



Surveys of Consumers

The Surveys of Consumers are conducted by the Survey Research Center at the University of Michigan. Founded in 1946 by George Katona, the surveys have long stressed the important influence of consumer spending and saving decisions in determining the course of the national economy.

The Surveys of Consumers have proven to be an accurate indicator of the future course of the national economy. The Index of Consumer Expectations, produced by the Surveys of Consumers, is included in the Leading Indicator Composite Index published by the U.S. Department of Commerce, Bureau of Economic Analysis. The inclusion of data from the Surveys of Consumers by the Commerce Department is a significant confirmation of its capabilities for understanding and forecasting changes in the national economy. Each series included in the composite Index of Leading Indicators is selected because of its performance on six important characteristics: economic significance, statistical adequacy, consistency of timing at business cycle peaks and troughs, conformity to business expansions and contractions, smoothness, and prompt availability. No other consumer survey meets these rigorous criteria.

The Index of Consumer Expectations focuses on three areas: how consumers view prospects for their own financial situation, how they view prospects for the general economy over the near term, and their view of prospects for the economy over the long term. The Expectations Index represents only a small part of the entire survey data that is collected on a regular basis.

Each monthly survey contains approximately 50 core questions, each of which tracks a different aspect of consumer attitudes and expectations. The samples for the Surveys of Consumers are statistically designed to be representative of all American households, excluding those in Alaska and Hawaii. Each month, a minimum of 600 interviews are conducted by telephone from the Ann Arbor facility.

The core questions cover three broad areas of consumer sentiment: personal finances, business conditions, and buying conditions. Overall assessments of past and expected changes in personal finances are supplemented by measures of the expected change in nominal family income, as well as expected real income changes. Attitudes towards business conditions in the economy as a whole over the near and the long-term horizon are measured in detail. Specific questionnaire items concerning expected changes in inflation, unemployment, and interest rates, as well as confidence in government economic policies, supplement the more general assessments. Finally, several questions probe for the respondent's appraisal of present market conditions for large household durables, vehicles, and houses.

In each area, consumers are not only asked to give their overall opinions, but are also asked to describe in their own words their reasons for holding these views. These follow-up questions reflect a growing interest in not only projecting what consumers will do, but also understanding why consumers make certain spending and saving decisions. Understanding the rationale that consumers give for their actions enables us to understand why consumers react differently to the same economic phenomena at different times.

The response of consumers to the sudden news of the plunge in stock prices in October 1987 both highlighted the importance of consumer expectations and suggested that consumer reactions would be different than many analysts expected. Following the crash, the most common assessment was that consumer confidence would play a pivotal role in determining whether a recession would develop. The surprise was that the fear and panic on Wall Street did not spread to Main Street. Consumers displayed a more measured response, assessing the direct damage to their own financial situation as limited, and the overall influence of the crash as unlikely to spread and engulf the entire economy.

Purchases of homes, vehicles, and household durables, as well as the incurrence of debt and acquisition of financial assets, are important economic decisions for individual families, but in the aggregate, the timing of these decisions influences the course of the entire economy. These large and infrequent spending and saving decisions are often associated with planning and deliberation on the part of consumers, rather than with impulse or habit. Moreover, these decisions are not based solely on consumers' current economic situation, but also depend on their expectations about household income, employment, prices, and interest rates.

