

# Measuring Consumer Uncertainty

by Michael P. Niemira

Frank Newport and Lydia Saad, writing in the April/May issue of *The Public Perspective*, examined the question of economic uncertainty after several years of press reports about growing economic anxiety in America. Newport and Saad, relying on Gallup surveys, concluded that despite the media's focus on economic angst the Gallup data do not support the premise that there is deeply felt and widespread economic anxiety.<sup>1</sup> The issue of uncertainty, of course, is not new and its exaggeration in the media is not an unusual occurrence either.

## The Background

In 1979, George Katona of the Survey Research Center at the University of Michigan questioned what was meant by the "journalistic notion" that uncertainty was pervasive in the nation. Katona asked, rhetorically, if survey data could assess whether the consumer really was uncertain and to what degree. Consumer confidence surveys have been assumed to measure not only the optimism-pessimism dimension but also uncertainty. So why not use the aggregate measures of consumer confidence directly? The problem of relying directly on a measure of the net degree of optimism held by the consumer is, as Katona and others have recognized over the years, that an overall optimism measure (as measured by some mathematical form of net differ-

“*At a time when almost everybody in a representative sample expresses optimistic expectations, or almost everybody expresses pessimistic expectations, we may say that the people are optimistic or pessimistic. On the other hand, when a substantial proportion is optimistic and a similar proportion is pessimistic, the people as a whole may be viewed as uncertain in their expectations about future developments. Thus the smaller the difference between expecting good or better times and expecting bad or worse times, the greater the uncertainty on the aggregate or macro level.—George Katona*”

ences of the positive and negative responses) is not a true gauge of uncertainty.

An early attempt to define a survey-based measure of uncertainty was suggested by Lazarsfeld, Berelson, and Gaudet. They wrote that “if the [period-to-period survey response] turnover is large, it indicates that the opinion or behavior is unstable. We know that people feel uncertain.”<sup>2</sup> This perspective defined uncertainty as the variability of opinion, which of course is distinct from the overall survey measures of confidence. But how should the variability concept be proxied?

Two common survey-based measures of consumer uncertainty, both variability-based, have been defined in the research literature. The first method might be dubbed the “Curtin measure” which is defined as a simple moving standard deviation of the overall confidence index and assesses volatility of opinion. The second method is the “Katona measure,” which is based on the range of response within the same period.

George Katona noted that the observed volatility [as suggested by Richard Curtin] may be interpreted in different ways; it may or may not reflect uncertainty.<sup>3</sup>

The problem is that statistical variance as a proxy for consumer uncertainty does not distinguish between predictable and unpredictable changes in consumer confidence.

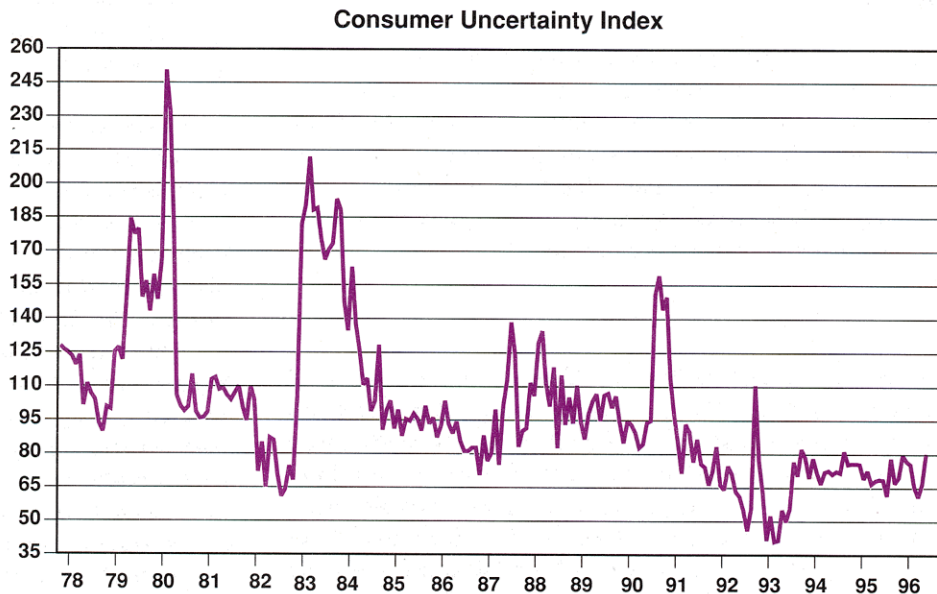
Hence, Katona posited a definition of uncertainty which was measured as aggregate dispersion of the expectations components based on the University of Michigan consumer sentiment survey. His logic for this measure was given as follows: “At a time when almost everybody in a representative sample expresses optimistic expectations, or almost everybody expresses pessimistic expectations, we may say that the people are optimistic or pessimistic. On the other hand, when a substantial proportion is optimistic and a similar proportion is pessimistic, the people as a whole may be viewed as uncertain in their expectations about future developments.”

