# Geodemographic approaches to identifying U.S. furniture markets 

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# Geodemographic Approaches to Identifying U.S. Furniture Markets' 

Frank M. Howell, Larry Doolittle, Jarryl B. Ritchie, Melissa A. Barfield, and Steven H. Bullard**

Demand for household furniture is shaped by a multitude of dynamic forces, from the global economic situation to subtle changes in consumer preferences. Correspondingly, the academic disciplines employed to identify, analyze, and predict these forces range from macroeconomics to psychology, and include demography, sociology, geography, and several applied fields. The demographic characteristics of furniture consumers has been a particularly popular area of research, primarily because of the availability of secondary data from various public agencies. Some of this research is reviewed in a subsequent section of this report.

The approach taken in the analysis reported here is a combination of the demography and the geography of American household furniture buyers. The demographic characteristics of households and householders who purchase more than their pro-rata share of furniture are fairly well known: they are more affluent, better educated "baby boomers" with children at home, and many are purchasing a larger house or re-modeling. Other characteristics, like occupation, rural or urban residence, and household type, play a secondary role through their correlation with the primary variables, and influence preferences for buying specific furniture items (a recliner, for example) or styles.

We began our analysis by concentrating on the demographic characteristics of household furniture buyers as reported by the 1991 Consumer Expenditure Survey (CEX). The demographic and expenditure data in the CEX allowed us to depict U.S. households by age, income, marital status, etc., in terms of how much they spend for furniture. This phase of the analysis tended to confirm what already is known about who is buying most household furniture-the financially comfortable baby-boomers mentioned previously.

For marketing purposes, knowing where furniture buyers both live and shop is of equal or greater importance than knowing their characteristics and preferences. By combining expenditure data from the consumer survey with demographic data from the 1990 Census of the Population, we were able to project furniture expenditures for each county in the U.S.-a "geodemographic" model of the "demand" side of the economy. By carefully examining this projection model, both furniture manufacturers and retailers can identify potential "hot-spots," or concentrations of consumers more prone to buy furniture.

The next phase of our analysis was an examination of furniture sales from the supply-side perspective. If all consumers purchased furniture only in their county of residence, the demand and supply data would be identical. Common experience and empirical research tells us that such is

[^0]not the case. Using data collected for Dun and Bradstreet, we produced a county-level supply model based on sales by furniture establishments. A spatially-based comparison of this model with the one based on the consumer survey reveals the location of retail furniture "magnets"; i.e., those counties where sales are greater than purchases by county residents. From the perspective of the consumer, this same model illustrates the "out shopping" phenomenon for furniture.

Our final analysis was an examination of the linkages between demographic factors and furniture sales at the county level. For this analysis, we chose county level retail sales of Household Furnishings and Equipment (SIC 57) ${ }^{* * *}$ at two points in time (1982 and circa 1990) and sales of Household Furniture (SIC 5712) circa 1990 as dependent variables. The independent variables were age distribution in the county, quality of housing, educational levels, labor force composition, and personal income levels. Results of the regression analysis performed with these variables suggest that local characteristics of communities are substantially correlated with the volume of furniture sales in the area. While the strongest correlations are with metropolitan location, income, and education, the variables consumer age, family type, and labor force characteristics also made important contributions to the regression equation.

While the analyses we performed and described in this report are not the final word on furniture sales projections, they do illustrate the potential contribution of existing data to an understanding of some of the major forces that help shape the market for household furniture in the United States. The geodemographic model presented here may contain no dramatic surprises, but it systematically documents the relationships between furniture consumers' demographics and their spatial distribution across the country.
***The Standard Industrial Classification (SIC) designation for group 57 establishments is "Home Furniture, Furnishings, and Equipment." We have used "Household Furnishings and Equipment" throughout this document for brevity and consistency to refer to SIC 57.

## A Brief Review of Literature on Factors Related to Furniture Sales

Over the past few years, furniture manufacturers and retailers have had to cope with a complex, dynamic market for their products. For example, analysts of the Bureau of Labor Statistics Consumer Expenditure Survey data have discovered that there was little growth in furniture sales between 1986 and 1991 because there was a boom in sales in 1986 while the country was in economic recession in 1991 (American Demographics 1991, p. 2). In a shrinking and changing market, furniture producers are challenged to find opportunities for growth and to be able to quickly adjust to the changing needs and preferences of various demographic groups. Research has discovered several variables which are related to furniture buying; a brief review of some of those studies is presented here.

Among the variables found to influence the furniture market, consumer age is perhaps most important (Ambry 1993). A national survey conducted by the Social Science Research Center at Mississippi State University in 1989 found that age was the best predictor of upholstered household furniture buying plans (Shaver 1993, p. 18). Spending among age groups varies for several reasons. Waldrop (1992, p. 50) found that, due to low birth and mortality rates and the baby boom between 1946 and 1964, the age distribution is misshapen. Therefore, the age group that dominates spending in nearly all markets, excluding health care, is the "baby boomer" group (Ambry 1990, p. 16). Besides their large number within the age distribution, baby boomers' spending also is influenced by activities associated with their lifestyle and spending power (Bullard 1991). For example, Shaver (1992a) reported that because there are so many of them and because of their stage in the lifecycle, baby boomers comprise $52 \%$ of the furniture market. Life style activities which are important factors influencing furniture spending for all age groups include marrying, having children, and buying homes (Shaver 1992a, p. 40).

As one would expect, income also influences furniture spending (Ambry 1993, p. 110). The second income of a working spouse seems to be particularly important, along with the presence of children. Using the 1986 and 1987 Consumer Expenditure Surveys, Waldrop (1989, p. 26) discovered that working wives and mothers are usually bigger spenders. For example, workingwife couples had average annual expenditures of $\$ 31,000$, homemaker-mother couples had average expenditures of $\$ 28,000$ and childless-homemaker couples had average expenditures of only $\$ 25,000$ (p. 28).

The level of education attained by household members is another variable that influences furniture spending. After analyzing the 1986 Consumer Expenditure Survey, Waldrop (1990, p. 24) found that college educated households earn and spend more money in several markets. Generally, householders with some college experience spent an average of $\$ 29,000$, while those without college spent only $\$ 18,000$. More importantly, Waldrop found that householders with some college experience spent more on housing and twice as much on furniture and appliances.

Single men and women make up $27 \%$ of all consumer units, and Shipp (1988), utilizing the 1984 and 1985 Consumer Expenditure Surveys, found that the two groups differ demographically. For example, about half of single men were under the age of 35 whereas about half of single women were over age 55 . Also, $75 \%$ of single women had incomes under $\$ 15,000$ compared to only $50 \%$ of single men. Although single men were bigger spenders- $\$ 15,000$ compared to $\$ 11,000$-women were more likely to purchase items such as homes, furniture and equipment whereas men spent more on entertainment; transportation, eating out, alcohol, and social security contributions (p. 25).

Home purchasing is another important factor influencing furniture spending. Utilizing the 1988 Consumer Expenditure Survey, Exter (1991) found that new households, new home ownership, and remodeling were important variables in the furniture market. Additionally, Crispell found that $25 \%$ of new homeowners purchase living room furniture compared to $17 \%$ of those who have lived in their homes more than five years (1990, p. 22).

Despite the usefulness of the analysis of various demographic groups, these groups are not uniform or static for all regions and communities of the country. For example, factors such as labor force characteristics, migration patterns, and religious convictions may influence the age distribution within a regional or local population (Waldrop 1992). Specifically, the type of labor force, the migration of a population, and the religious beliefs associated with family size of a certain group may all lead to atypical age distributions within communities.

Regional economic activity also can affect the relationship between demographic groups and spending patterns. Bullard (1990) utilized the 1987 Census of Retail Trade report of furniture and home furnishings and found a close relationship between furniture sales and a concentration of population, income, and economic activity at the regional level. For example, states like Oklahoma and Wyoming experienced population growth between 1980 and 1987, but furniture sales declined due to the suppressed economic activity and income in the region (p.30).

While analysis of demographic variables may be useful in locating areas of potential growth for the furniture market, these pockets of growth will not remain static. First, as household types change (especially the increase in single parent and single person households and the decrease in the number of "traditional" families), so will the furniture market. Single parent households, usually headed by women, typically have lower incomes. Therefore, their furniture spending will likely decrease (Shaver 1992b, p. 12). Age distributions will also change: as baby boomers age, the 45-54 age group will be the one to watch for furniture market growth (Schlosberg 1988, p. 28.; Shaver 1992a, p. 41; Shaver 1992c). Ambry (1993, pp. 104, 108) predicts that market shares of most age groups will not experience much change by the year 2000. However, she predicts that the market share for the $25-34$ age group will decrease from $24 \%$ to $19 \%$ and that the market share for the 45-54 age group will increase from $22 \%$ to $27 \%$.

The literature on furniture sales and demographic groups reveals the complexity and dynamics of the furniture market. Still, as Waldrop (1992) and Bullard (1990) have begun to discover, there
is a need for analysis of the furniture market that focuses on regional distributions of variables such as age, income, marital status, etc. Economic trends, such as layoffs within industries concentrated in certain regions and the "boom" of industries in other regions, may have important effects on furniture sales. It is also important to investigate the effects of rural and urban dynamics. For example, cities often are centers of commerce that draw customers from other areas. The effects of these and other community phenomena upon the demographic-furniture sales relationship require more intensive investigations.

## A Demographic Projection Model for Local Furniture Sales

In this section we describe the Consumer Expenditure Survey (CEX) and the Dun and Bradstreet Marketplace database. Both of these data sources contain useful information for the study of furniture. Using the 1990 Consumer Expenditure Survey, we constructed a demographic projection model for local furniture sales. These furniture projections will be compared with the Marketplace database and the differences in these two databases will be examined, providing a different approach to the study of furniture markets.

## ㅁ. Consumer Expenditure Survey Estimates of Furniture Consumption

The Consumer Expenditure Survey is a detailed survey of the income and expenditure patterns of consumer households in the United States. The survey collects a steady stream of data providing insight into the American consumer's buying habits (Bureau of Labor Statistics 1991). The Bureau of Labor Statistics estimates that the interview survey collects data on 60 to 70 percent of total household expenditures. Global estimates for food and other selected items account for an additional 20 to 25 percent of total household expenditures. CEX does not collect data on housekeeping supplies, personal care products, or nonprescription drugs. Overall, the survey covers
an estimated 90 to 95 percent of total expenditures. These data are combined with household characteristics and income information to form the consumer unit record. Each quarter, $20 \%$ of the sample completes the five quarter interview process and new consumer units are added (Bureau of Labor Statistics 1991).

The consumption data pertaining to furniture is of particular interest to this study. Consumer Expenditure Survey has a major category of Household Furnishings and Equipment, a Furniture category which is a nine-item subset of Household Furnishings and Equipment, and a two-item Upholstered Furniture subset of the Furniture category. The Upholstered Furniture sub-category contains the typical types of furniture produced by the Mississippi furniture industry. The exact contents of these categories can be found in Appendix A.

Assembly of CEX Data. Following the procedures outlined in the Consumer Expenditure Survey documentation, the data for the Furniture and the Upholstered Furniture variables were extracted from the CEX Detailed Expenditure File (MTAB). These data were aggregated to the consumer unit identification number level and matched with the Consumer Unit Characteristics and Income (FMLY) file.

Due to the rotational nature of this data set, it is necessary to control for the number of months that the consumer unit is part of the survey. With the three month recall survey, a consumer unit interviewed in January 1990 would not make a contribution to the expenditures of that year, as their purchases would have been made in October, November, and December of 1989. A consumer unit interviewed in February 1990 would contribute one month of expenditures (January) to the year's expenditure data, as the other two months (November and December) represent 1989 data. To control for this, a "month-in-scope" variable was constructed to reflect the number of months a particular consumer unit contributed to the year's data.

The population that each consumer unit represents is obtained by multiplying the weight of each consumer unit by month-in-scope and dividing the result by 12 . The average annual expenditure is obtained by multiplying the consumer
unit's expenditures on an item during the calendar period by the weight for that consumer unit and dividing that number by the population the consumer unit represents. Using this procedure, variables for Furniture expenditures and Upholstered Furniture expenditures were created (Bureau of Labor Statistics 1991, p. 9).

Extraction of Data from Consumer Expenditure Survey. Having completed the construction of the expenditure data, categorical variables were constructed for age and total family income. Each of these variables was composed of seven categories. The age categories were defined as: less than 25 years old, 25 to 34, 35 to 44,45 to 54 , 55 to 64,65 to 74 , and 75 years and older. The total family income categories were defined as: less than $\$ 10,000, \$ 10,000$ to $\$ 15,000, \$ 15,000$ to $\$ 20,000, \$ 20,000$ to $\$ 30,000, \$ 30,000$ to $\$ 40,000$, $\$ 40,000$ to $\$ 50,000$, and $\$ 50,000$ and over.

In addition to age and total family income, we also examined variables representing educational achievement and marital status. The categories for educational achievement were: less than 9 th grade, 9 th to 12 th grade, High School Graduate, 1-4 years of College, College Graduate, and Graduate or Professional degree. The categories for marital status were: Married, Widowed, Divorced, Separated, and Never Married.

Combinations of the variables that were used to generate group means from the income and furniture variables are shown in the following box. The group means generated by these variable pairings were then used to create the tables and the ratios that appear in Appendix B.
————
Total Family Income by Age
Total Household Expenditures by Age and Total Family Income
Household Furnishings and Equipment Expenditures by Age and Total Family Income
Furniture Expenditures by Age and Total Family Income
Upholstered Furniture Expenditures by Age and Total Family Income

-     - 

Total Family Income by Age and Education
Total Household Expenditures by Age and Education
Household Furnishings and Equipment Expenditures by Age and Education
Furniture Expenditures by Age and Education
Upholstered Furniture Expenditures by Age and Education

-     - 

Total Family Income by Age and Marital Status
Total Household Expenditures by Age and Marital Status
Household Furnishings and Equipment Expenditures by Age and Marital Status
Furniture Expenditures by Age and Marital Status
Upholstered Furniture Expenditures by Age and Marital Status

-     - 

Total Family Income by Marital Status
Total Household Expenditures by Family Income and Marital Status
Household Furnishings and Equipment Expenditures by Family Income and Marital Status
Furniture Expenditures by Family Income and Marital Status
Upholstered Furniture Expenditures by Family Income and Marital Status

-     - 

Average Dollar Expenditures. Age, Education, Marital Status, and Total Family Income are the principal variables in this study that were examined to determine their relationship with furniture purchases. These variables, while not explaining the total variance in furniture purchases, do contribute to our understanding of patterns in furniture buying.

The age of the head of the consumer unit appears to be important in the understanding of furniture purchasing. (See Table 1.) The age groups 35 to 44 and 45 to 54 consistently have the highest average furniture purchases. The 35 to 44 yearolds have higher average expenditures than the 45 to 54 age group in: Household Furnishing and Equipment ( $\$ 1,275.69$ to $\$ 1,209.14$ ) and Furniture ( $\$ 407.72$ to $\$ 374.44$ ). A shift occurs at the Upholstered Furniture level, with the 45 to 54 age group (\$141.08) expending, on average, more for Upholstered Furniture than the 35 to 44 age group (\$123.26).

These findings parallel those in the current literature stating that the age groups 35 to 44 and 45 to 54 have the highest average expenditures for furniture among all age groups. Similar results are reported in Thomas Exter's article "Nice Niches For Furniture" (1991) which used a combination of the Consumer Expenditure Surveys from 1987 to 1988 . It is interesting, however, that the upholstered furniture average does not follow the pattern of the other two categories; the 45 to 54 year olds expend more for upholstered furniture than do the 35 to 44 year olds.

The relationship between level of educational achievement and expenditures on furniture follows the pattern that one might expect-as the level of education increases, the average expenditure on furniture also increases. (See Table 2.) This change is probably more related to increases in the average levels of income that result from higher average educational achievement. The higher income provides the family with a larger disposable income from which to purchase furniture.

Marital status also affects average furniture expenditures. Married consumer units expend more on the average in each furniture category than any of the other groups. (See Table 3.) This seems reasonable because the married consumer unit would have at least two people in the household, both of whom may produce income. Also, married couples often live in larger residences that require more furniture, and new children and growing children require furniture to meet age specific needs.

As would be expected, higher total family income levels are also reflected in the average furniture expenditures. (See Table 4.) While this pattern is not consistent across all the income categories, it is suggestive of the idea that additional income allows for the purchase of more furniture and/or more expensive furniture. This pattern is most apparent in income levels above $\$ 20,000$.

Table 1: Average Annual Expenditures By Age

| Age | Household Furnishings <br> and Equipment | Furniture <br> $(9$ category $)$ | Upholstered Furniture <br> (2 category) |
| :--- | :---: | :---: | :---: |
| All Ages | $\$ 959.48$ | $\$ 310.49$ | $\$ 100.02$ |
| Less than 25 | $\$ 613.17$ | $\$ 253.93$ | $\$ 98.49$ |
| 25 to 34 | $\$ 915.33$ | $\$ 333.63$ | $\$ 92.94$ |
| 35 to 44 | $\$ 1,275.69$ | $\$ 407.72$ | $\$ 123.26$ |
| 45 to 54 | $\$ 1,209.14$ | $\$ 374.44$ | $\$ 141.08$ |
| 55 to 64 | $\$ 1,098.25$ | $\$ 370.11$ | $\$ 103.17$ |
| 65 to 74 | $\$ 640.54$ | $\$ 146.03$ | $\$ 52.87$ |
| $75+$ years old | $\$ 404.40$ | $\$ 91.34$ | $\$ 49.72$ |

Source: Consumer Expenditure Survey, 1990.

Table 2: Average Annual Expenditure by Educational Attainment

| Education | Household Furnishings <br> and Equipment | Furniture <br> (9 category) | Upholstered Furniture <br> (2 category) |
| :--- | :---: | :---: | :---: |
| All Educational Levels | $\$ 959.48$ | $\$ 310.49$ | $\$ 100.02$ |
| Less than 9th Grade | $\$ 409.98$ | $\$ 132.02$ | $\$ 56.12$ |
| 9th to 12th | $\$ 578.81$ | $\$ 153.99$ | $\$ 54.96$ |
| High School Graduate | $\$ 766.53$ | $\$ 264.39$ | $\$ 92.63$ |
| 1 to 4 yrs College | $\$ 937.83$ | $\$ 289.58$ | $\$ 102.03$ |
| College Graduate | $\$ 1,429.69$ | $\$ 451.15$ | $\$ 126.48$ |
| Graduate/Professional Degree | $\$ 2,048.07$ | $\$ 701.30$ | $\$ 186.71$ |

Source: Consumer Expenditure Survey, 1990.

Table 3: Average Annual Expenditure by Marital Status

| Marital Status | Household Furnishings <br> and Equipment | Furniture <br> $(9$ category $)$ | Upholstered Furniture <br> $(2$ category) |
| :--- | :---: | :---: | :---: |
| All Marital Statuses | $\$ 959.48$ | $\$ 310.49$ | $\$ 100.02$ |
| Married | $\mathbf{\$ 1 , 2 7 8 . 9 1}$ | $\$ 409.03$ | $\$ 126.98$ |
| Widowed | $\$ 444.17$ | $\$ 119.37$ | $\$ 47.31$ |
| Divorced | $\$ 629.74$ | $\$ 202.95$ | $\$ 65.68$ |
| Separated | $\$ 794.55$ | $\$ 203.85$ | $\$ 67.89$ |
| Never married | $\$ 521.16$ | $\$ 214.45$ | $\$ 78.26$ |

Source: Consumer Expenditure Survey, 1990.

Table 4: Average Annual Expenditure by Total Family Income

| Income | Household Furnishings <br> and Equipment | Furniture <br> (9 category) | Upholstered Furniture <br> (2 category) |
| :--- | :---: | :---: | :---: |
| All Income Levels | $\$ 959.48$ | $\$ 310.49$ | $\$ 100.02$ |
| Less than $\$ 10,000$ | $\$ 590.64$ | $\$ 217.25$ | $\$ 75.09$ |
| $\$ 10,000$ to $\$ 15,000$ | $\$ 595.60$ | $\$ 178.79$ | $\$ 64.28$ |
| $\$ 15,000$ to $\$ 20,000$ | $\$ 665.84$ | $\$ 187.82$ | $\$ 81.43$ |
| $\$ 20,000$ to $\$ 30,000$ | $\$ 734.78$ | $\$ 227.99$ | $\$ 80.36$ |
| $\$ 30,000$ to $\$ 40,000$ | $\$ 1,013.56$ | $\$ 330.83$ | $\$ 114.48$ |
| $\$ 40,000$ to $\$ 50,000$ | $\$ 1,174.30$ | $\$ 452.51$ | $\$ 120.45$ |
| $\$ 50,000$ and more | $\$ 2,111.97$ | $\$ 628.58$ | $\$ 178.21$ |

Source: Consumer Expenditure Survey, 1990.

In examining these tables, it seems clear that the variables of Age, Education, Marital Status, and Total Family Income all appear to have an effect on the average furniture expenditure of a consumer unit. Some interesting patterns appear in the data. The patterns of expenditures, when related to the age of the consumer unit, seem to reflect the patterns previously found in other furniture studies. However, the relationships with educational attainment, marital status, and total family income are less clear. Additional steps are required to more adequately determine the relationships of these variables to the average furniture expenditure by the consumer units in this sample.

