# Expenditures with Policy Implications: Results from the Consumer Expenditure Surveys on Housing, Alcohol, Tobacco, and Gambling

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The Consumer Expenditure Surveys (CE) are the most detailed source of expenditure data collected directly from households by the Federal government. In addition, information on income, assets and liabilities, and demographics are collected from a large, nationally representative sample of consumers. The result is a unique and rich source of data of interest to researchers, educators, advocates, policymakers, and others in a variety of fields. Moreover, these data, both tabular and at the household level (i.e., microdata), are publicly available for free download.

This session will feature presentations of current, CE-based research-in-progress into topics of interest to the ACCI audience, focusing on the relationships of expenditures to economic welfare for various groups. The first presentation explores expenditures for housing before, during, and after the "bubble" of the mid-2000's. Unique in the literature reviewed, which describes outcomes only for homeowners, this work includes discussion of outcomes for renters as well. The second examines the relationship between expenditures for alcohol, tobacco, and gambling to different demographics, particularly comparing outcomes for the Millennial generation and those who are older. The third describes the new, experimental, and publicly available state weights, allowing researchers to estimate expenditures for consumers in New Jersey, with a focus on housing expenditures, such as rents and utilities. It also describes research in progress to provide state weights for California and Florida.

The expenditures described all have policy implications. The implementation of state weight data will also allow policy makers or advocates in the selected States to compute useful information for these States. While the presentations do not advocate or suggest specific policies, the presenters will discuss the importance of the expenditures they describe in policy making, with the CE data being a tool for assessing possible or actual outcomes related to policies implemented.

Following the presentations, brief training will be provided in use of the CE data. First, demonstration of an online tool used to produce the graphic analyses used in the first (housing) paper will be presented. Next, a brief overview of the Public Use Microdata files, from which the final two presentations are drawn, will be presented.

The presenters at this session include three members of staff from the CE program. This group is chosen both to provide attendees with an opportunity to initiate or renew contact with CE program staff for current and future questions and comments, and also to demonstrate the accessibility and usefulness of the data to researchers who are learning about CE data, particularly students.

## Housing and Other Expenditures Before, During, and After the Recent Housing Bubble

During the mid-2000's, the U.S. experienced a "bubble" in home purchases, unprecedented since 1963, the earliest year for which the U.S. Census provides mean and median housing prices for new homes. While there are other periods in which there have been sharp rises, followed by sharp declines, in housing prices, none is as evident as in the mid-2000's.

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When discussing this phenomenon, analyses tend to focus on how this happened nationally. Yet, as per the familiar aphorism, in real estate, only three factors matter: location, location, and location. Therefore, it is reasonable to wonder whether the bubble was experienced differently in different parts of the country. Similarly, it is reasonable to wonder whether the bubble affected

In this work, expenditures for owned homes over time are compared nationally, regionally, for urban and rural areas, and for selected Metropolitan Statistical Areas. In addition, expenditures for rented dwellings are compared during the same periods. Finally, expenditures for non-housing items as well as incomes are mapped for the same period for both homeowners and renters to see how they changed as well, and to ultimately understand how these changes affected consumer welfare for these groups.

## Differences in Expenditures on "Sin" Goods Between Millennials and Non-Millennials

In this study, we consider differences in the expenditures on "sin" goods between Millennials, the generation born in or after 1981, and other generations, focusing on tobacco products, alcohol, and gambling (pari-mutuel losses only). Previous research has established that smoking and alcohol consumption are explained by demographic, psychological, and financial characteristics. For example, De Walque (2010) finds an inverse relationship between smoking prevalence and education;1 and Siahpush and Borland (2003) find a positive correlation between smoking and financial stress.2 In addition, literature has shown that gambling behavior is influenced by these factors and is related to smoking and drinking behavior.

Using Consumer Expenditure (CE) Interview Survey data for years 2004 through 2016, we construct a pooled sample for single-person only households that reported expenditures on smoking, alcohol, or gambling. We perform a Blinder-Oaxaca decomposition to explain the contribution of income, debt, and demographic characteristics to the difference in expenditures on "sin" goods between Millennials and non-Millennials. By limiting our study to single-person only households, we can describe the relationship between the characteristics of individual consumers and expenditures on "sin" goods.

