The Effect of Taxes and Transfers on Income and Poverty in the United States: 2005

Consumer Income

INTRODUCTION

This report examines how income distributions change when the definition of income is varied to reflect the inclusion or exclusion of different components. The measure of household income reported in the publication *Income, Poverty, and Health Insurance Coverage in the United States: 2005* (P60-231) uses the pretax, money income concept. Money income in this instance includes cash income before taxes are paid.

The government provides resources to households through cash and noncash transfer programs. These programs may be open to all or limited to those with incomes below set amounts. Holding other income components constant, transfers from the Social Security Administration, Veterans Administration, and state governments increase household income. Payroll, state, and federal tax liabilities reduce household income. Certain tax credits, such as the Earned Income Tax Credit and the Additional Child Tax Credit, are refundable and may increase household income.

This report also includes imputed resource measures not directly related to government programs. Imputed realized capital gains and rental income on owner-occupied homes increase household income; imputed realized capital losses and work expenses decrease household income. The net impact of positive transfers (government programs, realized capital gains, and imputed rent estimates) and negative transfers (tax liabilities, realized capital losses, and work expenses) varies at a household level.

This report presents medians that illustrate the aggregate impact of all of these programs and transfers on income distribution. Money income is compared with three additional income definitions: market income, post-social insurance income, and disposable income. These measures are presented to illustrate various dimensions of economic well-being and the impact of taxes and transfers. The text box called "Definitions of Income" details the components of these income definitions.[1]

While the income definitions presented in this report resemble the income measurements recommended by the Canberra Group (an international group of household income experts convened under the auspices of the United Nations Statistics Division), the definitions differ, due to both the lack of certain elements in the survey data and ongoing developmental efforts.[2] This report does not present international comparisons.

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[1] A list of variables included in each definition is available at <www.census.gov/hhes/www/income/definitions.html>.

[2] Money income in this report is similar to the Canberra Total Income concept. Disposable income is similar to the Canberra Adjusted Disposable Income concept. Canberra suggested adding some components, such as the value of home production, which are not incorporated into the income definitions reported here. Another difference is that the Canberra Report does not include realized capital gains and losses, which are imputed for use in this report. For further explanations about the Canberra Group's recommendations, see <www.lisproject.org/links/canberra/finalreport.pdf>. Development efforts include improvements to the modeling used to impute flows from capital gains, imputed rent, and noncash benefits.

DEFINITIONS OF INCOME

This report presents alternative measures of income that include estimates of taxes and values of various noncash benefits for calendar years 2004 and 2005. These measures were derived from information collected in the 2005 and 2006 Annual Social and Economic Supplements (ASEC) to the Current Population Survey (CPS). The following terms are used to describe the four measures of income used in this report:

Money Income: Includes all cash income received by individuals who are 15 years or older. It consists of income as reported, before deductions for taxes and other expenses. It does not include realized capital gains or lump-sum payments that may be disbursed from insurance companies, workers' compensation, or pension plans.

Market Income: Includes money income as described above and deducts government cash transfers. Government cash transfers are social security; supplemental security income (SSI); public assistance (including Temporary Assistance for Needy Families [TANF]); unemployment compensation; workers' compensation; veterans' payments; and survivor, pension, and disability benefits from certain sources.[3] This definition also includes imputed net realized capital gains and imputed rental income (also called return on home equity) and subtracts imputed work expenses excluding child care.[4]

Post-Social Insurance Income: Includes money income, imputed net realized capital gains, and imputed rental income; subtracts imputed work expenses as in market income; and also deducts government means-tested cash transfers. These include SSI, public assistance, and government paid means-tested veterans' payments. Post-social insurance income differs from market income by adding back non-means-tested government transfers, most notably social security.[5]

Disposable Income: Includes money income, imputed net realized capital gains, and imputed rental income; and subtracts imputed work expenses. Disposable income also deducts federal payroll taxes, federal and state income taxes, and property taxes for owner-occupied homes.[6] The value of noncash transfers is added, including food stamps, public or subsidized housing, and free or reduced-price school lunches.[7]

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[3] Government paid survivor, pension, and disability benefits include those paid by workers' compensation, U.S. Railroad Retirement, Black Lung Benefits, and State Temporary Sickness.

[4] Capital gains and losses are imputed using a statistical match to the 2001 Statistics of Income public use file from the Internal Revenue Service as part of the CPS ASEC tax model. For modeled tax filers, the imputed amounts are added to money income and are included as taxable income. Imputed rental income reflects the income homeowners would receive if they rented out their home; this value is added to money income to put homeowners and renters on a more equal footing. The return on home equity imputed for the CPS ASEC is an approximation of this income flow computed by applying a rate of return to imputed home equity. The American Housing Survey (AHS) provides the home and land values and mortgage debt used to compute home equity. The current year's return on municipal bonds is used as the rate of return. The 2006 ASEC uses 2003 National AHS data. Previous years used

home equity based on 1995 National AHS data. This modeling improvement was repeated for the 2005 ASEC to make valid year-to-year comparisons in Table A-1. Work expenses are imputed from the Survey of Income and Program Participation (SIPP) 2001 Panel. The Census Bureau is considering changes to its child-care expenses imputation procedures and is deferring their inclusion in the report until either the current method can be validated or an improved method can be found.

[5] Non-means-tested government transfers include unemployment compensation, workers' compensation, social security, and the survivor, pension, and disability benefits described in footnote 18.

[6] Property taxes are imputed from the 2003 National AHS.

[7] The reported value of food stamps is used; the value of housing subsidies is modeled using the 1985 National AHS; and the value of school lunches is modeled using parameters from the Food and Nutrition Service of the U.S. Department of Agriculture.

Table 1.
Median Income of Households by Income Definition: 2005

Definition	Median income (dollars)	Percent difference from previous definition	Percent difference from money income definition
Money income	46,326	(X)	(X)
Market income	43,701	−5.7	−5.7
Post-social insurance income	47,975	9.8	3.6
Disposable income	40,843	−14.9	−11.8

(X) Not applicable.

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

Using households as the units of analysis for income and using people as the units of analysis for poverty, this report primarily presents data for income year 2005 using information collected in the 2006 Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS). The CPS ASEC is augmented with data from the Internal Revenue Service, the U.S. Department of Agriculture, and the U.S. Department of Housing and Urban Development to compute the three income definitions. This report examines interdefinition differences and intradefinition comparisons; it then examines changes from 2004 to 2005.

In the 1990s, the National Academies of Science (NAS) convened a panel to review how poverty is measured (Citro and Michael, 1995). The panel asserted that any change in the income definition used to determine how much a person or a family needs to meet the basic necessities of life should be accompanied by a consistent adjustment of the measure of basic necessities (Recommendation 41.1, P. 10.) Further, that group of researchers believed it is necessary to update the thresholds used to define poverty, which were developed in the 1960s, to fully represent a person's or a family's changing needs. Although the U.S. Census Bureau has produced several reports based on the NAS panel's recommendations, this report does not address these poverty threshold issues. (Short, 1999, and Dalaker, 2003, use the NAS recommendations.) Rather than propose a revised measure of poverty, this report examines the effects of changing the resource definitions.[8] Different income definitions are compared to a set of thresholds that vary by the size and the composition of the family, but the same thresholds are used regardless of the income definition. The thresholds are based on the four-person family threshold designed by Mollie Orshansky in the 1960s.

[8] Alternative poverty estimates based on the NAS recommendations for 2005 are available at <www.census.gov/hhes/www /povmeas/nas.html>. The main differences between the measures presented in this report and the NAS measures are the inclusion of medical care and child-care expenses in the NAS estimates, the inclusion of imputed rent in the estimates in this report, and the use of different thresholds.

Household Income

The effects of government taxes and transfers on 2005 median household income are shown in Table 1 by comparing the traditional money income concept with the three alternative definitions: market income, post-social insurance income, and disposable income.

Market income represents resources available to people and families based on labor and capital market activities and does not include income from government sources including social security and public assistance.[9] It includes imputed rental income for owner-occupied housing and imputed realized capital gains and losses. Work expenses, excluding child-care costs, are also deducted to arrive at market income.[10] The number of households with net deductions exceeds the number of households with net additions from market sources. The result is median household market income that is lower than under the money income definition. Median household market income was $43,701 in 2005, or 5.7 percent lower than median household money income, $46,326. Market income can serve as a reference point to evaluate the impact of government transfers and the imputed return on home equity across the income distribution and the effect of imputed realized capital gains at the high end of the income distribution.

[9] Refer to text box "Definitions of Income" for a listing of all government cash transfers that are deducted from money income.
[10] The Census Bureau is considering changes to its child-care expenses imputation procedures and is deferring their inclusion in the report until either the current method can be validated or an improved method can be found.

Table 2.
Index of Median Household Income by Selected Characteristic and Income Definition: 2005

Characteristic	Money income		Market income		Post-social insurance income		Disposable income	
	Median (dollars)	Percent of money income	Median (dollars)	Percent of money income	Median (dollars)	Percent of money income	Median (dollars)	Percent of money income
All households	**46,326**	**100.0**	**43,701**	**94.3**	**47,975**	**103.6**	**40,843**	**88.2**
Type of Household								
Family households	57,278	100.0	55,650	97.2	59,731	104.3	50,707	88.5
Married-couple	66,067	100.0	65,564	99.2	69,349	105.0	57,786	87.5
Female householder, no husband present	30,650	100.0	27,107	88.4	30,419	99.2	29,464	96.1
Nonfamily households	27,326	100.0	24,712	90.4	29,395	107.6	25,283	92.5
Race[1] and Hispanic Origin								
White	48,554	100.0	46,153	95.1	50,482	104.0	42,883	88.3
White, not Hispanic	50,784	100.0	48,513	95.5	53,142	104.6	44,599	87.8
Black	30,858	100.0	27,370	88.7	30,713	99.5	28,416	92.1
Asian	61,094	100.0	61,505	100.7	64,362	105.3	53,051	86.8
Hispanic origin (any race)	35,967	100.0	33,730	93.8	35,744	99.4	32,769	91.1
Work Experience of Householder								
Worked	57,802	100.0	57,510	99.5	59,326	102.6	48,561	84.0
Worked full-time, year-round	63,610	100.0	64,232	101.0	65,537	103.0	52,711	82.9
Did not work	23,801	100.0	13,973	58.7	27,421	115.2	26,478	111.2

[1] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White **and** Asian or Asian **and** Black or African American, is available from Census 2000 through American FactFinder. About 2.6 percent of people reported more than one race in Census 2000.