Ratios of Average Expenditures on Furniture to Total Family Income and Total Household Expenditures. In the hope of further clarifying the relationships between the consumer unit characteristic variables and furniture expenditures, ratios were constructed relating purchases in the furniture categories to total income and total household expenditures. These ratios provide a mechanism allowing a more detailed look at the relationships involved in expenditures for furniture. Tables containing the ratios can be found in Appendix B.

The ratios constructed from the Consumer Expenditure Survey data allow the data to be examined in two ways. First, an examination of how much of each dollar of income and total household expenditures is expended in the various furniture categories provides further detail in the examination of furniture expenditures. The ratio tables show the ratios of expenditures for the following breakouts: age and total family income, age and education, age and marital status, and family income and marital status. These breakouts allow a finer level of examination of the data, helping to clarify the relationships of the demographic variables to furniture expenditures.

The second use for the ratios is their application to similar data from other data sets. They were constructed as a guide for estimating furniture expenditures based on different demographic, income and expenditure data. This provides a method for generating estimates of furniture expenditures for a variety of data. The ratios could be used to estimate furniture expenditures for a source that supplies only income data for a
particular age group. They could be used to generate an estimate of upholstered furniture purchases from a source providing only expenditure data for the broader furniture category. If these ratios are stable and accurate representations of the relationship between the various furniture categories and the income and expenditure groups, they offer a quick and simple way of generating estimates of furniture expenditures.

The Consumer Expenditure Survey offers a wealth of information about consumer expenditures in the U.S. Through the use of fairly simple data manipulations, the expenditure patterns for the consumers of furniture become much clearer. A knowledge of these patterns will allow the projection of the patterns to the county level. The next section will construct the demographicprojection model based on the patterns of expenditure observed in this section.

## - County-Level Furniture Sales Projections from Consumer Expenditure Survey

Using methods similar to those described in the previous section, we calculated furniture expenditure averages for each of the age by family income categories. These calculations make it possible to create a demographic projection of furniture sales at the county level.

Age and Income Groups for Projection Model. The age groups are the same as those used in the previous section; they also are found in the population census and are used in most analyses of furniture sales. The age groups are as follows: less than 25 years old, 25 to 34 years old, 35 to 44 years old, 45 to 54 years old, 55 to 64 years old, 65 to 74 years old, and $75+$ years old.

The income groups were slightly different from those used to calculate the ratios in the previous section. The income groups used are as follows: less than $\$ 10,000, \$ 10,000$ to $\$ 14,999, \$ 15,000$ to $\$ 24,999, \$ 25,000$ to $\$ 34,999, \$ 35,000$ to $\$ 49,999$, and $\$ 50,000$ and above.

The resulting averages for the three furniture categories can be found in Table 5, Table 6, and Table 7.

Table 5: Average Annual Expenditures for Household Furnishings and Equipment by Age and Total Family Income

| Age | Total Family Income |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $<\$ 10,000$ | $\$ 10,000$ to | $\$ 15,000$ to | $\$ 25,000$ to | $\$ 35,000$ to | $\$ 50,000+$ |
|  |  | $\$ 14,999$ | $\$ 24,999$ | $\$ 34,999$ | $\$ 49,999$ |  |
| $<25$ yr old | 256.20 | 638.91 | 990.68 | 914.75 | $2,078.72$ | $2,257.65$ |
| 25 to 34 | 472.63 | 443.45 | 737.05 | 908.59 | $1,038.21$ | $1,923.59$ |
| 35 to 44 | 973.01 | 636.37 | 754.60 | 824.95 | $1,027.16$ | $2,410.12$ |
| 45 to 54 | 669.40 | 614.38 | 666.74 | 740.46 | $1,562.86$ | $2,120.23$ |
| 55 to 64 | $1,032.58$ | $1,176.66$ | 527.08 | 855.78 | 993.52 | $1,919.13$ |
| 65 to 74 | 439.83 | 494.98 | 637.69 | $1,063.73$ | 611.81 | $1,577.38$ |
| $75+$ | 318.25 | 382.22 | 403.70 | 972.57 | 360.61 | 693.01 |

Source: Consumer Expenditure Survey, 1990.

Table 6: Average Annual Expenditures for Furniture (9 Category) by Age and Total Family Income

| Age | Total Family Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <\$10,000 | $\begin{aligned} & \$ 10,000 \text { to } \\ & \$ 14,999 \end{aligned}$ | $\begin{aligned} & \hline \$ 15,000 \text { to } \\ & \$ 24,999 \end{aligned}$ | $\begin{aligned} & \$ 25,000 \text { to } \\ & \$ 34,999 \end{aligned}$ | $\begin{aligned} & \$ 35,000 \text { to } \\ & \$ 49.999 \end{aligned}$ | \$50,000 + |
| <25 yr old | 86.19 | 228.25 | 479.78 | 353.37 | 861.68 | 1390.07 |
| 25 to 34 | 177.30 | 175.51 | 162.29 | 237.91 | 501.65 | 798.58 |
| 35 to 44 | 356.85 | 279.82 | 201.63 | 356.46 | 351.17 | 668.74 |
| 45 to 54 | 300.11 | 120.56 | 194.81 | 230.90 | 613.23 | 526.24 |
| 55 to 64 | 436.15 | 303.45 | 112.57 | 390.29 | 282.22 | 559.73 |
| 65 to 74 | 132.18 | 136.15 | 122.15 | 182.71 | 180.46 | 243.49 |
| $75+$ | 59.17 | 64.33 | 135.73 | 150.36 | 93.84 | 474.31 |

Source: Consumer Expenditure Survey, 1990.

Table 7: Average Annual Expenditures for Upholstered Furniture by Age and Total Family Income

| Age | Total Family Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <\$10,000 | $\begin{aligned} & \$ 10,000 \text { to } \\ & \$ 14,999 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 15,000 \text { to } \\ & \$ 24,999 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 25,000 \text { to } \\ & \$ 34,999 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 35,000 \text { to } \\ & \$ 49,999 \\ & \hline \end{aligned}$ | \$50,000 + |
| <25 yr old | 26.02 | 88.14 | 208.45 | 101.05 | 318.00 | 862.69 |
| 25 to 34 | 53.54 | 42.07 | 70.29 | 71.07 | 133.29 | 190.82 |
| 35 to 44 | 109.68 | 93.43 | 78.09 | 121.85 | 118.02 | 172.85 |
| 45 to 54 | 151.48 | 62.50 | 85.00 | 101.32 | 169.08 | 183.85 |
| 55 to 64 | 111.56 | 104.14 | 39.22 | 97.11 | 109.67 | 140.07 |
| 65 to 74 | 47.21 | 65.71 | 39.49 | 54.37 | 42.47 | 114.23 |
| 75+ | 41.59 | 20.87 | 100.34 | 32.30 | 0.00 | 216.58 |

Source: Consumer Expenditure Survey, 1990.

Next, county level populations for the age by family income groups were extracted from the 1990 Census (U.S. Department of Commerce 1992). These population figures were matched with the average expenditure figures from the CEX data set. The population of an age by family income group is multiplied by the corresponding annual expenditure average, producing a projected furniture expenditure level for that group in a particular county. This calculation is then completed for the remaining age by income groups. The projected furniture expenditure levels for each of the 42 age by income groups in a given county are summed, the result being a projected furniture expenditure for that county. This process is repeated for the remaining United States counties.

County-Level Projections. Projected expendi ture levels for U.S. counties were calculated for Household Furnishings and Equipment, Furniture, and Upholstered Furniture. The projected county-level expenditures for Household Furniture and Equipment had a mean of $\$ 32.11$ million with a standard deviation of $\$ 203.46$ million. The Furniture projections had a mean of $\$ 10.14$ million with a standard deviation of $\$ 35.76$ million and for the Upholstered Furniture projections the mean was $\$ 3.21$ million with a standard deviation of $\$ 11.15$ million. The five U.S. counties with the highest projected expenditure levels are presented in Table 8.

The complete projected expenditure figures for all U.S. counties are available from the authors.

These projections are presented here in map form with black indicating high projected expenditures and gray shadings representing areas of lower projected expenditures. The projected expenditures are highest in the counties with the larger populations and the higher income levels for the simple reason that more people with more money can spend more on furniture.

Figure 1 (Projected Household Furnishings and Equipment Sales in Millions of Dollars) represents the broadest category of furniture examined in this study (see Appendix A for items included in this category), and therefore has the largest projected sales levels. There are large regions of black-shaded counties in this map representing many of the more populated urban counties, where projected sales are over $\$ 25.1$ million annually.

In Figure 2 (Projected Furniture Sales in Millions of Dollars), the large areas of counties that were shaded black in the previous map have been reduced. This change represents the difference between the Household Furnishings and Equipment and the Furniture categories. The Furniture category is a more focused group with nine items included in the category.

The final map in this series is Figure 3 (Projected Upholstered Furniture Sales in Millions of Dollars). This map displays the projections for the most detailed category of this study-the twoitem Upholstered Furniture category. The black-

| Table 8: | Five U.S. Counties with Highest Projected Furniture Expenditure Levels <br> (in Millions of Dollars) | Household <br> Furnishings and <br> Equipment | Furniture |
| :--- | :---: | :---: | :---: |
| County (City) | $\$ 3,626.02$ | $\$ 1,158.38$ | Upholstered <br> Furniture |
| Los Angeles Co., CA <br> (Los Angeles) | $\$ 361.40$ |  |  |
| Cook Co., IL <br> (Chicago) | $\$ 2,149.73$ | $\$ 681.31$ | $\$ 213.20$ |
| Harris Co., TX <br> (Houston) | $\$ 1,183.75$ | $\$ 380.60$ | $\$ 118.19$ |
| Orange Co., CA <br> (Anaheim) | $\$ 1,162.48$ | $\$ 369.83$ | $\$ 113.01$ |
| San Diego Co., CA <br> (San Diego) | $\$ 1,062.15$ | $\$ 339.41$ | $\$ 106.26$ |

Source: Authors' Calculations (see text)
shaded areas in this map tend to be large metropolitan areas.

Another pattern that is evident in all three maps is the large region of lower projected furniture sales (gray) that runs down the middle of the United States and out toward the west coast. The counties in this region are sparsely populated and, as a consequence, furniture demand is relatively low. We would expect this pattern to occur also in the examination of the EstablishmentSales data to come later in this section.

This demographic-projection model provides an idea of the location and concentration of potential furniture buyers by their home county. This look at the demand-side of the furniture sales spectrum shows the location of consumers. The question that it does not answer is where the furniture is sold. It is expected that there will be some differences in the home county of the consumer and the county where they purchased furniture. The supply-side of the equation is addressed in the examination of a retail sales establishment database in the next section.

## Figure 1

Projected Household Furnishings and Equipment Sales in Millions of Dollars 1990, Authors' Projection Model


Figure 2

## Projected Furniture Sales in Millions of Dollars 1990, Authors' Projection Model



Figure 3
Projected Upholstered Furniture Sales in Millions of Dollars
1990, Authors' Projection Model


## - Furniture Establishment and Sales Data

The previous two sections have dealt with the demand side of the U.S. furniture market; this section will explore the supply side of the market. The data used in this section come from the Business Marketplace CD-ROM (Marketplace Sales \& Service 1993). This source provided information about furniture establishments and their annual sales at the county level based on information reported by the establishments to Dun and Bradstreet ( $\mathrm{D} \& \mathrm{~B}$ ). This data represents one of the few sources of non-suppressed county level furniture sales data available for the United States. The county level data for annual furniture sales, number of establishments, and average sales per establishment for Household Furnishings and Equipment establishments (SIC 57) and Furniture stores (SIC 5712) for the United States counties are available from the authors.

The annual county-level sales data for Household Furnishings and Equipment and Furniture are presented in Figure 4 and Figure 5, respectively. The mean for annual retail sales for Household Furnishings and Equipment establishments was $\$ 31.71$ million with a standard deviation of $\$ 203.46$ million. This is slightly lower than the demographic-projection model's mean of $\$ 32.11$ million, as reported in the last section. The mean for the annual retail sales for Furniture establishments was $\$ 8.72$ million with a standard deviation of $\$ 51.09$ million. This is slightly lower than the demographic-projection model's mean of $\$ 10.14$ million.

As seen in the previous section in Figure 1 and Figure 2, areas with larger populations have higher furniture sales. The largely urban Northeast has large areas of counties with Household Furnishings and Equipment and Furniture sales greater than $\$ 25.1$ million annually (black). There is the same pattern in the western half of the United States with lower furniture sales (gray areas). The retail sales data also show that a large number of counties in that region do not have any Household Furnishings and Equipment stores or Furniture stores (horizontal hatching) reported by Dun and Bradstreet.

The differences in the means between the demographic-projection and the Marketplace data were expected and suggest that consumers travel outside their counties of residence to purchase furniture. The differences should be explainable by investigating the differences in the two data sets and looking for patterns in the differences. In the next section, the differences between the demographic-projection model and the retail sales data will be examined.

## Figure 4

Household Furnishings and Equipment Sales in Millions of Dollars (SIC 57) Circa 1990, Dun and Bradstreet Database


Figure 5
Furniture Sales in Millions of Dollars
(SIC 5712) Circa 1990, Dun and Bradstreet Database


## - Comparison of EstablishmentSales (Supply) and DemographicProjection (Demand) Data

In the previous sections, the Consumer Expenditure Survey and the Marketplace data sets were discussed in detail. Alone, neither source provides a complete picture of furniture consumption in the United States. We used the Marketplace data as a baseline to which we compared the demographic projections from the CEX data. An examination of the differences in the two data sets reveals some interesting patterns in furniture expenditures in the United States.

Measures of Differences. The approach taken in the examination of the differences in the data sets was the calculation of two simple difference scores. The first difference score was derived by subtracting the residence-based CEX projection from the supply-side D \& B sales data. This score shows, in millions of dollars, where the CEX projection over-predicts or under-predicts sales relative to the D\&B data. The other difference score was calculated by dividing the first difference score by the D\&B figure and multiplying the result by 100 . This score is the percent of overprediction or under-prediction by the CEX projection. A negative value in either score means that the CEX projection under-predicted sales relative to the D\&B data while a positive value indicates over-prediction.

Observed Differences. The mean for the difference scores for Household Furnishings and Equipment establishments was $\$ 0.4$ million with a standard deviation of $\$ 157.69$ million, and the average percentage difference was $182.12 \%$ with a standard deviation of 443.65 . These scores mean that, on average, the CEX projections overpredict sales by $\$ 400,000$ or $\mathbf{1 8 2 . 1 2 \%}$ (Figure 6).

The mean for the difference scores for Furniture establishments was $\$ 1.42$ million with a standard deviation of $\$ 42.69$ million; the mean percentage difference was $172.08 \%$ with a standard deviation of 430.50 . In other words, the CEX data overpredicted sales by $\$ 1,420,000$ and $172.08 \%$ (Figure 7).

A portion of the differences between the two projections is explained by the outshopping phe-
nomenon of suburban and rural consumers going to the nearest large urban center to purchase furniture. In mapping the data, rings of counties in which sales were over-predicted (black) by the demographic projection often appeared around counties with large urban centers, in which sales generally were under-predicted (dotted) by the demographic projections. This pattern provides viable evidence of consumers traveling out of their residential county to make purchases. In Figure 6 and Figure 7, these areas appear as dark rings around a central lightly colored county. This occurrence can be seen around most of the counties in the United States containing major urban centers. Examples of this phenomenon are presented in Figure 8, Figure 9, and Figure 10. In Figure 8, Shelby County Tennessee, which contains Memphis, is circled by over-predicted counties. Figure 9 shows a similar situation in Brown County Wisconsin, the county containing Green Bay. In Figure 10, the pattern is around Dallas County Texas and the large urban area of Dallas. These large urban centers appear to be attracting furniture consumers from the neighboring counties.

## Figure 6

Percent Difference Between Household Furnishings and Equipment Sales Estimates (SIC 57) D and B Database and Authors' Projection Model: Circa 1990

\% Over/Under Projection
Less than $-50 \%$
$-50 \%$ to $0 \%$

- $0 \%$ ta $50 \%$
$50 \%$ to $200 \%$
$200 \%$ or more
No info/No Estab.

Percent Difference Between Furniture Sales Estimates (SIC 5712) D and B Database and Authors' Projection Model: Circa 1990


## Figure 8

Shelby Co., TN: Percent Difference Between Furniture Sales Estimates (SIC 5712) D and B Database and Authors' Projection Model: Circa 1990


## Figure 9

Brown Co., WI: Percent Difference Between Furniture Sales Estimates (SIC 5712) D and B Database and Authors' Projection Model: Circa 1990


Source: Social Science Research Center Mississippi State University

Figure 10
Dallas Co., TX: Percent Difference Between Furniture Sales Estimates (SIC 5712) D and B Database and Authors' Projection Model: Circa 1990

\% Over/Under Projection


Less than -50\%
$-50 \%$ to $0 \%$
$0 \%$ to $50 \%$
$50 \%$ to $200 \%$
$200 \%$ or more
No info/No Estab.

## - Summary

In this section, a demographic-projection model was introduced and constructed. This model made use of Household Furnishings and Equipment data from the Consumer Expenditure Survey and population data from the 1990 Census. The model provided a projection of the location of potential consumers of furniture. This information provides a look at the consumer demand for furniture. It is not a complete picture of the furniture market; it simply shows where the consumers live.

The Marketplace data set introduced in this section provided insight into the establishment side, or demand side, of the Household Furnishings and Equipment market. It provided a picture of where the expenditures were being made. This is different from the projection model in that it shows how much is being sold and where it is being sold. It does not show where the furniture is going to end up.

In examining the two data sets and the difference between them, a pattern becomes apparent. The urban counties are generally surrounded by counties in which the demographic model overestimated furniture sales. This suggests that the consumers from surrounding counties are traveling to the urban county to make their furniture purchases. The examination of the two projections provides an interesting look at consumer outshopping.

## County-Level Factors Related to Local Furniture Sales

This section complements the analyses reported in earlier ones by studying the pattern of social and economic factors in the demand for furniture at the community level. Whereas in previous section we made use of both micro-level consumption data and macro-level demographic fluctuations to estimate the demand for different types of furniture sales across U.S. counties, we now turn to an analysis of what factors existing in U.S.
communities appear to affect the amount of local sales for furniture within them.

Based upon the literature review, we summarize previous known findings about factors related to the local demand for furniture consumption and specify a composite model relating a set of these social and demographic variables to furniture sales. This model is estimated using county-level data obtained from both public and proprietary sources (see below). The results will address the question of what social, demographic and economic factors tend to characterize local areas which supply larger volumes of furniture sales each year. The analysis is an attempt to integrate the previous known research literature on this topic through a simultaneous empirical assessment of a broad array of variables thought to trigger higher (or lower) annual sales amounts.

## - Research Approach

The review of previous studies identifying community-level factors linked to increased aggregate furniture sales resulted in six basic types of variables:

- Age distribution of the local area;
- Quality of housing;
- Education levels;
- Labor force composition;
- Household composition; and
- Personal income levels.

From these six areas, a set of variables reflecting one or more areas was obtained from publiclyavailable databases released by the U.S. Department of Commerce (the County Statistics Files [CO-STAT], the 1990 Census of Housing and Population [various files], and the 1982 and 1987 Economic Census [Census of Retail Trade]) all pertaining to the years circa 1982 and circa 1987.

We chose these two approximate points in time to coincide with the Economic Census five-year cycle of data collection which would provide furniture sales data. We also made use of a proprietary database originating from information compiled
by Dun \& Bradstreet (MarketPlace Business by Marketplace Information Corporation). These data on furniture sales were circa 1990 and represent a more complete coverage of business establishments than does the Department of Commerce's Economic Census program (U.S. Department of Commerce 1993). The Economic Census data program only collects information from retail establishments which meet certain minimum threshold sales criteria; consequently, there are counties with data too sparse to allow the release of sales information for fear of identifying individual establishments. However, we were able to estimate the sales volume of many of these non-disclosed counties based on a simple regression of absolute sales volume in dollars on the number of furniture establishments in the county and employment in furniture sales. The Dun \& Bradstreet (D\&B) Marketplace data provide an additional supplement to the Economic Census furniture sales data, and one in which we can feel comfortable that reflects a broader coverage of furniture establishments. Thus, we have three dependent variables which measure furniture sales. Sales estimates, in dollars, for establishments classified under SIC 57 are used for 1982 (Economic Census) and circa 1990 (D\&B) while sales for establishments classified under SIC 5712 are for circa 1990 (D\&B). The latter figures yield more detailed information about specific furniture sales and are based upon more complete coverage than does the Economic Census database.

