

USA **FACTS**

Methodology

Families & Individuals

April 18, 2017

Introduction

The Families & Individuals tables presented by USAFacts show how key economic and demographic statistics vary according to three key variables: market income, family type, and elderly/non-elderly status. These groupings are not available consistently, and therefore we produced estimates using only government data.

The numbers in the Families & Individuals tables are estimates based on data collected from a variety of government sources, the two most important being microdata from the Current Population Survey (March Supplement) **issued** by the Census Bureau of the Public Use File **issued** by the Internal Revenue Service's Statistics of Income Division (IRS-SOI). The CPS is a sample of households representing the US civilian noninstitutionalized population. It contains information on topics such as housing, health insurance, labor status, family arrangement, etc. Unfortunately, the CPS does not contain everything we want, so we supplement that file with data from elsewhere via statistical processes. In the case of income data, we statistically match the IRS Public Use File with the CPS. The IRS data is superior to the CPS income data. In other cases, we impute variables in the CPS from other sources such as the American Community Survey using regression techniques for variables that are common to both files.

There are two types of economic units: families and individuals. We use the Census Bureau's definition for each. If there are two or more related individuals living together, they are a family economic unit. If a person is living alone or in a household with no other related persons, that person is considered an individual economic unit. Therefore, some economic units have only one person, while other economic units have multiple persons.

We rank these economic units, which we call FIUs (family and individual units) by market income to place each in a percentile that shows the unit relative to other units in the population. (There are approximately 147 million family and individual units). After determining each unit's market income percentile relative to all other units, we then place each unit into one of five categories:

1. Single person under 65 with no children under 18
2. Single person under 65 with children under 18

3. Married couple with head under 65 with no children under 18
4. Married couple with head under 65 with children under 18
5. Head aged 65 or over

It should be noted that although we divide the families based on presence of children under 18, if a person is aged 18+ and still living in the family with relatives, she would NOT be her own economic unit unless she had her own subfamily.

Below are descriptions of the various profiles (tables) we have calculated using the above process.

Cohort Profile

The *Cohort (or Family Unit) Profile* table provides a demographic profile of each of the FIU groups. It includes data on family size and age, sex, race, ethnicity and geography.

Description of Statistics

of Family and Individual Units: The aggregate number of family and individual units falling into each FIU group.

Average persons per FIU: Equals the aggregate number of persons residing in FIUs in that group divided by the aggregate number of FIUs in that group.

Average children per FIU: Equals the aggregate number of persons under the age of 18 residing in FIUs in that group divided by the aggregate number of FIUs in that group. For the two family types of "Married without Children" and "Single without Children," this figure is zero.

Average age of primary persons: Equals the aggregate age of primary persons in the FIUs divided by the aggregate number of primary persons in that FIU group. Primary persons are defined as the head of the FIU and the spouse of that FIU head, if applicable. Therefore, for

married couples, it accounts for the age of both husband and wife. For non-married couples, it only accounts for the age of the FIU head.

Top Earner by Sex - Male: Equals the percentage of FIUs in that group with a male having the highest income of the primary persons. Note: For those where two primary persons have the same income, a "tie" is declared and they are split evenly. For single FIUs, this statistic is simply a reflection of the sex of the FIU head. For married families, this statistic shows which sex is the higher earner. For same-sex couples, the top earner sex is simply the sex of the couple.

Top Earner by Sex - Female: Equals the percentage of FIUs in that group with a female having the highest income of the primary persons. Note: For those where two opposite-sex primary persons have the same income, a "tie" is declared and they are split evenly between male and family. For single FIUs, this statistic is simply a reflection of the sex of the FIU head. For married families, this statistic shows which sex is the higher earner. For same-sex couples, the top earner sex is simply the sex of the couple.

Race, Ethnicity of FIU Head – White: Equals the percentage of FIUs in groups where the FIU head is white. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed-race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and black, half were designated as white and half as black.

Race, Ethnicity of FIU Head – Black: Equals the percentage of FIUs in groups where the FIU head is black. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed-race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and black, half were designated as white and half as black.

Race, Ethnicity of FIU Head – Asian: Equals the percentage of FIUs in groups where the FIU head is black. Note that this is solely the race of the FIU head and does not account for the

race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed-race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and Asian, half were designated as white and half as Asian.

Race, Ethnicity of FIU Head – Other Race: Equals the percentage of FIUs in groups where the FIU head is some race other than white, black, or Asian. This includes most notably American Indians. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed-race group he/she identified with the Census Bureau. For example, for those persons identifying as being both other race and Asian, half were designated as other and half as Asian.

% Hispanic: Equals the percentage of FIUs in groups where the FIU head is Hispanic (any race). Note that this solely reflects the ethnicity of the FIU head and does not account for the ethnicity of spouses or children.

% US-Born: Equals the percentage of FIUs in groups where the FIU head was born in the United States, Puerto Rico, another outlying US area, or abroad with American parent(s). This is determined by the CPS variable PRCITSH (US born equals 1, 2, or 3). This statistic should not be interpreted as being the same as citizenship.

% Urban: Equals the percentage of FIUs residing in a geographic region that is urban. This is determined by the CPS variable *GTCBSASZ* (Metropolitan status). Those FIUs living in a household identifying as having a metropolitan size of 100,000 or more were considered urban.

% Urban: Equals the percentage of FIUs residing in a geographic region that is urban. This is determined by the CPS variable *GTCBSASZ* (Metropolitan status). Those FIUs who do not identify as having a metropolitan size of 100,000 or more were considered rural.

% Northeast: Equals the percentage of FIUs residing in a household in a state in the Northeast as defined by the Census Bureau. This includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

% Midwest: Equals the percentage of FIUs residing in a household in a state in the Midwest as defined by the Census Bureau. This includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

% South: Equals the percentage of FIUs residing in a household in a state in the South as defined by the Census Bureau. This includes Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia. The South is the largest of the four regions in terms of population.

% West: Equals the percentage of FIUs residing in a household in a state in the West as defined by the Census Bureau. This includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Incomes

The *Incomes* table provides an income profile of each of the FIU groups. It shows the relative importance of each income source for each family and economic unit (FIU) group. For each income category, the economy-wide aggregate income is allocated to each FIU using an allocation process. An allocator is chosen from the microdata set (either via CPS, IRS SOI Public Use File, or imputed from another source) and then the economy-wide total amount is distributed based on each FIU's share of the allocator. The allocator for each income source is discussed below.

Readers should note that the averages in the *Incomes* table are for all families in that FIU group and not just for those families claiming that income source.

Description of Statistics

Average Total Income: Equals the sum of average total market income and average total government transfers.

Average Total Market Income: Equals the sum of average wages and salaries, average supplements to wages and salaries, average self-employment income, average interest income, average rental income, average s-corp income, average dividend income, average capital gains income, average net retirement income, and average other market income.

Average Wages and Salaries: Equals aggregate wages and salaries allocated to the FIU group divided by the number of families in the FIU group. Total wages and salaries from BEA are distributed to each FIU in the microdata based on IRS reported wages for tax-filing units and CPS wages and salaries (WSAL) for non-filing units.

Average Supplements to Wages and Salaries: Equals aggregate supplements to wages and salaries allocated to the FIU group divided by the number of families in the FIU group. Aggregate supplements to wages and salaries equals the sum of the following aggregate amounts from each FIU group: employer contributions for health benefits to employees, aggregate employer-provided meals, employer-provided clothing, employer-provided lodging, state and local temporary disability contributions by employers, employer contributions for the Pension Benefit Guaranty Corporation, employer contributions for veterans life insurance, employer contributions for federal workers' compensation, employer portion of FICA taxes, and the employer portion of unemployment taxes.

