

Previous Consensus Forecasts

Consensus Forecasts For 2007

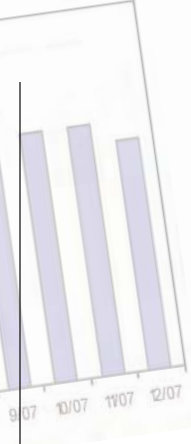
	Real GDP Chained ('2000\$)	GDP Price Index	Nominal GDP (Cur. \$)	Consumer Price Index	Indust. Prod. (Total)	Dis. Pers. Income ('2000\$)	Personal Cons. Exp. ('2000\$)	Non-Res. Fix. Inv. ('2000\$)	Corp. Profits (Cur. \$)	Treas. Bills 3-mo.	Treas. Notes 10-Year	Unempl. Rate (Civ.)	Housing Starts (Mil.)	Auto/Truck Sales (Mil.)	Net Exports ('2000\$)
January 2006 Consensus	3.1	2.1	5.3	2.4	3.3	3.3	3.0	6.2	5.2	4.5	5.0	4.9	1.82	16.9	-636.2
February 2006 Consensus	3.1	2.2	5.3	2.4	3.4	3.2	2.9	6.2	5.0	4.6	5.0	4.9	1.83	16.9	-637.0
March 2006 Consensus	3.0	2.2	5.3	2.4	3.4	3.2	2.9	6.3	4.6	4.7	5.0	4.9	1.82	16.9	-647.0
April 2006 Consensus	3.0	2.2	5.2	2.5	3.4	3.3	2.8	6.4	4.8	4.8	5.1	4.8	1.81	16.9	-652.7
May 2006 Consensus	2.9	2.3	5.2	2.6	3.4	3.3	2.8	6.6	4.5	4.8	5.2	4.8	1.80	16.8	-667.3
June 2006 Consensus	2.8	2.3	5.2	2.7	3.4	3.2	2.7	6.5	4.2	4.9	5.2	4.9	1.77	16.7	-655.0
July 2006 Consensus	2.7	2.4	5.1	2.7	3.3	3.2	2.7	6.4	4.3	5.0	5.2	4.9	1.76	16.7	-646.6
August 2006 Consensus	2.6	2.4	5.1	2.7	3.3	3.2	2.7	6.5	4.3	5.0	5.1	4.9	1.74	16.4	-622.8
September 2006 Consensus	2.6	2.4	5.1	2.7	3.3	3.2	2.7	6.5	4.3	5.0	5.1	4.9	1.70	16.4	-613.2
October 2006 Consensus	2.6	2.4	5.1	2.7	3.3	3.2	2.7	6.5	4.3	5.0	5.1	4.9	1.74	16.4	-613.1
November 2006 Consensus	2.4	2.2	4.6	2.0	2.0	2.0	3.4	3.1	4.3	4.2	5.0	4.7	1.64	16.4	-622.3
December 2006 Consensus	2.4	2.1	4.6	1.9	2.4	2.4	3.3	3.1	4.3	4.2	5.0	4.7	1.62	16.4	-615.4
January 2007 Consensus	2.7	2.1	4.8	2.0	2.0	2.0	3.3	3.1	3.2	4.8	5.0	4.8	1.55	16.3	-606.2
February 2007 Consensus	2.7	2.2	4.7	2.1	2.1	2.1	3.2	3.1	3.1	4.8	5.0	4.8	1.53	16.3	-585.4
March 2007 Consensus	2.7	2.2	4.7	2.1	2.1	2.1	3.2	3.1	3.1	4.8	5.0	4.8	1.53	16.3	-588.2
April 2007 Consensus	2.7	2.2	4.7	2.1	2.1	2.1	3.2	3.1	3.1	4.8	5.0	4.8	1.50	16.4	-582.5
May 2007 Consensus	2.7	2.2	4.7	2.1	2.1	2.1	3.2	3.1	3.1	4.8	5.0	4.8	1.48	16.4	-590.3
June 2007 Consensus	2.7	2.2	4.7	2.1	2.1	2.1	3.2	3.1	3.1	4.8	5.0	4.8	1.46	16.4	-602.8
July 2007 Consensus	2.0	2.7	4.7	2.7	2.7	2.2	3.4	2.9	4.2	3.8	4.4	4.6	1.45	16.3	-600.0
August 2007 Consensus	2.0	2.7	4.7	2.7	2.8	2.2	3.2	2.8	4.5	3.8	4.4	4.6	1.44	16.4	-587.2
September 2007 Consensus	2.0	2.7	4.7	2.7	2.8	2.2	3.2	2.8	4.5	3.8	4.4	4.6	1.44	16.4	-587.2
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December 2007 Consensus	2.0	2.7	4.7	2.7	2.8	2.2	3.2	2.8	4.5	3.8	4.4	4.6	1.44	16.4	-587.2
Forecast High	3.1	2.7	5.3	2.4	3.4	3.3	3.0	6.2	5.2	4.5	5.0	4.9	1.82	16.9	-636.2
Forecast Low	2.0	2.1	4.6	1.9	2.0	2.0	3.3	3.1	3.2	4.8	5.0	4.7	1.46	16.4	-602.8

Professional Prognosticators

Is Forecasting a Science or an Art?

