Consumer Spending for Necessities

The proportion of household spending used to purchase basic necessities is of interest to policymakers and social researchers as an elementary indicator of economic well-being. There are several complexities, however, in this application of the data; for example, the definition of “well-being” itself is not necessarily universal, and, even when the term is defined, the criteria upon which to evaluate well-being also are subjective and debatable. This article does not attempt to address these complexities; rather, data on consumer spending for necessities are presented in a manner that may be interpreted by a variety of readers for a variety of uses.

The discussion that follows is organized into three main sections. The first is a description of the data, including the definition of “necessities” used in this study and the demographic variables chosen for comparison. The second section is an evaluation of the Prussian mathematical statistician Ernst Engel’s proposition, using data from the 2000 Consumer Expenditure (CE) Survey to determine whether the relationship between income and the proportion of expenditures spent on necessities that Engel observed in 1857 still holds true. In the third part of the text, spending on necessities as a share of total spending is presented for various additional demographic groups.

Study methodology
The study uses the expenditure shares tables published in the CE Survey. These tables provide the proportions of average annual expenditures (or total spending) allocated to various categories of items. The categories of interest here are those designated to be necessities: Food, housing, and apparel. These three types of expenses are chosen to be consistent with the work done by Engel, which, as previously mentioned, is used as a basis for analyzing spending for necessities by households of differing income levels. For consistency, the same definition of necessities is used in the comparisons among demographic groups. It is important to note that, while food, housing, and apparel are certainly reasonable candidates for necessities in 2000, there have been changes to these spending categories over time. For example, within the necessity category of food, the allocation among subcomponents has shifted such that the share of the food dollar spent on food away from home (including meals at restaurants or fast food, carryout, and home delivery) has grown from 3.0 percent in

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1 The basic unit of measurement in the Consumer Expenditure Survey is the consumer unit. (See the glossary at the end of this anthology for the definition of a consumer unit. For convenience, consumer unit and household are used interchangeably throughout this article.)
In 1857, Engel observed a relationship between household income and the proportion of total expenditures used to purchase food, housing, and apparel. He found that, as income increases, the proportion of spending devoted to food decreases, while the shares of expenditures used to provide housing and apparel remain stable. Are the same patterns visible in the most recent CE Survey? Chart 1 illustrates the shares of total spending allocated to each of the three categories of necessity.

In support of Engel’s proposition, the share of average annual expenditures used to purchase food declines from 14.9 percent to 11.6 percent as income quintile to 5.3 percent spent by those in the lowest income quintile. This pattern is not the same one observed by Engel in 1857, and it may be related to rather large differences in housing tenure. In 2000, 57 percent of consumer units in the first income quintile are renters, while 88 percent of consumer units in the fifth quintile are homeowners.

The shares of average annual expenditures allocated to apparel are barely discernible in chart 1, supporting Engel’s observation that spending on apparel remains stable across income levels. In fact, the range of apparel shares is less than 1 percentage point, from 4.7 percent spent by those in the lowest income quintile to 5.3 percent spent by those in the highest income quintile.

### Spending on necessities by income group

#### In support of Engel’s proposition

Engel’s proposition states that the share of average annual expenditures used to purchase food, housing, and apparel decreases as income increases. The CE Survey data show that the share of total spending devoted to food declines from 14.9 percent in the lowest income quintile to 5.3 percent in the highest income quintile. This pattern is not the same one observed by Engel in 1857, and it may be related to rather large differences in housing tenure.

### Chart 1. Shares of average annual expenditures allocated to necessities by income quintile, Consumer Expenditure Survey, 2000

<table>
<thead>
<tr>
<th>Percent</th>
<th>First quintile</th>
<th>Second quintile</th>
<th>Third quintile</th>
<th>Fourth quintile</th>
<th>Fifth quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>27</td>
<td>25</td>
<td>22</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Food</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Apparel</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Chart 1 Analysis

- **Housing**: The share of total spending devoted to housing decreases across income quintiles, from 27 percent in the first quintile to 16 percent in the fifth quintile.
- **Food**: The share of total spending devoted to food decreases across income quintiles, from 14 percent in the first quintile to 11 percent in the fifth quintile.
- **Apparel**: The share of total spending devoted to apparel remains stable across income quintiles, ranging from 2 percent to 2 percent.

### Spending on necessities by selected demographic characteristics

As mentioned previously, the share of total spending allocated to housing is much greater for lower income households, and those households are also more likely to be renters. Looking at...
the data classified by housing tenure, one readily sees that consumer units who rent their homes also devote a greater share of their total expenditures to food (15.0 percent) and apparel (5.4 percent) than do their homeowners counterparts (13.1 percent and 4.7 percent, respectively).

Urban consumers spend a higher proportion of their total expenditures on housing (25.7 percent, as opposed to the 21.2 percent spent by consumers living in rural areas) and on apparel (5.0 percent, compared with 4.2 percent, respectively). Food, however, makes up a slightly greater proportion of total spending among rural households (14.1 percent) than among urban households (13.5 percent).

Race and Hispanic origin, which are based on the reference person of the consumer unit, are the next demographic characteristics listed in the table. Black consumer units spend higher shares of total expenditures on all three of the necessity categories than do white and other consumer units. The same is true for Hispanic compared with non-Hispanic households, although the relevant housing shares are not very different, with Hispanic consumer units allocating 26.3 percent of total spending to housing and non-Hispanics allocating 25.2 percent.

There is little variation in the necessity shares of consumer units living in different regions. For example, the range of expenditure shares used to purchase food is from 13.4 percent in the West and Midwest to 13.8 percent in the Northeast. (Households in the South spend a comparable 13.6 percent on food). Housing shares across regions are more variable, with consumer units in the Midwest having the lowest share (23.3 percent) of total spending and consumer units in the Northeast region having the highest share (27.7 percent).

Chart 2 depicts the shares of average annual expenditures allocated to necessities by the composition of the consumer unit. The household types selected for this analysis are husband and wife only, husband and wife with the oldest child under 6 years of age, husband and wife with the oldest child between the ages of 6 and 17, husband and wife with the oldest child aged 18 or older, and single parents with at least one child under the age of 18 years. (Table 1 also provides data for single-person and other consumer units.) The chart indicates that single parents devote greater proportions of their total spending to food (14.7 percent), housing (30.0 percent), and apparel (6.6 percent) than do other types of household. Also, the age of the oldest child in the household is inversely related to the share of total spending allocated to housing and directly related to the share allocated to food. Interestingly, the expenditure share for food is greater for husband-and-wife-only consumer units (13.2 percent) than for those with young children (11.5 percent). This difference is attributable to a decline in food away from home, as parents of young children may not eat outside of the home as often, or in restaurants as expensive, as do couples without children.10

The expenditure shares for food at home are roughly equivalent for husband-and-wife consumer units (7.5 percent) and households with children under 6 years of age (7.2 percent). However, the former allocate 5.7 percent of total spending to food away from home while the latter allocate just 4.3 percent.

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1 Shelter plus utilities.
2 Complete income reporters only.
In sum, this article has presented a variety of data on spending for necessities as a proportion of total expenditures, from the 2000 Consumer Expenditure Survey. With respect to Engel’s proposition, the expected trends are observed for food and apparel, while a contradictory decrease in housing shares occurs as income increases. Necessity spending also varies among consumer units with different demographic characteristics.