Aggregate employer contributions for health benefits is derived from BEA total employer contributions for health insurance being distributed to each FIU in the microdata based on the CPS variable EMCONTRB, which is employer contributions for health insurance. Unfortunately, this variable is maxed at 9999. Therefore, for those units with a value of 9999, we impute a different value using data from the Medical Expenditures Panel Survey conducted by the Department of Health and Human Services.

Aggregate employer contributions for food, clothing, and lodging is derived from BEA totals for these categories being distributed to each FIU in the microdata in proportion to

average weekly hours worked with a maximum of 40 per worker. Hours worked comes from the CPS variable HRSWK. There is very little data on employer contributions for these items and this allocator is far from perfect. However, the small aggregate amount for these three categories makes any impact of an error minimal.

Aggregate state and local temporary disability contributions by employers is derived from BEA total state and local employer temporary disability contributions being distributed to each FIU in the microdata based on employment status and residence of three states where such programs are in place (California, New Jersey, and Rhode Island).

Aggregate employer contributions for the Pension Benefit Guaranty Corporation is derived from BEA total PBGC contributions being distributed to each FIU in the microdata based on an imputation of defined benefit pension status for a worker. First, the individual must have a pension at work (based on CPS variable PENINCL). Then the defined benefit status is imputed using data from BLS by industry on the percentage of private workers who are covered under a defined benefit pension plan. A random number generator is then used to impute yes or no for a defined benefit pension plan to workers with a pension.

Aggregate employer contributions for veterans life insurance is derived from BEA total veterans life insurance employee contributions being distributed to each FIU in the microdata based on the presence of veterans benefits. In this case, the employer is the federal government.

Aggregate federal workers' compensation contributions by employers is derived from BEA total federal workers' compensation contributions being distributed to each FIU in the microdata based on employment in the federal government (CPS variable CLSWKR).

Aggregate employer portion of FICA taxes is derived from BEA total Medicare and Social Security taxes being distributed to each FIU in the microdata based on a simulated employer portion of Social Security and Medicare taxes. The employer contribution is "attached" to each employee on whose behalf it is paid and is counted as part of that person's compensation and thereby income. More information on how payroll taxes are simulated is provided in the taxes section of the methodology.

Aggregate employer portion of unemployment taxes is derived from BEA total unemployment taxes being distributed to each FIU in the microdata based on simulated unemployment tax. This is done using a basic formula for unemployment tax liability for each worker, which includes wages. The employer contribution is “attached” to each employee on whose behalf it is paid and is counted as part of that person’s compensation and thereby income.

Average self-employment income: Equals aggregate self-employment income allocated to the FIU group divided by the number of families in the FIU group. Self-employment income begins with BEA’s proprietors’ income, which includes partnership and sole proprietor income. We divide BEA’s proprietors’ income into three subcategories: (1) Reported to IRS, (2) Unreported to IRS, and (3) Other. We use the reconciliation of BEA’s proprietors’ income to the IRS (NIPA Table 7.14) to determine each of these totals.

We distribute the reported amount simply based on the sum of sole proprietor (all of schedule C) and partnership income (part of schedule E) reported on the IRS Public Use File. The unreported self-employment income is imputed to each tax return that claims self-employment income, as well as that small portion earned by the non-filing population. (We are essentially assuming that there is simply underreporting and not a full absence of reporting for any tax unit.) The unreported portion among tax filers is imputed for each tax return using results from a study conducted by SOI employee Andrew Johns and University of Michigan economist Joel Slemrod.

(http://webuser.bus.umich.edu/jslemrod/pdf/Tax_Noncompliance.pdf) We used the study’s estimates of rates of underreporting by AGI group for business income. Finally, the other subcategory from BEA proprietors’ income, which is a collection of small items that BEA includes in its proprietors’ income that the IRS does not include, is allocated to each family based on the sum of the reported and unreported self-employment income.

Average interest income: Equals aggregate interest income allocated to the FIU group divided by the number of families in the FIU group. Interest income includes BEA’s monetary interest received by households excluding that portion received via individual retirement accounts or pension funds. (It excludes any imputed interest.) The total adjusted-BEA amount is allocated to each FIU based on IRS reported interest income (taxable and non-taxable) for tax filing units and the CPS interest variable (INT) for non-filing units.

Average dividend income: Equals aggregate dividend income allocated to the FIU group divided by the number of families in the FIU group. Divided income includes BEA's personal dividend income excluding the portion derived from s-corps and the portion earned by individual retirement accounts and pension funds. The total adjusted-BEA amount is allocated to each FIU based on IRS reported dividend income for tax filing units and the CPS dividends variable (DIV) for non-filing units.

Average rental income: Equals aggregate rental income allocated to the FIU group divided by the number of families in the FIU group. Total rental income is allocated to each FIU based on IRS reported rental and royalty income for tax filing units and the CPS rental income variable (RNT) for non-filing units.

Average s-corp income: Equals aggregate s-corp income allocated to the FIU group divided by the number of families in the FIU group. Total s-corp income is allocated to each FIU based on IRS reported s-corp income. None is assumed to be earned by non-filing tax units.

Average capital gains income: Equals aggregate capital gains income allocated to the FIU group divided by the number of families in the FIU group. Total capital gains income is allocated to each FIU based on IRS reported net capital gains realizations. None is assumed to be earned by non-filing tax units. One limitation to this allocation method is the fact that capital losses are limited by the IRS, and we do not attempt to adjust for this limitation.

Average net retirement income: Equals average retirement income less average individual retirement contributions.

Average retirement income: Equals aggregate retirement income allocated to the FIU group divided by the number of families in the FIU group. Total retirement income is allocated to each FIU based on IRS reported retirement income plus nontaxable Roth IRA distributions simulated for tax filers and retirement income reported on the CPS by non-filing tax units (CPS variable RTM). The Roth simulation is done using a logit regression from the Survey of Consumer Finances predicting Roth share of retirement income and then imputing those values into our microdata file.

Average retirement contributions: Equals aggregate retirement contributions allocated to the FIU group divided by the number of families in the FIU group. Total retirement contributions are allocated to each FIU based on an imputed contributions amount. There are two categories of contributions: individual retirement accounts and retirement plans via employer. For IRA contributions, the imputation is done using IRS data by AGI income group and age group that shows the probability that a person would make IRA contributions and the average amount contributed. (<https://www.irs.gov/uac/soi-tax-stats-special-studies-on-individual-tax-return-data#ira>) For employee retirement plans offered through their place of employment, the probability an employee would make a contribution to his/her own plan was imputed using data by age and income group from the Survey of Consumer Finances. The fraction of the employee's wages that was contributed was also imputed using SCF data. Adjustments were made so that no single employee's contributions exceeded IRS limits.

Average other market income: Equals the sum of average life insurance distributions, average workers' compensation distributions, average supplemental unemployment benefits, average net business transfers, and average capital transfers less average life insurance contributions

Average life insurance distributions: Equals aggregate life insurance distributions for each FIU group divided by the aggregate number of FIUs in the FIU group. Life insurance distributions is derived from an allocation of the total life insurance distributions in the US to each FIU in the microdata using an imputation. The imputation method is as follows. First, those families in which a spouse reports receiving a life insurance distribution (SUR_SC1 or SUR_SC2 = 9) are given a 1. Then, using logit regression results from regressions run in the Survey of Consumer Finances predicting life insurance distributions, we impute probabilities of claiming life insurance benefits in our microdata. The total life insurance distributions are allocated evenly to each family claiming benefits. While such a method is far from perfect, we must acknowledge that there is little data on the distribution of life insurance claims.