The independent variables used in these multiple regression models are as follows. Region of the U.S. was specified as three dummy variables, reflecting the Northeast, West, and the South with the Midwest as the omitted category. Metropolitan status was also specified as two dummy variables, reflecting either a metro county or a nonmetropolitan county resting contiguous to a metro county. A county's population that was in the prime purchasing age-range of $25-44$ years was measured as a percentage of the total population of that county. Another population composition variable involved the percentage of households with children, defined as persons 18 years of age and under, in a county. The amount of new housing constructed recently was also a proportion of the existing number of dwellings in a county. The magnitude of a county's college-
educated population was included as the percentage of the 25 year-old population having completed a four-year college degree. Labor force characteristics included the unemployment rate, the percent that females are of the total civilian labor force, and the presence of any military persons in the local labor force. The latter variable was so skewed that its transformation to a dummy-coded format was necessary. The rate of three major family events, births, marriage, and divorce, were also included as independent variables. Finally, median income was utilized as a measure of financial capacity for consumption.

These variables were obtained for time periods either coincident with or antecedent to the time period of the dependent variable. Based upon extensive exploratory analyses examining each variable's distribution, both univariately and bivariately with the relevant dependent variable, some variables were transformed (e.g., natural $\log$ ) for inclusion in the model. Ordinary leastsquares (OLS) regression analysis was used to estimate parameters. Where some data were unavailable for counties or county-equivalents, these counties were excluded from a particular analysis on a pairwise basis since the pattern of their exclusion appeared to be random.

## - Results

The results of the multiple regression analyses are contained in several tables, each organized according to the dependent variable. Means, standard deviations, and zero-order correlations for each equation are also included in these tables. These results are presented, first, for 1982 Household Furnishings and Equipment sales for SIC 57 establishments, and, second, for circa 1990 Household Furnishings and Equipment sales for SIC 57 establishments, and, third, for circa 1990 Furniture sales for SIC 5712 establishments.

## 1982 Household Furnishings and Equipment

 Sales. Descriptive statistics for these variables are shown in Table 9 with correlations presented in Table 10. From the latter table, it can be seen that the variables with the highest zero-order relationships with (log) 1982 furniture sales are: metropolitan counties ( $r=.638$ ), the percentage of college graduates ( $r=.543$ ), and median familyincome ( $r=.500$ ). Smaller associations with furniture sales are observed with the percent of persons age $25-44$ years ( $r=.426$ ), the presence of any Armed Forces personnel ( $\mathrm{r}=.393$ ), and the percent of women in the civilian labor force ( $\mathrm{r}=$ .367). We also note that the correlation of adjacency to a metropolitan area is positively associated with sales in $1982(r=.202)$. Below, we will see that this relationship becomes negative by circa 1990 which is consistent with previous section's observations, based on a combination of micro-level consumption data and county-level aggregate information.

How these and other variables influenced furniture sales in U.S. counties during the early 1980s is shown in Table 11. What these results suggest is that furniture sales at the county-level during the early 1980 s were moderately determined by the social and economic composition of the residents therein. This model is associated with about sixty-percent of the variation in furniture sales ( $\mathrm{R}^{2}=.614 ; p<.001$ ). Using the standardized coefficients (betas) as estimates of the relative association between each independent variable and furniture sales, the results suggest that metro centers were clearly the dominant factor shaping total sales levels ( $\beta=.372$ ), followed by the proportion of college graduates ( $\beta=.242$ ). Other influences can be traced to the absence of children in the household ( $\beta=-.187$ ), median family income ( $\beta=.170$ ), the birth rate ( $\beta=.170$ ), being in the South ( $\beta=.145$ ), and an Armed Forces presence in the local labor force ( $\beta=.134$ ). There are some additional small effects on 1982 sales levels, such as that of the percentage of the labor force that is female, the unemployment rate, and new housing construction, but these coefficients are all somewhat smaller than those above.

Circa 1990 Furniture Sales. Two sets of results are provided for furniture sales occurring approximately 1990, one for establishments identified under SIC 57 (Household Furnishings and Equipment) and the other for SIC 5712 (Furniture Stores). These analyses are summarized in Tables 12-14 for SIC 57 and Tables 15-17 for SIC 5712.

For circa 1990 Household Furnishings and Equipment, the factors which correlate the highest with sales levels include metropolitan county status ( $r$ $=.591$ ), median family income ( $r=.520$ ), and the
proportion of college graduates in the county's population ( $r=.536$ ). With the exception of metro status, these correlations are higher than observed for the 1982 data. Other notworthy correlates include the proportion of a county's population in the 25-44 age group ( $r=.465$ ), the proportion of women in the local labor force ( $r=379$ ), and the presence of an Armed Forces population in the labor force $(r=.360)$. Some shifts in the regional patterns of Household Furnishings and Equipment purchasing from 1982 to circa 1990 involved the lack of a southern region effect ( $r=-$ .075) but a small relationship with being located in the Northeast region ( $r=.281$ ). The relationship of adjacency to a metro area has shifted from positive (in 1982) to negative in these circa 1990 sales data ( $\mathrm{r}=-.150$ ). This is consistent with the analysis presented in a previous section, but we are left without a clear explanation as to why exactly.

Turning to the multiple regression equation estimates (see Table 14), this model explains over one-half of the variation in Household Furnishings and Equipment sales ( $\mathrm{R}^{2}=.547 ; \mathrm{F}<.001$ ). This amount is only slightly less than the figure obtained for the 1982 model. Independent variables which influenced Household Furnishings and Equipment sales continued to be dominated by metropolitan status of the county ( $\beta=.339$ ). The proportion of college graduates ( $\beta=.207$ ) has the second largest standardized coefficient, followed by the lack of children in the household ( $\beta$ $=-.163$ ) and the presence of an Armed Forces contingent in the local labor force ( $\beta=.154$ ). Smaller influences can be observed from several independent variables, including the proportion of the local population in the 25-44 age group, the proportion of women in the labor force, and the birth rate.

The narrower specification of Household Furniture sales (SIC 5712) provides a comparison of the sensitivity of the social and economic factors used in this study to shape furniture sales. Table 17 shows that the pattern of correlations between these exogenous variables and furniture sales is roughly comparable to that for all Household Furnishings and Equipment (see Table 14). While the overall explanatory power of the equation is approximately ten-percent less ( $\mathrm{R}^{2}=.445 ; \mathrm{F}<$ .001) than that obtained for Household Furnish-
ings and Equipment sales, the consistency in the pattern of relationships of these independent variables to the two overlapping measures of furniture sales does provide support for an absence of "sensitivity" to these equations. That is, we do not obtain very different sources of variation in furniture-related sales equations when we compare SIC 57 sales information with SIC 5712 data. Examining the specific results for furniture sales (Table 17) shows that, as noted, metro status of the county has the dominant relationship to sales ( $\beta=-.333$ ). The lack of households with children also figures significantly into household furniture sales ( $\beta=-.224$ ). Effects of other variables are very similar to those obtained for SIC 57 sales data, except that their absolute magnitude tends to be slightly lower (e.g., percent aged 25-44 years).

Table 9. Means, Standard Deviations and Sample Sizes for Variables Used in Regression Analysis: U.S. Counties, Circa 1982

|  |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Mean | Std Dev | Cases |
|  |  |  |  |
| HHF\&E Sales 1982 | 8.142 | 1.496 | 2866 |
| Neast | .069 | .254 | 3139 |
| West | .141 | .348 | 3139 |
| South | .454 | .498 | 3139 |
| Adjmetro | .313 | .464 | 3139 |
| Metro | .237 | .425 | 3139 |
| Persons 25-44 1980 | -1.370 | .125 | 3136 |
| New Housing Units, 1980 | 2.551 | .432 | 3135 |
| HHD 18 and Under 1980 | .416 | .061 | 3136 |
| College Graduate 1980 | -2.253 | .408 | 3136 |
| Unemployment 1980 | 1.899 | .470 | 3132 |
| Armed Forces 1980 | .722 | .448 | 3136 |
| Female Labor 1980 | .397 | .039 | 3136 |
| Birth 1980 | 2.780 | .207 | 3116 |
| Marriage 1980 | 2.308 | .419 | 3122 |
| Divorce 1980 | 1.433 | .560 | 3055 |
| Median Income 1979 | 9.542 | .232 | 3136 |
| Minimum Pairwise N of Cases = | 2812 |  |  |
|  |  |  |  |

## Legend:

HHF\&E Sales 1982
Neast
West
South
Adjmetro
Metro
Persons 25-44 1980
New Housing Units, 1980
HHD 18 and Under 1980
College Graduate 1980
Unemployment 1980
Armed Forces 1980
Female Labor 1980
Birth 1980
Marriage 1980
Divorce 1980
Median Income 1979
(Natural Log) of Household Furnishings and Equipment Sales, 1982 (=Proj.) North East Region <1=Yes>
West Region <1=Yes>
South Region < $1=$ Yes>
County Adjacent to Metropolitan Area, 1980
Metropolitan County, $1980<1=$ Yes>
(Natural Log) Percent Persons 25-44 as Percent of Total Population
(Natural Log) Percent Housing Units Built 1975-1980 of Total Housing Units
Percent Households with Persons 18 and Under, 1980
(Natural Log) Percent of Total Persons 25+ College Graduate, 1980
(Natural Log) Civilian Unemployment Rate (BLS) 1980
Any Military in Labor Force, 1980 ? < $1=$ Yes>
Percent Female Labor Force of Total Labor Force, 1980
(Natural Log) Birth Rate per 1000 Persons, 1980
(Natural Log) Marriages per 1000 Persons, 1980
(Natural Log) Divorces per 1000 Persons, 1980
(Natural Log) Median Household Income 1979

Table 10. Correlation Matrix of Variables Used in Regression Analysis: U.S. Counties, Circa 1982

|  | L |  |  | . | A |  | L | L |  |  | L |  |  |  |  |  | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N |  |  |  | D |  | N | N | H |  | $N$ | A | F | L | L | L | N |
|  | F |  |  |  | J |  | 2 | N | H | L | U | R | E | N | N | N | M |
|  | S | N |  | S | M | M | 5 | W | D | N | N | M | M | B | M | D | 1 |
|  | A | E | w | 0 | E | E | 4 | H | 1 | C | E | E | L | I | A | , | N |
|  | L | A | E | U | T | T | 4 | U | 8 | G | M | D | B | R | R | $\checkmark$ | C |
|  | 8 | S | S | T | R | R | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
|  | 2 | T | T | H | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| LNFSAL82 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NEAST | . 263 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WEST | . 050 | -. 110 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH | -. 061 | -. 248 | -. 369 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ADJMETRO | -. 202 | -. 032 | *. 028 | . 053 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| METRO | . 638 | . 194 | -. 053 | *. 018 | -. 376 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| LN254480 | . 426 | . 083 | . 275 | *. 022 | -. 092 | . 439 | 1.000 |  |  |  |  |  |  |  |  |  |  |
| LNNWHU80 | *. 015 | -. 323 | . 292 | . 221 | *. 008 | . 103 | . 409 | 1.000 |  |  |  |  |  |  |  |  |  |
| HHD 1880 | -. 045 | -. 085 | *. 016 | . 234 | . 047 | . 124 | . 391 | . 397 | 1.000 |  |  |  |  |  |  |  |  |
| LNCG80 | . 543 | . 173 | . 318 | -. 272 | -. 206 | . 385 | . 421 | . 116 | -. 172 | 1.000 |  |  |  |  |  |  |  |
| LNUNEM80 | *. 027 | . 072 | *. 025 | *. 009 | . 140 | *-. 013 | . 091 | . 052 | . 237 | -. 287 | 1.000 |  |  |  |  |  |  |
| ARMED80 | . 393 | . 153 | -. 098 | . 044 | . 061 | . 309 | . 248 | . 105 | . 098 | . 155 | . 224 | 1.000 |  |  |  |  |  |
| FEMLB80 | . 367 | . 131 | -. 187 | . 141 | -. 033 | . 244 | . 097 | -. 048 | -. 191 | . 224 | . 145 | . 309 | 1.000 |  |  |  |  |
| LNBIR80 | -. 046 | -. 209 | . 284 | -. 090 | *-. 014 | -. 071 | . 066 | . 256 | . 499 | . 043 | *-. 013 | -. 088 | -. 272 | 1.000 |  |  |  |
| LNMAR80 | *. 024 | -. 088 | . 096 | . 111 | *-. 012 | -. 006 | . 130 | . 140 | -. 063 | . 054 | *-. 003 | *. 005 | . 073 | . 059 | 1.000 |  |  |
| LNDIV80 | . 243 | -. 087 | . 154 | . 088 | *..007 | . 173 | . 309 | . 228 | *. 014 | . 149 | . 126 | . 206 | . 219 | *. 008 | . 299 | $1.000$ |  |
| LNMINC79 | . 500 | . 162 | . 172 | -. 312 | -. 072 | . 500 | . 655 | . 182 | . 157 | . 541 | -. 145 | . 247 | . 042 | . 035 | . 057 | . 195 | 1.000 |

*= Not Significant at the $\mathrm{P}<.05$ Level
Legend:

| LNFSAL82 | (Natural Log) of Household Fumishings and Equipment Sales, 1982 ( $=$ Proj.) | HHD1880 <br> LNCG80 | Percent Households with Persons 18 and Under, 1980 (Natural Log) Percent of Total Persons 25+ College Graduate, 1980 |
| :---: | :---: | :---: | :---: |
| NEAST | North East Region <l=Yes> | LNUNEM80 | (Natural Log) Civilian Unemployment Rate (BLS) 1980 |
| WEST | West Region <1=Yes> | ARMED80 | Any Military in Labor Force, 1980? < $1=$ Yes> |
| SOUTH | South Region < $1=$ Yes> | FEMLB80 | Percent Female Labor Force of Total Labor Force, 1980 |
| ADJMETRO | County Adjacent to Metropolitan Area, 1980 | LNBIR80 | (Natural Log) Birth Rate per 1000 Persons, 1980 |
| METRO | Metropolitan County, $1980<1=Y e s>$ | LNMAR80 | (Natural Log) Marriages per 1000 Persons, 1980 |
| LN254480 | (Natural Log) Percent Persons 25-44 as Percent of Total Population | LNDIV80 | (Natural Log) Divorces per 1000 Persons, 1980 |
| LNNWHU80 | (Natural Log) Percent Housing Units Built 1975-1980 of | LNMINC79 | (Natural Log) Median Household Income 1979 |

Table 11. Regression of Household Furnishings and Equipment Sales in Millions, 1982 on Social Composition, Economic and Demographic Variables, Circa 1982: U.S. Counties

| Variable | r | b | se (b) | Beta | t | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEAST | . 263 | . 526 | . 081 | . 089 | 6.47 | . 0000 |
| WEST | . 050 | . 111 | . 067 | . 025 | 1.64 | . 1008 |
| SOUTH | . 061 | . 436 | . 049 | . 145 | 8.75 | . 0000 |
| ADJMETRO | . 202 | -. 014 | . 043 | -. 004 | -. 33 | . 7404 |
| METRO | . 638 | 1.311 | . 057 | . 372 | 22.68 | . 0000 |
| LN254480 | . 426 | . 999 | . 243 | . 083 | 4.10 | . 0000 |
| LNNWHU80 | *. 015 | -. 377 | . 053 | -. 108 | -7.08 | . 0000 |
| HHD1880 | -. 045 | -4.586 | . 482 | -. 187 | -9.49 | . 0000 |
| LNCG80 | . 543 | . 890 | . 065 | . 242 | 13.50 | . 0000 |
| LNUNEM80 | *. 027 | . 354 | . 045 | . 111 | 7.74 | . 0000 |
| ARMED80 | . 393 | . 448 | . 045 | . 134 | 9.84 | . 0000 |
| FEMLB80 | . 367 | 4.472 | . 553 | . 115 | 8.08 | . 0000 |
| LNBIR80 | -. 046 | 1.094 | . 118 | . 151 | 9.27 | . 0000 |
| LNMAR80 | *. 024 | -. 160 | . 045 | -. 044 | -3.53 | . 0004 |
| LND1V80 | . 243 | . 111 | . 036 | . 041 | 3.05 | . 0023 |
| LNMINC79 | . 500 | 1.098 | . 130 | . 170 | 8.38 | . 0000 |
| (Constant) |  | -2.257 | 1.559 |  | -1.44 | . 1478 |

$\mathrm{R}^{2}=.614 \quad \mathrm{~F}=278.437 \quad \mathrm{P}=.0000$
*=Not Significant at the $p<.05$ Level

## Legend:

LNFSAL82 (Natural Log) of Household Furnishings and Equipment Sales, 1982 (=Proj.)
NEAST North East Region <1=Yes>
WEST West Region <1=Yes>
SOUTH
ADJMETRO South Region <1=Yes>

METRO
County Adjacent to Metropolitan Area, 1980
Metropolitan County, $1980<1=$ Yes>
LN254480 (Natural Log) Percent Persons 25-44 as Percent of Total Population
LNNWHU80 (Natural Log) Percent Housing Units Built 1975-1980 of Total Housing Units
HHD1880 Percent Households with Persons 18 and Under, 1980
LNCG80 (Natural Log) Percent of Total Persons 25+ College Graduate, 1980
LNUNEM80 (Natural Log) Civilian Unemployment Rate (BLS) 1980
ARMED80 Any Military in Labor Force, 1980? < = Yes>
FEMLB80 Percent Female Labor Force of Total Labor Force, 1980
LNBIR80 (Natural Log) Birth Rate per 1000 Persons, 1980
LNMAR80 (Natural Log) Marriages per 1000 Persons, 1980
LNDIV80 (Natural Log) Divorces per 1000 Persons, 1980
LNMINC79 (Natural Log) Median Household Income 1979

Table 12. Means, Standard Deviations and Sample Sizes for Variables Used in Regression Analysis: U.S. Counties, Circa 1990

|  |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Mean | Std Dev | Cases |
| LNSALE57 |  |  |  |
| NEAST | 1.614 | 1.648 | 2892 |
| WEST | .069 | .254 | 3139 |
| SOUTH | .454 | .348 | 3139 |
| ADJMETRO | .313 | .498 | 3139 |
| METRO | .237 | .464 | 3139 |
| LN254490 | -1.228 | .425 | 3139 |
| LNNWHU90 | -2.528 | .118 | 3135 |
| LNHD1890 | -1.048 | .690 | 3140 |
| LNCG90 | -2.096 | .145 | 3140 |
| LBUNEM88 | 6.759 | .421 | 3140 |
| ARMED90 | .830 | 3.358 | 3138 |
| LNFEMLB9 | -.816 | .375 | 3141 |
| LNBIR84 | 2.700 | .065 | 3141 |
| LNMAR84 | 2.255 | .198 | 3134 |
| LNDIV84 | 1.397 | .419 | 3127 |
| LNMINC89 | 10.051 | .553 | 3062 |
|  |  | .258 | 3141 |
| Minimum Pairwise N of Cases $=2835$ |  |  |  |
|  |  |  |  |

## Legend:

LNSALE57
NEAST
WEST
SOUTH
ADJMETRO
METRO
LN254490
LNNWHU90
LNHD1890
LNCG90
LBUNEM88
ARMED90
LNFEMLB9
LNBIR84
LNMAR84
LNDIV84
LNMINC89
(Natural Log) Total Sales in Millions, 1990 (D\&B)
North East Region <1=Yes>
West Region <1=Yes>
South Region < $1=$ Yes>
County Adjacent to Metropolitan Area, 1980
Metropolitan County, $1980<1=$ Yes>
(Natural Log) Persons 25-44 as Percent of Total Population, 1990
(Natural Log) Percent Housing Unity Built 1985-1990 of total Housing Units
(Natural Log) Percent Households with Persons 18 and Under, 1990
(Natural Log) Percent Persons 25+ College Graduate, 1990
Civilian Labor Force Unemployment Rate (BLS) 1988
Any Military in Labor Force, 1990 ? < $=$ Yes>
(Natural Log) Percent Female labor Force of Total Labor Force, 1990
(Natural Log) Birth Rate, 1984
(Natural Log) Marriage Rate 1984
(Natural Log) Divorce Rate 1984
(Natural Log) Median Household Income 1989