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

Post-social insurance income is defined as market income plus non-means-tested government cash transfers, such as social security, unemployment compensation, and workers' compensation. Households with income from at least one of these sources have higher post-social insurance income than market income. Thus, at $47,975 in 2005, median household post-social insurance income was higher than median household market income.

Disposable income has the lowest median income of all the definitions and represents the net income households have available to meet living expenses. Disposable income includes all resources in post-social insurance income and adds the value of

noncash transfers such as food stamps, public or subsidized housing, and school lunches, along with means-tested cash transfers, while deducting property taxes, payroll taxes, and state and federal income taxes.[11] The net result of these additions and deductions lowered median household income by 14.9 percent from the post-social insurance income definition. At $40,843, the median household disposable income estimate is 11.8 percent lower than income under the money income definition, $46,326.

Table 2 uses median money income as the base to gauge the effects of the other income definitions on

[11] More information on how taxes are modeled in the CPS ASEC can be found in O'Hara, 2004.

subgroups of households. It shows how the inclusion and exclusion of income components under the various definitions affects the income of various demographic groups. For households with a female householder with no husband present, the market income definition results in a median that is 88.4 percent of their median household money income.[12] For married-couple households, median market income composes 99.2 percent of their median money

[12] The householder is the person (or one of the people) in whose name the home is owned or rented and the person to whom the relationship of other household members is recorded. If a married couple jointly owns the home, either the husband or the wife may be listed as the householder. Since only one person in each household is designated as the householder, the number of householders is equal to the number of households. This report uses the characteristics of the householder to describe the household.

income. Households with a female householder with no husband present typically have incomes low enough to be affected by the deduction of work expenses and government transfers in the market income definition. The post-social insurance income definition brings the female householder with no husband present index value nearer to the money income base by adding back non-means-tested government transfers. Median disposable household income for female householders with no husband present is 96.1 percent of median money income. By incorporating noncash transfers (such as food stamps, housing subsidies, and school lunches), means-tested cash transfers, and taxes, this definition affects female householders with no husband present more than other household types. Noncash transfers and tax credits, such as the Earned Income Tax Credit, add resources to low-income households, but subtractions for work expenses and payroll taxes prevent the median disposable income from equaling the full base value of median money income.

Asian households have the highest median money income ($61,094) among the race groups shown in Table 2.[13] While median market income is lower than median money income for all households, Asian households have higher median household market income than median money income (100.7 percent of median money income). Asian households have one of the highest relative percentages of median post-social insurance income to money income, at 105.3 percent, and one of the lowest relative percentages of median disposable income to money income, at 86.8 percent.[14] These figures indicate that Asian households are affected less by the subtraction of government transfers and are affected more by the deduction of modeled taxes or the inclusion of imputed realized capital gains and net rent.

Among race groups and Hispanics, median money income is lowest for Black households and Hispanic households ($30,858 and $35,967, respectively).[15] In addition, Black households had the lowest ratio, by race and Hispanic origin, of median market income to median money income when government cash transfers and work expenses are deducted (88.7 percent). Conversely, Black households and Hispanic households have the highest ratios of median disposable income to money income. Black households have median disposable income that is 92.1 percent of the group's median money income, and Hispanic households have median disposable income that is 91.1 percent of their

median money income.[16] This suggests that Black and Hispanic households (those with lower median money income) are being positively affected by government cash and noncash transfers such as public assistance, including Temporary Assistance for Needy Families (TANF), public or subsidized housing, and food stamps.

Households with a householder who did not work have lower median money income ($23,801) than households with a working householder ($57,802). Among the work experience comparisons in Table 2, the households with a householder who did not work display the largest difference between money income and market income, with a ratio of 58.7 percent. Households with a nonworking householder include a high percentage of nonworking elderly, disabled, or other low-income householders. The median household market income of the elderly is affected by the deduction of social security, government-paid veterans' payments, survivor benefits, and disability benefits. Low-income households are affected by the deduction of government means-tested cash transfers such as supplemental security income (SSI) and public assistance in the market and post-social insurance definitions. The median post-social insurance income for households with a nonworking householder is slightly less than twice the median market income ($27,421 and $13,973, respectively), capturing the effect of including social security income for retirees in the post-social insurance income definition. Households with nonworking

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[13] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). The body of this report (text, figures, and tables) shows data using the first approach (race alone). Use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. The CPS does not use separate population controls for weighting the Asian sample to national totals.

In this report, the term "non-Hispanic White" refers to people who are not Hispanic and who reported White and no other race. The Census Bureau uses non-Hispanic Whites as the comparison group for other race groups and Hispanics.

[14] Not statistically different from White and White alone, not Hispanic.

[15] Because Hispanics may be any race, data in this report for Hispanics overlap with data for racial groups. Data users should exercise caution when interpreting aggregate results for the Hispanic population or for race groups because these populations consist of many distinct groups that differ in socioeconomic characteristics, culture, and recency of immigration. Data were first collected for Hispanics in 1972 and for Asians and Pacific Islanders in 1987. For further information, see <www.bls.census.gov/cps/ads/adsmain.htm>.

[16] The difference in ratios of disposable income to money income for Black households and Hispanic households are not statistically different.

householders have higher disposable income than money income, at a ratio of 111.2, showing that the resources added in the disposable income definition exceed the deductions for this group.

Two widely used measures of income inequality are the shares of aggregate income and the Gini Index. The shares of aggregate income are presented by quintile and are derived by dividing aggregate income for each quintile by overall aggregate household income. The Gini Index summarizes the dispersion of income and ranges from 0 (indicating perfect equality) to 1 (indicating perfect inequality). Table 3 presents these two measures of income inequality for each income definition. The share of aggregate income held by the lowest quintile is largest under the disposable income definition. Conversely, the disposable income definition shows the smallest share of aggregate household income for the highest quintile. Comparing the distributions by income definitions shows how government programs redistribute income. The distribution of income under the market definition is more unequal than under the money income definition. The Gini Index for money income is 0.450, and for market income it is 9.6 percent higher at 0.493. Figure 1 shows that under the market income definition, the lowest three quintiles have a smaller share of aggregate income than under any of the other three income definitions, and the top quintile has the largest share shown under any of the definitions. The Gini Index under the disposable income definition was 0.418, showing the most equal income distribution.

Figure 2 shows the income density functions for money income and disposable income, illustrating the impact taxes and transfers have on

Table 3.
Share of Aggregate Household Income by Quintile and the Gini Index: 2005

Quintile	Money income	Market income	Post-social insurance income	Disposable income
Lowest	3.42	1.50	3.24	4.42
Second	8.79	7.26	8.59	9.86
Third	14.42	14.00	14.33	15.33
Fourth	23.03	23.41	22.80	23.11
Highest	50.34	53.83	51.03	47.28
Gini index	0.450	0.493	0.447	0.418

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

the entire income distribution. Household income is on the horizontal axis. The vertical axis indicates the frequency at which the value occurs in the data.[17] The area under each curve is equal to 1. Using the disposable income definition (the blue density function), the overall distribution slides to the left and compresses, exhibiting less variance around its median. As the figure shows, there are more households in the middle and fewer in the lower and upper sections using the disposable income definition. This illustrates the redistributional effect of government taxes and transfers resulting in less inequality using the disposable income definition than using the money income definition. The additions and subtractions used to construct disposable income have a differential impact on various segments of the income distribution. Under the disposable income definition, the density is increased between zero and the median. The increased area under the disposable income curve indi-

cates that more households have income between 0 and $40,843. This is due to the redistributional effects of the additions (noncash transfers and net realized capital gains) and subtractions (work expenses and all taxes) under the disposable income definition. Above $60,000, the density decreases under the disposable income definition; there is less area under the disposable income curve compared with the area under the money income curve, indicating fewer households. This trend continues to the high end of the income distribution, indicating the impact of progressive taxes.

Comparing the 2005 data to the previous year, there are changes in real median household incomes under the money income and disposable income definitions for all households (Table A-1).[18] Money income increased 1.1 percent and disposable income decreased 1.5 percent between 2004 and 2005.

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[17] To plot the income distributions using all weighted ASEC households, a smoothing function in SAS is employed to determine the probability that a particular income value occurs. To display all probabilities, the density of each income amount is plotted, forming the distribution. The vertical axis is labeled "Density" since this continuous distribution is determined by a statistical function. Similarly, if discrete observations were plotted using a bar graph, the vertical axis would be labeled "Frequency."

[18] All income values are adjusted to reflect 2005 dollars. "Real" refers to income after adjusting for inflation. The adjustment is based on percentage changes in prices between earlier years and 2005 and is computed by dividing the annual average Consumer Price Index Research Series (CPI-U-RS) for 2005 by the annual average for earlier years. The CPI-U-RS values for 1947 to 2005 are available on the Internet at <www.census.gov/hhes/www/income /income05/cpiurs.html>. Inflation between 2004 and 2005 was 3.3 percent. See the text box "What Are the CPI-U and the CPI-U-RS?" on p. 14 for more information on the CPI-U-RS.