Average life insurance contributions: Equals aggregate life insurance contributions allocated to the FIU group divided by the number of families in the FIU group. Aggregate life insurance contributions is allocated to each FIU after first dividing contributions into

employer-provided contributions and individual contributions. For employer-provided contributions, coverage is imputed to workers based on wages and industry using data from the Bureau of Labor Statistics. For individual contributions, imputations are made using life insurance contributions data from the Survey of Consumer Finances.

Aggregate workers' compensation distributions for each FIU group is derived based on an allocation of BEA's workers' compensation total benefits to each FIU in the microdata. The allocator used is the amount of workers' compensation benefits reported by the unit in the CPS (variable WC_VAL) or simulated to be used after an adjustment for underreporting of workers' compensation benefits. An adjustment is made based on the fact that the number of individuals reporting workers' compensation benefits in the CPS is lower than that reported by other sources, such as BLS. This adjustment is as follows: perform a logit regression to determine what factors predict WC benefit claims in the CPS and then simulate probability that someone not currently reporting actually has workers' compensation benefits. Using a random number generator and the probabilities, some families are then given workers' compensation benefits even though they did not report receiving any.

Aggregate supplemental unemployment benefits for each FIU group is derived by an allocation of total supplemental unemployment benefits from BEA to each FIU in the microdata. The allocator in the microdata is the number of individuals in the unit claiming supplemental unemployment in the CPS (variable SUBUC).

Aggregate net business transfers is derived for each FIU group by randomly assigning net business transfers to 4% of the population, which is based on the percentage of the population making insurance claims. The BEA business transfers total is then allocated to these families.

Aggregate capital transfers is derived for each FIU group by randomly assigning capital transfers to 1% of the population. The BEA capital transfers total is then allocated to these families.

Average total government transfers equals the sum of average cash and cash-like transfers and non-cash transfers.

Average cash and cash-like transfers equals the sum of the following average transfers per FIU categories: Social Security, unemployment, TANF, SSI, Refundable Tax Credits, SNAP, Railroad Retirement, PBGC benefits, veterans life insurance benefits, federal workers' compensation benefits, veterans pension and disability benefits, veterans readjustment benefits, disaster relief, payments to September 11 victims, periodic stimulus benefits, state and local temporary disability benefits, state and local workers' compensation benefits, energy assistance benefits, foster care and adoption assistance, state and local veterans benefits, Alaska Permanent Fund benefits, and crime victim payments. More information about these transfer categories can be found in the transfers section of this methodology.

Average non-cash transfers equals the sum of the following average transfers per FIU categories: Medicare, Medicaid, Black Lung, education assistance, Military Medical retirees, CHIP, General Assistance, WIC food, employment and training benefits, periodic stimulus benefits, other Affordable Care Act benefits besides refundable credits, and other federal/state transfer benefits. More information can be found in the transfers section of this methodology.

Average disposable income equals total income less the following average per FIU categories: payroll taxes (both employer and employee), personal current taxes, taxes less subsidies on owner-occupied housing, estate and gift taxes, non-tax contributions for government social insurance, and net transfers to the rest of the world. The tax categories are discussed in the taxes section of this methodology. Non-tax contributions for government social insurance includes each of the employer contributions categories included in the supplements to wages and salaries category (state and local temporary disability contributions, state and local workers' compensation contributions, PBGC contributions, veterans life insurance contributions, and federal workers' compensation contributions) plus individual contributions for certain non-tax CGSI programs, including Supplementary Medical Insurance (SMI) contributions by Medicare recipients, veterans life insurance contributions by individuals, and state and local social insurance contributions by individuals. Supplementary Medical Insurance contributions are simulated using the premiums formula, which requires higher-income Medicare participants to pay more for SMI. Veterans life insurance contributions by individuals are allocated to those participating in other veterans programs. State and local social insurance contributions by individuals are

allocated in the same manner as employer contributions to state and local temporary disability.

Government Transfers (Averages)

The *Government Transfers (Averages)* cohort table provides a profile of each of the FIU group's receipts of government transfers. It breaks out key government transfer programs, including both cash/cash-like transfers and non-cash transfers.

For each transfers category, the economy-wide total amount from the Household P&L (see here) is allocated to each FIU using an allocation process. An allocator is chosen from the microdata set (either via CPS, IRS SOI Public Use File, or imputed from another source or calculated), and then the economy-wide total amount from BEA Table 3.12 (Government Social Benefits) is distributed based on each FIU's share of the allocator. The allocator for each transfer income category is discussed below.

Readers should note that the averages in the transfers table are according to all families in that FIU group and not just for those families receiving that transfer.

Description of Statistics

Average Total Government Transfers: Equals the sum of average total cash/cash-like transfers and average total non-cash transfers.

Average Total Cash & Cash-Like: Equals the sum of the following transfer categories: average Social Security, average unemployment, average TANF, average SSI, average refundable tax credits, average SNAP, and average other cash & cash-like.

Average Social Security: Equals aggregate Social Security transfers for each FIU group divided by total number of families in the FIU group. Social Security total is allocated to each FIU based on reported Social Security benefits on tax returns for filing tax units and the CPS-reported amount (variable SS_VAL) for non-filing tax units.

Average Unemployment Benefits: Equals aggregate unemployment benefits for each FIU group divided by total number of families in the FIU group. Unemployment benefits reported by BEA is allocated to each FIU based on reported unemployment compensation benefits in the CPS (variable UC_VAL).

Average TANF: Equals aggregate TANF benefits for each FIU group divided by total number of families in the FIU group. TANF total reported by BEA is allocated to each FIU based on reported public assistance income in the CPS (variable PAW_VAL).

Average SSI: Equals aggregate SSI transfers for each FIU group divided by total number of families in the FIU group. SSI is allocated to each FIU based on SSI benefits reported in the CPS (variable SSI_VAL).

Average Refundable Tax Credits: Equals aggregate refundable tax credits for each FIU group divided by total number of families in the FIU group. Refundable tax credits is the sum of five separate tax credits: earned income tax credit (EITC), additional child tax credit, American opportunity credit (AOC), ACA premium tax credits, and other refundable tax credits. Earned income tax credit and additional child tax credit are distributed to each FIU based on simulations from NBER's TaxSim model. More information on this process is contained in the tax section of the methodology. American opportunity credit and ACA premium tax credits are distributed to each FIU based on our own calculated credit amounts. These calculations take into account various participation rules and phase-outs. It should be noted that we use the BEA refundable credit total amounts from Table 3.12. Per a recent methodology change by BEA, this includes both the refundable and nonrefundable portions of those tax credits that are refundable. This is different from OMB's treatment of refundable credits in the federal budget, where only the refundable portion is classed as an outlay. Because of this change, BEA's federal income tax figure (personal current taxes) is larger than before, as the nonrefundable portion is no longer considered to be a tax reduction.

Average SNAP: Equals aggregate SNAP benefits for each FIU group divided by total number of families in the FIU group. SNAP total reported by BEA is allocated to each FIU based on reported market value of SNAP in the CPS (variable F_MV_FS).

Average Other Cash & Cash-Like: Equals aggregate other cash & cash-like transfers for each FIU group divided by total number of families in the FIU group. Aggregate other cash & cash-like transfers includes the following transfer categories: Railroad Retirement, PBGC benefits, veterans life insurance benefits, federal workers' compensation benefits, veterans' pension and disability benefits, veterans' readjustment benefits, disaster relief benefits, September 11 victims benefits, periodic stimulus benefits, state and local temporary disability benefits, state and local workers' compensation benefits, energy assistance benefits, foster care and adoption benefits, state and local veterans' benefits, Alaska Permanent Fund benefits, and state and local crime victim payments. The BEA amount for each of these is allocated to each FIU in the microdata file using a chosen allocator.