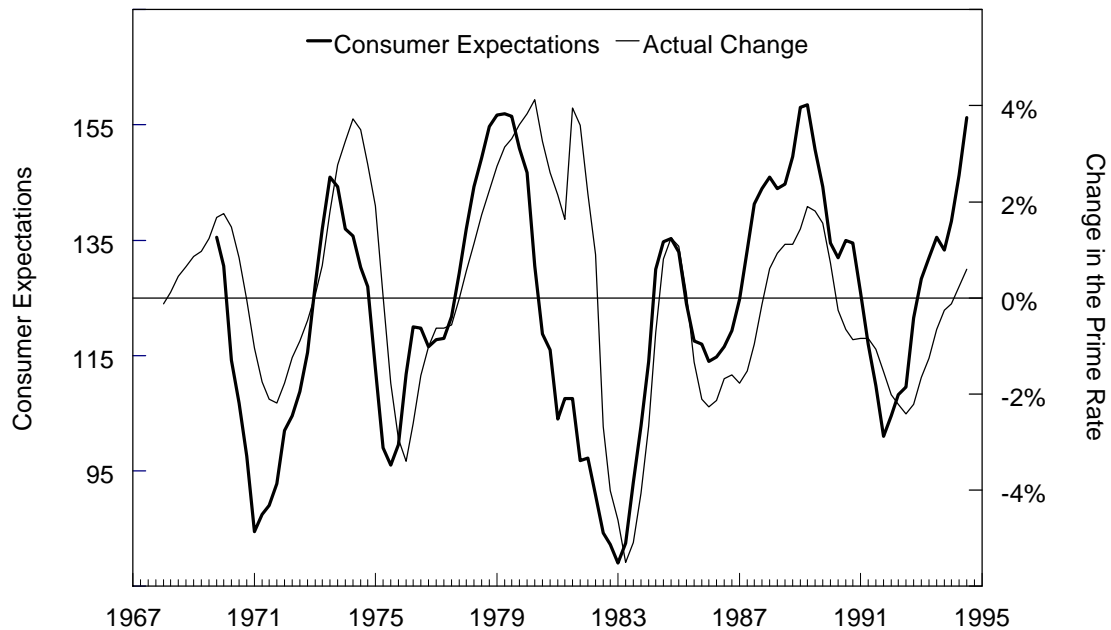
Economic optimism promotes consumer confidence and a willingness to make large expenditures and debt commitments, while economic uncertainty breeds pessimism and a desire to curtail expenditures and rebuild financial reserves. When many people change from an optimistic to a pessimistic view of economic prospects at the same time, it has been repeatedly found that a widespread shift toward postponement of expenditures follows. It is in this manner that the economic optimism and confidence of individual families exert their influence on the course of the aggregate economy.

The importance of consumer optimism and confidence in shaping the course of the economy has been recognized in many countries. Other countries that now regularly monitor consumer sentiment through studies that are patterned after the Surveys of Consumers include: Austria, Australia, Belgium, Canada, Denmark, Finland, France, West Germany, Great Britain, Greece, Ireland, Italy, Japan, Luxembourg, Norway, Spain, Sweden, Switzerland, and Taiwan.

How accurately do consumers anticipate interest rate changes?

Consumers are asked: "No one can say for sure, but what do you think will happen to interest rates for borrowing money during the next 12 months — will they go up, stay the same, or go down?"

Interest Rate Expectations vs. Changes in the Prime Interest Rate (4-Quarter moving averages)



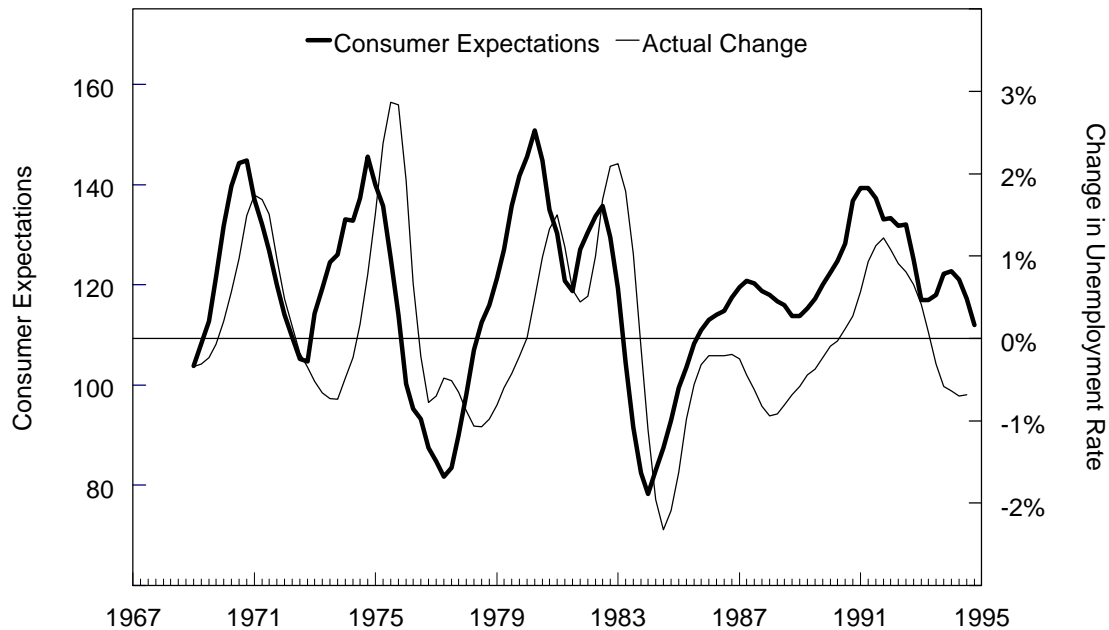
The survey measure is shown as a balance score equal to the percentage of consumers who expected interest rates to decrease minus the percentage that expected interest rates to increase, plus 100. For the objective measure, the annual percentage point change in the prime rate is used to be consistent with the wording of the survey question, which asks consumers about the expected direction of change.