Table 13. Correlation Matrix of Variables Used in Regression Analysis: U.S. Counties, Circa 1990

|  | L |  |  |  | A | . | L | L | L |  | L |  | L |  |  |  | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N |  |  |  | D |  | N | N | N |  | B | A | N | L | L | L | N |
|  | S |  |  |  | J |  | 2 | N | H | L | U | R | F | N | N | N | M |
|  | A | N |  | S | M | M | 5 | W | D | N | N | M | E | B | M | D | 1 |
|  | L | E | W | 0 | E | E | 4 | H | 1 | C | E | E | M | I | A | 1 | N |
|  | E | A | E | U | T | T | 4 | U | 8 | G | M | D | L | R | R | V | C |
|  | 5 | S | S | T | R | R | 9 | 9 | 9 | 9 | 8 | 9 | B | 8 | 8 | 8 | 8 |
|  | 7 | T | T | H | O | O | 0 | 0 | 0 | 0 | 8 | 0 | 9 | 4 | 4 | 4 | 9 |
| LNSALE57 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NEAST | . 281 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WEST | *. 029 | -. 110 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH | -. 075 | -. 248 | -. 369 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ADJMETRO | -. 150 | -. 032 | *. 028 | . 053 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| METRO | . 591 | . 194 | -. 053 | *. 018 | -. 376 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| LN254490 | . 465 | . 152 | . 155 | *-. 007 | -. 087 | . 479 | 1.000 |  |  |  |  |  |  |  |  |  |  |
| LNNWHU90 | . 192 | . 036 | *. 013 | . 441 | . 040 | . 224 | . 394 | 1.000 |  |  |  |  |  |  |  |  |  |
| LNHD1890 | -. 049 | -. 082 | . 097 | . 055 | . 063 | . 074 | . 363 | . 247 | 1.000 |  |  |  |  |  |  |  |  |
| LNCG90 | . 536 | . 218 | . 243 | -. 246 | -. 231 | . 444 | . 428 | . 060 | -. 131 | 1.000 |  |  |  |  |  |  |  |
| LBUNEM88 | -. 192 | -. 170 | . 087 | . 195 | . 128 | -. 198 | -. 128 | . 091 | . 242 | -. 423 | 1.000 |  |  |  |  |  |  |
| ARMED90 | . 360 | . 116 | -. 106 | . 066 | . 080 | . 244 | . 240 | . 255 | . 075 | . 110 | . 038 | 1.000 |  |  |  |  |  |
| LNFEMLB9 | . 379 | . 109 | -. 186 | . 089 | -. 073 | . 275 | . 190 | . 199 | -. 160 | . 298 | -. 190 | . 346 | 1.000 |  |  |  |  |
| LNBIR84 | . 064 | -. 117 | . 310 | -. 110 | -. 038 | . 023 | . 218 | . 049 | . 564 | . 141 | . 146 | -. 031 | -. 071 | 1.000 |  |  |  |
| LNMAR84 | . 111 | -. 040 | *. 0009 | . 196 | -. 034 | . 056 | . 156 | . 213 | *-. 025 | . 036 | *. 012 | . 086 | . 105 | *. 027 | 1.000 |  |  |
| LNDIV84 | . 215 | -. 068 | . 148 | . 133 | . 003 | . 154 | . 231 | . 219 | *. 001 | . 115 | . 046 | . 166 | . 162 | *-. 017 | . 260 | 1.000 |  |
| LNMINC89 | . 520 | . 265 | . 126 | -. 264 | -. 091 | . 546 | . 672 | . 202 | . 129 | . 624 | -. 481 | . 234 | . 182 | . 061 | . 075 | . 150 | 1.000 |

*=Not Significant at the $\mathrm{P}<.05$ Level

## Legend:

| LNSALE57 | (Natural log) Total Sales in Millions(\$), (D\&B), 1990 | LBUNEM88 | Civilian Labor Force Unemployment Rate (BLS) 1988 |
| :---: | :---: | :---: | :---: |
| NEAST | North East Region < $1=$ Yes> | ARMED90 | Any Military in Labor Force, 1990? <1=Yes> |
| WEST | West Region < $=$ Yes> | LNFEMLB9 | (Natural Log) Percent Fernale Labor Force of Total Labor Force, |
| SOUTH | South Region <1=Yes> |  | 1990 |
| ADJMETRO | County Adjacent to Metro Area, 1980 | LNBIR84 | (Natural Log) Birth Rate 1984 |
| METRO | Metropolitan County, $1980<1=$ Yes> | LNMAR84 | (Natural Log) Marriage Rate 1984 |
| LN254490 | (Natural Log) Persons 25-44 as Percent of Total Population, 1990 | LNDIV84 | (Natural Log) Divorce Rate 1984 |
| LNNWHU90 | (Natural Log) Percent Housing Units Built 1985-1990 of Total Housing Units | LNMINC89 | (Natural Log) Median Household Income 1989 |
| LNHD1890 | (Natural Log) Percent Households with Persons 18 and Under, 1990 |  |  |
| LNCG90 | (Natural Log) Percent Persons 25+ College Graduate, 1990 |  |  |

Table 14. Regression of Household Furnishings and Equipment Sales, SIC 57 on Social Composition, Economic and Demographic Variables, Circa 1990: U.S. Counties

| Independent Variable | r | b | se (b) | Beta | t | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEAST | . 281 | . 742 | . 092 | . 114 | 8.03 | . 0000 |
| WEST | *. 029 | -. 089 | . 077 | -. 018 | -1.15 | . 2470 |
| SOUTH | -. 075 | -. 021 | . 060 | -. 006 | -. 36 | . 7151 |
| ADJMETRO | -. 150 | . 174 | . 051 | . 049 | 3.41 | . 0007 |
| METRO | . 591 | 1.316 | . 069 | . 339 | 19.04 | . 0000 |
| LN254490 | . 465 | 1.730 | . 286 | . 123 | 6.04 | . 0000 |
| LNNWHU90 | . 192 | -. 036 | . 040 | -. 015 | -. 91 | . 3593 |
| LNHD1890 | -. 049 | -1.869 | . 215 | -. 163 | -8.67 | . 0000 |
| LNCG90 | . 536 | . 811 | . 077 | . 207 | 10.53 | . 0000 |
| LBUNEM88 | -. 192 | . 034 | . 008 | . 071 | 4.24 | . 0000 |
| ARMED90 | . 360 | . 678 | . 063 | . 154 | 10.63 | . 0000 |
| LNFEMLB9 | . 379 | 2.668 | . 384 | . 105 | 6.94 | . 0000 |
| LNBIR84 | . 064 | . 923 | . 144 | . 110 | 6.39 | . 0000 |
| LNMAR84 | . 111 | . 085 | . 053 | . 021 | 1.60 | . 1093 |
| LNDIV84 | . 215 | . 185 | . 041 | . 062 | 4.43 | . 0000 |
| LNMINC89 | . 520 | . 526 | . 160 | . 082 | 3.28 | . 0010 |
| (Constant) |  | -3.866 | 2.016 | -1.918 | . 055 |  |

$\mathrm{R}^{2}=.54718 \quad \mathrm{~F}=212.82623 \quad$ Signif $\mathrm{F}=.0000$
$*=$ Not Significant at the $\mathrm{P}<.05$ Level

## Legend:

LNSALE57 (Natural log) Total Sales in Millions(\$), (D\&B), 1990
NEAST North East Region <1=Yes>
WEST West Region <1=Yes>
SOUTH South Region <l=Yes>
ADJMETRO County Adjacent to Metro Area, 1980
METRO Metropolitan County, 1980 < $=$ =Yes>
LN254490 (Natural Log) Persons 25-44 as Percent of Total Population, 1990
LNNWHU90 (Natural Log) Percent Housing Units Built 1985-1990 of Total Housing Units
LNHD1890 (Natural Log) Percent Households with Persons 18 and Under, 1990
LNCG90 (Natural Log) Percent Persons 25+College Graduate, 1990
LBUNEM88 Civilian Labor Force Unemployinent Rate (BLS) 1988
ARMED90 Any Military in Labor Force, 1990? < $1=$ Yes>
LNFEMLB9 (Natural Log) Percent Female Labor Force of Total Labor Force, 1990
LNBIR84 (Natural Log) Birth Rate 1984
LNMAR84 (Natural Log) Marriage Rate 1984
LNDIV84 (Natural Log) Divorce Rate 1984
LNMINC89 (Natural Log) Median Household Income 1989

Table 15. Means, Standard Deviations and Sample Sizes for Variables Used in Regression Analysis: U.S. Counties, Circa 1990

|  |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Mean | Std Dev | Cases |
| LNSA5712 | .839 | 1.531 | 2485 |
| NEAST | .069 | .254 | 3139 |
| WEST | .141 | .348 | 3139 |
| SOUTH | .454 | .498 | 3139 |
| ADJMETRO | .313 | .464 | 3139 |
| METRO | .237 | .425 | 3139 |
| LN254490 | -1.228 | .118 | 3135 |
| LNNWHU90 | -2.528 | .690 | 3140 |
| LNHD1890 | -1.048 | .145 | 3140 |
| LNCG90 | -2.096 | .421 | 3140 |
| LBUNEM88 | 6.759 | 3.358 | 3138 |
| ARMED90 | .830 | .375 | 3141 |
| LNFEMLB9 | -.816 | .065 | 3141 |
| LNBIR84 | 2.700 | .198 | 3134 |
| LNMAR84 | 2.255 | .419 | 3127 |
| LNDIV84 | 1.397 | .553 | 3062 |
| LNMINC89 | 10.051 | .258 | 3141 |
|  |  |  |  |
| Minimum Pairwise N of Cases $=2438$ |  |  |  |

## Legend:

LNSA5712
NEAST
WEST
SOUTH
ADJMETRO
METRO
LN254490
LNNWHU90
LNHD1890
LNCG90
LBUNEM88
ARMED90
LNFEMLB9
LNBIR84
LNMAR84
LNDIV84
LNMINC89
(Natural Log) Total Sales in Millions (D\&B), 1990
North East Region <1=Yes>
West Region <1=Yes>
South Region <1=Yes>
County Adjacent to Metropolitan Area, 1980
Metropolitan County, 1980 < $=$ =Yes>
(Natural Log) Percent Persons 25-44 as Percent of Total Population, 1990
(Natural Log) Percent Housing Units Built 1985-1990 of total Housing Units
(Natural Log) Percent Households with Persons 18 and Under, 1990
(Natural Log) Percent Persons 25+ College Graduate, 1990
Civilian Labor Force Unemployment Rate (BLS) ‘88
Any Military in Labor Force, 1990? < $1=$ Yes>
(Natural Log) Percent Female Labor Force of Total Labor Force, 1990
(Natural Log) Birth Rate 1984
(Natural Log) Marriage Rate 1984
(Natural Log) Divorce Rate 1984
(Natural Log) Median Household Income 1989

Table 16. Correlation Matrix of Variables Used in Regression Analysis: U.S. Counties, Circa 1990

|  | L |  |  |  | A |  | L | L | L |  | L |  | L |  |  |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N |  |  |  | D |  | N | N | N |  | B | A | N | L | L | L | N |
|  | S |  |  |  | J |  | 2 | N | H | $L$ | U | R | F | N | N | N | M |
|  | A | N |  | s | M | M | 5 | W | D | N | N | M | E | B | M | D | I |
|  | 5 | E | W | 0 | E | E | 4 | H | 1 | C | E | E | M | I | A | 1 | N |
|  | 7 | A | E | U | T | T | 4 | U | 8 | G | M | D | L | R | R | V | C |
|  | 1 | S | S | T | R | R | 9 | 9 | 9 | 9 | 8 | 9 | B | 8 | 8 | 8 | 8 |
|  | 2 | T | T | H | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 9 | 4 | 4 | 4 | 9 |
| LNSA5712 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NEAST | . 238 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WEST | . 050 | -. 110 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SOUTH | -. 035 | -. 248 | -. 369 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ADJMETRO | -. 180 | -. 032 | *.. 028 | . 053 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| METRO | . 545 | . 194 | -. 053 | *. 018 | -. 376 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| LN254490 | . 433 | . 152 | . 155 | *-. 007 | -. 087 | . 479 | 1.000 |  |  |  |  |  |  |  |  |  |  |
| LNNWHU90 | . 179 | . 036 | *-. 013 | . 441 | . 040 | . 224 | . 394 | 1.000 |  |  |  |  |  |  |  |  |  |
| LNHD1890 | -. 073 | -. 082 | . 097 | . 055 | . 063 | . 074 | . 363 | . 247 | 1.000 |  |  |  |  |  |  |  |  |
| LNCG90 | . 480 | . 218 | . 243 | -. 246 | -. 231 | . 444 | . 428 | . 060 | -. 131 | 1.000 |  |  |  |  |  |  |  |
| LBUNEM88 | -. 176 | -. 170 | . 087 | . 195 | . 128 | -. 198 | -. 128 | . 091 | . 242 | -. 423 | 1.000 |  |  |  |  |  |  |
| ARMED90 | . 269 | . 116 | -. 106 | . 066 | . 080 | . 244 | . 240 | . 255 | . 075 | . 110 | . 038 | 1.000 |  |  |  |  |  |
| LNFEMLB9 | . 331 | . 109 | -. 186 | . 089 | -. 073 | . 275 | . 190 | . 199 | -. 160 | . 298 | -. 190 | . 346 | 1.000 |  |  |  |  |
| LNBIR84 | . 069 | -. 117 | . 310 | -. 110 | -. 038 | *. 023 | . 218 | . 049 | . 564 | . 141 | . 146 | -. 031 | -. 071 | 1.000 |  |  |  |
| LNMAR84 | . 084 | -. 040 | *-. 009 | . 196 | -. 034 | . 056 | . 156 | . 213 | *-. 025 | . 036 | *. 012 | . 086 | . 105 | *. 027 | 1.000 |  |  |
| LNDIV84 | . 174 | -. 068 | . 148 | . 133 | . 003 | . 154 | . 231 | . 219 | *. 001 | . 115 | . 046 | . 166 | . 162 | *-. 017 | . 260 | 1.000 |  |
| LNMINC89 | . 439 | . 265 | . 126 | -. 264 | -. 091 | . 546 | . 672 | . 202 | . 129 | . 624 | -. 481 | . 234 | . 182 | . 061 | . 075 | . 150 | 1.000 |

*=Not Significant at the $\mathrm{P}<.05$ Level
Legend:

| LNSA5712 | (Natural log) Total Sales in Millions(\$), (D\&B), 1990 | LBUNEM88 | Civilian Labor Force Unemployment Rate (BLS) 1988 |
| :---: | :---: | :---: | :---: |
| NEAST | North East Region <1=Yes> | ARMED90 | Any Military in Labor Force, 1990? < 1 =Yes> |
| WEST | West Region <1=Yes> | LNFEMLB9 | (Natural Log) Percent Female Labor Force of Total Labor Force, |
| SOUTH | South Region < 1 = Yes> |  | 1990 |
| ADJMETRO | County Adjacent to Metro Area, 1980 | LNBIR84 | (Natural Log) Birth Rate 1984 |
| METRO | Metropolitan County, 1980 <1 =Yes> | LNMAR84 | (Natural Log) Marriage Rate 1984 |
| LN254490 | (Natural Log) Persons 25-44 as Percent of Total Population, 1990 | LNDIV84 | (Natural Log) Divorce Rate 1984 |
| LNNWHU90 | (Natural Log) Percent Housing Units Built 1985-1990 of Total Housing Units | LNMINC89 | (Natural Log) Median Household Income 1989 |
| LNHD1890 | (Natural Log) Percent Households with Persons 18 and Under, 1990 |  | $\omega$ |
| LNCG90 | (Natural Log) Percent Persons 25+ College Graduate, 1990 |  | 0 |

Table 17. Regression of Furniture Sales, SIC 5712 on Social Composition, Economic and Demographic Variables, Circa 1990: U.S. Counties

| Independent Variable | r | b | se(b) | Beta | t | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEAST | . 238 | . 644 | . 102 | . 106 | 6.28 | . 0000 |
| WEST | . 050 | . 107 | . 085 | . 024 | 1.25 | . 2106 |
| SOUTH | . 035 | . 133 | . 066 | . 043 | 1.99 | . 0457 |
| ADJMETRO | -. 180 | . 047 | . 056 | . 014 | . 83 | . 4029 |
| METRO | . 545 | 1.199 | . 076 | . 333 | 15.63 | . 0000 |
| LN254490 | . 433 | 2.590 | . 317 | . 199 | 8.14 | . 0000 |
| LNNWHU90 | . 179 | -. 022 | . 044 | -. 010 | -. 51 | . 6087 |
| LNHD1890 | -. 073 | -2.379 | . 239 | -. 224 | -9.95 | . 0000 |
| LNCG90 | . 480 | . 561 | . 085 | . 154 | 6.56 | . 0000 |
| LBUNEM88 | -. 176 | . 017 | . 009 | . 038 | 1.90 | . 0570 |
| ARMED90 | . 269 | . 383 | . 070 | . 093 | 5.41 | . 0000 |
| LNFEMLB9 | . 331 | 2.134 | . 426 | . 091 | 5.00 | . 0000 |
| LNBIR84 | . 069 | 1.067 | . 160 | . 137 | 6.66 | . 0000 |
| LNMAR84 | . 084 | -. 031 | . 059 | -. 008 | -. 52 | . 5978 |
| LNDIV84 | . 174 | . 084 | . 046 | . 030 | 1.81 | . 0694 |
| LNMINC89 | . 439 | . 040 | . 177 | . 006 | . 23 | . 8182 |
| (Constant) |  | . 189 | 2.237 |  | . 08 | . 9324 |

$\mathrm{R}^{2}=.44506 \quad \mathrm{~F}=121.35228 \quad$ Signif $\mathrm{F}=.0000$

* $=$ Not Significant at $\mathrm{P}<.05$ Level


## Legend:

LNSA5712 (Natural log) Total Sales in Millions(\$), (D\&B), 1990
NEAST North East Region <1=Yes>
WEST West Region <1=Yes>
SOUTH South Region <1=Yes>
ADJMETRO County Adjacent to Metro Area, 1980
METRO Metropolitan County, 1980 <1=Yes>
LN254490 (Natural Log) Persons 25-44 as Percent of Total Population, 1990
LNNWHU90 (Natural Log) Percent Housing Units Built 1985-1990 of Total Housing Units
LNHD1890 (Natural Log) Percent Households with Persons 18 and Under, 1990
LNCG90 (Natural Log) Percent Persons 25+ College Graduate, 1990
LBUNEM88 Civilian Labor Force Unemployment Rate (BLS) 1988
ARMED90 Any Military in Labor Force, 1990? < $=$ =Yes>
LNFEMLB9 (Natural Log) Percent Female Labor Force of Total Labor Force, 1990
LNBIR84 (Natural Log) Birth Rate 1984
LNMAR84 (Natural Log) Marriage Rate 1984
LNDIV84 (Natural Log) Divorce Rate 1984
LNMINC89 (Natural Log) Median Household Income 1989

## - Summary

This portion of the study sought to identify aggregate patterns in furniture-related sales data that might be determined by the social and economic composition of consumers within local areas of the United States. This section has examined the socioeconomic patterns linked to the variation in furniture-related sales data measured at the county-level of aggregation in the U.S. Using the county as a crude proxy for local areas, we obtained county-level estimates of furniture sales data classified in the SIC 57 range for 1982 and in the SIC 57 and 5712 ranges for circa 1990. These data were used in multiple regression equations which specified them as endogenous consequences of a common set of exogenous social, demographic, and economic factors. These exogenous variables had been identified in the published literature as factors related to furniture sales either at the micro- or macro-level.

The results suggest that local area characteristics of communities in the U.S. are substantially related to the volume of furniture-related sales in the area. Moreover, the evidence presented in this section indicates that these relationships have been rather stable over the past decade. The single most important characteristic of furniturerelated sales in a local community is, not surprisingly, its metropolitan status: metro counties clearly lead sales areas in the U.S. And, counties adjacent to metro areas but which are not officially part of them suffer a significant deficit in such sales partly because of their larger neighbors. However, our results show that it is almost entirely due to the socioeconomic composition of these non-metropolitan neighboring counties because the deficits observed are reduced to zero when controls for such variables are introduced. Even though metro counties tend to have households which enjoy higher median incomes; are more likely to contain one or more college-educated householder or who is between the ages of 25 to 44, we can observe significant and potentially important enduring relationships between these "compositional" variables and furniture sales regardless of metro or non-metro location. Both during the early 1980s and circa 1990, we observed important correlations between some of these compositional indicators of local communities and the volume of furniture-related sales
extant within them. While the literature has identified a number of factors that may be associated with micro- or macro-level furniture sales, these results suggest that it is largely location (metro-status), resources (median family income), tastes (college-educated population), and stage of the family life-cycle (households without children) that are important aggregate factors in countylevel furniture sales.

A surprising result involved the presence of a military-related portion of the local labor force. We discovered this pattern through an exploratory analysis of furniture sales volume using a geographic information systems (GIS) procedure and included it in our "compositional" model using regression estimates. It obtained a small but somewhat consistent relationship with furniture sales both during 1982 and later circa 1990. This result was on par with the association exhibited by other theoretically important factors (e.g., the portion of the labor force that is female, percent aged 25-44, etc.) and should be examined more closely in detailed micro-level studies.

## Conclusions on Identifying U.S. Furniture Markets Through a Geodemographic Approach

By combining a demographic analysis of household furniture buying with a spatial market assessment, we were able to construct a model of furniture consumption at both the national and local (county) levels. The contents of the model are primarily those demographic variables that previous studies have identified as important correlates of furniture buying: consumer age, income, marital status, etc. Intuition tells us that wherever there is a concentration of consumers possessing these characteristics, furniture sales will be favorably impacted: the geodemographic model confirms this supposition.

Comparing consumer expenditure data with data on actual retail sales identifies counties wherein
households tend to buy furniture outside their county of residence. This "outshopping" phenomenon is the flip-side of retail magnates-usually metropolitan areas that attract buyers from surrounding counties. It would seem there is a greater opportunity for retailers to take advantage of this phenomenon on a scale much smaller than Dallas, Memphis, or Green Bay, Wisconsin (the metro areas illustrated in this report). That is, a retailer in a relatively small market could identify potential buyers by a demographic analysis of communities within a given radius of his business and concentrate advertising on those households. Obviously, this is an area where more site-specific research is needed.