Figure 1.
Share of Aggregate Household Income by Quintile: 2005
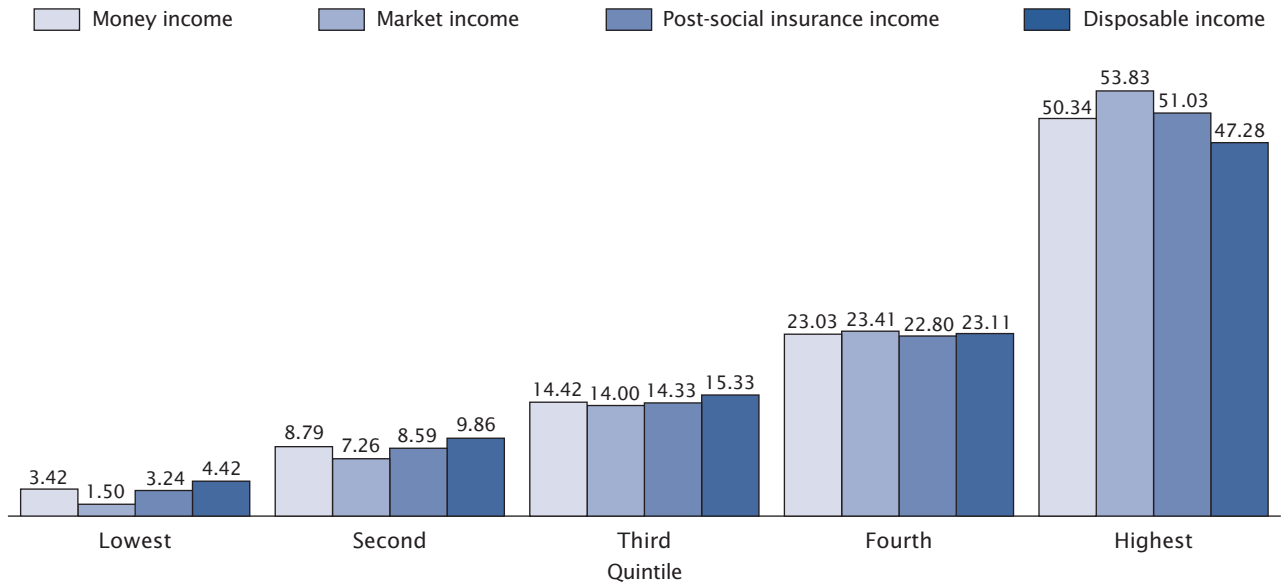
| | Money income | Market income | Post-social insurance income | Disposable income |

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

Figure 2.
Money and Disposable Income Distributions: 2005
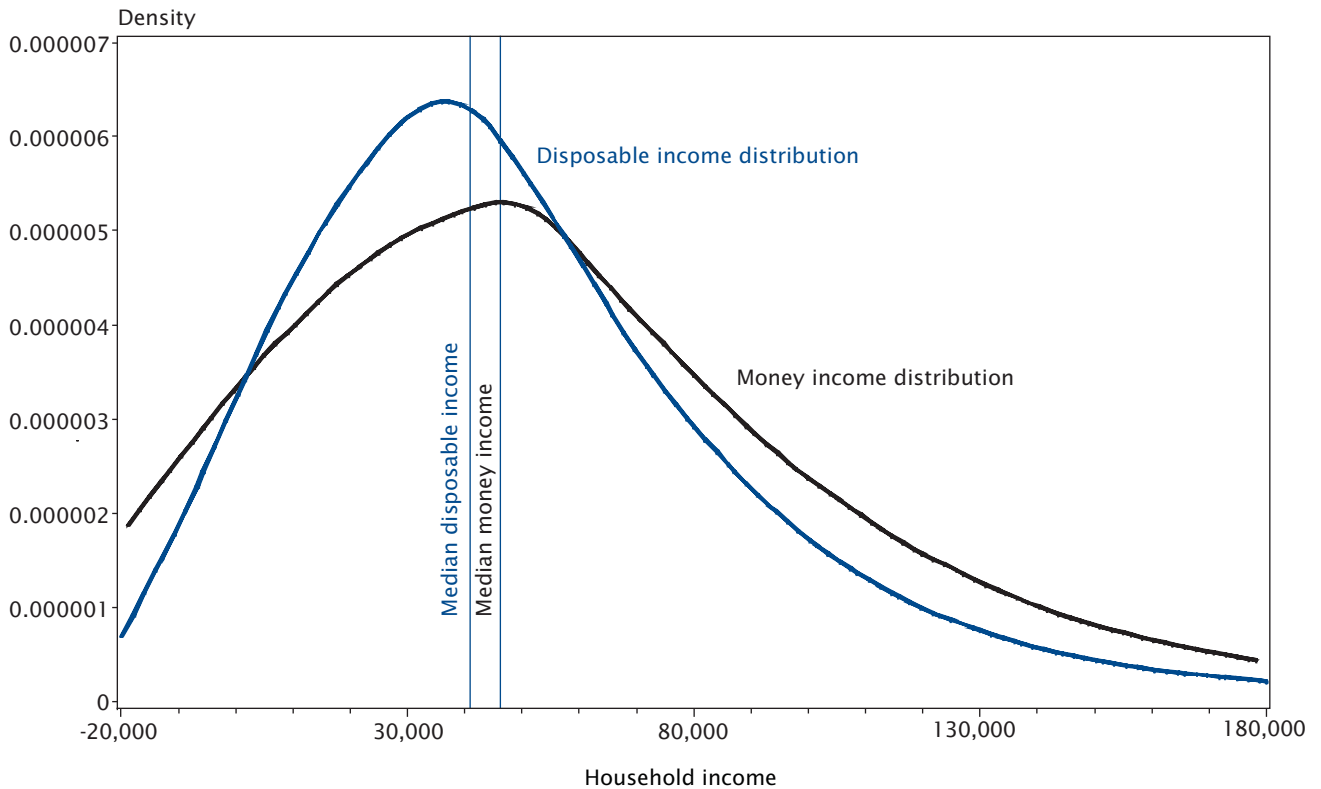
Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

The decline in real disposable income was the result of a net increase in modeled taxes over government transfers between 2004 and 2005. The general trend for most demographic groups is a decline in real median income under the disposable income definition, with no change in money, market, and post-social insurance income definitions. Median income in the Northeast, however, increased in real terms under each of the income definitions except disposable income, where it remained statistically unchanged.

Comparing Income Definitions to Thresholds

This section examines the number and the percentage of people who are living in families or in households with unrelated individuals with incomes below a set of thresholds using each of the four income definitions discussed in the previous sections. This is a way to assess the effect of taxes and transfers on people at the low end of the income distribution as the thresholds are held constant. The thresholds used in this report are based on the official poverty thresholds for a two-adult, two-child family as prescribed by the Office and Management and Budget's (OMB) Statistical Policy Directive 14.[19] This report modifies this four-person family threshold for other family sizes by incorporating an equivalence scale that reflects different assumptions about resource sharing and economies of scale. (See Appendix B for more details.) The derived

set of thresholds (called three-parameter thresholds in this report) is not very different from the official thresholds in magnitude; they are distributed differently among families by size and composition.[20]

Table 4 presents the number of people with money income below their three-parameter poverty threshold. As in Table 2, money income is used as the base to gauge the effects of using the other income definitions. The indexes are the number of people below their thresholds using the alternative income divided by those under their thresholds using the money income definition.

The number of people with market income below their three-parameter thresholds is higher than the number using the money income definition (as seen with an index over 100). Market income deducts government transfers and work expenses and adds imputed net rent for owners and net realized capital gains. The impact of the deductions outweighs that of the

additions on the lower end of the income distribution. Reinstating non-means-tested government transfers to the market income components reduces the number of people with income below their thresholds from 55.4 million using the market income definition to 37.3 million using the post-social insurance income definition. The differences between post-social insurance income and money income are the inclusion of imputed net rent and net realized capital gains, and the exclusion of modeled work expenses and means-tested cash assistance. The number of people with disposable income below their three-parameter thresholds is less than the number using the money income definition. All groups show an index value below 100 using the disposable income definition. Certain additions and subtractions in the disposable income definition affect the lower end of the income distribution, resulting in fewer people with disposable income below their threshold compared with the number of people with money income below their threshold (as seen with an index lower than 100).

Table 4 also presents differences in the number of people below their three-parameter thresholds across demographic groups. The second column shows that the number of people is higher when only market income is counted. (Market income includes imputed net realized capital gains and imputed rental income and excludes government transfers, such as social security.)

Looking at age, more than three times the number of people over age 65 have market income below their three-parameter thresholds

[19] The official thresholds were used in the report *Income, Poverty, and Health Insurance Coverage in the United States: 2005* (P60-231).

[20] The official thresholds are compared to the equivalence scale thresholds in Table B-1. The equivalence scale thresholds do not separate one- and two-person family units by age as in the official thresholds; people aged 65 and over are treated the same as people under 65. The table indicates that the equivalence scale thresholds are higher for all zero-, one-, and two-child family units with two exceptions—the two adult, two-child base of $19,806 around which the adjustments are made and the two-adult, seven-child threshold, which is lower after adjustment than the official amount. For all family units with three or more related children, the equivalence scale adjusted threshold amounts are lower than the official amounts. For more information about the impact of the equivalence scale and other thresholds, see Betson, 1996; Johnson, Shipp, and Garner, 1997; and Olsen, 1999. These papers are available at <www.census.gov/hhes/www/povmeas/papers.html>.

Table 4.
People With Income Below the Three-Parameter Thresholds by Selected Characteristic and Income Definition: 2005

(Numbers in thousands. People as of March of the following year)

Characteristic	Number with money income below their thresholds	Ratio of the number of people below the threshold under alternative income definitions to the number below the threshold using money income definition		
		Market income	Post-social insurance income	Disposable income
Total[1]	**36,804**	**150.4**	**101.4**	**81.7**
Age				
Under 18 years	12,764	115.4	104.4	74.4
18 to 64 years	20,234	133.1	104.3	89.9
65 years and older	3,805	360.1	75.6	62.8
Family Status				
In families	26,923	146.0	102.5	78.1
Married-couple families	11,505	174.3	99.3	76.1
Female householder, no husband present	13,401	122.7	104.8	78.3
Unrelated individuals	9,424	164.7	97.6	91.3
Race[2] and Hispanic Origin				
White	24,604	160.5	99.9	82.4
White, not Hispanic	16,011	181.2	97.0	82.9
Black	9,251	130.6	103.9	79.2
Asian	1,436	127.7	105.4	88.2
Hispanic (any race)	9,335	121.8	105.7	81.6
Educational Attainment (People 25 years and older)				
Less than 12th grade, no diploma	6,788	170.4	100.7	77.2
High school graduate, no college	6,618	196.6	98.3	83.9
Some college, less than bachelor's degree	3,710	180.1	96.4	85.0
Bachelor's degree or higher	1,894	176.5	88.8	85.2

[1] Details may not sum to total because of rounding or omitted groups.
[2] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White **and** Asian or Asian **and** Black or African American, is available from Census 2000 through American FactFinder. About 2.6 percent of people reported more than one race in Census 2000.