When these expectations are compared with actual changes in the prime rate, a remarkably accurate forecast emerges. Consumer expectations changed, on average, two quarters in advance of the change in the prime rate, achieving a time series correlation of 0.74 with that two quarter lead. Consumers generally anticipated interest rate changes 6 months in advance of the actual change.

How well do consumers anticipate unemployment rate changes?

Consumers are asked: "How about people out of work during the coming 12 months — do you think that there will be more unemployment than now, about the same, or less?"

Unemployment Expectations vs. Changes in the Unemployment Rate (4-Quarter moving averages)



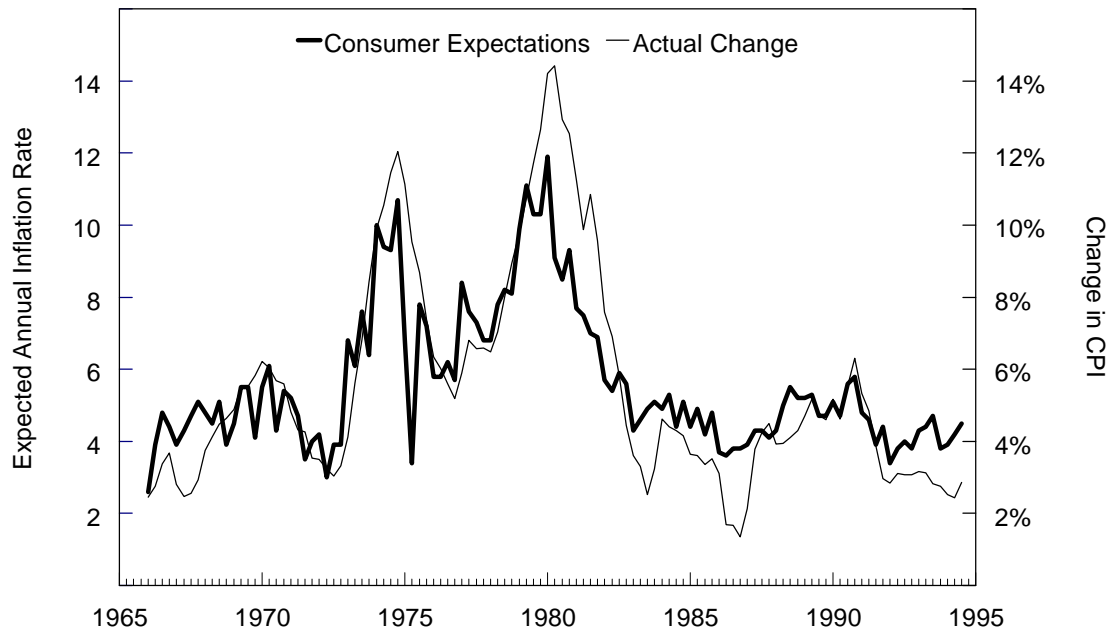
The survey measure is shown as a balance score equal to the percentage of consumers who thought the unemployment rate would increase minus the percentage who thought it would decline, plus 100. Since consumers are asked about the direction of expected change in the unemployment rate, not its level, the annual percentage point change in the unemployment rate is used as the objective measure.

These unemployment expectations have proven to be accurate forecasts of actual changes in the unemployment rate. As can be seen from the chart, the unemployment expectations series foreshadows actual changes in the unemployment rate to a high degree. Consumer expectations changed three quarters in advance of the actual change in the unemployment rate, producing a time series correlation of 0.80 with this lead. Consumers generally anticipated changes in the unemployment rate 9 months in advance of the actual change.

How accurately do consumers gauge future inflation?

Consumers are asked: "During the next 12 months, do you think that prices in general will go up, or go down, or stay where they are now?" and "By about what percent do you expect prices to go (up/down), on the average, during the next 12 months?"