The county-level regression analysis showed the relative and collective importance of several variables in the furniture sales equation. The multiple correlation coefficients produced by this analysis were in the .45 to .60 range, which is reasonably high given the small number of variables. This type of analysis has the potential for standard setting for local sales; i.e., how much above or below the national figure is a given county or metro area, and, more to the point, why? Again, the opportunity for follow-up study is apparent.

We believe that the value of a geodemographic approach for identifying furniture markets has been clearly demonstrated in this report. However, it appears likely that a greater value for manufactures of household furniture of the type produced in Mississippi would be in an application of this approach to the local level (community, county, and retail establishment, for example). The analysis of secondary data for this purpose should be accompanied by more intensive study to explain departures from the norm in either direction.

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## Appendix A Furniture Categories

## Household Furnishings and Equipment

Repl dishwash/disp/hood rntr Repl dishwash/disp/hood ownd w/w carpet inst rntr w/w carpet inst repl ownd Bathroom linens
Bedroom linens
Kitchen and dining room linens Curtains and drapes
Slipcovers/decorative pillows Sewing materials
Other linens
Mattress and springs
Other bedroom furniture Sofas
Living room chairs
Living room tables
Kitchen/dining room furniture
Infants furniture
Outdoor furniture
Occasional furniture
Purch/inst refrig/freezer min
Purch/inst refrig/freezer ownd
Purch/inst clothes washer rntr
Purch/inst clothes washer ownd
Purch/inst clothes dryer rntr Purch/inst clothes dryer ownd

Stoves ovens rntr
Stoves ovens ownd
Microwave ovens rntr
Microwave ovens ownd
Purch/inst port dishwasher rntr
Purch/inst port dishwasher ownd
Purch/inst window a/c rntr
Purch/inst window a/c ownd
Floor coverings (non-perm.)
Window coverings
Infants equipment
Outdoor equipment
Non-inst w/w carp/squares rntr w/w carp non inst repl/sqs ownd Clocks
Lamps and lighting fixtures
Oth household decorative items
Telephones and accessories
Plastic dinnerware
China and other dinnerware
Flatware
Glassware
Silver serving pieces
Other serving pieces
Nonelectric cookware
Lawn and garden equipment

Power tools
Electric floor cleaning equip
Sewing machines
Small electric kitchen appli-
ances
Portable heating/cooling equip
Office furniture home use
Hand tools
Indoor plants fresh flowers
Closet and storage items
Rental Luggage of furniture
Luggage
Compter/compter hrdwar $n$ bus use
Compter sftwr/cmptr acc nbus use
Repair-cmptremptr sys n b
Telephone answering devices
Calculators
Typwrits/oth off mach non-bus use
Smoke alarm pur/rent rntr
Smoke alarm pur/rent ownd
Smoke alarm pur/rent ownv
Oth hh appl rntr
Oth hh appl ownd

## Furniture

Mattress and springs
Other bedroom furniture
Sofas
Living room chairs
Living room tables
Kitchen/dining room furniture
Infants furniture
Outdoor furniture
Occasional furniture

## Upholstered Furniture

Sofas
Living room chairs

## Appendix B <br> Ratios of Furniture Expenditures

Table B.1: Ratio of Household Furnishings and Equipment to Total Family Income


Table B.2: Ratio of Furniture Expenditures (9 category) to Total Family Income by: AGE and TOTAL FAMILY INCOME ( 7 CATEGORIES)

|  |  | Total Family Income |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < \$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All incomes | Key |
| <25yr old |  | \$86.19 | \$228.25 | \$395.38 | \$523.36 | \$565.28 | \$668.79 | \$1,390.07 | \$253.93 | Fumiture (9 cat) |
|  |  | \$3,785.09 | \$12,161.86 | \$16,864.40 | \$24,687.83 | \$34,201.67 | \$43,294.44 | \$62,229.48 | \$12,545.64 | Tot. Family Income |
|  |  | \$0.0228 | \$0.0188 | \$0.0234 | \$0.0212 | \$0.0165 | \$0.0154 | \$0.0223 | \$0.0202 | Retlo Hholditot Fam. |
| 25 to 34 |  | \$177.30 | \$175.51 | \$175.67 | \$185.78 | \$328.03 | \$548.75 | \$798.58 | \$333.63 |  |
|  |  | \$3,318.88 | \$12,288.25 | \$17,168.21 | \$24,658.29 | \$33,909.75 | \$44,135.16 | \$67,540.10 | \$28,221.61 |  |
|  |  | \$0.0534 | \$0.0143 | \$0.0102 | \$0.0075 | \$0.0097 | \$0.0124 | \$0.0118 | \$0.0118 |  |
| 35 to 44 |  | \$356.85 | \$279.82 | \$222.06 | \$268.55 | \$359.00 | \$340.95 | \$668.74 | \$407.72 |  |
|  |  | \$2,502.91 | \$12,126.21 | \$17,356.56 | \$24,687.65 | \$34,612.93 | \$44,639.82 | \$73,103.05 | \$34,317.27 |  |
|  |  | \$0.1426 | \$0.0231 | \$0.0128 | \$0.0109 | \$0.0104 | \$0.0076 | \$0.0091 | \$0.0119 |  |
| AGE | 45 to 54 | \$300.11 | \$120.56 | \$147.64 | \$204.34 | \$404.34 | \$676.00 | \$526.24 | \$374.44 |  |
|  |  | \$2,353.24 | \$12,255.63 | \$17,277.07 | \$24,684.18 | \$34,711.25 | \$45,028.67 | \$77,940.80 | \$35.798.45 |  |
|  |  | \$0.1275 | \$0.0098 | \$0.0085 | \$0.0083 | \$0.0116 | \$0.0150 | \$0.0068 | \$0.0105 |  |
|  | 55 to 64 | \$436.15 | \$303.45 | \$122.87 | \$280.04 | \$279.37 | \$300.82 | \$559.73 | \$370.11 |  |
|  |  | \$2,923.97 | \$12,365.59 | \$17,431.27 | \$24,875.16 | \$34,944.51 | \$45,110.27 | \$79,041.67 | \$28,051.39 |  |
|  |  | \$0.1492 | \$0.0245 | \$0.0070 | \$0.0113 | \$0.0080 | \$0.0067 | \$0.0071 | \$0.0132 |  |
|  | 65 to 74 | \$132.18 | \$136.15 | \$138.33 | \$140.11 | \$144.33 | \$231.86 | \$243.49 | \$146.03 |  |
|  |  | \$4,785.20 | \$12,490.95 | \$17,201.17 | \$24,213.05 | \$34,361.86 | \$44,441.89 | \$82,230.55 | \$19,056.95 |  |
|  |  | \$0.0276 | \$0.0109 | \$0.0080 | \$0.0058 | \$0.0042 | \$0.0052 | \$0.0030 | \$0.0077 |  |
|  | $75+$ | \$59.17 | \$64.33 | \$156.60 | \$134.64 | \$67.19 | \$153.65 | \$474.31 | \$91.34 |  |
|  |  | \$5,331.71 | \$12,242.35 | \$17,346.94 | \$24,370.62 | \$33,416.95 | \$45,409.23 | \$79,134.86 | \$13,807.99 |  |
|  |  | \$0.0111 | \$0.0053 | \$0.0090 | \$0.0055 | \$0.0020 | \$0.0034 | \$0.0060 | \$0.0066 |  |
|  | All Ages | \$217.25 | \$178.79 | \$187.82 | \$227.99 | \$330.83 | \$452.51 | \$628.58 | \$310.49 |  |
|  |  | \$3,606.12 | \$12,290.42 | \$17,241.77 | \$24,621.31 | \$34,359.41 | \$44,613.18 | \$74,408.05 | \$27,083.85 |  |
|  |  | \$0.0602 | \$0.0145 | \$0.0109 | \$0.0093 | \$0.0096 | \$0.0101 | \$0.0084 | \$0.0115 |  |

Table B.3: Ratio of Upholstered Furniture Expenditures to Total Family Income by: AGE and TOTAL FAMILY INCOME (7 CATEGORIES)


Table B.4: Ratio of Household Furnishing and Equipment Expenditures to Total Household Expenditures by: AGE and TOTAL FAMILY INCOME (7 CATEGORIES)

|  |  | Total Family Income |  |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < \$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All Incomes |  |
|  | <25yr old | \$256.20 | \$638.91 | \$715.93 | \$1,214.60 | \$1,061.60 | \$2,923.63 | \$2,257.65 | \$613.17 | Hhold Furn \& Equlp |
|  |  | \$10,966.31 | \$14,832.21 | \$22,409.70 | \$21,618.96 | \$26,868.56 | \$37,092.02 | \$37,705.43 | \$15,975.57 | Tot. Hhold Expenditur |
|  |  | \$0.0234 | \$0.0431 | \$0.0319 | \$0.0562 | \$0.0395 | \$0.0788 | \$0.0599 | \$0.0384 | Ratio Hholdfot HHEx |
| 25 to 34 |  | \$472.63 | \$443.45 | \$846.22 | \$653.93 | \$1,113.39 | \$1,037.86 | \$1,923.59 | \$915.33 |  |
|  |  | \$15,289.38 | \$18,676.83 | \$18,797.02 | \$21,975.89 | \$31,405.59 | \$32,341.73 | \$46,485.64 | \$26,217.83 |  |
|  |  | \$0.0309 | \$0.0237 | \$0.0450 | \$0.0298 | \$0.0355 | \$0.0321 | \$0.0414 | \$0.0349 |  |
| 35 to 44 |  | \$973.01. | \$636.37 | \$623.26 | \$779.22 | \$997.01 | \$1,039.15 | \$2,410.12 | \$1,275.69 |  |
|  |  | \$25,494.43 | \$19,668.29 | \$24,447.17 | \$22,631.39 | \$31,462.13 | \$34,447.54 | \$53,109.75 | \$33,470.02 |  |
|  |  | \$0.0382 | \$0.0324 | \$0.0255 | \$0.0344 | \$0.0317 | \$0.0302 | \$0.0454 | \$0.0381 |  |
| AGE 45 to 54 |  | \$669.40 | \$614.38 | \$694.39 | \$687.74 | \$1,064.26 | \$1,676.05 | \$2,120.23 | \$1,209.14 |  |
|  |  | \$22,268.41 | \$17,397.30 | \$19,767.00 | \$24,534.05 | \$32,686.92 | \$39,347.00 | \$58,194.97 | \$34,774.50 |  |
|  |  | \$0.0301 | \$0.0353 | \$0.0351 | \$0.0280 | \$0.0326 | \$0.0426 | \$0.0364 | \$0.0348 |  |
| 55 to 64 |  | \$1,032.58 | \$1,176.66 | \$576.30 | \$604.06 | \$986.97 | \$1,068.84 | \$1,919.13 | \$1,098.25 |  |
|  |  | \$21,795.85 | \$18,663.03 | \$19,011.46 | \$20,960.93 | \$28,207.60 | \$34,856.03 | \$47,381.05 | \$27,288.18 |  |
|  |  | \$0.0474 | \$0.0630 | \$0.0303 | \$0.0288 | \$0.0350 | \$0.0307 | \$0.0405 | \$0.0402 |  |
| 65 to 74 |  | \$439.83 | \$494.98 | \$642.58 | \$846.76 | \$722.04 | \$768.52 | \$1,577.38 | \$640.54 |  |
|  |  | \$13,175.87 | \$16,055.52 | \$19,111.67 | \$24,138.61 | \$28,315.23 | \$34,192.03 | \$46,122.18 | \$20,076.81 |  |
|  |  | \$0.0334 | \$0.0308 | \$0.0336 | \$0.0351 | \$0.0255 | \$0.0225 | \$0.0342 | \$0.0319 |  |
| $75+$ |  | \$318.25 | \$382.22 | \$432.21 | \$631.15 | \$665.40 | \$518.28 | \$693.01 | \$404.40 |  |
|  |  | \$10,092.45 | \$14,759.75 | \$13,366.58 | \$22,969.02 | \$25,386.97 | \$24,643.81 | \$54,381.04 | \$14,777.51 |  |
|  |  | \$0.0315 | \$0.0259 | \$0.0323 | \$0.0275 | \$0.0262 | \$0.0210 | \$0.0127 | \$0.0274 |  |
| All Ages |  | \$590.64 | \$595.60 | \$665.84 | \$734.78 | \$1,013.56 | \$1,174.30 | \$2,111.97 | \$959.48 |  |
|  |  | \$16,888.04 | \$17,153.23 | \$19,780.80 | \$22,674.36 | \$30,643.29 | \$34,634.79 | \$51,949.52 | \$26,682.65 |  |
|  |  | \$0.0350 | \$0.0347 | \$0.0337 | \$0.0324 | \$0.0331 | \$0.0339 | \$0.0407 | \$0.0360 |  |

Table B.5: Ratio of Furniture Expenditures (9 category) to Total Household Expenditures by: AGE and TOTAL FAMILY INCOME (7 CATEGORIES)

|  |  | Total Family Income |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < \$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All Incomes | Key |
| <25yr old |  | \$86.19 | \$228.25 | \$395.38 | \$523.36 | \$565.28 | \$668.79 | \$1,390.07 | \$253.93 | Fumiture (9 cat) |
|  |  | \$10,966.31 | \$14,832.21 | \$22,409.70 | \$21,618.96 | \$26,868.56 | \$37,092.02 | \$37,705.43 | \$15,975.57 | Tot. Hhold Expendilur |
|  |  | \$0.0079 | \$0.0154 | \$0.0176 | \$0.0242 | \$0.0210 | \$0.0180 | \$0.0369 | \$0.0159 | Ratio Hhold $/$ tot HHEx |
| 25 to 34 |  | \$177.30 | \$175.51 | \$175.67 | \$185.78 | \$328.03 | \$548.75 | \$798.58 | \$333.63 |  |
|  |  | \$15,289.38 | \$18,676.83 | \$18,797.02 | \$21,975.89 | \$31,405.59 | \$32,341.73 | \$46,485.64 | \$26,217.83 |  |
|  |  | \$0.0116 | \$0.0094 | \$0.0093 | \$0.0085 | \$0.0104 | \$0.0170 | \$0.0172 | \$0.0127 |  |
| 35 to 44 |  | \$356.85 | \$279.82 | \$222.06 | \$268.55 | \$359.00 | \$340.95 | \$668.74 | \$407.72 |  |
|  |  | \$25,494.43 | \$19,668.29 | \$24,447.17 | \$22,631.39 | \$31,462.13 | \$34,447.54 | \$53,109.75 | \$33,470.02 |  |
|  |  | \$0.0140 | \$0.0142 | \$0.0091 | \$0.0119 | \$0.0114 | \$0.0099 | \$0.0126 | \$0.0122 |  |
| AGE 45 to 54 |  | \$300.11 | \$120.56 | \$147.64 | \$204.34 | \$404.34 | \$676.00 | \$526.24 | \$374.44 |  |
|  |  | \$22,268.41 | \$17,397.30 | \$19,767.00 | \$24,534.05 | \$32,686.92 | \$39,347.00 | \$58,194.97 | \$34,774.50 |  |
|  |  | \$0.0135 | \$0.0069 | \$0.0075 | \$0.0083 | \$0.0124 | \$0.0172 | \$0.0090 | \$0.0108 |  |
| 55 to 64 |  | \$436.15 | \$303.45 | \$122.87 | \$280.04 | \$279.37 | \$300.82 | \$559.73 | \$370.11 |  |
|  |  | \$21,795.85 | \$18,663.03 | \$19,011.46 | \$20,960.93 | \$28,207.60 | \$34,856.03 | \$47,381.05 | \$27,288.18 |  |
|  |  | \$0.0200 | \$0.0163 | \$0.0065 | \$0.0134 | \$0.0099 | \$0.0086 | \$0.0118 | \$0.0136 |  |
| 65 to 74 |  | \$132.18 | \$136.15 | \$138.33 | \$140.11 | \$144.33 | \$231.86 | \$243.49 | \$146.03 |  |
|  |  | \$13,175.87 | \$16,055.52 | \$19,111.67 | \$24,138.61 | \$28,315.23 | \$34,192.03 | \$46,122.18 | \$20,076.81 |  |
|  |  | \$0.0100 | \$0.0085 | \$0.0072 | \$0.0058 | \$0.0051 | \$0.0068 | \$0.0053 | \$0.0073 |  |
| $75+$ |  | \$59.17 | \$64.33 | \$156.60 | \$134.64 | \$67.19 | \$153.65 | \$474.31 | \$91.34 |  |
|  |  | \$10,092.45 | \$14,759.75 | \$13,366.58 | \$22,969.02 | \$25,386.97 | \$24,643.81 | \$54,381.04 | \$14,777.51 |  |
|  |  | \$0.0059 | \$0.0044 | \$0.0117 | \$0.0059 | \$0.0026 | \$0.0062 | \$0.0087 | \$0.0062 |  |
| All Ages |  | \$217.25 | \$178.79 | \$187.82 | \$227.99 | \$330.83 | \$452.51 | \$628.58 | \$310.49 |  |
|  |  | \$16,888.04 | \$17,153.23 | \$19,780.80 | \$22,674.36 | \$30,643.29 | \$34,634.79 | \$51,949.52 | \$26,682.65 |  |
|  |  | \$0.0129 | \$0.0104 | \$0.0095 | \$0.0101 | \$0.0108 | \$0.0131 | \$0.0121 | \$0.0116 |  |

- Eta squared $=0.1150$
Table B.6: Ratio of Upholstered Furniture Expenditures to Total Household Expenditures

|  | Total Family Income |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < \$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All Incomes | Key |
|  | <25yr old | \$26.02 | \$88.14 | \$157.99 | \$225.53 | \$159.79 | \$257.55 | \$862.69 | \$98.49 | Upholstered Furn |
|  |  | \$10,966.31 | \$14,832.21 | \$22,409.70 | \$21,618.96 | \$26,868.56 | \$37,092.02 | \$37,705.43 | \$15,975.57 | Tot. Hhold Expendilur |
|  |  | \$0.0024 | \$0.0059 | \$0.0071 | \$0.0104 | \$0.0059 | \$0.0069 | \$0.0229 | \$0.0062 | Ratio Hhold/Tot HHEx |
|  | 25 to 34 | \$53.54 | \$42.07 | \$94.55 | \$56.15 | \$98.43 | \$138.29 | \$190.82 | \$92.94 |  |
|  |  | \$15,289.38 | \$18,676.83 | \$18,797.02 | \$21,975.89 | \$31,405.59 | \$32,341.73 | \$46,485.64 | \$26,217.83 |  |
|  |  | \$0.0035 | \$0.0023 | \$0.0050 | \$0.0026 | \$0.0031 | \$0.0043 | \$0.0041 | \$0.0035 |  |
|  | 35 to 44 | \$109.68 | \$93.43 | \$81.42 | \$100.89 | \$124.06 | \$108.40 | \$172.85 | \$123.26 |  |
|  |  | \$25,494.43 | \$19,668.29 | \$24,447.17 | \$22,631.39 | \$31,462.13 | \$34,447.54 | \$53,109.75 | \$33,470.02 |  |
|  |  | \$0.0043 | \$0.0048 | \$0.0033 | \$0.0045 | \$0.0039 | \$0.0031 | \$0.0033 | \$0.0037 |  |
|  | 45 to 54 | \$151.48 | \$62.50 | \$41.51 | \$97.89 | \$169.11 | \$147.27 | \$183.85 | \$141.08 |  |
|  |  | \$22,268.41 | \$17,397.30 | \$19,767.00 | \$24,534.05 | \$32,686.92 | \$39,347.00 | \$58,194.97 | \$34,774.50 |  |
| AGE |  | \$0.0068 | \$0.0036 | \$0.0021 | \$0.0040 | \$0.0052 | \$0.0037 | \$0.0032 | \$0.0041 |  |
|  | 55 to 64 | \$111.56 | \$104.14 | \$43.01 | \$74.15 | \$96.36 | \$108.72 | \$140.07 | \$103.17 |  |
|  |  | \$21,795.85 | \$18,663.03 | \$19,011.46 | \$20,960.93 | \$28,207.60 | \$34,856.03 | \$47,381.05 | \$27,288.18 |  |
|  |  | \$0.0051 | \$0.0056 | \$0.0023 | \$0.0035 | \$0.0034 | \$0.0031 | \$0.0030 | \$0.0038 |  |
|  | 65 to 74 | \$47.21 | \$65.71 | \$48.50 | \$28.83 | \$76.56 | \$32.10 | \$114.23 | \$52.87 |  |
|  |  | \$13,175.87 | \$16,055.52 | \$19,111.67 | \$24,138.61 | \$28,315.23 | \$34,192.03 | \$46,122.18 | \$20,076.81 |  |
|  |  | \$0.0036 | \$0.0041 | \$0.0025 | \$0.0012 | \$0.0027 | \$0.0009 | \$0.0025 | \$0.0026 |  |
|  | $75+$ | \$41.59 | \$20.87 | \$117.25 | \$57.47 | \$15.16 | \$0.00 | \$216.58 | \$49.72 |  |
|  |  | \$10,092.45 | \$14,759.75 | \$13,366.58 | \$22,969.02 | \$25,386.97 | \$24,643.81 | \$54,381.04 | \$14,777.51 |  |
|  |  | \$0.0041 | \$0.0014 | \$0.0088 | \$0.0025 | \$0.0006 | \$0.0000 | \$0.0040 | \$0.0034 |  |
|  | All Ages | \$75.09 | \$64.28 | \$81.43 | \$80.36 | \$114.48 | \$120.45 | \$178.21 | \$100.02 |  |
|  |  | \$16,888.04 | \$17,153.23 | \$19,780.80 | \$22,674.36 | \$30,643.29 | \$34,634.79 | \$51,949.52 | \$26,682.65 |  |
|  |  | \$0.0044 | \$0.0037 | \$0.0041 | \$0.0035 | \$0.0037 | \$0.0035 | \$0.0034 | \$0.0037 |  |

