

**Update to Selected Tables in “Reassessing the Facts about Inequality, Poverty,  
and Redistribution” (Policy Analysis Number 839, April 24, 2018, Cato Institute)**

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## Update to Selected Tables in “Reassessing the Facts about Inequality, Poverty, and Redistribution, Policy Analysis Number 839, April 24, 2018, Cato Institute

The original publication<sup>1</sup> was based on Census and Congressional Budget Office (CBO) data for 2013, National Income and Product Accounts (NIPA) for 2013, and research from the Congressional Research Service (CRS) and United States Senate Budget Committee (SBC) related to 2011. The CRS and SBC data are not regular, scheduled releases and have not been updated. The NIPA data are now updated through 2017<sup>2</sup> and the COB data through 2014.<sup>3</sup> This paper documents updated estimates based on the newer data.

The CBO data for 2014 are not entirely comparable with those for 2013.

The most important difference is that the CBO has so far published tables only for income groups sorted by “income before transfer and taxes.” This new aggregate category is the sum of market income and social insurance benefits (Social Security, Medicare, unemployment insurance, and workers’ compensation). Formerly, the CBO has published tables where household income is sorted by market income. The differences between tabulations of households sorted by market income and those sorted by income before transfers and taxes are important.

Because the income used for sorting already includes the transfers associated with four large programs, there are very few social-insurance recipients in the bottom quintile (8.0 percent when sorted by income before transfers and taxes versus 34.3 percent when sorted by market income). Because retirees often have very little market income, many of them are in the lowest quintile by market income, but the typical Social Security benefit exceeds the upper income limit for the lowest quintile, so they are boosted into the second quintile when sorted by incomes that include those benefits.

As a result, the average market income for the lowest quintile is somewhat higher because many of the low-market-income households have been raised to the second quartile as a result of the social-insurance benefits. This is the most dramatic of the effects, but there are similar ripple effects throughout the distribution. The net effects are relatively small, but they mute the degree to which transfers and taxes have changed the distribution of spendable income. Tables comparing the results follow

Some other changes are improvements in the comprehensiveness of some of the estimates. Those improvements are reflected in the smaller adjustments required to the reconciliation of sources for transfer payments.

CBO also changed the definitions of some of its categories. In 2013, it reported transfer payments in two summary categories: Social Security and Medicare; and other transfers. In 2014 it reported social

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<sup>1</sup> John F. Early, *Reassessing the Facts about Inequality, Poverty, and Redistribution*, Policy Analysis Number 839, April 24, 2018, Cato Institute, Washington. <https://www.cato.org/publications/policy-analysis/reassessing-facts-about-inequality-poverty-redistribution>.

<sup>2</sup> U.S. Bureau of Economic Analysis, National Income and Product Accounts, <https://www.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1921=survey&1903=86>.

<sup>3</sup> Congressional Budget Office, “The Distribution of Household Income and Federal Taxes, 2014,” including 51361-SupplementalData.xls, <https://www.cbo.gov/publication/53597>.

insurance benefits and means-tested transfers. The total of the two categories in each case would be the same, just the division and labeling was changed. While the labels can be seen as simply notational differences, the change appears to reflect a deeper, subtle shift away from identifying the four components of “social insurance” as transfer payments. They are transfer payments and fundamentally no different from other transfer payments except that the criteria may be notionally different. As demonstrated in the original paper, Social Security and Medicare are highly redistributive, providing benefits to lower-income beneficiaries that are 10 time greater than those for higher income recipients, relative to contributions made. In fact, at the highest income levels, Social Security and Medicare provide no benefits at all and represent significant dead-weight loss.<sup>4</sup>

Table 3 in the original publication documented the missing transfer payments from the CBO estimates using the NIPA and CRS/SBC data. It follows:

Table 3 (original publication):

Reconciliation of total income transfers and computation of additional transfers.

