



May 6, 2022

Honorable John Yarmuth
Chairman
Committee on the Budget
U.S. House of Representatives
Washington, DC 20515

*Re: Analyzing How the Effects of Federal Policies May Differ
by Race and Ethnicity*

Dear Mr. Chairman:

Many Members have asked whether the Congressional Budget Office can provide information on how the effects of federal policies differ by race and ethnicity. This letter updates you regarding the agency's efforts to increase its capacity to analyze how budgetary and economic conditions or developments may affect various demographic groups (including groups based on race and ethnicity) differently.

Over the past few years, CBO has examined different outcomes among demographic groups in a number of contexts. For example, in July 2020, CBO described the race and ethnicity, sex, age, education, and household earnings of the 19 million people who were expected to receive regular unemployment benefits in that month.¹ More recently, CBO examined the effects of the pandemic on the employment of men and women of different races and ethnicities.²

Those types of analyses can be challenging to produce because of limitations in the data. In response to Congressional interest in how policies

¹ See Congressional Budget Office, *Characteristics of People Receiving Regular Unemployment Benefits in July 2020* (letter to the Honorable Richard Neal, July 2020), www.cbo.gov/publication/56447.

² See Congressional Budget Office, *Additional Information About the Updated Budget and Economic Outlook: 2021 to 2031* (July 2021), Box 2-1, www.cbo.gov/publication/57263. See also Congressional Budget Office, *Additional Information About the Economic Outlook: 2021 to 2031* (February 2021), Box 1, www.cbo.gov/publication/56989.

affect people in different groups, CBO is seeking to enhance its capabilities, building on its earlier work and existing models. For example, CBO may use methods to statistically combine detailed income tax data from tax returns with survey data, and it has proposed to the Census Bureau a project to evaluate the accuracy of such statistically matched data.

This letter provides more detail on the challenges regarding data availability and describes CBO's ongoing efforts to increase the agency's capacity to analyze budgetary and economic outcomes for various demographic groups.

Data Challenges

Analysis of how the effects of policies differ among racial and ethnic groups generally involves the use of many types of data, including demographic details about individuals as well as information on their family and household relationships, their participation in various government programs, and their income and wealth. In most cases, no single source of data contains all the information needed to analyze the effects of federal policy on different groups.

Different data sources have different strengths and weaknesses, and CBO selects the best available data for each analysis. Sometimes, multiple data sources need to be combined. For example, when CBO analyzes the distribution of household income and how that distribution is affected by government transfer programs and taxes, it combines survey data with administrative data (the information federal agencies collect in carrying out their duties).³

Considering multiple data sources (or combining them) is particularly important because results may differ greatly depending on the data source that is chosen. For example, survey data from the Current Population Survey (CPS) implies that the total amount of earned income tax credit (EITC) is about two-thirds the amount shown in administrative data from filed and audited tax returns. The CPS data also imply that a much larger share of EITC benefits go to married couples than is shown in the tax data.⁴

Administrative Data. Administrative data drawn from federal programs are closely aligned with the budgetary effects of those programs, which

³ See Congressional Budget Office, *The Distribution of Household Income, 2018* (August 2021), www.cbo.gov/publication/57061.

⁴ See Congressional Budget Office, "Using Survey Data for Tax Analysis" (December 2021), www.cbo.gov/publication/57540.

facilitates budgetary analysis. However, such data are generally limited to the information needed to administer the program and often do not include race or ethnicity or provide limited information about race and ethnicity.

For example, the Supplemental Nutrition Assistance Program (SNAP) Quality Control data include race and ethnicity, but those data are frequently missing. CBO also uses administrative data from the Centers for Medicare & Medicaid Services, the Department of Education, and the Social Security Administration, among others. In each case, CBO's use of the data is determined by data-use agreements with the sending agency and by federal statute.⁵ Obtaining access to administrative data is challenging for CBO, and on occasion access to such data cannot be agreed to in time to facilitate the agency's analysis for the Congress.