Average Total Non-Cash Transfers: Equals the sum of average Medicare, average Medicaid, and average other noncash.

Average Medicare: Equals aggregate Medicare for each FIU group divided by total number of families in the FIU group. Medicare total reported by BEA is allocated to each FIU based on each FIU's reported number of Medicare enrollees. This is based on CPS health insurance coverage variables. Each Medicare recipient is allocated the same amount even though, of course, some Medicare recipients use more Medicare services than others.

Average Medicaid: Equals aggregate Medicaid for each FIU group divided by total number of families in the FIU group. Medicaid total reported by BEA is allocated to each FIU based on each FIU's reported number of Medicaid enrollees. This is based on CPS health insurance coverage variables. Each Medicaid recipient is allocated the same amount even though, of course, some Medicaid recipients use more Medicaid services than others.

Average Other Noncash: Equals aggregate other noncash transfers for each FIU group divided by total number of families in the FIU group. Aggregate other noncash transfers includes the following transfer categories: Black Lung, federal education assistance, military medical insurance for retirees, other Affordable Care Act transfers, other federal transfers, CHIP (state Children's Health Insurance Program), general assistance, WIC food benefits, state and local education assistance, state and local employment and training programs,

and other state and local transfers. The BEA amount for each of these is allocated to each FIU in the microdata file using a chosen allocator.

Taxes

There are two USAFacts Families & Individuals tables pertaining to taxes. One shows all taxes along with detail of direct taxes paid by Families & Individuals. The other table shows indirect taxes assumed to be paid by Families & Individuals in their roles as consumers, workers, and owners of capital.

All taxes are ultimately borne by Families & Individuals. The question of which party ultimately bears the burden of a tax has been the subject of economic research for hundreds of years. If a tax is imposed on a business's production process, to what extent will that cause prices to rise for consumers of that product (or other products), workers' wages to fall, or owners' profits to fall? For each tax, we must make an assumption about which party bears the burden of the tax. This is called tax incidence. We then choose an allocator that best fits that incidence assumption and use that allocator to distribute the BEA tax amount to each FIU in our microdata set. For some taxes such as federal individual income taxes, we simply assume that the party whose name is on the 1040 form bears the burden. For other taxes such as corporate income taxes, we assume that some portion is born by workers and some by owners of capital. The allocation process for each tax is discussed in this section.

Readers should note that the averages in the *Taxes* tables are per all families in that FIU group and not just for those families paying that tax.

Description of Statistics

Average Total Taxes: Equals average total federal taxes plus average total state and local taxes.

Average Total Federal Taxes: Equals the sum of the following: average federal income taxes, average federal payroll taxes (direct), average other federal taxes (direct), and average indirect federal taxes.

Average Federal Income Taxes: Equals aggregate federal incomes allocated to each FIU group divided by total number of FIUs in FIU group. Federal income taxes refers to federal individual income taxes. The BEA total for federal individual income taxes is allocated to FIUs based on simulated federal individual taxes paid (excluding refundable tax credits). The simulation is done using the *TAXSIM* model of the National Bureau of Economic Research (NBER), which allows for us to feed our microdata file through their tax simulator in order to estimate federal income and payroll tax liabilities, as well as state income tax liabilities, for each tax unit in our microdata. For more information on *TAXSIM*: <http://nber.org/~taxsim/>

Average Federal Payroll Taxes (Direct): Equals aggregate federal payroll taxes (employee portion) divided by total number of FIUs in the FIU group. The employee portion of BEA total Medicare and Social Security taxes is allocated to FIUs based on simulated payroll taxes from the *TAXSIM* model, which includes the new 0.9% Medicare tax on high-income taxpayers that was enacted in the Affordable Care Act. The *TAXSIM* model produces the combined employer and employee payroll tax. Therefore, we estimate the additional 0.9% tax and subtract it from the *TAXSIM* model and then divide the residual by two to split up employer/employee portion. We then add the additional 0.9% tax to the employee split portion.

Average Other Federal Taxes (Direct): Equals aggregate other federal taxes (direct) allocated to FIU group divided by total number of FIUs in the FIU group. Average other federal taxes (direct) includes federal estate and gift taxes, federal excise taxes on alcohol and tobacco, and that portion of the federal excise taxes on air travel and gasoline that are paid directly by consumers of those products (i.e., not businesses using those products). BEA tax amount for federal alcohol taxes is distributed to FIUs based on imputed alcohol consumption. Alcohol consumption is imputed for each FIU using data from the Consumer Expenditures Survey done by BLS. Tobacco, gasoline, and air travel all follow the same process using Consumer Expenditures Survey (CEX) data. CEX crosstabs by income, age, and unit size are used to impute consumption of each item for each FIU. Federal estate and

gift taxes are allocated based on family wealth and estate tax law. Family wealth is imputed using data from the Survey of Consumer Finances.

Average Indirect Federal Taxes: Equals aggregate indirect federal taxes allocated to FIU group divided by total number of FIUs in the FIU group. Indirect federal taxes include employer portion of federal payroll taxes (including Social Security, Medicare, and unemployment taxes), federal corporate income taxes, federal customs and duties, and the portion of federal excise taxes that are paid by businesses. Each of these business taxes is allocated to FIUs using an allocation method. More information on each of these indirect taxes is discussed elsewhere in the methodology.

Average Federal Employer Payroll Taxes: Equals aggregate employer payroll taxes allocated to FIU group divided by total number of FIUs in the FIU group. Employer payroll taxes are allocated using the *TAXSIM* estimated federal payroll taxes. The employer portion is calculated as half of the NBER simulated amount less the calculated extra 0.9% Medicare tax. Also added is the employer unemployment tax, which is calculated for each worker in the microdata using unemployment tax rates/rules.

Average Federal Corporate Income Taxes: Equals aggregate federal corporate income taxes allocated to FIU group divided by total number of FIUs in the FIU group. Corporate income tax total amount from BEA is allocated to FIUs under the assumption that the tax is borne half by workers in the form of reduced wages and half by owners of capital. Therefore, the tax is distributed to FIUs in proportion to each FIU's share of overall labor income (half of CIT) and overall capital income (half of CIT). Labor income includes wages and salaries, benefits, and part of business and retirement income. Capital income includes dividends, interest, capital gains, and part of business and retirement income.

Average Other Federal Indirect Taxes: Equals aggregate other federal indirect taxes allocated to FIU group divided by total number of FIUs in the FIU group. This category includes the business portion of gasoline and airport taxes, as well as the full amount of federal diesel fuel taxes paid. Also included are customs and duties and new taxes on medical device manufacturers, pharmaceutical companies, and health insurers implemented in the Affordable Care Act. For each of these business taxes, it is assumed that they are fully passed forward to consumers in the form of higher prices of either specific

goods/services (health care taxes) or all consumer goods (gasoline, airport, customs/duties). Consumption for health care is calculated using CPS data on both health care expenditures and enrollment along with National Health Expenditure Accounts data on health expenditures by type of service/end-product. Total FIU consumption is estimated using data from the Consumer Expenditures Survey.

Average Total State and Local Taxes: Equals the sum of the following: average state and local income taxes, average state and local sales taxes (direct), average state and local property taxes (direct), average other state and local taxes (direct), and average indirect state and local taxes.

Average State and Local Income Taxes: Equals aggregate state and local income taxes allocated to FIU group divided by total number of FIUs in the FIU group. State and local income taxes are simulated using the *TAXSIM* model and the CPS variable identifying state of residence for the FIU.