	Transfer and Related Expenditures (\$ billions), 2011						
	Congressional Budget Office	National Income & Product Accounts			Congressional Research Service & U.S Senate Budget Committee		
	Total	Total	Federal	State & Local	Total	Federal	State & Local
<b>Total Transfers</b>	\$ 1,592.0	\$ 2,316.9	\$ 1,772.5	\$ 544.3	\$ 1,029.0	\$ 746.0	\$ 283.0
Less OASI	\$ 577.4	\$ 581.3	\$ 581.3	\$ -	\$ -	\$ -	\$ -
Less Medicare	\$ 512.4	\$ 515.9	\$ 515.9	\$ -	\$ -	\$ -	\$ -
Less Earned Income Tax Credit		\$ 63.0	\$ 63.0	\$ -	\$ 63.0	\$ 63.0	\$ -
<b>Transfers excluding OASI, Medicare, and EITC</b>	\$ 502.1	\$ 1,156.6	\$ 612.3	\$ 544.3	\$ 966.0	\$ 683.0	\$ 283.0
Less unemployment benefits	\$ 46.6	\$ 46.6	\$ 0.9	\$ 45.7	\$ -	\$ -	\$ -
Less workers' compensation	\$ 13.5	\$ 13.5	\$ 0.3	\$ 13.2	\$ -	\$ -	\$ -
Less disability benefits	\$ 126.8	\$ 126.8	\$ 126.8	\$ -	\$ -	\$ -	\$ -
Less black lung benefits	\$ 0.2	\$ 0.2	\$ 0.2	\$ -	\$ -	\$ -	\$ -
<b>Other transfers excluding major federal benefits</b>	\$ 315.0	\$ 969.5	\$ 484.1	\$ 485.4	\$ 966.0	\$ 683.0	\$ 283.0
Add Un-attributable federal transfers			\$ 198.7				
Add State-only transfers							\$ 202.4
<b>Reconciled other transfers</b>		\$ 1,168.3	\$ 682.9	\$ 485.4	\$ 1,168.4	\$ 683.0	\$ 485.4
<b>CBO under-reported &amp; excluded benefits</b>	\$ 853.3						
Plus Stafford Student Loans	\$ 40.0						
<b>Additional transfer payments</b>	\$ 893.3	Percent increase NIPA transfers to 2013 per household				3.79%	
<b>Additional transfer payments per household</b>	\$ 7,294.97	2013 additional transfer payments per household				\$ 7,571.69	

The updating of this table is not affected by the change in income sort order, but it does show the CBO’s improved accounting for transfers by about \$60 billion. It also reflects the CBO’s new aggregation categories.

<sup>4</sup> John F. Early, *Reassessing the Facts about Inequality, Poverty, and Redistribution*, Policy Analysis Number 839, April 24, 2018, Cato Institute, Washington, p. 6. Also “Appendix C, Online Technical Appendixes,” <https://object.cato.org/sites/cato.org/files/pubs/pdf/pa-839-technical-appendixes.pdf>.

Table 3 (updated):

Reconciliation of total income transfers and computation of additional transfers.

	Transfer and Related Expenditures (\$ billions), 2014 (except as noted)						
	Congressional Budget Office 2014	National Income & Product Accounts, 2014			Congressional Research Service & U.S Senate Budget Committee, 2011		
	Total	Total	Federal	State & Local	Total	Federal	State & Local
<b>Total Transfers</b>	\$ 1,883.0	\$ 2,498.8	\$ 1,881.9	\$ 616.9	\$ 1,029.0	\$ 746.0	\$ 283.0
Less OASDI	\$ 773.1	\$ 711.0	\$ 711.0	\$ -	\$ -	\$ -	\$ -
Less Medicare	\$ 448.9	\$ 515.9	\$ 515.9	\$ -	\$ -	\$ -	\$ -
Less unemployment benefits	\$ 37.4						
Less workers' compensation	\$ 12.5						
Less Earned Income Tax Credit		\$ 87.8	\$ 87.8	\$ -	\$ 63.0	\$ 63.0	\$ -
<b>Transfers excluding "Social Insurance"</b>	\$ 611.0	\$ 1,184.1	\$ 567.2	\$ 616.9	\$ 966.0	\$ 683.0	\$ 283.0
CRS/SBC adjusted to 2014					\$ 1,044.8	\$ 738.7	\$ 306.1
Add Un-attributable federal transfers			\$ 214.9				
Add State-only transfers							\$ 310.8
<b>Reconciled transfers excluding "Social Insurance"</b>		\$ 1,399.0	\$ 782.1	\$ 616.9	\$ 1,276.8	\$ 683.0	\$ 593.8
<b>CBO under-reported &amp; excluded benefits</b>	\$ 788.0						
Plus Stafford Student Loans	\$ 45.0						
<b>Additional transfer payments required</b>	\$ 833.0						
<b>Additional transfers per household (dollars)</b>	\$ 6,680						