Table B.7: Ratio of Upholstered Furniture Expenditures to Household Furniture and Equipment Expenditures by: AGE and TOTAL FAMILY INCOME (7 CATEGORIES)

|  |  | Total Family Income |  |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | <\$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All Incomes |  |
| <25yr old |  | \$26.02 | \$88.14 | \$157.99 | \$225.53 | \$159.79 | \$257.55 | \$862.69 | \$98.49 | Upholstared Furn |
|  |  | \$256.20 | \$638.91 | \$715.93 | \$1,214.60 | \$1,061.60 | \$2,923.63 | \$2,257.65 | \$613.17 | \%H Furn EEqul |
|  |  | \$0.1016 | \$0.1380 | \$0.2207 | \$0.1857 | \$0.1505 | \$0.0881 | \$0.3821 | \$0.1606 | Ratio Uphoisht fat |
| 25 to 34 |  | \$53.54 | \$42.07 | \$94.55 | \$56.15 | \$98.43 | \$138.29 | \$190.82 | \$92.94 |  |
|  |  | \$472.63 | \$443.45 | \$846.22 | \$653.93. | \$1,113.39 | \$1,037.86 | \$1,923.59 | \$915.33 |  |
|  |  | \$0.1133 | \$0.0949 | \$0.1117 | \$0.0859 | \$0.0884 | \$0.1332 | \$0.0992 | \$0.1015 |  |
| 35 to 44 |  | \$109.68 | \$93.43 | \$81.42 | \$100.89 | \$124.06 | \$108.40 | \$172.85 | \$123.26 |  |
|  |  | \$973.01 | \$636.37 | \$623.26 | \$779.22 | \$997.01 | \$1,039.15 | \$2,410.12 | \$1,275.69 |  |
|  |  | \$0.1127 | \$0.1468 | \$0.1306 | \$0.1295 | \$0.1244 | \$0.1043 | \$0.0717 | \$0.0966 |  |
| AGE 45 to 54 |  | \$151.48 | \$62.50 | \$41.51 | \$97.89 | \$169.11 | \$147.27 | \$183.85 | \$141.08 |  |
|  |  | \$669.40 | \$614.38 | \$694.39 | \$687.74 | \$1,064.26 | \$1,676.05 | \$2,120.23 | \$1,209.14 |  |
|  |  | \$0.2263 | \$0.1017 | \$0.0598 | \$0.1423 | \$0.1589 | \$0.0879 | \$0.0867 | \$0.1167 |  |
| 55 to 64 |  | \$111.56 | \$104.14 | \$43.01 | \$74.15 | \$96.36 | \$108.72 | \$140.07 | \$103.17 |  |
|  |  | \$1,032.58 | \$1,176.66 | \$576.30 | \$604.06 | \$986.97 | \$1,068.84 | \$1,919.13 | \$1,098.25 |  |
|  |  | \$0.1080 | \$0.0885 | \$0.0746 | \$0.1228 | \$0.0976 | \$0.1017 | \$0.0730 | \$0.0939 |  |
| 65 to 74 |  | \$47.21 | \$65.71 | \$48.50 | \$28.83 | \$76.56 | \$32.10 | \$114.23 | \$52.87 |  |
|  |  | \$439.83 | \$494.98 | \$642.58 | \$846.76 | \$722.04 | \$768.52 | \$1,577.38 | \$640.54 |  |
|  |  | \$0.1073 | \$0.1328 | \$0.0755 | \$0.0340 | \$0.1060 | \$0.0418 | \$0.0724 | \$0.0825 |  |
| $75+$ |  | \$41.59 | \$20.87 | \$117.25 | \$57.47 | \$15.16 | \$0.00 | \$216.58 | \$49.72 |  |
|  |  | \$318.25 | \$382..22 | \$432.21 | \$631.15 | \$665.40 | \$518.28 | \$693.01 | \$404.40 |  |
|  |  | \$0.1307 | \$0.0546 | \$0.2713 | \$0.0911 | \$0.0228 | \$0.0000 | \$0.3125 | \$0.1229 |  |
| All Ages |  | \$75.09 | \$64.28 | \$81.43 | \$80.36 | \$114.48 | \$120.45 | \$178.21 | \$100.02 |  |
|  |  | \$590.64 | \$595.60 | \$665.84 | \$734.78 | \$1,013.56 | \$1,174.30 | \$2,111.97 | \$959.48 |  |
|  |  | \$0.1271 | \$0.1079 | \$0.1223 | \$0.1094 | \$0.1129 | \$0.1026 | \$0.0844 | \$0.1042 |  |

[^1]Table B.8: Ratio of Furniture Expenditures (9 category) to Household Furniture and Equipment Expenditures by: AGE and TOTAL FAMILY INCOME (7 CATEGORIES)

|  | Total Family Income |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < \$10k | \$10k to \$15k | \$15k to \$20k | \$20k to \$30k | \$30k to \$40k | \$40k to \$50k | \$50k + | All incomes | Key |
| <25yr old | \$86.19 | \$228.25 | \$395.38 | \$523.36 | \$565.28 | \$668.79 | \$1,390.07 | \$253.93 | Fumiture (9 cat) |
|  | \$256.20 | \$638.91 | \$715.93 | \$1,214.60 | \$1,061.60 | \$2,923.63 | \$2,257.65 | \$613.17 | HH Furn \& Equlp Expe |
|  | \$0.3364 | \$0.3572 | \$0.5523 | \$0.4309 | \$0.5325 | \$0.2288 | \$0.6157 | \$0.4141 | Ratio Furn/ih fes Ex |
| 25 to 34 | \$177.30 | \$175.51 | \$175.67 | \$185.78 | \$328.03 | \$548.75 | \$798.58 | \$333.63 |  |
|  | \$472.63 | \$443.45 | \$846.22 | \$653.93 | \$1,113.39 | \$1,037.86 | \$1,923.59 | \$915.33 |  |
|  | \$0.3751 | \$0.3958 | \$0.2076 | \$0.2841 | \$0.2946 | \$0.5287 | \$0.4152 | \$0.3645 |  |
| 35 to 44 | \$356.85 | \$279.82 | \$222.06 | \$268.55 | \$359.00 | \$340.95 | \$668.74 | \$407.72 |  |
|  | \$973.01 | \$636.37 | \$623.26 | \$779.22 | \$997.01 | \$1,039.15 | \$2,410.12 | \$1,275.69 |  |
|  | \$0.3667 | \$0.4397 | \$0.3563 | \$0.3446 | \$0.3601 | \$0.3281 | \$0.2775 | \$0.3196 |  |
| 45 to 54 | \$300.11 | \$120.56 | \$147.64 | \$204.34 | \$404.34 | \$676.00 | \$526.24 | \$374.44 |  |
|  | \$669.40 | \$614.38 | \$694.39 | \$687.74 | \$1,064.26 | \$1,676.05 | \$2,120.23 | \$1,209.14 |  |
| AGE $\quad 5$ | \$0.4483 | \$0.1962 | \$0.2126 | \$0.2971 | \$0.3799 | \$0.4033 | \$0.2482 | \$0.3097 |  |
|  | \$436.15 | \$303.45 | \$122.87 | \$280.04 | \$279.37 | \$300.82 | \$559.73 | \$370.11 |  |
|  | \$1,032.58 | \$1,176.66 | \$576.30 | \$604.06 | \$986.97 | \$1,068.84 | \$1,919.13 | \$1,098.25 |  |
|  | \$0.4224 | \$0.2579 | \$0.2132 | \$0.4636 | \$0.2831 | \$0.2814 | \$0.2917 | \$0.3370 |  |
| 65 to 74 | \$132.18 | \$136.15 | \$138.33 | \$140.11 | \$144.33 | \$231.86 | \$243.49 | \$146.03 |  |
|  | \$439.83 | \$494.98 | \$642.58 | \$846.76 | \$722.04 | \$768.52 | \$1,577.38 | \$640.54 |  |
|  | \$0.3005 | \$0.2751 | \$0.2153 | \$0.1655 | \$0.1999 | \$0.3017 | \$0.1544 | \$0.2280 |  |
| 75+ | \$59.17 | \$64.33 | \$156.60 | \$134.64 | \$67.19 | \$153.65 | \$474.31 | \$91.34 |  |
|  | \$318.25 | \$382.22 | \$432.21 | \$631.15 | \$665.40 | \$518.28 | \$693.01 | \$404.40 |  |
|  | \$0.1859 | \$0.1683 | \$0.3623 | \$0.2133 | \$0.1010 | \$0.2965 | \$0.6844 | \$0.2259 |  |
| All Ages | \$217.25 | \$178.79 | \$187.82 | \$227.99 | \$330.83 | \$452.51 | \$628.58 | \$310.49 |  |
|  | \$590.64 | \$595.60 | \$665.84 | \$734.78 | \$1,013.56 | \$1,174.30 | \$2,111.97 | \$959.48 |  |
|  | \$0.3678 | \$0.3002 | \$0.2821 | \$0.3103 | \$0.3264 | \$0.3853 | \$0.2970 | \$0.3236 |  |

[^2]

Table B.10: Ratio of Furniture Expenditures (9 category) to Total Family Income by: AGE and EDUCATION (6 CATEGORIES)


Table B.11: Ratio of Upholstered Furniture Expenditures to Total Family Income by: AGE and EDUCATION (6 CATEGORIES)

| Education |  |  |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < 9th Grade | 9th to 12th | H.S Grad. | 1-4yr College | College Grad. | Grad/Pro deg | All Education |  |
|  | <25yr old | \$134.68 | \$44.49 | \$122.62 | \$83.09 | \$134.97 | \$333.02 | \$98.49 | Upholstered Furn |
|  |  | \$9,669.20 | \$10,009.12 | \$16,489.30 | \$9,539.30 | \$21,106.70 | \$19,241.64 | \$12,545.64 | Tot. Family Income |
|  |  | \$0.0139 | \$0.0044 | \$0.0074 | \$0.0087 | \$0.0064 | \$0.0173 | \$0.0079 | Ratio Hhold/tot Fam. |
|  | 25 to 34 | \$16.40 | \$64.30 | \$86.93 | \$77.08 | \$128.47 | \$144.67 | \$92.94 |  |
|  |  | \$16,076.25 | \$17,325.24 | \$25,521.29 | \$27,224.83 | \$37,988.27 | \$37,628.16 | \$28,221.61 |  |
|  |  | \$0.0010 | \$0.0037 | \$0.0034 | \$0.0028 | \$0.0034 | \$0.0038 | \$0.0033 |  |
|  | 35 to 44 | \$57.39 | \$48.81 | \$114.48 | \$95.92 | \$130.30 | \$235.36 | \$123.26 |  |
|  |  | \$18,810.78 | \$21,068.30 | \$26,847.48 | \$33,659.16 | \$42,762.36 | \$52,913.20 | \$34,317.27 |  |
|  |  | \$0.0031 | \$0.0023 | \$0.0043 | \$0.0028 | \$0.0030 | \$0.0044 | \$0.0036 |  |
|  | 45 to 54 | \$169.44 | \$87.09 | \$114.56 | \$186.10 | \$129.12 | \$175.94 | \$141.08 |  |
|  |  | \$21,964.85 | \$21,914.18 | \$27,667.54 | \$40,162.21 | \$49,600.25 | \$56,983.62 | \$35,798.45 |  |
| AGE |  | \$0.0077 | \$0.0040 | \$0.0041 | \$0.0046 | \$0.0026 | \$0.0031 | \$0.0039 |  |
|  | 55 to 64 | \$58.98 | \$49.31 | \$75.40 | \$128.14 | \$169.63 | \$230.99 | \$103.17 |  |
|  |  | \$15,733.19 | \$17,798.44 | \$25,479.63 | \$28,787.46 | \$45,207.38 | \$50,737.88 | \$28,051.39 |  |
|  |  | \$0.0037 | \$0.0028 | \$0.0030 | \$0.0045 | \$0.0038 | \$0.0046 | \$0.0037 |  |
|  | 65 to 74 | \$43.67 | \$19.52 | \$57.70 | \$78.65 | \$52.98 | \$99.81 | \$52.87 |  |
|  |  | \$12,641.32 | \$15,959.59 | \$17,263.19 | \$25,405.70 | \$30,130.13 | \$31,879.56 | \$19,056.95 |  |
|  |  | \$0.0035 | \$0.0012 | \$0.0033 | \$0.0031 | \$0.0018 | \$0.0031 | \$0.0028 |  |
|  | $75+$ | \$27.13 | \$76.60 | \$60.91 | \$55.38 | \$63.05 | \$53.40 | \$49.72 |  |
|  |  | \$9,668.73 | \$13,811.62 | \$13,661.48 | \$19,439.38 | \$20,583.32 | \$24,895.76 | \$13,807.99 |  |
|  |  | \$0.0028 | \$0.0055 | \$0.0045 | \$0.0028 | \$0.0031 | \$0.0021 | \$0.0036 |  |
|  | All Ages | \$56.12 | \$54.96 | \$92.63 | \$102.03 | \$126.48 | \$186.71 | \$100.02 |  |
|  |  | \$13,983.80 | \$17,084.76 | \$23,877.50 | \$27,678.87 | \$39,796.14 | \$46,125.18 | \$27,083.85 |  |
|  |  | \$0.0040 | \$0.0032 | \$0.0039 | \$0.0037 | \$0.0032 | \$0.0040 | \$0.0037 |  |

[^3]Table B.12: Ratio of Household Furnishing and Equipment Expenditures to Total Household Expenditures by: AGE and EDUCATION (6 CATEGORIES)

|  | Education |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < 9th Grade | 9th to 12th | H.S Grad. | 1-4yr College | College Grad. | Grad/Pro deg | All Education |  |
| <25yr old | \$405.29 | \$684.02 | \$452.63 | \$478.59 | \$1,034.98 | \$2,060.44 | \$613.17 | Hhold Furn \& Equip |
|  | \$10,722.08 | \$13,637.08 | \$18,299.90 | \$13,932.75 | \$23,883.44 | \$22,667.40 | \$15,975.57 | Tot. Hhold Expendltur |
|  | \$0.0378 | \$0.0502 | \$0.0247 | \$0.0344 | \$0.0433 | \$0.0909 | \$0.0384 | Ratlo Hhold Tot HH Ex |
| 25 to 34 | \$727.49 | \$318.18 | \$899.07 | \$823.84 | \$1,328.51 | \$1,176.70 | \$915.33 |  |
|  | \$19,038.59 | \$18,357.15 | \$24,074.00 | \$27,143.71 | \$32,081.25 | \$30,869.20 | \$26,217.83 |  |
|  | \$0.0382 | \$0.0173 | \$0.0373 | \$0.0304 | \$0.0414 | \$0.0381 | \$0.0349 |  |
| 35 to 44 | \$396.58 |  | $\$ 777.33$ | \$1,214.33 | \$1,930.28 |  | \$1,275.69 |  |
|  | \$21,399.59 | \$23,575.75 | \$25,409.14 | $\$ 32,923.15$ | $\$ 42,314.11$ | $\$ 50,001.50$ | \$33,470.02 |  |
|  | \$0.0185 | \$0.0411 | \$0.0306 | \$0.0369 | \$0.0456 | \$0.0424 | \$0.0381 |  |
| 45 to 54 | \$679.34 | \$521.36 | \$809.45 | \$1,431.15 | \$1,369.14 | \$2,689.35 | \$1,209.14 |  |
|  | \$19,308.73 | \$22,821.43 | \$26,516.41 | \$36,574.13 | \$50,684.79 | \$57,769.84 | \$34,774.50 |  |
| $\begin{array}{ll}\text { AGE } & \\ & 55 \text { to } 64\end{array}$ | \$0.0352 | \$0.0228 | \$0.0305 | \$0.0391 | \$0.0270 | \$0.0466 | \$0.0348 |  |
|  | \$447.15 | \$575.70 | \$769.63 | \$835.01 | \$1,570.35 | \$3,764.85 | \$1,098.25 |  |
|  | \$17,034.04 | \$16,364.43 | \$23,599.90 | \$28,551.50 | \$40,306.39 | \$54,897.30 | \$27,288.18 |  |
|  | \$0.0263 | \$0.0352 | \$0.0326 | \$0.0292 | \$0.0390 | \$0.0686 | \$0.0402 |  |
| 65 to 74 | \$433.58 | \$574.18 | \$649.86 | \$677.98 | \$847.65 | \$1,127.64 | \$640.54 |  |
|  | \$12,414.08 | \$19,686.76 | \$18,825.59 | \$27,182.56 | \$23,816.43 | \$32,393.74 | \$20,076.81 |  |
|  | \$0.0349 | \$0.0292 | \$0.0345 | \$0.0249 | \$0.0356 | \$0.0348 | \$0.0319 |  |
| $75+$ | \$216.76 | \$489.94 | \$623.02 | \$609.91 | \$127.18 | \$393.80 | \$404.40 |  |
|  | \$11,083.37 | \$12,884.97 | \$14,808.36 | \$23,404.77 | \$20,303.07 | \$22,247.76 | \$14,777.51 |  |
|  | \$0.0196 | \$0.0380 | \$0.0421 | \$0.0261 | \$0.0063 | \$0.0177 | \$0.0274 |  |
| All Ages | \$409.98 | \$578.81 | \$766.53 | \$937.83 | \$1,429.69 | \$2,048.07 | \$959.48 |  |
|  | \$14,732.82 | \$18,458.28 | \$23,136.47 | \$27,904.04 | \$37,358.90 | \$44,274.31 | \$26,682.65 |  |
|  | \$0.0278 | \$0.0314 | \$0.0331 | \$0.0336 | \$0.0383 | \$0.0463 | \$0.0360 |  |

Table B.13: Ratio of Furniture Expenditures (9 category) to Total Household Expenditures by: AGE and EDUCATION (6 CATEGORIES)


[^4]Table B.14: Ratio of Upholstered Furniture Expenditures to Total Household Expenditures by: AGE and EDUCATION (6 CATEGORIES)

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{9}{|c|}{Education} <br>
\hline \& $<9$ th Grade \& 9th to 12th \& H.S Grad. \& 1-4yr College \& College Grad. \& Grad/Pro deg \& All Education \& Key <br>
\hline \multirow[t]{3}{*}{<25yr old} \& \$134.68 \& \$44.49 \& \$122.62 \& \$83.09 \& \$134.97 \& \$333.02 \& \$98.49 \& Upholstered Furn <br>
\hline \& \$10,722.08 \& \$13,637.08 \& \$18,299.90 \& \$13,932.75 \& \$23,883.44 \& \$22,667.40 \& \$15,975.57 \& Tot. Hhold Expenditur <br>
\hline \& \$0.0126 \& \$0.0033 \& \$0.0067 \& \$0.0060 \& \$0.0057 \& \$0.0147 \& \$0.0062 \& Ratlo Hhold/Tot HHEx <br>
\hline \multirow[t]{3}{*}{25 to 34} \& \$16.40 \& \$64.30 \& \$86.93 \& \$77.08 \& \$128.47 \& \$144.67 \& \$92.94 \& <br>
\hline \& \$19,038.59 \& \$18,357.15 \& \$24,074.00 \& \$27,143.71 \& \$32,081.25 \& \$30,869.20 \& \$26,217.83 \& <br>
\hline \& \$0.0009 \& \$0.0035 \& \$0.0036 \& \$0.0028 \& \$0.0040 \& \$0.0047 \& \$0.0035 \& <br>
\hline \multirow[t]{3}{*}{35 to 44} \& \$57.39 \& \$48.81 \& \$114.48 \& \$95.92 \& \$130.30 \& \$235.36 \& \$123.26 \& <br>
\hline \& \$21,399.59 \& \$23,575.75 \& \$25,409.14 \& \$32,923.15 \& \$42,314.11 \& \$50,001.50 \& \$33,470.02 \& <br>
\hline \& \$0.0027 \& \$0.0021 \& \$0.0045 \& \$0.0029 \& \$0.0031 \& \$0.0047 \& \$0.0037 \& <br>
\hline \multirow[t]{2}{*}{45 to 54} \& \$169.44 \& \$87.09 \& \$114.56 \& \$186.10 \& \$129.12 \& \$175.94 \& \$141.08 \& <br>
\hline \& \$19,308.73 \& \$22,821.43 \& \$26,516.41 \& \$36,574.13 \& \$50,684.79 \& \$57,769.84 \& \$34,774.50 \& <br>
\hline \multirow[t]{4}{*}{AGE

