When the economy hits a turnaround, conspiracy theories abound.

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"PREDICTION is very difficult," Niels Bohr once remarked, "especially about the future." Lately, predicting the economy's recent past has proved to be difficult, too. Actually, determining last quarter's or last year's growth in gross domestic product has always been difficult and subject to error and revisions.

The daunting task of computing G.D.P -- the total value of economic output -- for an ever-evolving $10 trillion economy falls on the Bureau of Economic Analysis, a nonpartisan agency in the Commerce Department. The bureau bases its estimates on information from a diverse set of sources, not all of which are instantly available. Final tallies of corporate profits, for example, are not available for three years.

To produce timely information, the bureau announces an "advance" G.D.P. estimate within a month of the end of each quarter. Missing components are extrapolated from recent trends. As more complete information becomes available, the estimate is revised. Every year, usually in July, the bureau updates the data for the preceding three years.

Last month, as part of its regular cycle, the bureau announced eye-catching revisions. Most strikingly, the economy began to slow more than previously realized in 2000, and was shrinking in the first half of 2001.

Had this been known sooner, policy could well have been different. For example, the back end of the $1.4 trillion tax cut would have been much harder to justify if it was apparent that a contraction was cutting into the budget surplus.

Why does the bureau periodically rewrite history? Why not wait until the final estimates are available? This is like asking why people look at a weather forecast: why not just wait to see if it rains before planning a picnic?

The preliminary estimates are imprecise, but they give an indication of where the economy stands. No one would want to wait three years to find out if growth was slowing.

Besides, the bureau has a reasonably good track record, especially compared with its counterparts in other countries.

Economists judge the accuracy of initial estimates by whether future revisions can be predicted from currently available information and whether the revisions tend to be positive or negative. On this score, revisions are "efficient," meaning they are hard to predict and not too far from zero on average -- even though the average quarterly revision is plus or minus 1.4 percentage points on an annual basis. By comparison, real growth rates have ranged from -3 percent to +10 percent the last two decades.

A careful study by Jon Faust, John Rogers and Jonathan Wright, three economists at the Federal Reserve Board, found that revisions to G.D.P. growth in the United States were the smallest in the Group of Seven (Britain, Canada, France, Germany, Italy, Japan and the United States). In addition, the direction and magnitude of revisions are harder to predict from available information like stock returns and interest rates in the United States than elsewhere. They also
find that in the United States revisions tend to be no different in an election year.

This record is even more impressive in view of the fact that, on average, the delay from the end of a quarter to when G.D.P. is announced is twice as long in the rest of the G-7 as in the United States.

Still, early estimates are generally noisier around turning points -- times when a recession ends or begins -- because the extrapolations no longer provide good approximations.

Consequently, revisions that encompass turning points regularly expose the bureau to sniping and unfounded accusations of partisanship. The columnist Robert Novak, for example, accused the bureau's career professionals of "incompetence" and suggested they cooked the books under pressure from the Clinton administration to make 2000 look better than it was. Rush Limbaugh accused the bureau of lying. And Martin Hutchinson of U.P.I. questioned whether the bureau and Alan Greenspan, "heavily influenced by his liberal Democrat wife,"the NBC News correspondent Andrea Mitchell, engineered the statistics to give the illusion of a productivity miracle.

If they were not taken seriously by some people and amplified in the news media, these attacks would be amusing. Instead, they damage the credibility of statistical agencies and erode morale among their employees.

Had the bureau really cooked the books, why would it bother to correct them? And why would it deliberately understate the contraction early in 2001 if it was part of a left-wing Mitchell-Greenspan conspiracy?

Most telling, recent revisions are not out of line with history, especially around turning points. From 1978 to 2000, two-thirds of eventual revisions were from -1.1 to +2 percentage points. Revisions to growth the last three years are statistically consistent with this range, though some components are somewhat more variable than usual. The average absolute revision in this period to date is 1.4 points, right on the long-term average.

In the early 1990's the errors were running in the opposite direction as the economy was recovering from recession. The agency was accused of overstating growth to make the first Bush administration look good.

Rather than respond to politically motivated critiques, the bureau has worked on a plan to reduce the size of revisions by improving measurement of services and software, which account for more than half of recent revisions. But it is disappointing that the White House has not jumped to the agency's defense. A statement of support by someone on the administration's economic team would help shore up morale and maintain confidence in economic data.

While Monday-morning quarterbacking is popular sport, it is always difficult to predict revisions to G.D.P. Clearly the Bush administration misjudged how the economy performed in 2001. In March, Treasury Secretary Paul H. O'Neill said, "It seems quite clear now that our economy never suffered a recession."

Prediction is indeed difficult, but it is predictable that anyone who makes too much of noisy preliminary data or alleges a conspiracy without any basis is apt to look silly when the final results are tallied.