Table 4 displays the percentage distribution among income groups for each of the components that contribute to the final spendable income of households. The original follows:

Table 4 (original publication, groups sorted by market income):

Percentage of selected financial totals contributed by each income group, 2013, adjusted for items not included by the CBO

Income Fifth	Percent of Households	Market Income	CBO Estimates				CBO Gaps			Final Net Income After All Taxes & Transfers	Percent Change from Market to Final
			Social Security & Medicare	Other Transfers	Federal Taxes	Net Income After Taxes & Transfers	State & Local & Under-reported Federal Transfers	Additional Federal Taxes	State & Local Taxes		
<b>Lowest</b>	23.2%	2.2%	34.3%	39.4%	0.8%	8.3%	42.6%	1.9%	1.5%	12.9%	493.2%
<b>Second</b>	19.1%	7.0%	24.3%	32.0%	4.2%	11.1%	31.1%	6.2%	6.5%	13.9%	97.7%
<b>Middle</b>	19.1%	12.6%	16.9%	20.7%	8.6%	14.5%	18.9%	11.1%	12.6%	15.4%	21.5%
<b>Fourth</b>	19.1%	20.5%	14.1%	7.8%	17.2%	19.8%	7.3%	18.0%	20.2%	18.6%	-9.2%
<b>Highest</b>	19.6%	57.7%	10.4%	0.0%	69.2%	46.2%	0.0%	62.8%	59.3%	39.3%	-31.9%
<b>Top Percentiles</b>											
<b>81 to 90</b>	9.8%	15.6%	5.7%	0.0%	15.3%	13.6%	0.0%	16.9%	15.4%	12.0%	-23.2%
<b>91 to 95</b>	4.9%	10.8%	2.6%	0.0%	11.5%	9.1%	0.0%	11.7%	10.7%	7.9%	-27.0%
<b>96 to 99</b>	3.9%	14.3%	1.8%	0.0%	16.8%	11.4%	0.0%	15.4%	14.0%	9.8%	-31.3%
<b>Top 1%</b>	1.0%	17.4%	0.3%	0.0%	25.5%	12.5%	0.0%	18.8%	19.1%	10.1%	-42.2%
<b>Ratios</b>											
<b>High to Low</b>		26.6	3.3	n/a	91.6	5.6	n/a	32.6	40.0	3.0	-88.5%
<b>Mid to Low</b>		5.8	2.0	0.5	11.4	1.7	0.4	5.8	8.5	1.2	-79.5%
<b>High to Mid</b>		4.6	1.6	n/a	8.0	3.2	n/a	5.6	4.7	2.6	-44.0%
Note: Income groups determined by rank of household market income											

The updated Table 4 reflects the revised CBO classification of transfers and intermediate income estimates. Unlike the original table the households are sorted into income groups based on income before transfers and taxes.