55 to 64} \& \$0.0088 \& \$0.0038 \& \$0.0043 \& \$0.0051 \& \$0.0025 \& \$0.0030 \& \$0.0041 \& <br>
\hline \& \$58.98 \& \$49.31 \& \$75.40 \& \$128.14 \& \$169.63 \& \$230.99 \& \$103.17 \& <br>
\hline \& \$17,034.04 \& \$16,364.43 \& \$23,599.90 \& \$28,551.50 \& \$40,306.39 \& \$54,897.30 \& \$27,288.18 \& <br>
\hline \& \$0.0035 \& \$0.0030 \& \$0.0032 \& \$0.0045 \& \$0.0042 \& \$0.0042 \& \$0.0038 \& <br>
\hline \multirow[t]{3}{*}{65 to 74} \& \$43.67 \& \$19.52 \& \$57.70 \& \$78.65 \& \$52.98 \& \$99.81 \& \$52.87 \& <br>
\hline \& \$12,414.08 \& \$19,686.76 \& \$18,825.59 \& \$27,182.56 \& \$23,816.43 \& \$32,393.74 \& \$20,076.81 \& <br>
\hline \& \$0.0035 \& \$0.0010 \& \$0.0031 \& \$0.0029 \& \$0.0022 \& \$0.0031 \& \$0.0026 \& <br>
\hline \multirow[t]{3}{*}{75+} \& \$27.13 \& \$76.60 \& \$60.91 \& \$55.38 \& \$63.05 \& \$53.40 \& \$49.72 \& <br>
\hline \& \$11,083.37 \& \$12,884.97 \& \$14,808.36 \& \$23,404.77 \& \$20,303.07 \& \$22,247.76 \& \$14,777.51 \& <br>
\hline \& \$0.0024 \& \$0.0059 \& \$0.0041 \& \$0.0024 \& \$0.0031 \& \$0.0024 \& \$0.0034 \& <br>
\hline \multirow[t]{3}{*}{All Ages} \& \$56.12 \& \$54.96 \& \$92.63 \& \$102.03 \& \$126.48 \& \$186.71 \& \$100.02 \& <br>
\hline \& \$14,732.82 \& \$18,458.28 \& \$23,136.47 \& \$27,904.04 \& \$37,358.90 \& \$44,274.31 \& \$26,682.65 \& <br>
\hline \& \$0.0038 \& \$0.0030 \& \$0.0040 \& \$0.0037 \& \$0.0034 \& \$0.0042 \& \$0.0037 \& <br>
\hline
\end{tabular}

Table B.15: Ratio of Upholstered Furniture Expenditures to Household Furniture and Equipment Expenditures by: AGE and EDUCATION (6 CATEGORIES)


[^5]Table B.16: Ratio of Furniture Expenditures (9 category) to Household Furniture and Equipment Expenditures by: AGE and EDUCATION (6 CATEGORIES)

| Education |  |  |  |  |  |  |  | Key <br> Fumlture ( 9 cat) HH Furn \& Equip Expe Ratio Furn/HH F\&E Ex |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <9th Grade | 9th to 12th | H.S Grad. | 1-4yr College | College Grad. Grad/Pro deg |  | All Education |  |
| <25yr old | \$504.40 | \$179.16 | \$303.28 | \$166.68 | \$493.62 | \$701.72 | \$253.93 |  |
|  | \$405.29 | \$684.02 | \$452.63 | \$478.59 | \$1,034.98 | \$2,060.44 | \$613.17 |  |
|  | \$1.2445 | \$0.2619 | \$0.6700 | \$0.3483 | \$0.4769 | \$0.3406 | \$0.4141 |  |
| 25 to 34 | \$161.74 | \$135.13 | \$308.28 | \$287.38 | \$451.72 | \$572.73 | \$333.63 |  |
|  | \$727.49 | \$318.18 | \$899.07 | \$823.84 | \$1,328.51 | \$1,176.70 | \$915.33 |  |
|  | \$0.2223 | \$0.4247 | \$0.3429 | \$0.3488 | \$0.3400 | \$0.4867 | \$0.3645 |  |
| 35 to 44 | \$80.29 | \$163.87 | \$295.24 | \$338.32 | \$594.25 | \$777.70 | \$407.72 |  |
|  | \$396.58 | \$968.75 | \$777.33 | \$1,214.33 | \$1,930.28 | \$2,118.22 | \$1,275.69 |  |
|  | \$0.2025 | \$0.1692 | \$0.3798 | \$0.2786 | \$0.3079 | \$0.3671 | \$0.3196 |  |
| 45 to 54 | \$297.65 | \$218.47 | \$316.27 | \$428.57 | \$382.35 | \$623.30 | \$374.44 |  |
|  | \$679.34 | \$521.36 | \$809.45 | \$1,431.15 | \$1,369.14 | \$2,689.35 | \$1,209.14 |  |
| AGE | \$0.4381 | \$0.4190 | \$0.3907 | \$0.2995 | \$0.2793 | \$0.2318 | \$0.3097 |  |
| 55 to 64 | \$175.75 | \$186.09 | \$225.56 | \$336.68 | \$446.97 | \$1,353.56 | \$370.11 |  |
|  | \$447.15 | \$575.70 | \$769.63 | \$835.01 | \$1,570.35 | \$3,764,85 | \$1,098.25 |  |
|  | \$0.3930 | \$0.3232 | \$0.2931 | \$0.4032 | \$0.2846 | \$0.3595 | \$0.3370 |  |
| 65 to 74 | \$116.19 | \$71.84 | \$155.20 | \$171.36 | \$205.57 | \$290.20 | \$146.03 |  |
|  | \$433.58 | \$574.18 | \$649.86 | \$677.98 | \$847.65 | \$1,127.64 | \$640.54 |  |
|  | \$0.2680 | \$0.1251 | \$0.2388 | \$0.2528 | \$0.2425 | \$0.2574 | \$0.2280 |  |
| 75+ | \$50.37 | \$145.67 | \$122.44 | \$100.96 | \$96.62 | \$54.82 | \$91.34 |  |
|  | \$216.76 | \$489.94 | \$623.02 | \$609.91 | \$127.18 | \$393.80 | \$404.40 |  |
|  | \$0.2324 | \$0.2973 | \$0.1965 | \$0.1655 | \$0.7597 | \$0.1392 | \$0.2259 |  |
| All Ages | \$132.02 | \$153.99 | \$264.39 | \$289.58 | \$451.15 | \$701.30 | \$310.49 |  |
|  | \$409.98 | \$578.81 | \$766.53 | \$937.83 | \$1,429.69 | \$2,048.07 | \$959.48 |  |
|  | \$0.3220 | \$0.2660 | \$0.3449 | \$0.3088 | \$0.3156 | \$0.3424 | \$0.3236 |  |

Table B.17: Ratio of Household Furnishings and Equipment to Total Family Income by: AGE and MARITAL STATUS (5 CATEGORIES)


[^6]Table B.18: Ratio of Furniture Expenditures (9 category) to Total Family Income by: AGE and MARITAL STATUS (5 CATEGORIES)


Table B.19: Ratio of Upholstered Furniture Expenditures to Total Family Income by: AGE and MARITAL STATUS (5 CATEGORIES)

|  |  |  |  |  | Marital Statu |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Martled | Widowed | Dlvorced | Seperated | Never Married | All Status | Key |
|  | <25yr old | \$217.24 | (\$0.01) | \$48.93 | \$29.57 | \$61.10 | \$98.49 | Upholstered Furn |
|  |  | \$21,735.01 | \$5,030.43 | \$11,122.35 | \$13,002.12 | \$9,395.73 | \$12,545.64 | Tot. Family Income |
|  |  | \$0.0100 | (\$0.0000) | \$0.0044 | \$0.0023 | \$0.0065 | \$0.0079 | Ratlo Hholditot Fam. |
|  | 25 to 34 | \$114.24 | \$65.23 | \$32.04 | \$82.16 | \$71.65 | \$92.94 |  |
|  |  | \$34,241.61 | \$29,719.34 | \$19,366.46 | \$16,881.87 | \$20,911.76 | \$28,221.61 |  |
|  |  | \$0.0033 | \$0.0022 | \$0.0017 | \$0.0049 | \$0.0034 | \$0.0033 |  |
|  | 35 to 44 | \$150.17 | \$0.00 | \$65.35 | \$73.32 | \$100.15 | \$123.26 |  |
|  |  | \$40,098.54 | \$22,652.39 | \$23,815.31 | \$22,656.73 | \$24,936.67 | \$34,317.27 |  |
|  |  | \$0.0037 | \$0.0000 | \$0.0027 | \$0.0032 | \$0.0040 | \$0.0036 |  |
|  | 45 to 54 | \$158.63 | \$33.54 | \$77.55 | \$108.62 | \$238.38 | \$141.08 |  |
|  |  | \$41,769.17 | \$21,816.12 | \$25,885.61 | \$16,715.12 | \$27,698.32 | \$35,798.45 |  |
| AGE |  | \$0.0038 | \$0.0015 | \$0.0030 | \$0.0065 | \$0.0086 | \$0.0039 |  |
|  | 55 to 64 | \$124.75 | \$51.56 | \$123.75 | \$0.00 | \$4.56 | \$103.17 |  |
|  |  | \$34,852.14 | \$17,944.31 | \$15,996.82 | \$13,374.17 | \$16,500.20 | \$28,051.39 |  |
|  |  | \$0.0036 | \$0.0029 | \$0.0077 | \$0.0000 | \$0.0003 | \$0.0037 |  |
|  | 65 to 74 | \$59.84 | \$58.21 | \$22.08 | \$0.00 | \$23.37 | \$52.87 |  |
|  |  | \$22,672.82 | \$15,454.82 | \$13,251.78 | \$18,861.56 | \$11,905.20 | \$19,056.95 |  |
|  |  | \$0.0026 | \$0.0038 | \$0.0017 | \$0.0000 | \$0.0020 | \$0.0028 |  |
|  | $75+$ | \$60.47 | \$42.75 | \$45.65 | \$0.00 | \$66.86 | \$49.72 |  |
|  |  | \$19,165.02 | \$10,671.11 | \$11,715.52 | \$3,478.32 | \$13,794.92 | \$13,807.99 |  |
|  |  | \$0.0032 | \$0.0040 | \$0.0039 | \$0.0000 | \$0.0048 | \$0.0036 |  |
|  | All Ages | \$126.98 | \$47.31 | \$65.68 | \$67.89 | \$78.26 | \$100.02 |  |
|  |  | \$34,537.40 | \$14,598.17 | \$20,707.11 | \$17,877.44 | \$17,496.20 | \$27,083.85 |  |
|  |  | \$0.0037 | \$0.0032 | \$0.0032 | \$0.0038 | \$0.0045 | \$0.0037 |  |

[^7]Table B.20: Ratio of Household Furnishing and Equipment Expenditures to Total Household Expenditures by: AGE and MARITAL STATUS (5 CATEGORIES)


- Eta squared $=0.1169$
Table B.21: Ratio of Furniture Expenditures (9 category) to Total Household Expenditures by: AGE and MARITAL STATUS (5 CATEGORIES)


[^8]Table B.22: Ratio of Upholstered Furniture Expenditures to Total Household Expenditures by: AGE and MARITAL STATUS (5 CATEGORIES)

| Marital Status |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Marrled | Widowed | Divorced | Seperated | Never Marrled | All Status |  |
| <25yr old | \$217.24 | (\$0.01) | \$48.93 | \$29.57 | \$61.10 | \$98.49 | Upholstered Furn |
|  | \$22,314.40 | (\$1.88) | \$11,867.34 | \$19,650.45 | \$13,793.72 | \$15,975.57 | Tot. Hhold Expenditur |
|  | \$0.0097 | \$0.0053 | \$0.0041 | \$0.0015 | \$0.0044 | \$0.0062 | Ratlo Hhold Tot HH Ex |
| 25 to 34 | \$114.24 | \$65.23 | \$32.04 | \$82.16 | \$71.65 | \$92.94 |  |
|  | \$30,252.45 | \$25,932.12 | \$22,918.26 | \$23,204.20 | \$19,582.94 | \$26,217.83 |  |
|  | \$0.0038 | \$0.0025 | \$0.0014 | \$0.0035 | \$0.0037 | \$0.0035 |  |
| 35 to 44 | \$150.17. | \$0.00 | \$65.35 | \$73.32 | \$100.15 | \$123.26 |  |
|  | \$38,752.17 | \$23,282.69 | \$22,598.54 | \$28,156.97 | \$24,199.17 | \$33,470.02 |  |
|  | \$0.0039 | \$0.0000 | \$0.0029 | \$0.0026 | \$0.0041 | \$0.0037 |  |
| AGE 45 to 54 | \$158.63 | \$33.54 | \$77.55 | \$108.62 | \$238.38 | \$141.08 |  |
|  | \$40,322.71 | \$26,301.93 | \$24,869.66 | \$19,326.66 | \$24,153.62 | \$34,774.50 |  |
|  | \$0.0039 | \$0.0013 | \$0.0031 | \$0.0056 | \$0.0099 | \$0.0041 |  |
| $\begin{array}{ll}\text { AGE } & \\ & 55 \text { to } 64\end{array}$ |  | $\$ 51.56$ | \$123.75 | \$0.00 | \$4.56 | \$103.17 |  |
|  | \$33,335.02 | \$18,569.72 | \$17,505.05 | \$17,980.31 | \$12,208.13 | \$27,288.18 |  |
|  | \$0.0037 | \$0.0028 | \$0.0071 | \$0.0000 | \$0.0004 | \$0.0038 |  |
| 65 to 74 | \$59.84 | \$58.21 | \$22.08 | \$0.00 | \$23.37 | \$52.87 |  |
|  | \$24,123.02 | \$16,803.06 | \$13,579.59 | \$15,226.27 | \$9,256.85 | \$20,076.81 |  |
|  | \$0.0025 | \$0.0035 | \$0.0016 | \$0.0000 | \$0.0025 | \$0.0026 |  |
| $75+$ | \$60.47 | \$42.75 | \$45.65 | \$0.00 | \$66.86 | \$49.72 |  |
|  | \$20,819.17 | \$11,724.81 | \$9,696.15 | \$5,124.42 | \$12,238.89 | \$14,777.51 |  |
|  | \$0.0029 | \$0.0036 | \$0.0047 | \$0.0000 | \$0.0055 | \$0.0034 |  |
| All Ages |  |  |  |  | \$78.26 | \$100.02 |  |
|  | \$33,108.82 | \$15,844.90 | \$20,850.40 | \$22,379.18 | \$17,842.75 | \$26,682.65. |  |
|  | \$0.0038 | \$0.0030 | \$0.0032 | \$0.0030 | \$0.0044 | \$0.0037 |  |

Table B.23: Ratio of Upholstered Furniture Expenditures to Household Furniture and Equipment Expenditures by: AGE and MARITAL STATUS (5 CATEGORIES)


[^9]Table B.24: Ratio of Furniture Expenditures (9 category) to Household Furniture and Equipment Expenditures by: AGE and MARITAL STATUS (5 CATEGORIES)

Table B.25: Ratio of Household Furnishings and Equipment to Total Family Income by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  | Marital Status |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Divorced | Seperated | Never Marrled | All Status |  |
|  | <\$10k | \$1,085.97 | \$372.03 | \$277.10 | \$288.87 | \$255.36 | \$590.64 | Hhold Fum \& Equip <br> Tot. Family Income |
|  |  | \$2,274.82 | \$5,223.29 | \$4,264.15 | \$4,453.51 | \$3,731.64 | \$3,606.12 |  |
|  |  | \$0.4774 | \$0.0712 | \$0.0650 | \$0.0649 | \$0.0684 | \$0.1638 | Ratio HholdTot Fam. |
|  | \$10K to | \$783.59 | \$396.96 | \$469.13 | \$520.09 | \$528.63 | \$595.60 |  |
|  | \$15K | \$12,504.84 | \$12,276.30 | \$12,232.44 | \$11,948.95 | \$12,012.99 | \$12,290.42 |  |
|  |  | \$0.0627 | \$0.0323 | \$0.0384 | \$0.0435 | \$0.0440 | \$0.0485 |  |
| F | \$15 to | \$711.97 | \$376.51 | \$561.87 | \$1,211.88 | \$652.10 | \$665.84 |  |
| M | \$20K | \$17,302.61 | \$17,362.02 | \$17,155.45 | \$17,026.80 | \$17,141.56 | \$17,241.77 |  |
| 1 |  | \$0.0411 | \$0.0217 | \$0.0328 | \$0.0712 | \$0.0380 | \$0.0386 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$807.57 | \$431.02 | \$799.18 | \$761.57 | \$553.15 | \$734.78 |  |
|  | \$30K | \$24,783.28 | \$24,072.18 | \$24,555.57 | \$24,269.66 | \$24,439.11 | \$24,621.31 |  |
| 1 |  | \$0.0326 | \$0.0179 | \$0.0325 | \$0.0314 | \$0.0226 | \$0.0298 |  |
| N |  |  |  |  |  |  |  |  |
| c | \$30K to | \$1,044.43 | \$815.25 | \$900.19 | \$2,717.28 | \$748.20 | \$1,013.56 |  |
| 0 | \$40K | \$34,555.66 | \$34,144.86 | \$34,027.01 | \$33,771.15 | \$33,886.06 | \$34,359.41 |  |
| M |  | \$0.0302 | \$0.0239 | \$0.0265 | \$0.0805 | \$0.0221 | \$0.0295 |  |
| E | \$40K to | \$1,214.09 | \$1,275.75 | \$681,02 | \$565.09 | \$1,453.06 | \$1,174.30 |  |
|  | \$50K | \$44,710.96 | \$45,101.35 | \$44,158.61 | \$45,591.06 | \$43,640.59 | \$44,613.18 |  |
|  |  | \$0.0272 | \$0.0283 | \$0.0154 | \$0.0124 | \$0.0333 | \$0.0263 |  |
|  | \$50K and | \$2,232.85 | \$870.44 | \$1,765.95 | \$2,384.58 | \$1,214.67 | \$2,111.97 |  |
|  | Higher | \$74,777.98 | \$78,894.23 | \$68,424.49 | \$76,064.63 | \$72,290.02 | \$74,408.05 |  |
|  |  | \$0.0299 | \$0.0110 | \$0.0258 | \$0.0313 | \$0.0168 | \$0.0284 |  |
|  | All | \$1,278.91 | \$444.17 | \$629.74 | \$794.55 | \$521.16 | \$959.48 |  |
|  | Incomes | \$34,537.40 | \$14,598.17 | \$20,707.11 | \$17,877.44 | \$17,496.20 | \$27,083.85 |  |
|  |  | \$0.0370 | \$0.0304 | \$0.0304 | \$0.0444 | \$0.0298 | \$0.0354 |  |

- Eta squared $=0.2146$

Table B.26: Ratio of Furniture Expenditures (9 category) to Total Family Income by: FAMLIY INCOME and MARITAL STATUS (5 CATEGORIES)

|  |  | Marital Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Divorced | Seperated | Never Married | All Status | Key |
|  | <\$10k | \$391.64 | \$77.44 | \$171.16 | \$136.27 | \$110.01 | \$217.25 | Fumiture (9 cat) |
|  |  | \$2,274.82 | \$5,223.29 | \$4,264.15 | \$4,453.51 | \$3,731.64 | \$3,606.12 | Tot. Family income |
|  |  | \$0.1722 | \$0.0148 | \$0.0401 | \$0.0306 | \$0.0295 | \$0.0602 | Ratlo Hhold/tot Fam. |
|  | \$10K to | \$223.67 | \$143.19 | \$126.80 | \$64.33 | \$196.18 | \$178.79 |  |
|  | \$15K | \$12,504.84 | \$12,276.30 | \$12,232.44 | \$11,948.95 | \$12,012.99 | \$12,290.42 |  |
|  |  | \$0.0179 | \$0.0117 | \$0.0104 | \$0.0054 | \$0.0163 | \$0.0145 |  |
| A |  |  |  |  |  |  |  |  |
| A | \$15 to | \$192.68. | \$64.39 | \$114.86 | \$302.47 | \$265.29 | \$187.82 |  |
| M | \$20K | \$17,302.61 | \$17,362.02 | \$17,155.45 | \$17,026.80 | \$17,141.56 | \$17,241.77 |  |
| 1 |  | \$0.0111 | \$0.0037 | \$0.0067 | \$0.0178 | \$0.0155 | \$0.0109 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$256.74 | \$193.69 | \$198.56 | \$263.93 | \$157.19 | \$227.99 |  |
|  | \$30K | \$24,783.28 | \$24,072.18 | \$24,555.57 | \$24,269.66 | \$24,439.11 | \$24,621.31 |  |
| 1 |  | \$0.0104 | \$0.0080 | \$0.0081 | \$0.0109 | \$0.0064 | \$0.0093 |  |
| N |  |  |  |  |  |  |  |  |
| c | \$30K to | \$358.84 | \$191.88 | \$263.11 | \$314.40 | \$295.48 | \$330.83 |  |
| 0 | \$40K | \$34,555.66 | \$34,144.86 | \$34,027.01 | \$33,771.15 | \$33,886.06 | \$34,359.41 |  |
| M |  | \$0.0104 | \$0.0056 | \$0.0077 | \$0.0093 | \$0.0087 | \$0.0096 |  |
| E | \$40K to | \$480.38 | \$311.59 | \$240.70 | \$434.80 | \$485.42 | \$452.51 |  |
|  | \$50K | \$44,710.96 | \$45,101.35 | \$44,158.61 | \$45,591.06 | \$43,640.59 | \$44,613.18 |  |
|  |  | \$0.0107 | \$0.0069 | \$0.0055 | \$0.0095 | \$0.0111 | \$0.0101 |  |
|  | \$50K and | \$640.67 | \$313.51 | \$493.24 | \$373.96 | \$815.65 | \$628.58 |  |
|  | Higher | \$74,777.98 | \$78,894.23 | \$68,424.49 | \$76,064.63 | \$72,290.02 | \$74,408.05 |  |
|  |  | \$0.0086 | \$0.0040 | \$0.0072 | \$0.0049 | \$0.0113 | \$0.0084 |  |
|  | All | \$409.03 | \$119.37 | \$202.95 | \$203.85 | \$214.45 | \$310.49 |  |
|  | Incomes | \$34,537.40 | \$14,598.17 | \$20,707.11 | \$17,877.44 | \$17,496.20 | \$27,083.85 |  |
|  |  | \$0.0118 | \$0.0082 | \$0.0098 | \$0.0114 | \$0.0123 | \$0.0115 |  |

