	19.7	47.5	21.4
Dividends	1.3	3.7	6.6	12.1	74.9	100.0	7.4	7.6	16.2	43.7	24.0
Net capital gains	0.1	0.2	0.9	3.3	93.8	100.0	2.8	4.8	13.7	72.4	45.7
Inside buildup within DC retirement plans	1.8	3.9	7.9	16.4	69.3	100.0	15.9	14.8	20.7	17.8	5.8
<i>Retirement Income</i>											
Taxable IRA distributions	1.0	5.9	13.4	26.5	52.6	100.0	13.4	14.8	18.0	6.5	1.0
Taxable pension distributions	1.7	11.4	21.7	30.4	34.5	100.0	13.2	10.4	8.7	2.2	0.4
Nontaxable pension distributions	1.0	7.2	15.8	25.9	49.7	100.0	17.6	13.0	14.8	4.2	0.9
<i>Other Taxable Income</i> <sup>2</sup>	3.0	5.7	8.6	13.2	68.9	100.0	8.4	8.7	16.4	35.5	19.4
<i>Transfer Payments</i>											
Taxable Social Security benefits	0.1	3.8	24.3	39.9	32.0	100.0	13.6	8.1	7.7	2.5	0.3
Nontaxable Social Security benefits	30.2	35.8	22.1	7.6	3.0	100.0	1.4	0.7	0.7	0.2	0.0
Unemployment compensation	21.3	24.9	21.2	19.7	12.6	100.0	7.8	2.7	1.9	0.2	0.0
Supplemental Social Security (SSI)	47.1	27.8	13.3	7.8	2.6	100.0	1.5	0.6	0.4	0.1	0.0
Temporary Assistance for Needy Families (TANF)	21.1	40.2	20.3	10.9	6.2	100.0	2.7	2.0	1.1	0.3	0.0
SNAP benefits (formerly food stamps)	42.9	29.2	16.6	8.8	1.5	100.0	0.9	0.2	0.3	0.1	0.0
Other transfer payments <sup>3</sup>	8.5	19.0	27.5	24.6	18.9	100.0	9.7	5.8	2.8	0.5	0.1
<i>Corporate Income Tax Liability</i>	1.6	4.2	8.1	14.1	71.0	100.0	10.6	9.5	15.4	35.6	20.0
<b>Total: Expanded Cash Income</b>	4.5	9.2	14.6	20.2	51.7	100.0	13.1	9.2	12.2	17.2	8.1

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-1)

(1) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals.

(2) Includes alimony received and other sources of income reported on individual tax returns.

(3) Includes disability, child support, workers' compensation, energy assistance, and veteran benefits.