Table 4 (updated, groups sorted by income before transfers and taxes):  
 Percentage of selected financial totals contributed by each income group, 2013, adjusted for items not included by the CBO

Income fifth	Income group percentage of total											Percentage change from market to spendable
	Percentage of households	Market income	CBO estimates					CBO gaps			Spendable income	
			Social insurance benefits	Income before transfers & taxes	Means-tested transfers	Federal taxes	Income after taxes & transfers	State & local & under-reported federal transfers	Additional federal taxes	State & local taxes		
Lowest	19.1	3.0	8.0	3.5	49.3	2.1	6.8	53.5	2.8	2.4	11.6	282.5
Second	21.0	6.9	23.6	8.5	28.9	5.0	10.8	31.3	6.3	5.9	13.4	94.1
Middle	20.0	12.1	23.8	13.3	11.5	8.6	14.3	12.1	11.0	11.1	14.7	21.4
Fourth	19.9	19.7	23.8	20.1	6.4	16.6	20.1	3.1	17.7	19.4	18.8	-4.6
Highest	20.1	58.3	20.8	54.6	4.0	67.7	48.0	0.0	62.3	61.2	41.6	-28.7
<b>Top percentiles</b>												
81 to 90	10.0	15.0	10.5	14.5	2.2	14.3	13.8	0.0	19.1	12.9	12.7	-15.6
91 to 95	5.2	10.8	5.4	10.3	0.9	11.1	9.4	0.0	12.4	10.1	8.5	-21.6
96 to 99	4.0	14.3	4.0	13.3	0.6	16.5	11.6	0.0	14.6	14.9	10.1	-29.4
Top 1%	1.0	18.2	0.9	16.5	0.2	25.8	13.1	0.0	16.2	23.3	10.4	-43.1
<b>Ratios</b>												
High to low		19.2	2.6	15.5	12.4	31.8	7.0	n/a	22.5	25.4	3.6	-81.4
Mid to low		4.0	3.0	3.8	4.3	4.1	2.1	4.4	4.0	4.6	1.3	-68.3
High to mid		4.8	0.9	4.1	1.1	7.9	3.3	n/a	5.7	5.5	2.8	-41.3

Note: Income groups determined by rank of household income before transfers and taxes, a value that includes social insurance benefits

While the shift in the social insurance distribution can be explained in part by the change in sort-order discussed earlier, the presence of 20.8 percent of social insurance benefits in the highest quintile seems implausible and needs further investigation.

Similarly, the 4.0 percent of means-tested transfers in the highest quintile seems unlikely and needs further explanation.

Table A below compares some of the key relationships on the two versions of Table 4. As expected, the different sort orders have muted some of the relationships, but the basic conclusions remain the same. The ratio of high to low for market income is somewhat smaller, not because the higher-income is lower, but because the lower-income is higher owing to households with zero or low earnings and significant social-insurance benefits being shifted to the second quintile while not-so-low-earning households with no social insurance payments moved to the lowest quintile.

The tax relationships are similar, but also more muted because there is now more taxable income in the first quintile because low-to-zero earners with substantial untaxed social insurance benefits have moved to the second quintile.

Table A

Comparison of income distributions built on Congressional Budget Office estimates for 2013 with households sorted by market income and for 2014 with households sorted by income before transfers and taxes

<b>Metric</b>	<b>2013</b>	<b>2014</b>
<u>Ratio highest to lowest value</u>		
Market income	26.6	19.2
CBO federal taxes	69.2	31.8
Additional federal taxes	32.6	22.5
State and local taxes	40.0	25.4
Final spendable income	3.0	3.6
<u>Ratio middle to lowest group</u>		
Final spendable income	1.2	1.3
<u>Percent change from market income to spendable income for ...</u>		
Lowest group	493.2	282.5
Second group	97.7	94.1
Middle group	21.5	21.4
Fourth group	-9.2	-4.6
Highest group	-31.9	-28.7
Ratio highest to lowest	-88.5	-81.4
<u>Percent of taxes paid by highest group</u>		
CBO federal taxes	69.2	67.7
Other federal taxes	62.8	62.3
State and local taxes	59.3	61.2

Ideally, CBO will provide either the market-income sort of the data or the underlying micro data necessary to compute it.