Expected Annual Inflation Rate vs. Changes in the Consumer Price Index (4-Quarter moving averages)



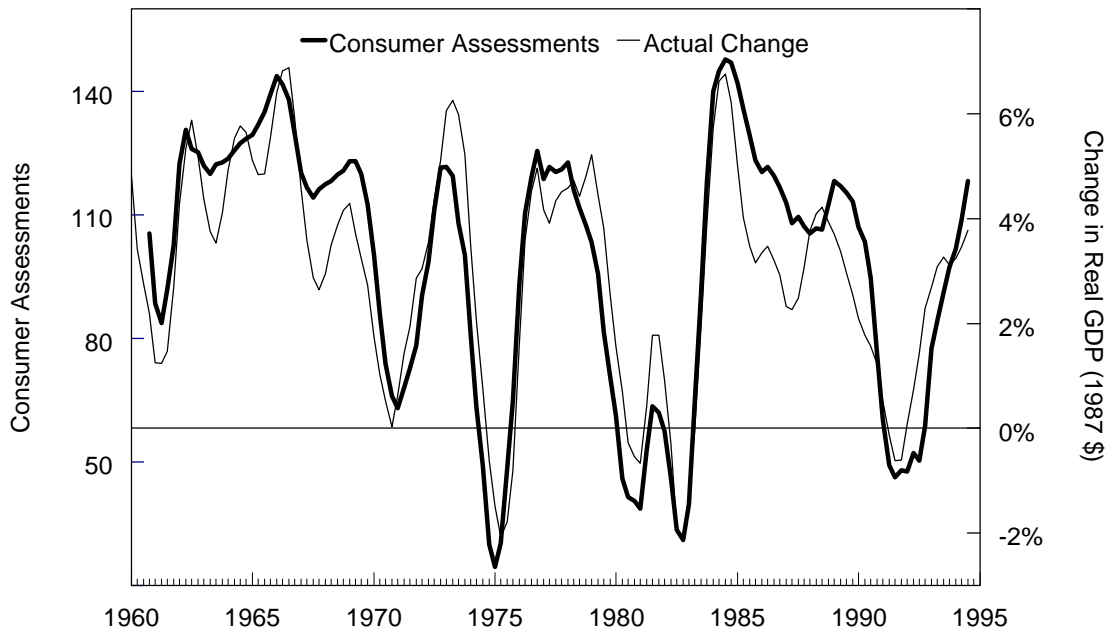
The change consumers expect in the annual inflation rate and the actual annual rate of change are shown in the chart. For the expectations series, the mean expected annual inflation rate is used. For the objective measure, the annual percentage change in the CPI is used.

Changes in price expectations, on average, preceded changes in the CPI by one quarter. From 1966 to present, a time series correlation of 0.90 was achieved when the expectations series was led one quarter.

How well do consumers assess trends in the national economy?

Consumers are asked: "Would you say that at the present time business conditions are better or worse than they were a year ago?"

Consumers Assessments of Economic Conditions vs. Changes in Real GDP (4-Quarter moving averages)



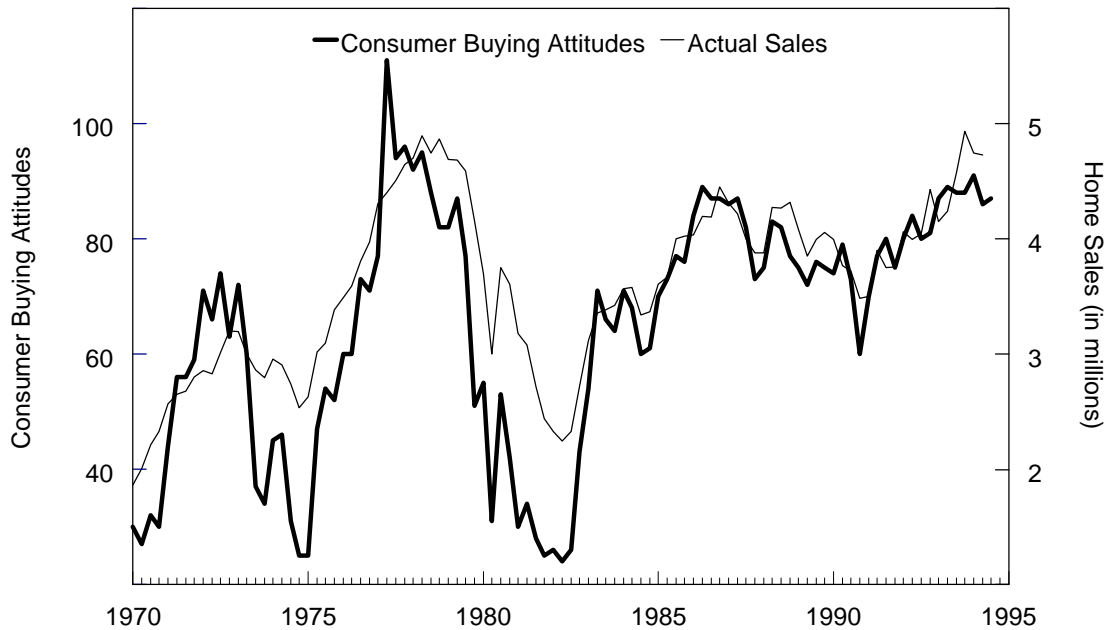
The survey measure is shown as a balance score equal to the percentage of consumers that thought the economy had improved minus the percentage that thought it had worsened, plus 100. The annual percentage change in real GDP is used as the objective measure.