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

than below their money income threshold. The majority of people 65 and older receive some income from government transfer programs such as social security, and government transfer payments are subtracted from money income to form market income. Imputed net realized capital gains and imputed rental income on owner-occupied homes are included in the market income definition. These two imputed income sources generally benefit those in the 65 and older category who are retired and may live in their own (paid-in-full) homes.[21] Since the number of people 65 and older who are below their three-parameter thresholds is

[21] If imputed net rent is excluded from the market income definition, the number of people with disposable income below their thresholds is 32.7 million. This is an 8.6 percent increase over the number of people below their thresholds when imputed net rent is included. Looking specifically at people aged 65 and over, excluding the net rent value increases the number below their thresholds by 41.8 percent (from 2.4 million to 3.4 million). A summary of this data, excluding imputed net rent, is available at <www.census.gov/hhes/www/povmeas/povmeas.html>.

higher using market income, the omission of social security in this definition has a larger impact than the inclusion of the imputed rental income and realized capital gains on people 65 and older.

Differences among people by family status are driven by the prevalence of female householder with no husband present families. Of the 26.9 million people in families with money income below their thresholds, 13.4 million, or about 50 percent, are living in family

units with a female householder with no husband present. Using the post-social insurance income definition, people in female householder with no husband present families have an index value of 104.8, meaning that, among people in this family type, more have income below their threshold than would be below their threshold under the money income definition. This 4.8 percentage-point increase over the money income definition base captures the exclusion of cash means-tested government transfers, particularly public assistance that includes TANF, from the resource definition.

The final column in Table 4 displays the most comprehensive measure of income, disposable income. This definition expands on those detailed thus far by incorporating noncash transfers and deducting all taxes. The net effect of these additions and subtractions moves people of all characteristics below the 100.0 base of money income. The largest reduction is for those 65 and older. This definition reflects the impact of noncash government transfers, as well as tax credits such as the Earned Income Tax Credit and the Additional Child Tax Credit, which specifically target low-income people.

Table 5 shows that using disposable income instead of money income lowers the percentage of people below their three-parameter thresholds from 12.6 percent to 10.3 percent, a 2.3 percentage-point decline.[22] This follows since more resources have been incorporated into the income definition than have been subtracted for

[22] If child-care expenses are included in work expenses, the percentage of people with disposable income below their thresholds is 10.5 percent rather than the 10.3 percent in the text above. A summary of this data, with modeled child-care expenses, is available at <www.census.gov/hhes/www/povmeas/povmeas.html>.

Table 5.
The Percentage of People Below the Three-Parameter Thresholds by Selected Characteristic and Income Definition: 2005
(People as of March of the following year)

Characteristic	Money income	Disposable income
Total	**12.6**	**10.3**
Age		
Under 18 years	17.4	13.0
18 to 64 years	11.0	9.9
65 years and older	10.7	6.7
Family Status		
In families	11.1	8.7
Married-couple families	6.2	4.7
Female householder, no husband present	31.7	24.8
Unrelated individuals	19.0	17.4
Race[1] and Hispanic Origin		
White	10.5	8.6
White, not Hispanic	8.2	6.8
Black	25.1	19.9
Asian	11.4	10.1
Hispanic (any race)	21.7	17.7
Educational Attainment (People 25 years and older)		
Less than 12th grade, no diploma	24.3	18.8
High school graduate, no college	10.9	9.1
Some college, less than bachelor's degree	7.5	6.4
Bachelor's degree or higher	3.5	3.0

[1] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White **and** Asian or Asian **and** Black or African American, is available from Census 2000 through American FactFinder. About 2.6 percent of people reported more than one race in Census 2000.

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

those at the lower end of the income distribution.

Table 5 displays the percentage of people below their three-parameter thresholds for selected characteristics using the money income and disposable income definitions. Female householders with no husbands present show a 6.9 percentage-point difference between the money income and disposable income definitions (31.7 percent and 24.8 percent, respectively). The proportion of people with fewer than 12 years of education below their thresholds was 5.5

percentage points lower under the disposable income definition than under the money income definition. The difference in the percentage below their thresholds between definitions was larger for Blacks (5.2 percentage points) and Hispanics (4.0 percentage points) than for non-Hispanic Whites and Asians (both approximately 1.3 percentage points).[23] Looking at the age categories, the disposable income

[23] The difference in the rates for Blacks (5.2 percentage points) is not statistically different from the difference in the rates for people with less than 12 years of education (5.5 percentage points).

Population Below the Three-Parameter Thresholds Using Money Income and Disposable Income—Distribution by Selected Characteristic: 2005
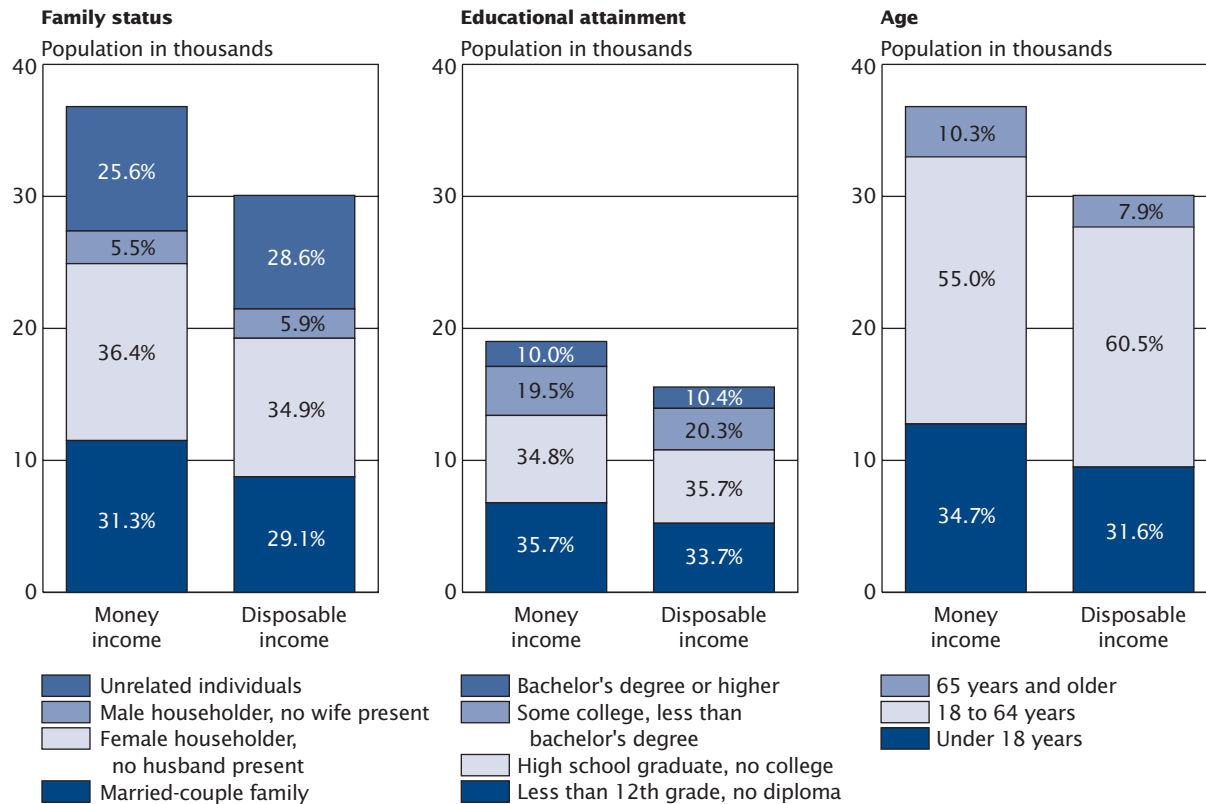
Family status
Population in thousands

Educational attainment
Population in thousands

Age
Population in thousands

Legend:
- Unrelated individuals
- Male householder, no wife present
- Female householder, no husband present
- Married-couple family

- Bachelor's degree or higher
- Some college, less than bachelor's degree
- High school graduate, no college
- Less than 12th grade, no diploma

- 65 years and older
- 18 to 64 years
- Under 18 years

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

definition shows a lower percentage for all three age groups.

Figure 3 shows the breakdown of the population below their three-parameter thresholds using money income and disposable income by selected characteristics. The bars are different heights because, by construction, fewer people have income below their three-parameter threshold using the disposable income definition.

People in female householder with no husband present families have a lower percentage below their three-parameter thresholds when the disposable income definition is used, and they remain the largest

group regardless of income definition. Using the money income definition, they compose 36.4 percent of all people below their thresholds. Using the disposable income definition, they compose 34.9 percent of the people below their three-parameter thresholds.

The young and the old benefit from the inclusion of more resources, such as imputed rental income and noncash transfers. People under 18 years old represent 34.7 percent of the population with money income less than their thresholds and 31.6 percent of the population with disposable income (which includes the value of noncash transfers) below their

thresholds. The number of people 65 and older below their thresholds fell 2.4 percentage points (from 10.3 percent to 7.9 percent) using the inclusive disposable income definition, which incorporates all transfers, taxes, and imputed rental income, compared with using money income.