* Eta squared $=0.0979$

Table B.27: Ratio of Upholstered Furniture Expenditures to Total Family Income by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)


* Eta squared $=0.0405$

Table B.28: Ratio of Household Furnishing and Equipment Expenditures to Total Household Expenditures by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  |  | Marital Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Divorced | Seperated | Never Marrled | All Status | Key |
|  | <\$10k | \$1,085.97 | \$372.03 | \$277.10 | \$288.87 | \$255.36 | \$590.64 | Hhold fum \& Equip |
|  |  | \$25,169.11 | \$11,405.29 | \$14,035.70 | \$13,190.75 | \$11,158.47 | \$16,888.04 | Tot. Hhold Expenditur |
|  |  | \$0.0431 | \$0.0326 | \$0.0197 | \$0.0219 | \$0.0229 | \$0.0350 | Ratio Hhold/ot HHEx |
|  | \$10K to | \$783.59 | \$396.96 | \$469.13 | \$520.09 | \$528.63 | \$595.60 |  |
|  | \$15K | \$20,037.44 | \$14,185.47 | \$16,824.95 | \$19,038.42 | \$13,859.52 | \$17,153.23 |  |
|  |  | \$0.0391 | \$0.0280 | \$0.0279 | \$0.0273 | \$0.0381 | \$0.0347 |  |
| F |  |  |  |  |  |  |  |  |
| A | \$15 to | \$711.97 | \$376.51 | \$561.87 | \$1,211.88 | \$652.10 | \$665.84 |  |
| M | \$20K | \$21,429.52 | \$15,846.89 | \$19,171.98 | \$20,189.92 | \$18,515.79 | \$19,780.80 |  |
| 1 |  | \$0.0332 | \$0.0238 | \$0.0293 | \$0.0600 | \$0.0352 | \$0.0337 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20k to | \$807.57 | \$431.02 | \$799.18 | \$761.57 | \$553.15 | \$734.78 |  |
|  | \$30K | \$23,576.13 | \$20,896.17 | \$22,402.90 | \$25,499.62 | \$19,800.85 | \$22,674.36 |  |
| 1 |  | \$0.0343 | \$0.0206 | \$0.0357 | \$0.0299 | \$0.0279 | \$0.0324 |  |
| N |  |  |  |  |  |  |  |  |
| c | \$30K to | \$1,044.43 | \$815.25 | \$900.19 | \$2,717.28 | \$748.20 | \$1,013.56 |  |
| 0 | \$40K | \$32,590.75 | \$26,627.72 | \$27,575.17 | \$31,889.69 | \$25,170.79 | \$30,643.29 |  |
| M |  | \$0.0320 | \$0.0306 | \$0.0326 | \$0.0852 | \$0.0297 | \$0.0331 |  |
| E | \$40K to | \$1,214.09 | \$1,275.75 | \$681.02 | \$565.09 | \$1,453.06 | \$1,174.30 |  |
|  | \$50K | \$34,916.37 | \$33,550.47 | \$25,431.50 | \$58,217.98 | \$36,367.06 | \$34,634.79 |  |
|  |  | \$0.0348 | \$0.0380 | \$0.0268 | \$0.0097 | \$0.0400 | \$0.0339 |  |
|  | \$50K and | \$2,232.85 | \$870.44 | \$1,765.95 | \$2,384.58 | \$1,214.67 | \$2,111.97 |  |
|  | Higher | \$52,924.67 | \$46,397.26 | \$44,247.30 | \$56,222.00 | \$46,982.20 | \$51,949.52 |  |
|  |  | \$0.0422 | \$0.0188 | \$0.0399 | \$0.0424 | \$0.0259 | \$0.0407 |  |
|  | All | \$1,278.91 | \$444.17 | \$629.74 | \$794.55 | \$521.16 | \$959.48 |  |
|  | Incomes | \$33,108.82 | \$15,844.90 | \$20,850.40 | \$22,379.18 | \$17,842.75 | \$26,682.65 |  |
|  |  | \$0.0386 | \$0.0280 | \$0.0302 | \$0.0355 | \$0.0292 | \$0.0360 |  |

* Eta squared $=0.2146$

Table B.29: Ratio of Furniture Expenditures (9 category) to Total Household Expenditures by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  |  | Marital Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Divorced | Seperated | Never Marrled | All Status | Key |
|  | <\$10k | \$391.64 | \$77.44 | \$171.16 | \$136.27 | \$110.01 | \$217.25 | Fumiture (9 cat) |
|  |  | \$25,169.11 | \$11,405.29 | \$14,035.70 | \$13,190.75 | \$11,158.47 | \$16,888.04 | Tot. Hhold Expendilur |
|  |  | \$0.0156 | \$0.0068 | \$0.0122 | \$0.0103 | \$0.0099 | \$0.0129 | Rato Hhold $/$ ot HHEx |
|  | \$10K to | \$223.67. | \$143.19 | \$126.80 | \$64.33 | \$196.18 | \$178.79 |  |
|  | \$15K | \$20,037.44 | \$14,185.47 | \$16,824.95 | \$19,038.42 | \$13,859.52 | \$17,153.23 |  |
|  |  | \$0.0112 | \$0.0101 | \$0.0075 | \$0.0034 | \$0.0142 | \$0.0104 |  |
| F |  |  |  |  |  |  |  |  |
| A | \$15 to | \$192.68 | \$64.39 | \$114.86 | \$302.47 | \$265.29 | \$187.82 |  |
| M | \$20K | \$21,429.52 | \$15,846.89 | \$19,171.98 | \$20,189.92 | \$18,515.79 | \$19,780.80 |  |
| 1 |  | \$0.0090 | \$0.0041 | \$0.0060 | \$0.0150 | \$0.0143 | \$0.0095 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$256.74 | \$193.69 | \$198.56 | \$263.93 | \$157.19 | \$227.99 |  |
|  | \$30K | \$23,576.13 | \$20,896.17 | \$22,402.90 | \$25,499.62 | \$19,800.85 | \$22,674.36 |  |
| 1 |  | \$0.0109 | \$0.0093 | \$0.0089 | \$0.0104 | \$0.0079 | \$0.0101 |  |
| N |  |  |  |  |  |  |  |  |
| c | \$30k to | \$358.84 | \$191.88 | \$263.11 | \$314.40 | \$295.48 | \$330.83 |  |
| $\bigcirc$ | \$40K | \$32,590.75 | \$26,627.72 | \$27,575.17 | \$31,889.69 | \$25,170.79 | \$30,643.29 |  |
| M |  | \$0.0110 | \$0.0072 | \$0.0095 | \$0.0099 | \$0.0117 | \$0.0108 |  |
| E | \$40K to | \$480.38 | \$311.59 | \$240.70 | \$434.80 | \$485.42 | \$452.51 |  |
|  | \$50K | \$34,916.37 | \$33,550.47 | \$25,431.50 | \$58,217.98 | \$36,367.06 | \$34,634.79 |  |
|  |  | \$0.0138 | \$0.0093 | \$0.0095 | \$0.0075 | \$0.0133 | \$0.0131 |  |
|  | \$50K and | \$640.67 | \$313.51 | \$493.24 | \$373.96 | \$815.65 | \$628.58 |  |
|  | Higher | \$52,924.67 | \$46,397.26 | \$44,247.30 | \$56,222.00 | \$46,982.20 | \$51,949.52 |  |
|  |  | \$0.0121 | \$0.0068 | \$0.0111 | \$0.0067 | \$0.0174 | \$0.0121 |  |
|  | All | \$409.03 | \$119.37 | \$202.95 | \$203.85 | \$214.45 | \$310.49 |  |
|  | Incomes | \$33,108.82 | \$15,844.90 | \$20,850.40 | \$22,379.18 | \$17,842.75 | \$26,682.65 |  |
|  |  | \$0.0124 | \$0.0075 | \$0.0097 | \$0.0091 | \$0.0120 | \$0.0116 |  |

[^10]Table B.30: Ratio of Upholstered Furniture Expenditures to Total Household Expenditures by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  |  | Marital Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Divorced | Seperated | Never Married | All Status | Key |
|  | <\$10k | \$117.51 | \$43.84 | \$62.77 | \$54.05 | \$47.61 | \$75.09 | Upholstered Furn |
|  |  | \$25,169.11 | \$11,405.29 | \$14,035.70 | \$13,190.75 | \$11,158.47 | \$16,888.04 | Tot. Hhold Expenditur |
|  |  | \$0.0047 | \$0.0038 | \$0.0045 | \$0.0041 | \$0.0043 | \$0.0044 | Ratlo Hhold/Tot HHEx |
|  | $\$ 10 \mathrm{~K}$ to \$15K | \$70.99 | \$48.07 | \$56.95 | \$20.78 | \$83.33 | \$64.28 |  |
|  |  | \$20,037.44 | \$14,185.47 | \$16,824.95 | \$19,038.42 | \$13,859.52 | \$17,153.23 |  |
|  |  | \$0.0035 | \$0.0034 | \$0.0034 | \$0.0011 | \$0.0060 | \$0.0037 |  |
| F |  |  |  |  |  |  |  |  |
| A | \$15 to | \$85.93 | \$29.21 | \$35.64 | \$117.99 | \$121.18 | \$81.43 |  |
| M | \$20K | \$21,429.52 | \$15,846.89 | \$19,171.98 | \$20,189.92 | \$18,515.79 | \$19,780.80 |  |
| 1 |  | \$0.0040 | \$0.0018 | \$0.0019 | \$0.0058 | \$0.0065 | \$0.0041 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$86.14 | \$55.02 | \$76.18 | \$95.25 | \$71.33 | \$80.36 |  |
|  | \$30K | \$23,576.13 | \$20,896.17 | \$22,402.90 | \$25,499.62 | \$19,800.85 | \$22,674.36 |  |
| 1 |  | \$0.0037 | \$0.0026 | \$0.0034 | \$0.0037 | \$0.0036 | \$0.0035 |  |
| N |  |  |  |  |  |  |  |  |
| C | $\$ 30 \mathrm{~K}$ to \$40K | \$129.53 | \$35.64 | \$69.30 | \$69.27 | \$108.60 | \$114.48 |  |
| 0 |  | \$32,590.75 | \$26,627.72 | \$27,575.17 | \$31,889.69 | \$25,170.79 | \$30,643.29 |  |
| M |  | \$0.0040 | \$0.0013 | \$0.0025 | \$0.0022 | \$0.0043 | \$0.0037 |  |
| M | $\$ 40 \mathrm{~K}$ to \$50K | \$141.20 | \$117.27 | \$13.23 | \$0.00 | \$67.62 | \$120.45 |  |
|  |  | \$34,916.37 | \$33,550.47 | \$25,431.50 | \$58,217.98 | \$36,367.06 | \$34,634.79 |  |
|  |  | \$0.0040 | \$0.0035 | \$0.0005 | \$0.0000 | \$0.0019 | \$0.0035 |  |
|  | \$50K and Higher | \$183.25 | \$76.02 | \$141.75 | \$156.14 | \$198.55 | \$178.21 |  |
|  |  | \$52,924.67 | \$46,397.26 | \$44,247.30 | \$56,222.00 | \$46,982.20 | \$51,949.52 |  |
|  |  | \$0.0035 | \$0.0016 | \$0.0032 | \$0.0028 | \$0.0042 | \$0.0034 |  |
|  | All | \$126.98 | \$47.31 | \$65.68 | \$67.89 | \$78.26 | \$100.02 |  |
|  | Incomes | \$33,108.82 | \$15,844.90 | \$20,850.40 | \$22,379.18 | \$17,842.75 | \$26,682.65 |  |
|  |  | \$0.0038 | \$0.0030 | \$0.0032 | \$0.0030 | \$0.0044 | \$0.0037 |  |

Table B.31: Ratio of Upholstered Furniture Expenditures to Household Furniture and Equipment Expenditures by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  |  | Marital Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | Widowed | Dlvorced | Seperated | Never Married | All Status | Key |
|  | < \$10k | \$117.51 | \$43.84 | \$62.77 | \$54.05 | \$47.61 | \$75.09 | Upholstered Furn |
|  |  | \$1,085.97 | \$372.03 | \$277.10 | \$288.87 | \$255.36 | \$590.64 | HH Furn \& Equip |
|  |  | \$0.1082 | \$0.1178 | \$0.2265 | \$0.1871 | \$0.1864 | \$0.1271 | Ratio Uphols/iH F\&E |
|  | \$10K to | \$70.99 | \$48.07 | \$56.95 | \$20.78 | \$83.33 | \$64.28 |  |
|  | \$15K | \$783.59 | \$396.96 | \$469.13 | \$520.09 | \$528.63 | \$595.60 |  |
|  |  | \$0.0906 | \$0.1211 | \$0.1214 | \$0.0400 | \$0.1576 | \$0.1079 |  |
| F |  |  |  |  |  |  |  |  |
| A | \$15 to | \$85.93 | \$29.21 | \$35.64 | \$117.99 | \$121.18 | \$81.43 |  |
| M | \$20K | \$711.97 | \$376.51 | \$561.87 | \$1,211.88 | \$652.10 | \$665.84 |  |
| 1 |  | \$0.1207 | \$0.0776 | \$0.0634 | \$0.0974 | \$0.1858 | \$0.1223 |  |
| L |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$86.14 | \$55.02 | \$76.18 | \$95.25 | \$71.33 | \$80.36 |  |
|  | \$30K | \$807.57 | \$431.02 | \$799.18 | \$761.57 | \$553.15 | \$734.78 |  |
| 1 |  | \$0.1067 | \$0.1277 | \$0.0953 | \$0.1251 | \$0.1290 | \$0.1094 |  |
| N |  |  |  |  |  |  |  |  |
| C | \$30K to | \$129.53 | \$35.64 | \$69.30 | \$69.27 | \$108.60 | \$114.48 |  |
| 0 | \$40K | \$1,044.43 | \$815.25 | \$900.19 | \$2,717.28 | \$748.20 | \$1,013.56 |  |
| M |  | \$0.1240 | \$0.0437 | \$0.0770 | \$0.0255 | \$0.1451 | \$0.1129 |  |
| E |  |  |  |  |  |  |  |  |
| $\$ 40 \mathrm{~K}$ to$\$ 50 \mathrm{~K}$ |  | \$141.20 | \$117.27 | \$13.23 | \$0.00 | \$67.62 | \$120.45 |  |
|  |  | \$1,214.09 | \$1,275.75 | \$681.02 | \$565.09 | \$1,453.06 | \$1,174.30 |  |
|  |  | \$0.1163 | \$0.0919 | \$0.0194 | \$0.0000 | \$0.0465 | \$0.1026 |  |
| \$50K and Higher |  | \$183.25 | \$76.02 | \$141.75 | \$156.14 | \$198.55 | \$178.21 |  |
|  |  | \$2,232.85 | \$870.44 | \$1,765.95 | \$2,384.58 | \$1,214.67 | \$2,111.97 |  |
|  |  | \$0.0821 | \$0.0873 | \$0.0803 | \$0.0655 | \$0.1635 | \$0.0844 |  |
|  |  | \$126.98 | \$47.31 | \$65.68 | \$67.89 | \$78.26 | \$100.02 |  |
| Incomes |  | \$1,278.91 | \$444.17 | \$629.74 | \$794.55 | \$521.16 | \$959.48 |  |
|  |  | \$0.0993 | \$0.1065 | \$0.1043 | \$0.0854 | \$0.1502 | \$0.1042 |  |

* Eta squared $=0.0405$

Table B.32: Ratio of Furniture Expenditures (9 category) to Household Furniture and Equipment Expenditures by: FAMILY INCOME and MARITAL STATUS (5 CATEGORIES)

|  | Marital Status |  |  |  |  |  |  | Key |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Married | WIdowed | Divorced | Seperated | Never Marrled | All Status |  |
|  | <\$10k | \$391.64 | \$77.44 | \$171.16 | \$136.27 | \$110.01 | \$217.25 | Furniture ( $\theta$ cat) |
|  |  | \$1,085.97 | \$372.03 | \$277.10 | \$288.87 | \$255.36 | \$590.64 | HH Furn \& Equip Expe |
|  |  | \$0.3606 | \$0.2082 | \$0.6177 | \$0.4717 | \$0.4308 | \$0.3678 | Ratio Furn/HH F\&E Ex |
|  | \$10K to | \$223.67 | \$143.19 | \$126.80 | \$64.33 | \$196.18 | \$178.79 |  |
|  | \$15K | \$783.59 | \$396.96 | \$469.13 | \$520.09 | \$528.63 | \$595.60 |  |
|  |  | \$0.2854 | \$0.3607 | \$0.2703 | \$0.1237 | \$0.3711 | \$0.3002 |  |
| F |  |  |  |  |  |  |  |  |
| A | \$15 to | \$192.68 | \$64.39 | \$114.86 | \$302.47 | \$265.29 | \$187.82 |  |
| M | \$20K | \$711.97 | \$376.51 | \$561.87 | \$1,211.88 | \$652.10 | \$665.84 |  |
| 1 |  | \$0.2706 | \$0.1710 | \$0.2044 | \$0.2496 | \$0.4068 | \$0.2821 |  |
| 1 |  |  |  |  |  |  |  |  |
| Y | \$20K to | \$256.74 | \$193.69 | \$198.56 | \$263.93 | \$157.19 | \$227.99 |  |
|  | \$30K | \$807.57 | \$431.02 | \$799.18 | \$761.57 | \$553.15 | \$734.78 |  |
| I |  | \$0.3179 | \$0.4494 | \$0.2485 | \$0.3466 | \$0.2842 | \$0.3103 |  |
| N |  |  |  |  |  |  |  |  |
| C | \$30K to | \$358.84 | \$191.88 | \$263.11 | \$314.40 | \$295.48 | \$330.83 |  |
| 0 | \$40K | \$1,044.43 | \$815.25 | \$900.19 | \$2,717.28 | \$748.20 | \$1,013.56 |  |
| M |  | \$0.3436 | \$0.2354 | \$0.2923 | \$0.1157 | \$0.3949 | \$0.3264 |  |
| E |  |  |  |  |  |  |  |  |
|  | \$40K to | $\$ 480.38$ | $\$ 311.59$ | $\$ 240.70$ | $\$ 434.80$ | $\$ 485.42$ | $\$ 452.51$ |  |
|  | \$50K | \$1,214.09 | \$1,275.75 | \$681.02 | \$565.09 | $\$ 1,453.06$ | $\$ 1,174.30$ |  |
|  |  | \$0.3957 | \$0.2442 | \$0.3534 | \$0.7694 | \$0.3341 | \$0.3853 |  |
|  | \$50K and | \$640.67 | \$313.51 | \$493.24 | \$373.96 | \$815.65 | \$628.58 |  |
|  | Higher | \$2,232.85 | \$870.44 | \$1,765.95 | \$2,384.58 | \$1,214.67 | \$2,111.97 |  |
|  |  | \$0.2869 | \$0.3602 | \$0.2793 | \$0.1568 | \$0.6715 | \$0.2976 |  |
|  | All | \$409.03 | \$119.37 | \$202.95 | \$203.85 | \$214.45 | \$310.49 |  |
|  | Incomes | \$1,278.91 | \$444.17 | \$629.74 | \$794.55 | \$521.16 | \$959.48 |  |
|  |  | \$0.3198 | \$0.2687 | \$0.3223 | \$0.2566 | \$0.4115 | \$0.3236 |  |

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[^1]:    * Eta squared $=0.0613$

[^2]:    * Eta squared $=0.1150$

[^3]:    * Eta squared $=0.0478$

[^4]:    * Eta squared $=0.1249$

[^5]:    * Eta squared $=0.0478$

[^6]:    - Eta squared $=0.1169$

[^7]:    * Eta squared $=0.0420$

[^8]:    * Eta squared $=0.0691$

[^9]:    - Eta squared $=0.0420$

[^10]:    * Eta squared $=0.0979$