Average State and Local Sales Taxes (Direct): Equals aggregate state and local sales taxes allocated to FIU group divided by total number of FIUs in the FIU group. This category includes some general and selective sales taxes. General sales taxes comprise the largest tax within this category, and the total amount to be allocated excludes taxes on business-to-business transactions, which are included in the indirect taxes category. General sales taxes on items sold directly to end-use consumers are allocated to each FIU based on the FIU's imputed consumption of items that are generally subject to sales taxes by state governments. Selective sales taxes in this category include alcohol, tobacco, pari-mutuel, and amusement taxes, which are allocated to FIUs based on imputed alcohol, tobacco, gambling, and recreation consumption, respectively. Such imputations are based on CEX data. Only 55% of state and local gasoline taxes are assumed to be paid on direct-to-consumer gasoline purchases, based on data from the Department of Energy's Energy Information Administration. These gasoline taxes are allocated to FIUs based on imputed gasoline consumption for the FIU. This imputation is based on CEX data.

Average State and Local Property Taxes (Direct): Equals aggregate state and local property taxes (direct) allocated to FIU group divided by total number of FIUs in the FIU group. This includes two taxes: (1) personal property taxes and (2) real estate taxes. Personal property

tax amount from BEA NIPA Table 3.3 is allocated to FIUs in proportion to the value of the vehicles the FIU owns. In the aggregate, personal property taxes are relatively small compared to real estate taxes. In the aggregate, that portion of property taxes that are deemed to be real estate of owner-occupied housing is allocated in proportion to real estate taxes paid variable in the CPS for non-itemizing tax units and non-filing units and the real estate taxes deduction for those tax units that itemize. The total property taxes on owner-occupied housing figure comes from BEA's taxes on production and imports on owner-occupied housing from NIPA Table 7.12.

Average Other State and Local Taxes (Direct): Equals aggregate other state and local taxes (direct) allocated to FIU group divided by total number of FIUs in the FIU group. This includes personal motor vehicle licenses, state and local estate and gift taxes, and other personal taxes (such as personal licenses). Personal motor vehicle licenses are allocated based on the number of vehicles in the FIU. State and local estate and gift taxes are allocated based on family wealth and typical state and local state and local estate/gift/inheritance tax law. Wealth is imputed from Survey of Consumer Finances data. Personal licenses are allocated based on the number of persons in the FIU.

Average Indirect State and Local Taxes: Equals aggregate indirect state and local taxes allocated to FIU group divided by total number of FIUs in the FIU group. Indirect state and local taxes include corporate income taxes, indirect sales taxes, indirect property taxes, severance taxes, business licenses, special assessments, business vehicle licenses, and others.

Average State and Local Corporate Income Taxes: Equals aggregate state and local corporate income taxes allocated to FIU group divided by total number of FIUs in the FIU group. Corporate income tax total amount from BEA is allocated to FIUs under the assumption that the tax is borne half by workers in the form of reduced wages and half by owners of capital. Therefore, the tax is distributed to FIUs in proportion to each FIU's share of overall labor income (half of CIT) and overall capital income (half of CIT). Labor income includes wages and salaries, benefits, and part of business and retirement income. Capital income includes dividends, interest, capital gains, and part of business and retirement income.

Average State and Local Sales Taxes (Indirect): Equals aggregate state and local sales taxes (indirect) allocated to FIUs in the FIU group divided by total number of FIUs in the FIU group. Included here are the following general and selective sales taxes: general sales taxes paid on business-to-business transactions, gasoline taxes paid on gasoline consumed by businesses, insurance receipts taxes, and public utility taxes. The sales tax paid on business-to-business transactions is assumed to be passed forward to end-use consumers of all consumer goods generally. Therefore, the total amount is allocated to FIUs based on total FIU consumption. Sales taxes paid on gasoline consumed by businesses are also assumed to be passed forward to end-use consumers of all consumer goods generally. For insurance receipts taxes, the portion that is paid on insurance policies held directly by individuals/households is assumed to be borne by the individual/household and is allocated in proportion to insurance expenditures. Insurance expenditures are imputed from the Consumer Expenditures Survey. Like gasoline taxes paid by businesses, that portion that is on insurance policies held by businesses is assumed to be passed forward to end-use consumers of all goods generally. For public utility taxes, the portion that is paid on public utilities consumption of individuals/households is assumed to be borne by the individual/household and is allocated in proportion to utilities expenditures. Utilities expenditures are imputed from the Consumer Expenditures Survey. That portion of public utilities taxes that is paid on utility services provided to businesses (such as electricity used by a grocery store or factory) is assumed to be passed forward to end-use consumers of all consumer goods generally. Therefore, this portion of public utilities taxes is allocated to FIUs based on overall FIU expenditures.

Average State and Local Property Taxes (Indirect): Equals aggregate state and local property taxes (indirect) allocated to FIUs in the FIU group divided by the total number of FIUs in the FIU group. The total amount allocated in this category is property taxes excluding those on owner-occupied housing and personal property. This category is divided into two subcategories: residential and non-residential property. Taxes on residential property (tenant-occupied) are assumed to be borne 20% by tenants and 80% by owners of capital. This is based on the research of Carroll and Yinger (1994), which analyzed the effect of property taxes on rent. The tenant portion is allocated based on each FIU's rent paid, which is imputed into our microdata for renters using data on rent paid from the American Community Survey. The owners of capital portion is allocated based on each FIU's share of

overall capital income. Taxes on non-residential property (i.e., general business property) is allocated to FIUs based on capital income.

Average Other State and Local Indirect Taxes: Equals aggregate other state and local indirect taxes allocated to FIUs in the FIU group divided by the total number of FIUs in the FIU group. This category includes the following state and local taxes paid by businesses: motor vehicle license on business-owned vehicles, severance taxes, special assessments, and a few minor tax sources.

Tax Expenditures

This table presents a distributional analysis for Families & Individuals of the tax savings associated with various key tax provisions in the federal income tax code. Federal law defines tax expenditures as “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.”

Each tax expenditure is done in isolation, which means that it is assumed that the only tax provision that is changing is that one and no other provision. For each tax expenditure, the estimate of the tax expenditure’s total amount from the Joint Committee on Taxation is allocated to each FIU based on simulated tax savings amount using NBER’s *TAXSIM* model. For each tax expenditure, we simulate federal individual income tax liabilities for each tax unit in our microdata under two states of the world: (1) current law (including the tax expenditure), and (2) a hypothetical tax code where that provision was eliminated. The difference between the two for each FIU is then the allocator used to distribute the JCT’s total amount to each FIU.

For each tax expenditure, the average is per all families and is not restricted to those families who have reduced tax liabilities due to the provision.

Description of Statistics

Average state and local tax deduction: Equals the aggregate amount of tax savings for FIUs in the group from the tax code’s itemized deduction for state and local taxes paid divided

by the total number of FIUs in the FIU group. This includes the deduction for personal property, real estate taxes, and one of state/local income and sales taxes that is allowed for those itemizing on their federal income tax. To estimate the tax savings from the state and local tax deduction, we zero out the state and local deduction for each tax unit and run the tax units through the *TAXSIM* model. We then compare the individual income tax liabilities for each unit with and without the deduction in effect. The JCT total amount for the state and local tax deduction is allocated to each FIU in proportion to the simulated tax savings.

Average mortgage interest deduction: Equals the aggregate amount of tax savings for FIUs in the group from the tax code's itemized deduction for mortgage interest paid divided by the total number of FIUs in the FIU group. To estimate the tax savings from the state and local tax deduction, we zero out the mortgage interest deduction for each tax unit and run the tax units through the *TAXSIM* model. We then compare the individual income tax liabilities for each unit with and without the deduction in effect. The JCT total amount for the mortgage interest deduction is allocated to each FIU in proportion to the simulated tax savings.