Data are presented for income years 2004 and 2005 in Table A-2. For the total poverty universe, no significant changes occurred across all four definitions between 2004 and 2005. Changes across demographic characteristics, such as the increase in poverty for female householder with no husband present families from

Figure 4.
Distributions of Income-to-Threshold Ratios by Income Definition: 2005
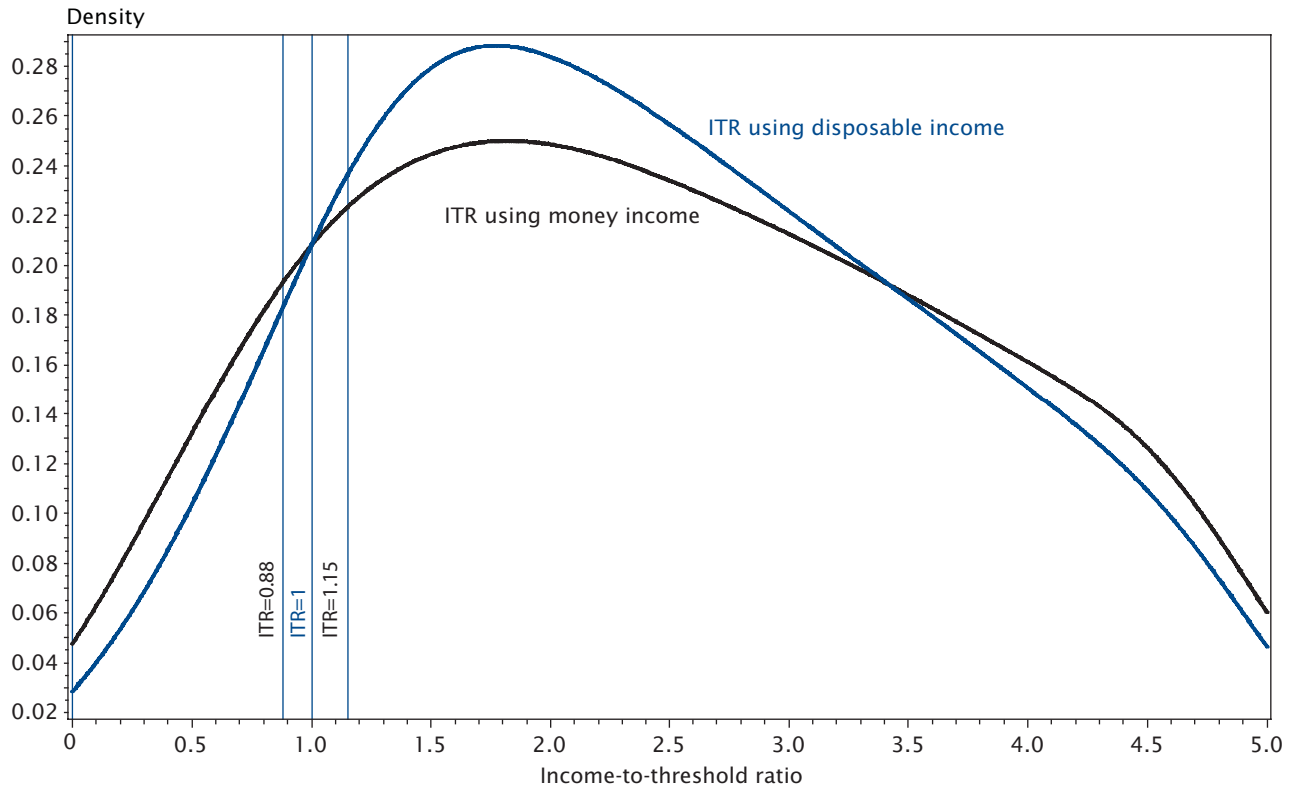
Density

ITR using disposable income

ITR using money income

ITR=0.88
ITR=1
ITR=1.15

Income-to-threshold ratio

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

2004 to 2005 across all definitions, can also be determined from Table A-2.

Another way to view income distribution is by calculating income-to-threshold ratios (ITR). Since this report uses four income definitions and one set of thresholds, four ratios are possible, where the numerator varies by the definition and the denominator stays the same. If income is below a given threshold, then the ITR is less than 1.0. Values at or above 1.0 indicate that income is equal to or greater than the threshold. Federal and state governments use this ratio

concept with the official poverty thresholds to determine eligibility for various programs. For instance, the food stamp program determines eligibility for people below 130 percent of the federal poverty guidelines, and free school lunches are available to families with income below 180 percent of the federal poverty guidelines.

Figure 4 illustrates the distribution of people according to their ITR for the money income and disposable income definitions. The two curves show that the number of people with income below the thresholds varies between the

definitions when holding the thresholds constant. The area under the curve to the left of the vertical line at 1.0 illustrates the population below the thresholds— 36.8 million people using money income and 30.1 million people using disposable income (Table 6). The area between the curves to the left of the 1.0 vertical line represents the people who are no longer below the threshold if the disposable income definition is used but remain below the threshold if the money income definition is used, indicating the impact of taxes and transfers on income distributions.

Table 6.
People With Income Below Specified Ratios of Their Three-Parameter Thresholds by Definition of Income: 2005

(Numbers in thousands. People as of March of the following year)

Definition of income	Income-to-threshold ratio					
	Under 0.88		Under 1.00		Under 1.15	
	Number	Percentage	Number	Percentage	Number	Percentage
Money income	30,896	10.5	36,804	12.6	44,844	15.3
Market income	49,640	16.9	55,369	18.9	62,272	21.2
Post-social insurance income	31,848	10.9	37,306	12.7	44,120	15.1
Disposable income	24,059	8.2	30,075	10.3	39,075	13.3

Source: U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement.

The ratios can also be used to illustrate the impact of changing the threshold amounts to revise the concept of need to 2005 standards or to update the threshold amounts by a different CPI index. Figure 4 and Table 6 show the impact of raising and lowering the thresholds. If the thresholds are updated using the CPI-U-RS instead of the CPI-U, the amounts are 12 percent lower, resulting in a threshold amount that is 88 percent of the 100 percent three-parameter thresholds used in this report. (See the text box "What Are the CPI-U and the CPI-U-RS" for more information.) The line labeled 0.88 on Figure 4 represents this inflation adjustment. Under both income definitions, the number of people below their thresholds is lower if the CPI-U-RS is used instead

of the CPI-U. Similar to the income distributions shown in Figure 2, the ITR distributions indicate that disposable income is less dispersed than money income. As in Figure 2, the area under each curve sums to 1. As seen in Table 6, using the 88 percent ITR lowers the percentage of people with money income below their threshold from 12.6 percent to 10.5 percent and the percentage with disposable income below their threshold from 10.3 percent to 8.2 percent. These results are intuitive, as incomes are being compared against a lower dollar amount.

If the thresholds are modified to incorporate income growth over the past several decades, the amounts would be 15 percent higher, resulting in a threshold

amount that is 115 percent of the 100 percent three-parameter thresholds used elsewhere in this report. The 115 percent level is based on the approximate increase in real median family income for four-person families from 1978 to 2005 using the CPI-U. At 1.15 on Figure 4, the disposable income curve is higher than the money income curve, but the area under the curves—representing the total number of people with ITR less than 1.15—still finds more people below the inflation-adjusted 1.15 ITR using the money income definition. The higher threshold increases the percentage of people with money income and the percentage with disposable income below their threshold, as seen in Table 6.

WHAT ARE THE CPI-U AND THE CPI-U-RS?

The CPI-U (Consumer Price Index for All Urban Consumers) and the CPI-U-RS (Consumer Price Index Research Series Using Current Methods) are both price indexes used to update dollar figures for inflation. These indexes are computed by the Bureau of Labor Statistics (BLS) to track the average change in prices for consumer goods and services used for consumption. More than 200 categories are tracked for the CPI, including food and beverages, housing, apparel, transportation, medical care, recreation, and education. The index does not include taxes or investments such as stocks, real estate, or life insurance.

The CPI-U is used to update the official poverty thresholds for inflation. This means that each year since 1967 the poverty thresholds have been updated to a higher level using the change in the CPI-U. Statistical Policy Directive 14, issued by the Office of Management and Budget (OMB), states that the official poverty measure is to be updated this way.

The CPI-U-RS is an inflation index covering 1978 to the present. It applies most of the methodological improvements made to the CPI-U since 1978 to every year of the series. Among other improvements, the CPI-U-RS retroactively applies the newest methods of quality adjustment for many items, including personal computers, televisions, apparel, and many appliances, and it takes better account of how consumers might buy lower-priced goods or services to protect themselves from price increases on similar items. Dollar figures updated with the CPI-U-RS tend to be lower than those updated with the CPI-U, partly because the CPI-U-RS also uses a corrected method for calculating homeownership costs.

Although the CPI-U-RS has some limitations, including being subject to annual revisions, the BLS states that "the CPI-U-RS can serve as a valuable proxy for researchers needing a historical estimate of inflation using current methods. The direct adjustment of individual CPI index series makes this the most detailed and systematic estimate available of a consistent CPI series." More information about the CPI-U-RS is available on the BLS Web site at <www.bls.gov/cpi/cpirsdc.htm>.

The results in this report use two sets of thresholds to evaluate the percentage of people living with incomes below these thresholds. Like the official thresholds, the three-parameter thresholds in this report have been updated annually (since 1978) using the CPI-U. An alternative series of thresholds could also be obtained by using alternative updating methods. One alternative method is to use the CPI-U-RS series to update the thresholds. To produce a series of thresholds, a base year must be chosen. The base year is usually the first year of analysis or the most recent year.

Comparing the outcomes when alternative inflation indexes are used to adjust the thresholds highlights the effects of the indexes on trends in poverty. For example, using 1978 as the base year and adjusting the three-parameter thresholds each year by the change in the CPI-U-RS yields thresholds that are slightly lower than the official thresholds in each subsequent year. As a result, the 2005 threshold is 88 percent of the three-parameter thresholds updated using the CPI-U. This is because the change in the CPI-U-RS between 1978 and 2005 is lower than the change in the CPI-U during this time. As Figure 5 shows, the resulting series of the percentage of people living below these thresholds is also lower than the rates using the CPI-U.

Alternatively, the current year (2005) can be used as the base year. Following the treatment of income in the report *Income, Poverty, and Health Insurance Coverage in the United States: 2005* (P60-231), the current (2005) poverty thresholds could be adjusted back to 1978 using the CPI-U-RS. Because the CPI-U-RS increases less than the CPI-U, the poverty thresholds in 1978 would be higher than the thresholds obtained using the CPI-U, which yields a higher percentage of people living with incomes below these thresholds. The trends in both series are similar no matter which base period is used. Both trends, however, differ from the trend using the CPI-U. Using the CPI-U-RS yields a slight decrease in poverty between 1978 and 2005, while the CPI-U yields an increase between these 2 years.