“Thus the smaller the difference between expecting good or better times and expecting bad or worse times, the greater the uncertainty on the aggregate or macro level. This measure [is] constructed irrespective of whether optimists or pessimists are more frequent...It indicates not only...that growing optimism dispels uncertainty but also that growing pessimism dispels uncertainty.”<sup>4</sup>

## Measures of Uncertainty and Their Record

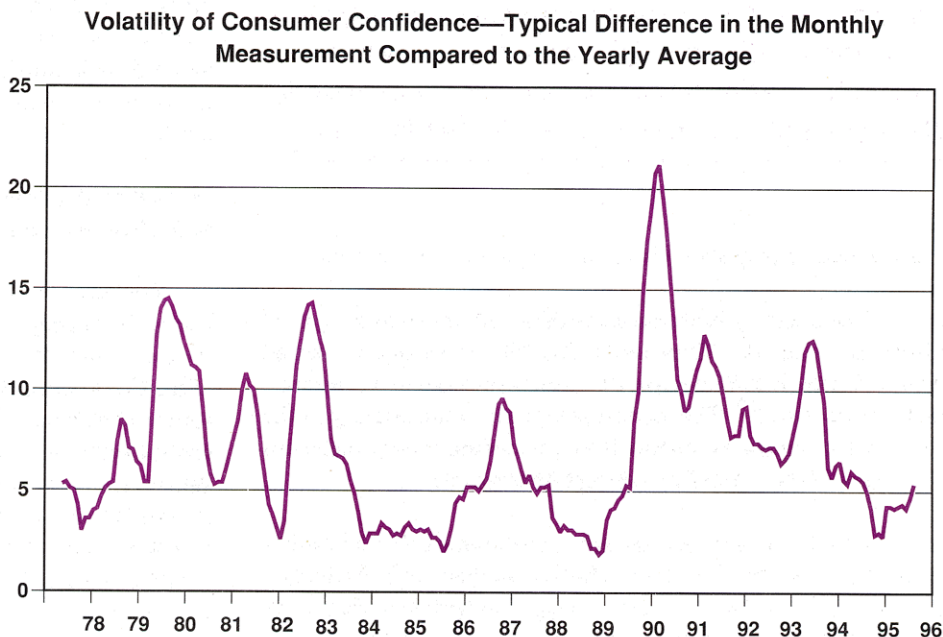
We have updated and extended Katona's concept of uncertainty and compiled, with the help of Lynn Franco of the Conference Board, our own Consumer Uncertainty Index (CUI) based on the Conference Board's monthly consumer confidence survey. Our CUI is an equally-weighted average of dispersion in the expectations about business conditions, employment, and income. For comparison, we also have looked at the Curtin concept of uncertainty as applied to the Conference Board's composite Consumer Confidence Index, using a twelve-month moving standard deviation. These data are shown in the

## Consumers' Present-Day Views of the Economy Reflect Low Levels of Uncertainty



The Consumer Uncertainty Index is defined as the sum of the absolute value of the net positive (higher minus lower) gap for three expectations components of the Conference Board's survey. It is based on the **six-month ahead expectations reported for (1) business conditions, (2) employment and (3) income**. The CUI is then indexed to a base year (1985 equals 100), the same base year as the Conference Board's summary survey measures.

## And This Stability is of Views That Are Relatively Confident



Volatility is defined as a 12-month moving standard deviation of the Conference Board's Consumer Confidence Index. That moving standard deviation **measures the rolling average in the gap between the current observation of the index and its 12-month average**. It is based on the total index—which includes both an evaluation of the present situation and expectations over the next six months.



accompanying charts. Two points are clear: (1) the standard-deviation measure is smoother than the CUI; and (2) the two measures often don't tell the same story, but over the last two years they have been in synch. Still, because of its greater rigor, more detailed measurement, and clearer interpretation, the Katona concept of consumer uncertainty is preferable. This is captured in our Consumer Uncertainty Index.

A look at the historical record of the CUI suggests its usefulness. In 1979, the Consumer Uncertainty Index was escalating rapidly and soared in the early 1980s when President Carter's consumer credit control proposal was announced. But as the CUI was rising in 1979, the Consumer Confidence Index (CCI) remained relatively high, which of course shows the importance of looking at the CUI as well as the CCI. Uncertainty was also quite high in 1983 following the recession, even though consumer confidence was improving. The 1983-85 period appears to be a textbook example of the Juster and Wachtel view that growing optimism, as measured by the Consumer Confidence Index, dispels uncertainty.<sup>5</sup>

### What the Public is Saying

Our Consumer Uncertainty Index supports the conclusion from the Newport and Saad review that consumer uncertainty is neither growing nor high. Indeed, based on the CUI, consumer uncertainty is historically low. Moreover, our analysis suggests that economic discomfort (as measured by inflation and unemployment) and uncertainty go hand-in-hand. This suggests to us that until there is a rise in unemployment or inflation, we would not expect consumer uncertainty to climb much from its low readings of recent years.

“*Our analysis suggests that high economic discomfort (as measured by high inflation and a high unemployment rate) and high uncertainty go hand-in-hand and vice-versa, which suggests to us that until there is a backup in the unemployment rate or the inflation rate, we would not expect consumer uncertainty to climb much from its low readings of recent years.*”

So despite the journalistic notion of pervasive uncertainty, the reality appears that the consumer is confident and relatively comfortable about the future. And now there is a monthly survey-based measure to empirically demonstrate that reality.

**Note:** Special thanks to Robert McGuckin, director of research, the Conference Board, for his helpful suggestions and insights.

### Endnotes:

<sup>1</sup> Frank Newport and Lydia Saad, "The Economy and the Election," *The Public Perspective* (April/May 1996), p. 4.

<sup>2</sup> Paul Lazarsfeld, et al, *The People's Choice* (New York: Columbia University Press, 1948).

<sup>3</sup> George Katona, "Toward a Macropsychology," *American Psychologist* (February 1979), p. 122.

<sup>4</sup> Ibid.

<sup>5</sup> T.F. Juster and P. Wachtel, "Uncertainty, Expectations, and Durable Goods Demand Models," in B. Stumpel, J.N. Morgan, and E. Zahn, (eds.), *Human Behavior in Economic Affairs* (Elsevier, New York, 1972).



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