Average charitable deduction: Equals the aggregate amount of tax savings for FIUs in the group from the tax code's itemized deduction for charitable contributions divided by the total number of FIUs in the FIU group. To estimate the tax savings from the charitable deduction, we zero out the charitable contributions for each tax unit and run the tax units through the *TAXSIM* model. We then compare the individual income tax liabilities for each unit with and without the deduction in effect. The JCT total amount for the charitable deduction is allocated to each FIU in proportion to the simulated tax savings.

Average Exclusion of Employer-Provided Health Insurance: Equals the aggregate amount of tax savings for FIUs in that group from the exclusion of employer-provided health insurance divided by the total number of FIUs in that FIU group. The exclusion of employer-provided health insurance results from the fact that health insurance premiums paid by employers on behalf of their employees is not subject to income taxation like wages paid. We add to each tax unit's income the amount of health benefits paid by the employer. If both the head and spouse receive health benefits from their employer, both are added to the tax unit's income. The JCT total amount for the exclusion is allocated to each FIU in proportion to the simulated tax savings.

Average child tax credit: Equals the aggregate amount of tax savings for FIUs in the group from the tax code's child tax credit – both the regular child tax credit and the additional child tax credit – divided by the total number of FIUs in the FIU group. To estimate the tax savings from the child tax credit, we choose the option in the *TAXSIM* model that allows users to turn off the child tax credit. We then run the tax units through the *TAXSIM* model under the alternative policy option. We then compare the individual income tax liabilities for each unit with and without the child tax credit in effect. The JCT total amount for the child tax credit is allocated to each FIU in proportion to the simulated tax savings.

Average earned income tax credit (EITC): Equals the aggregate amount of tax savings for FIUs in the group from the tax code's earned income tax credit (includes refundable and nonrefundable) divided by the total number of FIUs in the FIU group. To estimate the tax savings from the EITC, we choose the option in the *TAXSIM* model that allows users to turn off the EITC. We then run the tax units through the *TAXSIM* model under the alternative policy option. We then compare the individual income tax liabilities for each unit with and without the EITC in effect. The JCT total amount for the EITC is allocated to each FIU in proportion to the simulated tax savings.

Employment Profile

The *Employment Profile* table provides a look at key labor force statistics within each of the FIU groups. It shows key statistics such as the labor force participation rate, unemployment rate, number of hours worked, and number of earners. Each of the statistics in the table comes from CPS labor force variables. The specific CPS variable used for each item is discussed below.

Description of Statistics

Population 16 and Over: The aggregate number of persons aged 16 and over in the FIU group who are civilian and non-institutionalized in March 2016.

Employed: The aggregate number of persons from the population 16 and over who were employed in March 2016 per the CPS. An individual in the CPS is deemed employed if the variable PEMLR equals 1 or 2.

Unemployed: The aggregate number of persons from the population aged 16 and over who were unemployed in March 2016. This is U-3 definition of unemployed, which means not working and looking for a job at some point over the past four weeks. An individual in the CPS is deemed unemployed if the variable PEMLR equals 3 or 4.

Employment-Population Ratio: Equals number employed divided by the population 16 and over.

Labor Force Participation Rate: Equals number in the labor force (employed + unemployed) divided by the population 16 and over.

Unemployment Rate: Equals number unemployed divided by the labor force (employed + unemployed). This is the traditional unemployment rate (U-3).

Average Hours Worked by Primary Earners: Equals aggregate number of hours worked by primary earners in 2015 (head and spouse if applicable) divided by 52. Hours worked for each person is calculated using the CPS variables WKSWORK and HRSWK.

Average All Hours Worked: Equals aggregate number of hours worked by all earners in 2015 (primary and non-primary such as children) divided by 52. Hours worked for each person is calculated using the CPS variables WKSWORK and HRSWK.

Percent of Units with 0 Primary Earners: Equals aggregate number of FIUs with 0 primary earners in the FIU group divided by the aggregate number of FIUs in the FIU group. This is based on the CPS variable EARNER.

Percent of Units with 1 Primary Earner: Equals aggregate number of FIUs with exactly 1 primary earner in the FIU group divided by the aggregate number of FIUs in the FIU group. This is based on the CPS variable EARNER.

Percent of Units with 2 Primary Earners: Equals aggregate number of FIUs with exactly 2 primary earners in the FIU group divided by the aggregate number of FIUs in the FIU group. This is based on the CPS variable EARNER.

Jobs Profile

The *Jobs Profile* table provides an industry breakdown of the employment of primary persons within each of the FIU groups. It shows the percentage of primary persons within each FIU group that fall into each industry or are not working. The industries are defined using CPS variables WEMIND and INDUSTRY.

Example: The % retail equals the aggregate number of primary persons (FIU head and spouse if applicable) employed in the agricultural sector divided by the aggregate number of primary persons (whether working or not).

Education Profile

The *Education Profile* table provides a look at how educational attainment of the FIU head and the enrollment of members of the FIU compares across FIU groups. The educational attainment statistics come from the CPS, while educational enrollment statistics use a combination of CPS data and ACS data due to a lack of certain enrollment data in the CPS. The imputations from the ACS into the CPS were done using logit regressions being run in the ACS and then probabilities imputed into the CPS. These probabilities along with random numbers imputed the enrollment status of individuals within constraints imposed by the CPS (such as college enrollment/attainment variables in the CPS).

Descriptions of Statistics:

Percent No High School: Equals the aggregate number of FIUs in the FIU group with the head person not having at least a high school diploma or equivalent divided by the total number of FIUs in the FIU group.

Percent High School Grad: Equals the aggregate number of FIUs in the FIU group with the head person having an educational attainment of high school diploma or equivalence with no college coursework taken.

Percent Some College: Equals the aggregate number of FIUs in the FIU group with the head person having an educational attainment of some college but no bachelor's degree. This includes those with an associate's degree but no bachelor's degree.

Percent College Grad: Equals the aggregate number of FIUs in the FIU group with the head person having an educational attainment of a bachelor's degree or higher. This includes also those with master's degrees, doctorate degrees, etc.

Number Preschool Public: Equals the aggregate number of persons aged 3+ in the FIU group who are enrolled in public preschool. This figure is imputed into the CPS using data from the ACS.

Number Preschool Private: Equals the aggregate number of persons aged 3+ in the FIU group who are enrolled in private preschool. This figure is imputed into the CPS using data from the ACS.

Number K-12 Public: Equals the aggregate number of persons in the FIU group who are enrolled in public schools in grades K-12. This figure is imputed into the CPS using data from the ACS.

Number K-12 Private: Equals the aggregate number of persons in the FIU group who are enrolled in private schools in grades K-12. This figure is imputed into the CPS using data from the ACS.

Number College Full-Time: Equals the aggregate number of persons in the FIU group who are enrolled in public and private colleges on a full-time basis. For persons aged 16-55, this

number is estimated using the variable A_ENRLW in the CPS. For those outside the age 16-55 range, an imputation of the probability of college enrollment was made and assigned randomly based on random number generators.

Number College Part-Time: Equals the aggregate number of persons in the FIU group who are enrolled in public and private colleges on a part-time basis. For persons aged 16-55, this number is estimated using the variable A_ENRLW in the CPS. For those outside the age 16-55 range, an imputation of the probability of college enrollment was made and assigned randomly based on random number generators.

Health Expenditures

The *Health Expenditures* table provides a look at how various health coverage and expenditure statistics compare across FIU groups. The CPS is the source of the health insurance status variables. The expenditure statistics are allocated to FIUs using BEA/NHEA data along with CPS data and some imputations.