Survey Data. Statistical agencies collect data from survey respondents on a voluntary basis. Such surveys typically collect a broader range of information, including demographics, educational attainment, and participation in federal programs, than is included in administrative data. The Bureau of Labor Statistics and the Census Bureau jointly sponsor the CPS, for example. CPS data are the source of official statistics on employment and poverty in the United States, and they are often a key source of data for CBO's analyses. CBO also uses data from the American Community Survey, the Health and Retirement Study, the Medical Expenditure Panel Survey, the Panel Study of Income Dynamics, the Survey of Consumer Finances, and the Survey of Income and Program Participation.

Although survey data are an important resource for CBO, those data frequently have limitations or need adjustment. For example, CPS respondents underreport the receipt of transfers from programs such as Medicaid and SNAP. To address that limitation, CBO adjusts the CPS data for certain analyses to be consistent with administrative totals.⁶ As another example, a survey may be limited in the demographic information it collects. In the Survey of Consumer Finances, only the person interviewed is asked about his or her race, even though that person provides financial information for an entire household.

⁵ For additional information, see Congressional Budget Office, *The Congressional Budget Office's Access to Data From Federal Agencies* (June 2021), www.cbo.gov/publication/57150.

⁶ See Congressional Budget Office, "How CBO Adjusts for Underreporting of Means-Tested Transfers in Its Distributional Analyses" (presentation at the Bureau of Labor Statistics' 2021 Consumption Symposium, September 2021), www.cbo.gov/publication/57460.

Ongoing Efforts

In response to the interest in how policies affect people in different groups, CBO is seeking to build on its earlier work and existing models. CBO has developed a method to statistically combine detailed income data from tax returns with survey data from the CPS to enable the agency to analyze the distribution of income and the effects of the tax and transfer system under current law. That data set provides reliable estimates of income and tax liability for household characteristics that are reported in both sources of data, such as marital status, the presence of children, and whether a household is headed by an elderly person. However, it is unclear whether tax and income information could be statistically combined with demographic characteristics such as race and ethnicity, which are only measured in the survey data and not in the tax data. (Relying only on survey data, including for income and tax information, would result in greater uncertainty in the estimates of income and taxes.)

CBO has proposed a project to evaluate how well the statistical match represents the household characteristics of the population relative to survey-only data. The project would compare that statistically matched data with CPS data that are linked to the actual tax information available for survey respondents. The project is awaiting approval by the Census Bureau. Once the project begins, CBO expects that it will take at least six months to receive preliminary indications as to whether CBO's method for statistically matching administrative data with survey data can be adapted to accurately reflect income, taxes, and program participation by racial and ethnic groups.

If the project shows that CBO's methods for statistically matching administrative data with survey data preserve the distribution of demographic characteristics such as race, ethnicity, and education level throughout the income distribution, then the agency will have greater ability to report differences between demographic groups in income, average tax rates, and transfers, and to estimate how particular policy changes would affect those differences.

CBO is also assessing how climate change is expected to affect communities with different average income, racial, and other demographic characteristics. For that project, CBO is matching estimates of future flood risk by location with data from the American Community Survey. That survey provides information on income, race, and other demographic characteristics of households. By matching those characteristics with

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estimates of flood risk, CBO expects to report how different communities will be affected by those risks.

The agency is pursuing other efforts to show the distribution of income, taxes, transfers, and other federal spending by race. With each new report, CBO evaluates the extent to which analysis by race and ethnic group is feasible. For example, in a forthcoming report on the distribution of family wealth, CBO describes how family wealth differs by race and other demographic characteristics. That report will be released later this spring.

CBO is also enhancing the agency's capacity to model differences by race and ethnicity as it makes periodic major updates to its models. For example, the agency is in the process of rewriting its long-term microsimulation model, which projects Social Security taxes and benefits at the individual level. CBO is beginning the work to add race and ethnicity to that model. That work will allow CBO to analyze the distribution of Social Security benefits to many demographic groups, including those based on education, marital status, and race and ethnicity.

As this work proceeds, I will keep you informed about CBO's findings and their implications for when the agency will be able to undertake additional analysis by race and other demographic characteristics.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip L. Swagel", with a long, sweeping flourish extending to the right.

Phillip L. Swagel
Director

cc: Honorable Jason Smith
Ranking Member

Honorable Bernie Sanders
Chairman, Senate Budget Committee

Honorable Lindsey Graham
Ranking Member, Senate Budget Committee