Figure 5.
Percentage of People Below Their Three-Parameter Thresholds: 1978–2005

Percent

Three-parameter thresholds (CPI-U-RS from 2005)

Three-parameter thresholds (CPI-U from 1978)
Three-parameter thresholds (CPI-U-RS from 1978)
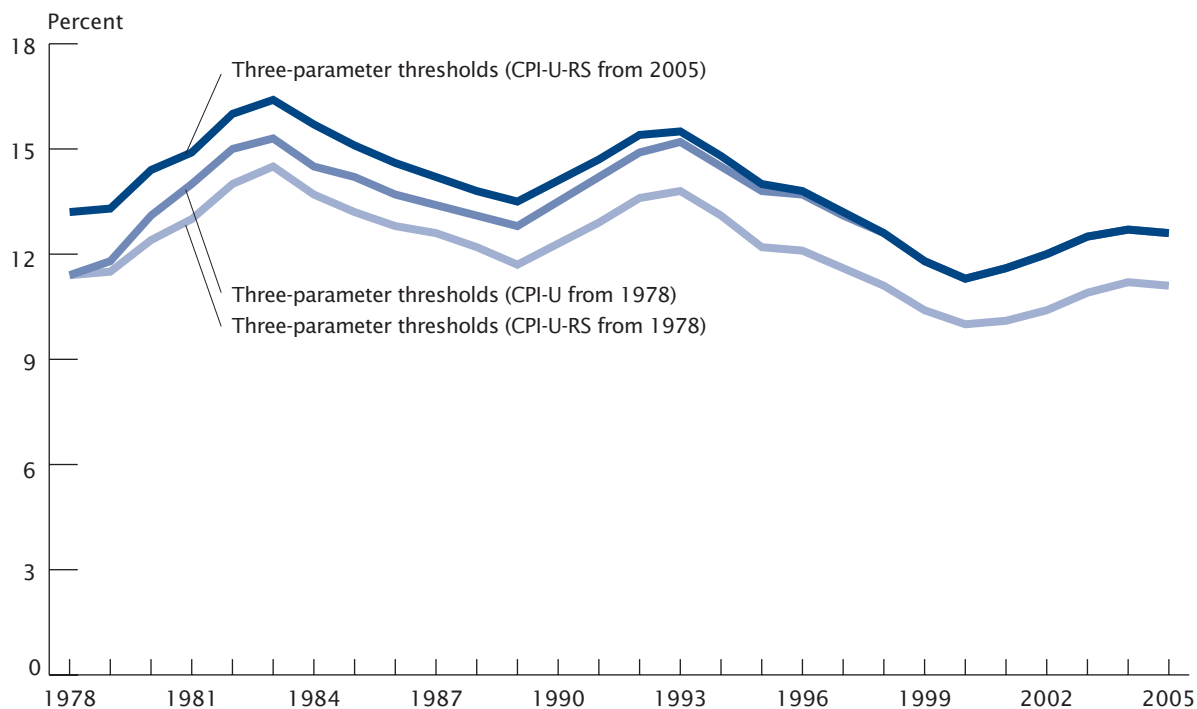
Note: The data points are placed at the midpoints of the respective years.
Source: U.S. Census Bureau, Current Population Survey, 1979 to 2006 Annual Social and Economic Supplements.

SOURCE OF THE DATA AND ACCURACY OF THE ESTIMATES

The data in this report are from the ASEC to the 2005 and 2006 CPS conducted by the Census Bureau. The population represented in the survey (the population universe) is the civilian noninstitutionalized population living in the United States. Members of the armed forces living off post or with their families on post are included if at least one civilian adult lives in the household. Most of the data from the CPS ASEC were collected in March (with some data collected in February and April), and the data were controlled to independent population estimates for March of the survey year.

The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/income/p60_231sa.pdf>.

CPS DATA COLLECTION

The information in this report was collected in the 50 states and the District of Columbia and does not represent residents of Puerto Rico and U.S. island areas. It is based on a sample of about 100,000 addresses. The estimates in this report are controlled to national population estimates by age, race, sex, and Hispanic origin and to state population estimates by age, race, and sex. The population controls used to prepare estimates for 1999 to 2006 were based on the results from Census 2000 and are updated annually using administrative records such as birth and death certificates.

The CPS is a household survey primarily used to collect employment data. The sample universe for the basic CPS consists of the resident civilian noninstitutionalized population of the United States. People in institutions, such as prisons, long-term care hospitals, and nursing homes, are therefore not eligible to be interviewed in the CPS. Students living in dormitories are only included in the estimates if information about them is reported in an interview at their parents' homes. The sample universe for the CPS ASEC is slightly larger than the basic CPS since it includes military personnel who live in a household with at least one other civilian adult, regardless of whether they live off post or on post. All other armed forces are excluded. For further documentation about the CPS ASEC, see <www.bls.census.gov/cps/ads /adsmain.htm>.

REFERENCES

Betson, David. 1996. "Is Everything Relative? The Role of Equivalence Scales in Poverty Measurement." University of Notre Dame, unpublished manuscript.

Citro, Constance F., and Robert T. Michael (eds.). 1995. *Measuring Poverty: A New Approach*. Washington, DC: National Academy Press.

Cleveland, Robert W. 2005. *Alternative Income Estimates in the United States: 2003*. U.S. Census Bureau, Current Population Reports, P60-228. Washington, DC: U.S. Government Printing Office. <www.census.gov/prod /2005pubs/p60-228.pdf>.

Dalaker, Joe. 2005. *Alternative Poverty Estimates in the United States: 2003*. U.S. Census Bureau, Current Population Reports, P60-227. Washington, DC: U.S. Government Printing Office. <www.census.gov /hhes/www/poverty /altpovest03/altpovestrpt.html>.

DeNavas-Walt, Carmen, Bernadette D. Proctor, and Cheryl Hill Lee. 2006. *Income, Poverty, and Health Insurance Coverage in the United States: 2005*. U.S. Census Bureau, Current Population Reports, P60-231. Washington, DC: U.S. Government Printing Office.

<www.census.gov/hhes/www /poverty/poverty05.html >.

Johnson, David, Stephanie Shipp, and Thesia I. Garner. August 1997. "Developing Poverty Thresholds Using Expenditure Data." *Proceedings of the Government and Social Statistics Section*. Alexandria, VA: American Statistical Association, pp. 28–37.

O'Hara, Amy. 2004. "New Methods for Simulating CPS Taxes." U.S. Census Bureau Technical Paper. <www.census.gov/hhes/www /income/oharataxmodel.pdf>.

Olsen, Kelly A. 1999. "Application of Experimental Poverty Measures to the Aged." *Social Security Bulletin*, Volume 62, Number 3.

Roemer, Marc. 2000. "Assessing the Quality of the March Current Population Survey and the Survey of Income and Program Participation Income Estimates, 1990–1996." U.S. Census Bureau. <www.census.gov/hhes /www/income/assess1.pdf>.

Short, Kathleen. 2001. *Experimental Poverty Measures: 1999*. U.S. Census Bureau, Current Population Reports, P60-216. Washington, DC: U.S. Government Printing Office. <www.census.gov/prod /2001pubs/p60-216.pdf>.

Skuterud, Mikal, Marc Frenette, and Preston Poon. 2004. "Describing the Distribution of Income: Guidelines for Effective Analysis." Statistics Canada, Income Research Paper Series.

U.S. Census Bureau. 2006. "The Effects of Government Taxes and Transfers on Income and Poverty: 2004." U.S. Census Bureau Internet Release. <www.census.gov/hhes /www/income/effect2004 /effect2004.html>.

U.S. Census Bureau. 1993. *Measuring the Effect of Benefits and Taxes on Income and Poverty 1992*. Current Population Reports, P60-186RD. Washington, DC: U.S. Government Printing Office. <www.census.gov/hhes /www/poverty/prevcps /p60-186rd.pdf>.

Weinberg, Daniel W. 2005. *Alternative Measures of Income and Poverty and the Anti-Poverty Effects of Taxes and Transfers*. CES-5-08. U.S. Census Bureau. <http://webserver01.ces .census.gov/index.php/ces/1.00 /cespapers?down_key=101716>.

COMMENTS

The Census Bureau welcomes the comments and advice of data and report users. If you have suggestions or comments, please write to:

Charles Nelson
Assistant Division Chief for
Income, Poverty, and Health
  Statistics
Housing and Household Economic
  Statistics Division
U.S. Census Bureau
Washington, DC 20233-8500

or send e-mail to
<charles.t.nelson@census.gov>.

Table A-1.
Median Income of Households by Selected Characteristic and Income Definition: 2004 and 2005

(Households as of March of the following year)

Characteristic	Number (thou-sands)	Money income (dollars)		Market income (dollars)		Post-social insurance income (dollars)		Disposable income (dollars)	
		Median	90-percent confidence interval[1] (±)	Median	90-percent confidence interval[1] (±)	Median	90-percent confidence interval[1] (±)	Median	90-percent confidence interval[1] (±)
2005									
All households	**114,384**	**46,326**	**255**	**43,701**	**297**	**47,975**	**272**	**40,843**	**229**
Type of Household									
Family households	77,402	57,278	332	55,650	400	59,731	359	50,707	290
Married-couple	58,179	66,067	402	65,564	488	69,349	414	57,786	324
Female householder, no husband present	14,093	30,650	432	27,107	597	30,419	546	29,464	328
Nonfamily households	36,982	27,326	267	24,712	345	29,395	284	25,283	227
Race[2] and Hispanic Origin									
White	93,588	48,554	349	46,153	371	50,482	348	42,883	245
White, not Hispanic	82,003	50,784	283	48,513	350	53,142	363	44,599	261
Black	14,002	30,858	495	27,370	677	30,713	623	28,416	400
Asian	4,273	61,094	1,171	61,505	2,507	64,362	1,884	53,051	1,276
Hispanic (any race)	12,519	35,967	586	33,730	632	35,744	639	32,769	484
Region									
Northeast	7,400	50,882	610	48,875	806	53,688	875	44,151	562
Midwest	14,904	45,950	578	43,387	562	47,487	548	39,886	410
South	8,406	42,138	349	39,022	440	43,457	484	37,919	333
West	25,174	50,002	608	48,413	644	52,143	662	44,846	526
Number of Earners									
No earners	24,244	16,893	209	6,650	163	20,381	278	19,984	235
One earner	42,066	37,541	324	35,565	337	38,719	295	33,027	227
Two earners or more	48,095	75,293	398	75,434	502	77,343	481	62,556	351
Two earners	38,327	70,952	391	71,159	531	72,967	510	59,184	373
Three earners	7,337	87,905	1,208	88,086	1,155	90,055	1,124	72,998	830
Four earners or more	2,430	100,000	(NA)	100,000	(NA)	100,000	(NA)	87,912	1,991
Work Experience of Householder									
Worked	79,087	57,802	446	57,510	358	59,326	354	48,561	276
Worked full-time, year-round	57,418	63,610	480	64,232	423	65,537	448	52,711	331
Did not work	35,297	23,801	272	13,973	273	27,421	303	26,487	251
2004[3] (in 2005 dollars)									
All households	**113,343**	**45,817**	**333**	**43,589**	**307**	**48,089**	**309**	**41,446**	**228**
Type of Household									
Family households	76,858	57,179	338	55,645	423	60,148	360	51,656	294
Married-couple families	57,975	65,946	489	65,844	492	69,732	477	58,602	327
Female householder, no husband present	13,981	30,824	530	27,725	587	31,178	543	30,563	356
Nonfamily households	36,485	27,128	262	24,738	320	29,237	263	25,205	218
Race[2] and Hispanic Origin									
White	92,880	48,218	311	46,245	356	50,707	301	43,470	247
White, not Hispanic	81,628	50,546	380	48,674	398	53,235	374	45,247	279
Black	13,809	31,102	532	27,785	799	31,175	591	28,931	465
Asian	4,123	59,427	2,078	61,771	2,041	63,245	2,190	52,485	1,559
Hispanic (any race)	12,178	35,418	816	33,415	697	35,608	586	33,367	459

See footnotes at end of table.