For health insurance status, readers should note that the rows will often sum to greater than 1 because individuals can be covered by more than one health insurance (such as Medicare and Medicaid).

Description of Statistics

Percent Health Insurance Employer: Equals the aggregate number of persons in the FIU group covered by health insurance through an employer (whether his/her own or another person's employment) divided by the total number of persons in the FIU group. This includes all persons (not just head or primary). Those covered by CHAMPUS/TRICARE are included as being covered by an employer.

Percent Health Insurance Medicare: Equals the aggregate number of persons in the FIU group covered by Medicare divided by the total number of persons in the FIU group. This includes all persons (not just head or primary).

Percent Health Insurance Medicaid: Equals the aggregate number of persons in the FIU group covered by Medicaid divided by the total number of persons in the FIU group. This includes all persons (not just head or primary).

Percent Health Insurance CHIP: Equals the aggregate number of persons in the FIU group covered by State Children Health Insurance Program (CHIP) divided by the total number of persons in the FIU group. This includes all persons (not just head or primary).

Percent Health Insurance Private: Equals the aggregate number of persons in the FIU group covered by private health insurance that is not acquired through employer divided by the total number of persons in the FIU group. This includes all persons (not just head or primary). Typically, private insurance is purchased by an individual or family through the private marketplace (or through an exchange post-ACA).

Percent Health Insurance Uninsured: Equals the aggregate number of persons in the FIU group that do not have any health insurance coverage (public or private) divided by the total number of persons in the FIU group. This includes all persons (not just head or primary). Note that a disproportionate number of non-citizens (especially those undocumented) is included in the uninsured number.

Total Government Subsidies: Equals the sum of average Medicare per FIU, average Medicaid per FIU, and average other government health transfers per FIU.

Average Subsidy Health Medicare: Equals the aggregate Medicare transfers allocated to the FIU group divided by the total number of FIUs in the FIU group. As explained in the transfer programs section of the methodology, Medicare transfers are allocated to FIUs based solely on Medicare enrollment.

Average Subsidy Health Medicaid: Equals the aggregate Medicaid transfers allocated to the FIU group divided by the total number of FIUs in the FIU group. As explained in the transfer programs section of the methodology, Medicaid transfers are allocated to FIUs based solely on Medicaid enrollment.

Average Subsidy Health Other Government: Equals aggregate government health transfers for CHIP and ACA allocated to the FIU group divided by the total number of FIUs in the FIU group. CHIP is allocated to FIUs solely on the basis of CHIP enrollment, while ACA is allocated to FIUs based on the simulated ACA premium tax credit and other ACA transfers.

Average Total Premiums: Equals the sum of average employer-paid premiums, average premiums paid by individuals, and average Medicare premiums.

Average Employer-Paid Premiums: Equals the aggregate employer subsidy for health insurance to employees allocated to the FIU group divided by the total number of FIUs in the FIU group. This figure is estimated using CPS variable EMCONTRB. Unfortunately, the CPS maxes this out at \$9,999, thereby requiring additional imputations using data from the Medical Expenditures Panel Survey (MEPS) conducted by HHS.

Average Premiums Private Insurance: Equals aggregate individual/employee premiums for employer-provided and private insurance allocated to the FIU group divided by the total number of FIUs in the FIU group. For the FIU group, this is calculated as the difference between total health expenditures paid for by private insurers less employer paid premiums.

Average Premiums Medicare: Equals aggregate premiums for Supplementary Medical Insurance (SMI) allocated to the FIU group divided by the total number of FIUs in the FIU group. Supplementary Medical Insurance premiums are simulated using the premiums formula, which requires higher-income Medicare participants to pay more for SMI. The BEA total from NIPA Table 3.6 is allocated to each FIU based on the simulation.

Average Out-of-Pocket Expenditures: Equals aggregate out-of-pocket health expenditures allocated to the FIU group divided by the total number of persons in the FIU group. Out-of-pocket health expenditures are allocated based on CPS variables POTC_VAL and PMED_VAL.

Housing Profile and Housing Subsidies

The *Housing Profile* and *Housing Subsidies* table provides a look at how housing tenure status and housing costs differ across FIU groups. The CPS is the source of the tenure status variables. The housing expenditure amounts are estimated using ACS imputations. Specifically, logit regressions for each tenure status are performed in the ACS predicting rent and mortgage expenditures as a percentage of income or home value. These regression results are then used in the CPS to impute rent paid and mortgage paid. Participation in certain government housing assistance programs uses variables directly from the CPS.

Description of Statistics

Percent Homeowner With Mortgage: Equals the aggregate number of FIUs in the FIU group residing in a household where the householder has an outstanding mortgage divided by the total number of FIUs in the FIU group. This is determined by the CPS variables H_TENURE and HPRES_MORT. For households with multiple families, each family is effectively given the tenure status of the householder (or primary family).

Percent Homeowner Without Mortgage: Equals the aggregate number of FIUs in the FIU group residing in a household where the householder owns the house and has no outstanding mortgage divided by the total number of FIUs in the FIU group. This is determined by the CPS variables H_TENURE and HPRES_MORT. For households with multiple families, each family is effectively given the tenure status of the householder (or primary family).

Percent Renter: Equals the aggregate number of FIUs in the FIU group residing in a household where the householder rents (either for payment or for free) divided by the total number of FIUs in the FIU group. This is determined by the CPS variable H_TENURE. For households with multiple families, each family is effectively given the tenure status of the householder (or primary family).

Average Annual Mortgage Payments for Owners: Equals the aggregate mortgage payments made by the FIU group divided by the total number of FIUs that are classified as homeowners. Mortgage payments are derived by allocating the BEA total mortgage payments (including both interest and principal) to each FIU based on imputed mortgage

payments made using the ACS-to-CPS imputation process described earlier. Note that all owners are included in the denominator, whether they have a mortgage or not.

Average Annual Rent Paid by Renters: Equals the aggregate rent paid by the FIU group divided by the total number of FIUs in the FIU group that are classified as renters. Rent paid is derived by allocating the BEA total rent paid from the personal consumption expenditures publication to each FIU based on imputed rent paid made using the ACS-to-CPS imputation process described earlier.

Percent Subsidized Rent: Equals the aggregate number of FIUs in the FIU group residing in a household for which the government subsidizes part or all of the rent divided by the total number of FIUs in the FIU group. (This is the percentage of all FIUs – not just renters.) The CPS variable HLORENT is the determinant for this statistic.

Percent Public Housing: Equals the aggregate number of FIUs in the FIU group residing in public housing divided by the total number of FIUs in the FIU group. The CPS variable HPUBLIC is the determinant for this statistic.

Number Receiving Housing Assistances: Equals the aggregate number of FIUs residing in a household receiving subsidized rent or residing in public housing.

Technology Profile

The *Technology Profile* table provides a look at how access and usage of certain technologies differs among subgroups of population. There are three key sources for the data in this table: the CPS, the ACS, and the National Health Interview Survey.

Internet access and computer access is imputed into the CPS by running logit regressions in the ACS and then using the logit regression results to estimate probabilities of various internet access for each FIU. Then FIUs are randomly assigned to one Internet access category using the probabilities and random numbers. Phone usage is imputed into the CPS using data from the National Health Interview Survey conducted by the CDC.

Description of Statistics

Percent Computer: Equals the number of FIUs in the FIU group that reside in a household with a computer divided by the total number of FIUs in the FIU group. A FIU is classified as having access to a computer if any FIU in the household has a computer. (This is due to the fact that data exists solely on a household basis.)

Percent Phone Only Landline: Equals the number of FIUs in the FIU group that reside in a household with only a landline telephone and no cellular phones divided by the total number of FIUs in the FIU group.

