Do Consumers’ Expenditures Follow Their Sentiment?

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Do feelings/attitudes about the economy predict expenditures?

Factors that may distort the relationship:

- Lag effects
- Differences in spending across product/service categories
- Differences in spending across demographic groups
Expenditure and Sentiment Data

Consumer Expenditure Survey (CE)
- Annual aggregates (means) for 1984 – 2014
- Adjusted for inflation using CPI
- Various categories of expenditures

Index of Consumer Sentiment (ICS)
- Surveys of Consumers by the University of Michigan
- Annual figures for 1984 - 2014 (mean of monthly figures)
- Published data describe sentiment about the economy as a whole
Literature Review

- Consumer Confidence and Consumer Spending (Ludvigson, 2004)
  - Used ICS and the BEA’s Personal Consumption Expenditure (PCE) data to measure the relationship between consumer sentiment and expenditures across categories.
  - Considered how well sentiment predicts other economic measures, e.g., income growth, stock wealth, etc.
  - Concluded that the relationship is unclear and proposes that it might be nonlinear.
Literature Review

- Evaluating Threshold Effects in Consumer Sentiment (Desroches & Gosselin, 2004)
  - Explored previous findings saying that consumer sentiment could be helpful during periods of economic shock.
  - Used inflation-adjusted PCE data and the Index of Consumer Sentiment.
  - Concluded that consumer sentiment affects aggregate expenditures most in periods of elevated economic uncertainty.
From the ICS Questionnaire

“Speaking now of the automobile market – do you think the next 12 months or so will be a good time or a bad time to buy a vehicle, such as a car, pickup, van, or sport utility vehicle?”

Potential Responses:

Good  Pro-Con  Bad  Don’t Know
Buying Conditions for Cars vs. Total Light Vehicle Sales

- Consumer Buying Attitudes
- Actual Sales

Vehicle Sales (in millions)
SENTIMENT AND EXPENDITURES
## Adjustment for Inflation

**Consumer Expenditure Survey**
- Total expenditures
- Apparel and services
- Education
- Entertainment
- Food
- Food at home
- Food away from home
- Healthcare
- Housing
- Mortgage interest and charges
- New cars and trucks
- Public transportation
- Transportation

**Consumer Price Index (Urban)**
- All items
- Apparel
- Education
- Recreation
- Food
- Food at home
- Food away from home
- Medical care
- Housing
- Financial services
- New vehicles
- Public transportation
- Transportation
Food expenditures vs. ICS


Food  Index of Consumer Sentiment
Differences in Predictive Power

**Strong Predictive Power**
- Total expenditures
- New vehicles
- Food away from home
- Apparel
- Education

**Weak Predictive Power**
- Housing
- Food
- Food at home
- Entertainment
Expenditures by Demographics

- The ICS comes from a random survey, but the differences in spending patterns among demographic groups across expenditure categories are neither consistent nor necessarily random.

- These differences distort the correlation between the ICS and consumer expenditures.
Conclusions

- The predictive power of consumer sentiment is different across expenditure categories.
- Demographic factors may distort the relationship between consumer sentiment and consumer spending.
- For the categories that consumer sentiment does predict expenditures well there do seem to be variable lags across categories.