Table A-1.
Median Income of Households by Selected Characteristic and Income Definition: 2004 and 2005—Con.

(Households as of March of the following year)

Characteristic	Number (thou-sands)	Money income (dollars) Median	Money income (dollars) 90-percent confidence interval[1] (±)	Market income (dollars) Median	Market income (dollars) 90-percent confidence interval[1] (±)	Post-social insurance income (dollars) Median	Post-social insurance income (dollars) 90-percent confidence interval[1] (±)	Disposable income (dollars) Median	Disposable income (dollars) 90-percent confidence interval[1] (±)
Region									
Northeast	21,187	49,462	819	47,700	813	52,477	838	43,949	613
Midwest	25,939	46,134	661	43,739	636	48,163	709	40,969	440
South	41,224	42,108	375	39,326	475	43,512	445	38,375	348
West	24,993	49,244	669	47,871	732	52,083	767	45,480	528
Number of Earners									
No earners	23,952	16,667	214	7,344	160	20,664	258	20,284	218
One earner	41,799	37,371	254	35,430	273	38,763	310	33,442	222
Two earners or more	47,593	75,024	452	75,744	505	77,728	512	63,841	381
Two earners	38,119	71,224	519	71,689	507	73,528	492	60,346	385
Three earners	7,202	86,628	1,258	87,908	1,181	89,651	1,135	74,081	1,069
Four earners or more	2,271	100,000	(NA)	100,000	(NA)	100,000	(NA)	90,445	1,739
Work Experience of Householder									
Worked	78,490	57,706	328	57,605	433	59,773	346	49,324	300
Worked full-time, year-round	56,605	63,624	301	64,223	402	65,441	416	53,540	312
Did not work	34,853	22,951	242	14,068	264	27,123	318	26,283	287

(NA) Not available.

[1] The 90-percent confidence interval is computed by multiplying the standard errors by 1.645. A 90-percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. For more information, see "Standard Errors and Their Use" at <www.census.gov/hhes/www /p60_231sa.pdf>.

[2] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White **and** Asian or Asian **and** Black or African American, is available from Census 2000 through American FactFinder. About 2.6 percent of people reported more than one race in Census 2000.

[3] The 2004 data have been revised to reflect a correction to the weights in the 2005 ASEC.

Source: U.S. Census Bureau, Current Population Survey, 2005 and 2006 Annual Social and Economic Supplements.

Number and Percentage of People With Alternative Definitions of Income Below the Three-Parameter Poverty Thresholds by Selected Characteristic: 2004 and 2005

(Numbers in thousands, confidence intervals (C.I.) in thousands or percentage points as appropriate. People as of March of the following year)

Characteristic	Total	Money income				Market income				Post-social insurance income				Disposable income			
		Number below threshold	90-percent C.I.[1](±)	Percentage below threshold	90-percent C.I.[1](±)	Number below threshold	90-percent C.I.[1](±)	Percentage below threshold	90-percent C.I.[1](±)	Number below threshold	90-percent C.I.[1](±)	Percentage below threshold	90-percent C.I.[1](±)	Number below threshold	90-percent C.I.[1](±)	Percentage below threshold	90-percent C.I.[1](±)
2005																	
Total[2]	293,135	36,804	678	12.6	0.2	55,369	801	18.9	0.3	37,306	682	12.7	0.2	30,075	621	10.3	0.2
Age																	
Under 18 years	73,285	12,764	344	17.4	0.5	14,731	365	20.1	0.5	13,321	350	18.2	0.5	9,495	304	13.0	0.4
18 to 64 years	184,345	20,235	514	11.0	0.3	26,936	583	14.6	0.3	21,109	523	11.5	0.3	18,191	489	9.9	0.3
65 years and older	35,505	3,805	136	10.7	0.4	13,701	214	38.6	0.6	2,876	120	8.1	0.3	2,389	110	6.7	0.3
Family Status																	
In families	242,389	26,923	591	11.1	0.2	39,319	698	16.2	0.3	27,602	598	11.4	0.2	21,039	528	8.7	0.2
Married-couple families. .	185,723	11,505	397	6.2	0.2	20,051	517	10.8	0.3	11,429	396	6.2	0.2	8,757	348	4.7	0.2
Female householder, no husband present	42,244	13,401	428	31.7	1.1	16,443	471	38.9	1.2	14,040	437	33.2	1.1	10,496	380	24.8	1.0
Unrelated individuals	49,526	9,424	210	19.0	0.4	15,526	293	31.3	0.6	9,197	207	18.6	0.4	8,603	198	17.4	0.4
Race[3] and Hispanic Origin																	
White	235,430	24,604	568	10.5	0.2	39,491	699	16.8	0.3	24,578	567	10.4	0.2	20,275	519	8.6	0.2
White, not Hispanic	195,553	16,011	465	8.2	0.2	29,019	611	14.8	0.3	15,524	458	7.9	0.2	13,272	426	6.8	0.2
Black	36,802	9,251	333	25.1	0.9	12,084	369	32.8	1.0	9,612	338	26.1	0.9	7,330	302	19.9	0.8
Asian	12,580	1,436	138	11.4	1.1	1,834	155	14.6	1.2	1,513	142	12.0	1.1	1,267	130	10.1	1.0
Hispanic (any race)	43,020	9,335	323	21.7	0.8	11,373	346	26.4	0.8	9,865	330	22.9	0.8	7,622	299	17.7	0.7
Nativity																	
Native	257,513	30,908	629	12.0	0.2	47,880	757	18.6	0.3	31,121	631	12.1	0.2	24,963	571	9.7	0.2
Foreign born	35,621	5,896	328	16.6	1.0	7,489	368	21.0	1.1	6,185	335	17.4	1.0	5,112	306	14.4	0.9
Educational Attainment (People 25 years and older)																	
Less than 12th grade, no diploma	27,896	6,788	308	24.3	1.2	11,570	396	41.5	1.5	6,837	308	24.5	1.2	5,238	270	18.8	1.0
High school graduate, no college	60,898	6,618	303	10.9	0.5	13,009	419	21.4	0.7	6,506	301	10.7	0.5	5,553	278	9.1	0.5
Some college, less than bachelor's degree	49,371	3,710	229	7.5	0.5	6,683	304	13.5	0.7	3,575	224	7.2	0.5	3,153	211	6.4	0.5
Bachelor's degree or higher.	53,720	1,894	165	3.5	0.3	3,342	217	6.2	0.3	1,682	155	3.1	0.3	1,614	151	3.0	0.3
Region																	
Northeast	54,010	6,094	285	11.3	0.5	9,353	341	17.3	0.6	6,255	288	11.6	0.5	4,855	257	9.0	0.5
Midwest	64,973	7,400	311	11.4	0.5	11,520	373	17.7	0.6	7,358	310	11.3	0.5	6,103	285	9.4	0.4
South	106,089	14,904	444	14.0	0.4	22,631	523	21.3	0.5	14,963	445	14.1	0.4	12,237	408	11.5	0.4
West	68,063	8,406	340	12.4	0.5	11,865	392	17.4	0.6	8,729	345	12.8	0.5	6,880	311	10.1	0.5
2004[4]																	
Total[2]	290,617	36,764	678	12.7	0.2	54,550	797	18.8	0.3	36,595	677	12.6	0.2	29,488	616	10.1	0.2
Age																	
Under 18 years	73,241	12,736	345	17.4	0.5	14,628	364	20.0	0.5	13,117	349	17.9	0.5	9,366	303	12.8	0.4
18 to 64 years	182,166	20,330	517	11.2	0.3	26,521	582	14.6	0.3	20,788	522	11.4	0.3	17,854	487	9.8	0.3
65 years and older	35,209	3,697	134	10.5	0.4	13,401	210	38.1	0.6	2,690	116	7.6	0.3	2,267	107	6.4	0.3
Family Status																	
In families	240,754	27,045	592	11.2	0.2	39,116	696	16.2	0.3	27,201	594	11.3	0.2	20,709	525	8.6	0.2
Married-couple families. .	184,772	12,017	406	6.5	0.2	20,454	522	11.1	0.3	11,687	400	6.3	0.2	9,034	354	4.9	0.2
Female householder, no husband present	42,053	13,034	422	31.0	1.1	15,962	464	38.0	1.2	13,479	429	32.1	1.1	9,981	371	23.7	0.9
Unrelated individuals	48,609	9,141	206	18.8	0.4	14,816	284	30.5	0.6	8,794	201	18.1	0.4	8,264	193	17.0	0.4
Race[3] and Hispanic Origin																	
White	233,741	25,073	573	10.7	0.2	39,340	698	16.8	0.3	24,551	567	10.5	0.2	20,167	518	8.6	0.2
White, not Hispanic	195,098	16,718	475	8.6	0.2	29,307	614	15.0	0.3	15,953	464	8.2	0.2	13,551	430	6.9	0.2
Black	36,426	8,988	338	24.7	0.9	11,546	376	31.7	1.0	9,153	341	25.1	0.9	7,052	303	19.4	0.8
Asian	12,231	1,224	131	10.0	1.1	1,678	153	13.7	1.2	1,301	135	10.6	1.1	1,149	127	9.4	1.0
Hispanic (any race)	41,690	9,053	317	21.7	0.8	10,919	337	26.2	0.8	9,358	320	22.4	0.8	7,134	290	17.1	0.7
Nativity																	
Native	255,443	30,715	627	12.0	0.2	46,831	750	18.3	0.3	30,253	623	11.8	0.2	24,260	564	9.5	0.2
Foreign born	35,173	6,048	332	17.2	1.0	7,719	374	21.9	1.1	6,342	340	18.0	1.0	5,228	309	14.9	0.9

See footnotes at end of table.