Percent Phone Only Cell: Equals the number of FIUs in the FIU group that reside in a household with only cellular phone access and no landline access divided by the total number of FIUs in the FIU group.

Percent Phone Both Landline and Cell: Equals the number of FIUs in the FIU group that reside in a household with both cellular phone access and landline access divided by the total number of FIUs in the FIU group.

Note that the percentage of FIUs with landline access (with or without cell) can be calculated by simply adding the percent only landline and the percent landline and cell. And the percentage of FIUs with cellular access (with or without landline) can be calculated by simply adding the percent only cell and the percent landline and cell.

Percent Internet High Speed: Equals the number of FIUs in the FIU group that reside in a household with high-speed Internet access divided by the total number of FIUs in the FIU group. High-speed Internet includes the following ACS Internet categories: fiber-optic internet (ACS variable FIBEROP), cable Internet access (ACS variable MODEM), and satellite Internet access (ACS variable SATELLITE).

Percent Internet Low Speed: Equals the number of FIUs in the FIU group that reside in a household with low-speed Internet access divided by the total number of FIUs in the FIU

group. Low-speed Internet includes the following ACS Internet categories: Other Internet services (ACS variable OTHSVCEX).

Percent Internet None: Equals the number of FIUs in the FIU group that reside in a household with no Internet access divided by the total number of FIUs in the FIU group.

Consumption Profile

The consumption profile table presents estimates of how much each FIU group spends on various personal consumption expenditure categories. These estimates are generally made by allocating total personal consumption expenditures from BEA (with some adjustments) to each FIU. For health and housing, we use CPS and ACS data to allocate the totals. For most other categories, we use imputed consumption for each FIU. These imputations are done using cohort data provided by the Consumer Expenditures Survey.

USAFACTS plans to make continuous improvements to the consumption table estimates using sources other than the Consumer Expenditures Survey.

Poverty Profile Tables

Poverty profile tables present a demographic profile of the Census Bureau's two poverty measures – the Official Poverty Measure and the Supplemental Poverty Measure. Unlike other cohort tables on our website, we use the Census Bureau's income and poverty data for each unit directly from the CPS. In other words, we do not supplement the microdata with IRS or other income data sources, and we do not do a formal allocation of BEA aggregates to each family and individual unit like we do in the percentile cohorts. It is done in this way so that we are directly comparable to the Census Bureau's published numbers.

The Official Poverty Measure (OPM) is the Census Bureau's long-standing poverty measure whose thresholds are based on the amount of food necessary for a unit. These thresholds

depend on the number and age distribution of persons in the unit. The Supplemental Poverty Measure (SPM) is a new alternative poverty measure that seeks to better reflect the economic resources and necessary expenses of Families & Individuals. More information can be found here: OPM (<https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>) and SPM (<https://www.census.gov/hhes/povmeas/methodology/supplemental/overview.html>)

The FIU groups are based on the ratio of each FIU's income (as defined by Census) to the poverty threshold (OPM or SPM) for that unit. For example, if a family has an income of \$75,000 and the poverty threshold for the family is \$15,000, they would be 500% of the poverty threshold. And they would be in the 400%+ FIU cohort of their respective group type.

Description of Statistics for the OPM/SPM poverty cohort tables:

of Family and Individual Units: The aggregate number of family and individual units falling into each FIU group.

Average persons per FIU: Equals aggregate number of persons residing in FIUs in that group divided by the aggregate number of FIUs in that group.

Average children per FIU: Equals aggregate number of persons under the age of 18 residing in FIUs in that group divided by the aggregate number of FIUs in that group. For the two family types of "Married without Children" and "Single without Children," this figure is zero.

Average age of primary persons: Equals the aggregate age of primary persons in the FIUs divided by the aggregate number of primary persons in that FIU group. Primary persons are defined as the head of the FIU, and the spouse of that FIU head, if applicable. Therefore, for married couples, it accounts for the age of both husband and wife. For non-married couples, it only accounts for the age of the FIU head.

Top Earner by Sex - Male: Equals the percentage of FIUs in that group with a male as having the highest income of the primary persons. Note: For those where two primary persons have the same income, a "tie" is declared and they are split evenly. For single FIUs, this statistic is simply a reflection of the sex of the FIU head. For married families, this statistic shows which sex is the higher earner. For same-sex couples, the top earner sex is simply the sex of the couple.

Top Earner by Sex - Female: Equals the percentage of FIUs in that group with a female as having the highest income of the primary persons. Note: For those where two opposite-sex primary persons have the same income, a "tie" is declared and they are split evenly between male and family. For single FIUs, this statistic is simply a reflection of the sex of the FIU head. For married families, this statistic shows which sex is the higher earner. For same-sex couples, the top earner sex is simply the sex of the couple.

Race, Ethnicity of FIU Head – White: Equals the percentage of FIUs in that group where the FIU head is white. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and black, half were designated as white and half as black.

Race, Ethnicity of FIU Head – Black: Equals the percentage of FIUs in that group where the FIU head is black. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and black, half were designated as white and half as black.

Race, Ethnicity of FIU Head – Asian: Equals the percentage of FIUs in that group where the FIU head is black. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals

identifying as more than one race, the individual was randomly assigned a race within that mixed race group he/she identified with the Census Bureau. For example, for those persons identifying as being both white and Asian, half were designated as white and half as Asian.

Race, Ethnicity of FIU Head – Other Race: Equals the percentage of FIUs in that group where the FIU head is some race other than white, black, or Asian. This includes most notably American Indians. Note that this is solely the race of the FIU head and does not account for the race of spouses or children. Therefore, interracial population may not be fully reflected if the head of interracial families is disproportionately from one race. For individuals identifying as more than one race, the individual was randomly assigned a race within that mixed race group he/she identified with the Census Bureau. For example, for those persons identifying as being both other race and Asian, half were designated as other and half as Asian.

% Hispanic: Equals the percentage of FIUs in that group where the FIU head is Hispanic (any race). Note that this solely reflects the ethnicity of the FIU head and does not account for the ethnicity of spouses or children.

% US-Born: Equals the percentage of FIUs in that group where the FIU head was born in the United States, in Puerto Rico or another outlying US area, or was born abroad of American parent(s). This is determined by CPS variable PRCITSH (US born equals 1, 2, or 3). This statistic should not be interpreted as being the same as citizenship.

% Urban: Equals the percentage of FIUs residing in a geographic region that is urban. This is determined by the CPS variable GTCBSASZ (Metropolitan status). Those FIUs living in a household identifying as having a metropolitan size of 100,000 or more were considered urban.

% Urban: Equals the percentage of FIUs residing in a geographic region that is urban. This is determined by the CPS variable GTCBSASZ (Metropolitan status). Those FIUs who do not identify as having a metropolitan size of 100,000 or more were considered rural.

% Northeast: Equals the percentage of FIUs residing in a household in a state in the Northeast as defined by the Census Bureau. This includes Connecticut, Maine,

Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

% Midwest: Equals the percentage of FIUs residing in a household in a state in the Midwest as defined by the Census Bureau. This includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

% South: Equals the percentage of FIUs residing in a household in a state in the South as defined by the Census Bureau. This includes Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia. The South is the largest of the four regions in terms of population.

% West: Equals the percentage of FIUs residing in a household in a state in the West as defined by the Census Bureau. This includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Required Notices

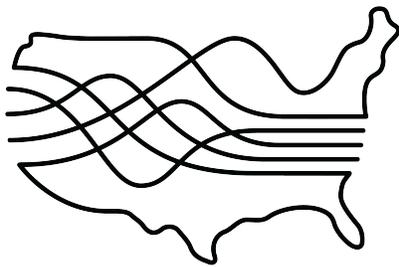
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