If the press reported daily on changes in the emperor's wardrobe, the people would believe he was wearing clothes.

That's about what the press does with the predictions of economists. It reports them daily as news. It reports them along with such certifiable facts as the passage of a bill in Congress and the president's travel plans. It presents them as though they mean something, as though the odds are in their favor, instead of as possessing all the dependability of omens in the astrology column. Not surprisingly, newspapers and magazines have got some readers believing what economists are forecasting about next month and next year.

The following kinds of predictions are so common that the press has largely ceased to examine their quality:

• "David M. Jones, chief economist for Aubrey G. Langton & Company, said interest rates would probably fall, but not for another year." (The New York Times, April 8, 1987)

• "The economy is still growing, but at a slower pace. I expect we'll see that continue into the [fourth] quarter." (Evelina Tainer, an economist at First National Bank of Chicago, in the Wall Street Journal, October 28, 1988)

• "Growth is too rapid for stable inflation. Measures of inflation should rise more rapidly during the remainder of the year." (Robert Schwartz, an economist at Merrill Lynch Economics, in Industry Week, June 20, 1988)

Editors say readers "must know" that economic predictions are like weather forecasts and should be taken with a grain of salt. But even though the record shows that the press can hardly assume economic predictions are as reliable as weather forecasts, it continually serves such prophecies straight up as news. What's more, much of the press--especially the electronic press--ignores the practices of several newspapers and news publications that seek to clarify the prediction mirage, helping readers separate forecasts that are complete garbage from those supported by marginal evidence.

It is no secret that economic forecasts often miss the target. London's Euromoney reports that from 1978 to 1984 the predictions of a dozen leading currency services on the value of the dollar and
other currency were "well below what one would expect to see by chance guessing only". Challenge observed not long ago: "Time and again in recent years, projections of economic growth and inflation for the next three months have been off—in terms of both direction and magnitude of change—and so substantially as to be worse than useless." And Arizona Business noted that a consensus of the best professional forecasters incorrectly predicted whether there would be an expansion or a contraction in the GNP for more than one-third of all quarters from 1978 to mid-1985.

Economists themselves caution against trusting forecasts. Lawrence Chimerine of WEFA Group has warned: "People have assumed the forecasts are accurate, but they should understand what the risks are, the potential errors". And Harvard economist Dale Jorgenson says those errors are significant: "Economists have made disastrous calls. It’s not just modelers who’ve missed but economists at large. They just miss the turning points and always have". Alice Rivlin, former president of the American Economics Association, sums up the practice of forecasting in the March 1987 American Economic Review: "Forecasting even for short periods remains an uncertain art in which neither economists nor politicians can have confidence". Gary S. Becker, a distinguished and often cited University of Chicago economist, writes: "They talk a good game, but economists hardly know enough about business cycles to figure out where they come from, let alone where they’re going". Among the list of false predictions in his Business Week article, Becker cites as noteworthy economists’ expectation that the 1987 stock market crash would lead to a recession, which it did not.

The general public should be wary, but Irwin Kellner, chief economist at Manufacturer’s Hanover Trust Company, wonders whether "people realize that there are no infallible crystal balls". Economists should place "less emphasis" on forecasting and more on explaining, he says. "Many economists have lost sight of what economics is all about...The determinants of the ways in which goods and services are produced and exchanged" and the allocation of income.

Economists’ own studies reveal the gross inaccuracy of economists’ forecasts. Stephen McNees of the Federal Reserve Bank of Boston has made something of a living evaluating his colleagues’ predictions. In the July/August 1988 New England Economic Review, he examines the precision of both annual and quarterly predictions for the US economy and concludes: "Forecasting errors exhibit great variability over time." The greatest errors have occurred at key turning points in the economy. For example, the 1973-1975 recession was entirely unexpected and the 1981-1982 recession was severely underestimated. McNees writes that significantly improving accuracy would probably require reducing the "egregious errors" that come from missing major economic shifts. William Cline of the Institute for International Economics, who has examined internation-
al economic forecasts over the last several decades, concludes as a "broad implication" of his work that "longer forecasts are rarely right".

McNees further finds that no individual's forecasts are consistently reliable. Some forecasters have marginally better records for predicting some variables or over certain time horizons, but no heads stay above the crowd. An earlier study by Victor Zarnowitz, now an economist at the University of Chicago, supports McNees' findings: "For most people most of the time, the predictive record is spotty, with but transitory spells of relatively high accuracy".

However, relatively more reliable forecasts can be obtained by averaging the predictions of many economists. Robert J. Eggert Sr., a retired business economist and editor of the monthly newsletter, Blue Chip Economic Indicators, surveys 75 forecasters on 15 statistics each month. He says that in a large sample of predictions the overly optimistic and overly pessimistic forecasts offset each other, which enhances the Blue Chip Consensus's predictive power. Fortune reports that the Blue Chip Consensus's annual estimate of real GNP has averaged within 0.6 percentage points of the actual figure over the last five years.

A study of more than 70 forecasting services in the Harvard Business Review suggests that, on average, a consensus will be more accurate than most of the forecasts that compose the consensus. McNees, in another study, draws a similar conclusion, pointing out that a consensus hits closer to the mark because it includes forecasts based "on different sets of information". The consensus cannot do magic, however. In 1982 the Blue Chip Consensus missed the real GNP figure by 4.3 percentage points.

