Tracking Expenditures

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Abstract

Using the consumer expenditure survey data a tabular and visual display will be presented to show the expenditures patterns and related information on different demographic groups within the population.   An analysis was done for the most recent 5 years on what people are spending their money on.

Introduction

Using the multiyear tables from the Consumer Expenditure Survey I show trends within the past five years on spending habits of the population from 2010 to 2015. Having an understanding about how people spend their money is important for businesses, policymakers, and researchers. Moreover, consumer spending is a signal of how well or not so well our nation's economy is doing. When consumer spending changes significantly, this situation becomes an important economic indicator.

Data

The Consumer Expenditure Survey (CE) is a nationwide household survey conducted by the U.S. Bureau of Labor Statistics (BLS) to find out how Americans spend their money. It is the only federal government survey that provides information on the complete range of consumers' expenditures as well as their incomes and demographic characteristics.

The CE consists of estimates derived from two separate surveys that the Census Bureau collects for the BLS, the Interview Survey and the Diary Survey. The Quarterly Interview Survey is designed to collect data on large and recurring expenditures that consumers can be expected to recall for a period of 3 months or longer, such as rent and utilities, and the Diary Survey is designed to collect data on small, frequently purchased items, including most food and clothing. Together, the data from the two surveys cover the complete range of consumers' expenditures.

The data tables used for this analysis are the multiyear tables average annual expenditures and characteristics of all consumer units, Consumer Expenditure Survey, 2006-2012 and 2013-2015. The topics that were analyzed are the expenditures of food, apparel and services, transportation, and education. The average age of people who were interviewed was 50. For demographic information, the CE breaks out male and female respondents in percentages. The same is done for demographic information by race. Race is categorized as White including Asian with other races, Hispanic, and Black.

Demography of those surveyed

After collecting the data it appeared that the consumer expenditure survey respondents are near the same percentage of both men and women. Where the percentage of females surveyed, on average, from 2010 to 2015 within the mailing list is 53 percent. While males, on average, is 47 percent from 2010 to 2015.

Those who are White non-Hispanic seems to have a large representation of those surveyed with 35.5 percent males and 40 percent females. While Blacks/Non-Hispanic and White/Hispanics are represented equally for both male and female with 5.3 percent and 6 percent respectively.

This brought about concern about measuring expenditures by race and gender as growth rates would appear to have the same trend across gender and race. Because of this limitation the decision was made to analyze the growth rate at the aggregated level.

Estimation Methods

Using the totals from the multiyear tables from 2010-2015 I calculate compound and annual growth rates on the expenditures of food, apparel and services, transportation, and education. These variables was selected because if a negative shock were to occur in the economy these variables rate of change would be more sensitive to this situation and would also show how confident the population is willing to spend their money. The compound growth is used to measure the average growth from 2010 to 2015, 2010 to 2013, and 2013 to 2015. These periods was selected because in 2013 it spending habits by those surveyed seems to change significantly. The rate of changed was calculated from 2010 to 2013 to note the growth before 2013 then from 2013 to 2015 to capture the growth after 2013.

The annual growth rates trend analysis covered the same period, 2010 to 2015. However, in this analysis, using the same variables we can see more detail within the same variables presented earlier as more frequent growth rates are calculated.

Results

It appears from 2010 to 2013 housing, food, education, health care, and apparel expenditures decreased compared to 2010 to 2015 average growth. While transportation expenditures had increased. In 2013 to 2015 health care continued to decrease as housing, food, education, apparel, and transportation increased compared to 2010 to 2015 average growth value.

As stated before, the results of the trend analysis shows that in 2013 something in our economy has caused a change of spending habits among the respondents. In the line graph of healthcare expenditures we can see that spending did increase significantly in 2014.

Moreover, it appears that consumers started to change their spending habits when it comes to food and transportation as food experienced a sharp decline of 0.05 percent and transportation expenditures decelerated to 0.07 percent in 2013. For clothing and education expenditures, spending decrease by -7.91 percent and -5.89 percent in 2013 respectively.

This situation could possibly be caused by tax increases in 2013 and an increase in healthcare premiums in 2014. After researching this finding I discovered that Curtis Dubay from the news website The Daily Signal reported that several tax increases occurred in 2013 to include payroll tax and the phasing out of personal exemptions and deductions.

Also, in 2014 healthcare premiums started increasing as reported by Julie Appleby of Kaiser Health News. She reports that because of the law more workers are expected to enroll which has caused a sharp increase in 2014. However, housing expenditures seem to not be affected as much by the increase in taxes as consumer spending increased by 1.5% in 2013 and 3.72% in 2014.