Not surprisingly, a close correspondence emerges when these subjective assessments of the national economy are compared with actual changes in real GDP. The time series correlation of the two series from 1960 to present was 0.90. The survey results indicate that consumers' subjective assessments show a close correspondence with actual developments in the national economy.

How well do consumers assess home buying conditions?

Consumers are asked: "Generally speaking, do you think now is a good time or a bad time to buy a home?"

Home Buying Attitudes vs. Sales of Single Family Homes



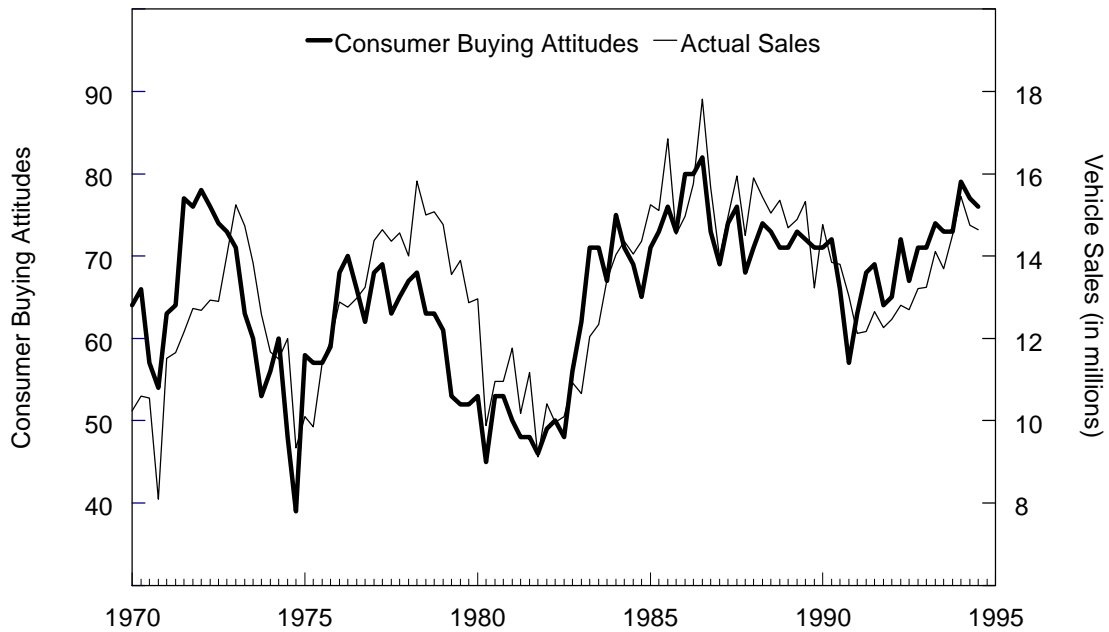
The survey measure is shown as a score equal to the percentage of consumers who thought it was a good time to buy a home plus the percentage who reported buy-in-advance price rationale. For the objective measure, unit sales of new and existing single family homes at seasonally adjusted annual rates is used.

The chart shows the correspondence in home buying attitudes and sales of new and existing single family homes in millions of units at annual rates. Changes in home buying attitudes preceded changes in sales on average by two quarters. A time series correlation of 0.77 was found when the attitude series was led by two quarters. Consumers generally anticipated changes in home sales 6 months in advance of the actual change.

How well do consumers anticipate vehicle sales?

Consumers are asked: "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 car?"

Buying Conditions for Cars vs. Total Light Vehicle Sales



The survey measure is shown as a score equal to 100 minus the percentage of consumers who thought it was a bad time to buy a car. For the objective measure, sales of new cars and light trucks in millions of units at seasonally adjusted annual rates is used.

As shown in the chart, the correspondence between car buying attitudes and subsequent vehicle sales is quite high. On average, changes in buying attitudes preceded changes in sales by two quarters. A time series correlation of 0.73 was achieved when the attitude series was led two quarters. Consumers generally anticipated changes in vehicle sales 6 months in advance of the actual change.