Table A-2.
Number and Percentage of People With Alternative Definitions of Income Below the Three-Parameter Poverty Thresholds by Selected Characteristic: 2004 and 2005—Con.

(Numbers in thousands, confidence intervals (C.I.) in thousands or percentage points as appropriate. People as of March of the following year)

Characteristic	Total	Money income				Market income				Post-social insurance income				Disposable income			
		Number below thresh-old	90-per-cent C.I.[1] (±)	Per-cent-age below thresh-old	90-per-cent C.I.[1] (±)	Number below thresh-old	90-per-cent C.I.[1] (±)	Per-cent-age below thresh-old	90-per-cent C.I.[1] (±)	Number below thresh-old	90-per-cent C.I.[1] (±)	Per-cent-age below thresh-old	90-per-cent C.I.[1] (±)	Number below thresh-old	90-per-cent C.I.[1] (±)	Per-cent-age below thresh-old	90-percent C.I.[1] (±)
Educational Attainment (People 25 years and older)																	
Less than 12th grade, no diploma	28,015	6,756	306	24.1	1.2	11,583	396	41.3	1.5	6,623	303	23.6	1.2	5,088	266	18.2	1.0
High school graduate, no college	60,893	6,646	304	10.9	0.5	12,746	415	20.9	0.7	6,377	298	10.5	0.5	5,385	275	8.8	0.5
Some college, less than bachelor's degree	48,077	3,411	219	7.1	0.5	6,245	294	13.0	0.7	3,235	214	6.7	0.5	2,757	197	5.7	0.5
Bachelor's degree or higher	52,381	2,118	173	4.0	0.3	3,260	214	6.2	0.5	1,843	161	3.5	0.3	1,841	161	3.5	0.3
Region																	
Northeast	53,906	6,269	279	11.6	0.5	9,242	337	17.1	0.7	6,232	279	11.6	0.5	4,931	248	9.1	0.5
Midwest	64,740	7,430	307	11.5	0.5	11,505	379	17.8	0.6	7,352	305	11.4	0.5	5,922	275	9.1	0.4
South	104,887	14,848	479	14.2	0.5	22,043	576	21.0	0.6	14,528	474	13.9	0.5	11,979	432	11.4	0.4
West	67,083	8,217	375	12.2	0.6	11,760	446	17.5	0.7	8,483	381	12.6	0.6	6,655	338	9.9	0.5

[1] The 90-percent confidence interval is computed by multiplying the standard errors by 1.645. A 90-percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. For more information, see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_231sa.pdf>.

[2] Details may not sum to total because of rounding.

[3] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White **and** Asian or Asian **and** Black or African American, is available from Census 2000 through American FactFinder. About 2.6 percent of people reported more than one race in Census 2000.

[4] The 2004 data have been revised to reflect a correction to the weights in the 2005 ASEC.

Source: U.S. Census Bureau, Current Population Survey, 2005 and 2006 Annual Social and Economic Supplements.

Appendix B.
THREE-PARAMETER EQUIVALENCE SCALE POVERTY THRESHOLDS

Official poverty thresholds, those calculated following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, are described on the Internet and in the report *Income, Poverty, and Health Insurance Coverage in the United States: 2005* (P60-231). The Census Bureau uses a set of money thresholds that vary by family size and composition to determine who is in poverty (Table B-1). Social Security Administration economist Mollie Orshansky devised the thresholds in the 1960s, based in large part on the U.S. Department of Agriculture's food plan, which defined a generally accepted adequate amount of food. Although the matrix has undergone a few slight revisions since then, thresholds reflecting a revised concept of need (or as Orshansky might have called it "adequacy for essentials of living") have not been included in the poverty series. Instead, for official poverty estimates, the thresholds are updated each year for the cost of inflation using the Consumer Price Index for All Urban Consumers (CPI-U). For a history of the official poverty measure, see "The Development of the Orshansky Thresholds and Their Subsequent History as the Official U.S. Poverty Measure" by Gordon Fisher, available at <www.census.gov/hhes/povmeas/papers/orshansky.html>. Although this report does not propose a revised poverty measure, it does examine a modification to the official poverty threshold matrix by instituting a three-parameter scale, as shown in Table B-1.

The three-parameter scale used here has the following characteristics:

- The first parameter reflects that children, on average, consume less than adults.

- The second parameter reflects that as family size increases, expenses do not increase at the same rate.

- The third parameter allows the first child in a single-adult family to represent a larger increase in expenses than the first child in a two-adult family.

For details on the derivation of this equivalence scale, see Appendix A of Short, 2001.

As with the official definition of poverty, if a family's total income is less than that family's threshold, then that family and every individual in it is considered below the threshold in this report. While the official poverty definition uses money income before taxes and does not include realized capital gains or the value of noncash benefits (such as public housing, Medicaid, and food stamps), this report compares three alternative measures of resources to the same set of three-parameter scale thresholds to determine how the number and characteristics of people with income below the thresholds vary as taxes and transfers are incorporated.

Example: Suppose Family A consists of four people: two children, their mother, and their father. Family A's poverty threshold in 2005 was $19,809. Suppose also that each member had the following income in 2005:

	Money income	Disposable income
Mother	$10,000	$10,000
Father	5,000	15,000
First child	0	0
Second child	0	0
Total:	$15,000	$25,000

Under the money income definition, the family had total income equal to $15,000, which was less than their threshold ($19,809); hence, the people in this family would be counted among those with money income less than their threshold. Under the disposable income definition, the family's total income was $25,000, possibly due to the inclusion of tax credits, food stamps, and housing subsidies. Since this amount is higher than their threshold ($19,809), the family members would be counted among those with disposable income above their thresholds. For each calculation, the threshold is the same and only the measure of resources differs.

Table B-1
Official Poverty Thresholds and Three-Parameter Scaled Thresholds Used in Alternative Poverty Estimates: 2005
(Dollars)

Size of family unit	Number of related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
Official Thresholds									
One person									
Under 65 years	10,160								
65 years and older	9,367								
Two people									
Householder under 65 years........	13,078	13,461							
Householder 65 years and older	11,805	13,410							
Three people	15,277	15,720	15,735						
Four people	20,144	20,474	**19,806**	19,874					
Five people.........................	24,293	24,646	23,891	23,307	22,951				
Six people..........................	27,941	28,052	27,474	26,920	26,096	25,608			
Seven people.......................	32,150	32,350	31,658	31,176	30,277	29,229	28,079		
Eight people	35,957	36,274	35,621	35,049	34,237	33,207	32,135	31,862	
Nine people or more.................	43,254	43,463	42,885	42,400	41,603	40,507	39,515	39,270	37,757
Four-Person Threshold With Three-Parameter Equivalence Scale Thresholds									
One person..........................	9,179								
Two people	12,943	13,852							
Three people	19,806	17,433	16,445						
Four people	24,224	22,063	**19,806**	18,872					
Five people.........................	28,320	26,306	24,224	22,063	21,172				
Six people..........................	32,175	30,274	28,320	26,306	24,224	23,370			
Seven people.......................	35,841	34,029	32,175	30,274	28,320	26,306	25,482		
Eight people	39,353	37,614	35,841	34,029	32,175	30,274	28,320	27,522	
Nine people or more.................	42,735	41,059	39,353	37,614	35,841	34,029	32,175	30,274	29,499

Source: U.S. Census Bureau.

Appendix C.
LIMITATIONS OF THE DATA

Income Underreporting in the CPS ASEC

The collection vehicle for the estimates shown in this release is the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS). Problems with income reporting in the ASEC are well documented (see Roemer, 2000, for example). A recent study by analysts at the Census Bureau and the Bureau of Economic Analysis (BEA) compared BEA State Personal Income (SPI) aggregates with those from the CPS for income year 2001 (Ruser, Pilot, and Nelson, 2004). They found that once the necessary adjustments were made to make the two datasets conceptually the same, the CPS ASEC aggregate was about $806 billion less than the SPI aggregate—a difference of around 11 percent. About one-half of this difference is due to adjustments BEA makes to its SPI for unreported earnings (wages and salaries and self-employment income). The study also found that the differences are not consistent by type of income. For example, the wage and salary difference was around 3 percent while the difference for transfer incomes was around 23 percent. Clearly there needs to be more research on the effect of underreporting of key income types on important summary measures such as the poverty rate and median household income. Weinberg, 2005, contains tabulations based on files created by the Urban Institute with support from the U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation. These files include underreporting adjustment models for three transfer programs: Temporary Assistance for Needy Families (TANF), supplemental security income (SSI), and food stamps. Tabulations from this file illustrate the potential importance of underreporting adjustments. They showed that the effect of using the file that incorporated imputations for unreported TANF, SSI, and food stamp benefits was to reduce the overall poverty rate by around 1 percentage point in 2002.

Imputed Values for Items Not Included in the CPS ASEC

The CPS ASEC does not collect data on the value of home production or the value of imputed rent from owner-occupied dwellings—though the latter uses a statistical match to the American Housing Survey to impute the value of rent and incorporate it into the market income definition. Imputed realized capital gains and losses are also included in market income. These imputed realized gains or losses are not incorporated into the Canberra Group recommendations, though they are also included by other international statistical agencies.[24] Realized capital gains and losses are often found in wealth distribution analyses, as they increase (or reduce) income when measuring household well-being.

[24] Finland and Norway include realized capital gains in their national income distribution statistics. See <www.stat.fi/eusilc /tormalehto_v02.pdf> for a fuller discussion of the issue.