While the CE does not capture psychological characteristics, it does collect information on debt, business losses, occupational variables, and other variables that are associated with psychological health. Other characteristics include sex, age, income, employment status, and urban vs rural areas.

# Constructing a "New Jersey Market Basket": Using the Consumer Expenditure Survey Population Weights to Understand State-Level Consumption

The Consumer Expenditure Interview Survey (CE) is a nationally representative survey with a weighting scheme that allows users to generate population estimates and standard errors from the sample of approximately 6,500 households per quarter. These weights undergo a calibration process which makes them representative at a handful of other geographic levels (e.g. Census region, metropolitan statistical area) and many demographic breakouts (e.g., age, race, household composition). Unfortunately, due to restrictions related to respondent confidentiality, sample size, and the way the sample is drawn from the nation's geography, it is impossible to calibrate the weight at the state level for most states. Over the past year, CE has evaluated the feasibility of generating state specific weights which would allow weights to be created and estimates to be generated for states that contain sufficient geographic coverage, a sufficiently large and representative sample, and are mostly drawn from self-representing sampling units that can be disclosed to the public. The first state CE evaluated was New Jersey which fit the aforementioned criteria and, as a result, was the first state for which weights were created. These new weights are also calibrated to the same socio-economic characteristic as the nationally representative survey weight.

This research focuses on utilizing those weights, produced for the 2016 calendar year, to produce a market basket of goods and services specific to the State of New Jersey. The shares of total expenditures of the reported categories will define the market basket. These shares will be constructed in the same way the shares of relative importance are computed for the Consumer Price Index. Descriptive statistics for each major expenditure category will be computed for New Jersey and

compared to the national estimate. Significance tests will be conducted for each mean and proportion computed using the weights to determine if the expenditure patterns vary significantly from the national average. This research will also explore the expenditure patterns of the major demographic groups in the State of New Jersey to get a better picture of state level consumption. Finally, to attempt to quantify the added-value of representative weights for New Jersey, a difference in means and difference in medians test will be done comparing New Jersey sample means and New Jersey weighted means.

### **About the Data**

The CE consists of two components: the Interview Survey and the Diary Survey. The Interview Survey collects detailed expenditure information in four consecutive quarterly visits to households. Each eligible household contains at least one consumer unit (similar to a family), from which a respondent is selected. In each case, respondents are asked to recall expenditures made by their consumer unit for a variety of goods and services over the last three months. In contrast, the Diary Survey collects information from participants for two consecutive weeks. On each day of the collection period, respondents document expenditures for the consumer unit. In addition, detailed information on demographics (age, family type and size, etc.), income, and, in the Interview Survey, assets and liabilities are collected.

Information on average annual spending for several categories of goods and services are arranged by characteristics demographics and income group) on the CE website. In addition to expenditure levels (i.e., average dollars spent per household), tables describing allocation of budgets (i.e., shares of total expenditures for which food, housing, and other items account) and other factors of interest are available. For consumer educators, advisors, or similar practitioners, tables are tools that are easily accessible—both in terms of obtaining and explaining contents—for use with their clients. For example, a consumer advisor might use the tables to compare the client's expenditure patterns to the average reported for consumers with similar characteristics to help identify areas of concern for that client. In addition, these data are useful for those who are interested in performing high-level analysis of descriptive statistics. In fact, there are sets of tables that include standard errors in addition to mean expenditures for those who are interested in pursuing basic hypothesis testing.

For researchers interested in completing in-depth or multivariate analysis, microdata are also publicly available. Included in the files are detailed expenditures for each household, as well as demographic and income information both at the household and individual member level. These data are also useful for analysts who are interested in descriptive statistics for demographic groups or categories for which tables are not currently produced.

The data from both surveys are integrated and published in standard tables, which are available on the Internet. At present, microdata files from each survey component collected in 1996 through 2016 are also available for free download from the Internet. Prior years are available for purchase on flash drives.

### References

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