Conclusion

Using the multiyear tables from the Consumer Expenditure Survey I show trends within the past five years on spending habits of the population from 2010 to 2015 it appears that an economic phenomenon had occurred in 2013. This situation was caused by fiscal policy and the data from the CE showed that consumers had chosen to buy cheaper goods or service during periods of high taxes and premiums.
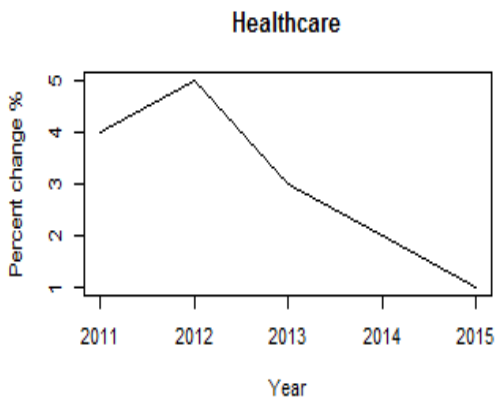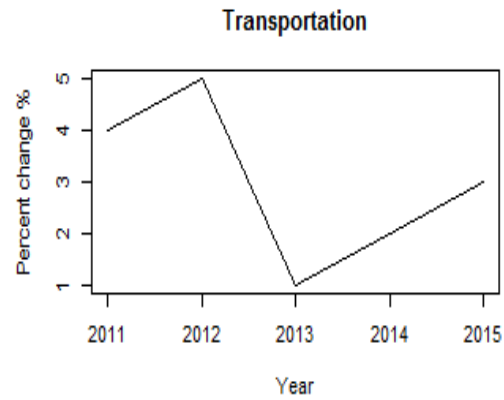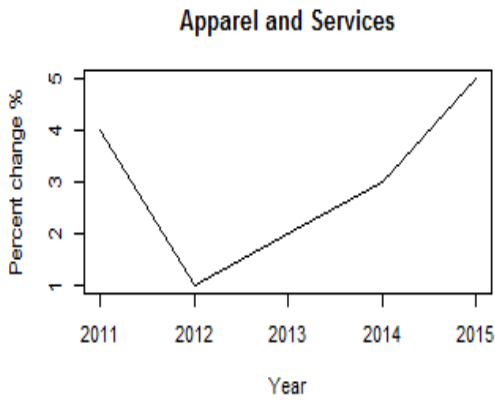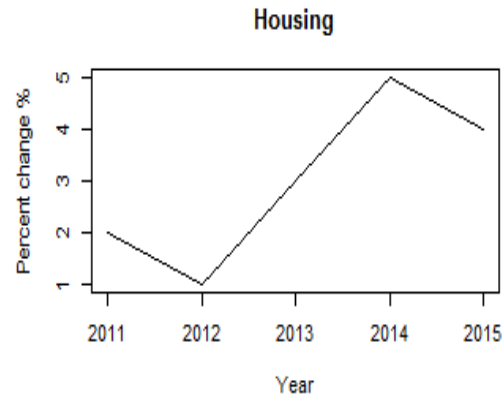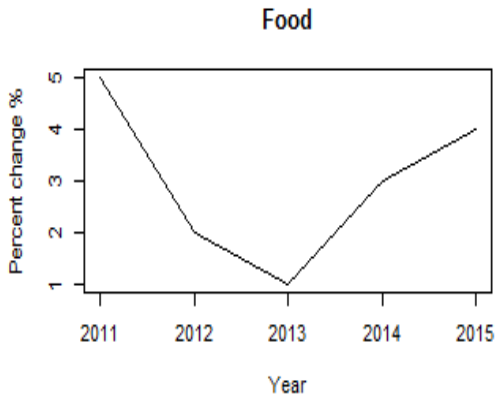
Works Cited

Appleby, Julie. "Employees will pay more for health care in 2014." Kaiser Health News. 23 May 2017.
<https://www.usatoday.com/story/money/personalfinance/2013/12/19/employee-health-insurance/3958071/>

Dubay, Curtis. "These 13 Tax Increases Hit in 2013." EconomyHealth Care. 23 May 2017. <http://dailysignal.com/2013/12/31/13-tax-increases-hit-2013/>

Appendix

Trends: Annual Growth Rates
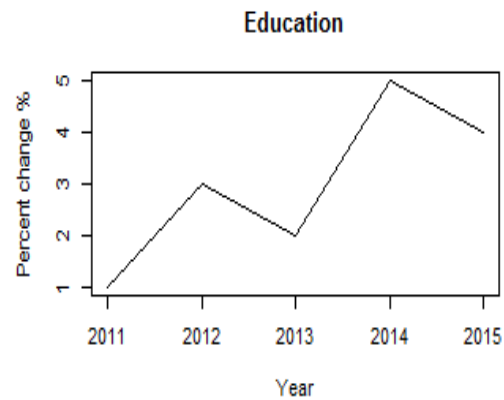
Trend analysis: Compound growth rates
2010-2015, 2010-2013, and 2013-2015

Findings: Expenditures Trend analysis- Compound Growth Rates