Economists' forecasts fail for numerous reasons. Their models are based on the economy's past behavior and thus do not account for structural changes in the system. Further, the economy functions within interlocking social, political and cultural forces whose effects are not easy to reckon. Kellner points out that "the relationship among economic variables and people's reactions to economic, political and social developments tends to change over time"—something economists' models simply "cannot pick up". For example, economists did not anticipate the OPEC oil shock, the resignation of President Richard Nixon or the Soviet invasion of Afghanistan. A host of other variables afflict forecasting: the continual revision of government data fed into economic models, unexpected shifts in government policy, technological change and the complex structure and regulation of financial institutions.

Jib Fowles, a future-studies expert at the University of Houston, explains: "Whatever domain one wants to forecast for, it is certain to be embedded in a larger system whose dynamics are scarcely recognized, much less understood and measured".

A major reason forecasts often miscarry is the extent to which they rely on judgment. Even with more sophisticated models,
judgment plays a major role in the divining process. Zarnowitz of the University of Chicago has pointed out: "Forecasts vary greatly with respect to the relative roles of model and judgment...but there is no way to avoid judgment".

"Experts have a tendency to exaggerate the value of their personal insights relative to systematic, reasoned statements of what has happened in the past", says McNees.

Given economic forecasting's basic unreliability, one might think the media would report forecasts as merely informed guesses or, at best, ballpark estimates. However, only a few publications—and those somewhat haphazardly—separate forecasts from solid news, reminding readers in various ways that the predictions are not straightforward items of information. Here is a brief inventory of methods—some currently in use, some not—for putting economists' forecasts in perspective.

- **The personal profile.** Since a forecast contains a good dose of judgment, the press should alert readers when the economist cited is known to be particularly optimistic, pessimistic or otherwise biased. *Business Week*, for instance, prefaced a forecast by David A. Levine with this description: "An unregenerate bull, he has tended to project booms where other experts and government reports often saw slowdowns or mild growth accelerations". Such characterizations remind readers that some economists routinely use rose-colored crystal balls, while others persistently call for doom.

Some forecasters do not require personal profiles because there is no reason to quote them in the first place. For instance, why cite the words of Joseph Granville, who predicts everything from earthquakes to Nobel Prize winners with considerable inaccuracy? (In 1981 he assured us he would win the Nobel no later than 1982. He didn't.)

- **The batting average.** Reporters can supply the forecaster's track record with his or her prediction. While no newspaper surveyed regularly reports a cited economist's actual "percentages", some provide the predictor's previous calls. The *Wall Street Journal*'s survey of economists last July, for instance, shows Kathleen Cooper of Security Pacific calling for a 2.3 percent rise in real GNP for the first half of 1989. The story includes her prediction of a 2.4 percent real GNP increase for the first half of 1988, along with the actual figure of 3.3 percent. The difference is an error of 38 percent.

A batting average reminds readers of the guesswork involved and offers a slight indication of the forecast's credibility. The track record has shortcomings, however: it may convince readers to take a certain economist or forecasting service too seriously. "Prescience today isn't a guarantee of accuracy tomorrow", notes Kellner. Studies show that the best forecaster one year is not at all assured of success the next.

- **The forecast range.** Charles Wolf Jr., dean of the Rand graduate school, has advocated using forecast ranges, presented in a manner
similar to the packaging of weather reports. The economic analogue to "There will be a 30 percent chance of snow tomorrow" is "Inflation will grow 3.5 percent next year, with a 60 percent chance that the rate will be 1 percent higher".

Economists generally do not offer ranges because, as Stanford economist John Taylor has said, "Government and business leaders aren't interested in range. They want a point estimate. Ranges mean you're wishy-washy". But whatever the fancies of business and government, the public need not be fed misleading pinpoint predictions. Arizona Business equated making quarterly forecasts a year ahead of time with "predicting that the high temperature two weeks from today would be exactly 97 degrees". Reporters should ask specifically for ranges when citing economists.

They can also phrase the forecasts in conditional language. Fortune magazine's "Fortune Forecast" presents an "Overview" which, in a recent edition, read like this: "Slower economic growth will keep the expansion rolling to new records. Inflation will quicken a bit as labor costs swell. Profits will increase again, but not much faster than sales. Interest rates will show only a small rise". None of these events is bound to happen. Writing that they "could" or "may" occur would have been less misleading.

- The forecast table. From time to time both the Wall Street Journal and the New York Times print tables that show up to 40 economists' forecasts for GNP, unemployment and so on. A large roster of predictions demonstrates the diversity of opinion that's out there. A December 1987 Times table shows economists at Prudential Insurance predicting a 3.3 percent increase in 1988's real GNP while the UCLA business forecast envisions a 0.8 percent drop. Such tables are also useful because they average all of the forecasts presented: the average is the best--and least used--forecast corrective.

Many in the press do not report a consensus prediction because it apparently is less their own news than is the prediction made by a personal source. Fortune's lengthy "Fortune Forecast" is prepared by an in-house staff of three economists using a home-brewed model. Unfortunately, in the process of trying to differentiate their economic reports, the media as a rule only add misinformation. At the very least, a consensus forecast should accompany individual predictions.

Newspapers and magazines may want to design their own methods of warning readers about the hazards of relying on economists' forecasts. One of the options might be to remove economists' predictions from the news and business sections and print them on the opinion and editorial pages. Or editors could add daily disclaimers along the lines of the eminent physicist Niels Bohr's observation: "It is possible to forecast anything except the future".