BY DOUG CAMPBELL

Consensus Forecasts Of Y/Y % Change In Real GDP In 2008



Jim Smith tells the story this way: It was the summer of 1971. Smith was the director of credit market research at Sears, Roebuck and Co. One day the chief executive, a man named Gordon Metcalf, strolled into Smith's office and talked about his recent visits with international suppliers. Overseas, Metcalf said, there was growing sentiment that the dollar was overvalued. Metcalf realized that if the dollar decreased in value, it could hurt Sears' business. Sears needed a clearer picture of the future impact of such a change.

"Get together with your friends and see what you can do," Metcalf ordered. So Smith dialed up his friends at the University of Pennsylvania, where the famed Wharton Econometric Forecasting Associates (WEFA) was housed. At the time, the notion that the gold-backed dollar might ever float in value was still considered far-fetched by some. But WEFA spent a few weeks tweaking a short-term model and ran some simulations for Smith, who duly reported the results to the executive suite.

It turned out to be highly valuable information, especially after Aug. 15, 1971, when the Nixon administration brought an end to the Bretton Woods Agreement of 1944 that fixed exchange rates worldwide. From then on, the dollar would float, its value determined by the constantly changing balance of supply and demand. While most other firms were caught off guard, Sears was ready.

"We saved and made a ton of money as a result of forecasting," Smith says today from his office in North Carolina, where he is chief economist with Parsec Financial in

Asheville. "That model pretty well played out with all that happened over the next two to three years."

This tale underlines the worth of a good forecast. In his time, Smith has made a few. In fact, after Sears he went on to become one of the nation's most celebrated economic forecasters. Since the late 1990s, the *Wall Street Journal* has three times named him the nation's most accurate forecaster.

But is there such a thing as a "star" forecaster? Are there a handful of prognosticators whose abilities consistently surpass the crowd? If so, then you would think they are either in possession of superior instincts or superior mathematical models. Perhaps it's a little of both.

Models of all stripes can never perfectly predict the future because they are not exact replicas of the actual economy. To get an accurate forecast, you need information that gets closer to the current state of affairs. Maybe a certain forecaster is friends with a banker who provides the tip that more loans are going past due. That's information the forecaster would want to incorporate. Of course, information can be wrong. The loan problems might have been limited to that single bank.

"It takes a great deal of tender, loving care to get the forecasts to run properly," Smith says. "Nobody is perfect every time."

Stars

Forecasters are constantly being ranked. Besides the *Wall Street Journal*, there are rankings and surveys in *USA Today* and *BusinessWeek*, as well as in the monthly *Blue Chip*

Economic Indicators, a must-read for chief economists at Fortune 500 firms. The surveyed forecasts encompass firms ranging from Morgan Stanley to FedEx on measures ranging from GDP to housing starts, usually predicting changes to a tenth of a percent. Over time, a handful of forecasters stand out. These are the star forecasters, and it's fair to say that Stuart Hoffman is among them.

Hoffman is chief economist at Pittsburgh-based PNC Financial Services Group. *The Wall Street Journal* named him one of the nation's top forecasters from 1988 through 2006, a remarkable run. And *Business Week* named him the most accurate forecaster for 2004.

Hoffman develops his forecasts the way many others do. He uses a basic model and monitors data ranging from consumer spending to productivity. He lets the model run for four to six quarters out to "see what the key economic trend looks like." Then he makes adjustments "based partly on intuition and conversations with other economists, particularly people in the business who are contacts I have." This talking-and-listening approach is most useful for short-term estimates. It is this network of contacts to which Hoffman attributes his success. That and his distance from Wall Street, where there is a tendency, Hoffman believes, for economists to get too caught up in the state of financial services and ignore other sectors of the economy.

Though there are more data available today, which are quicker both to obtain and to process, and models are more intricate, Hoffman isn't so sure his forecasts are much superior to what they were 20 years ago. "Forecasting is still as much of an art as it ever was," he says.

Smith agrees with that assessment. Though he is skilled in econometrics — a leading tool of forecasters, which uses both theory and statistical techniques to evaluate data — Smith believes that good forecasts are the result of good information. He attributes his predictive success to his

ability to listen. "I have never found a substitute in my 35 years of doing this for asking people what they think is going on," Smith says. "There's always somebody who knows more than you do, and you're well-advised to listen."

Building Crystal Balls

Modern-day forecasting history begins with Jan Tinbergen and Lawrence Klein, who both received Nobel Prizes primarily for their work in building multi-equation econometric models. In the 1950s Klein's models of the U.S. economy became the most widely used. In 1963, he established WEFA, which used a model bearing the association's name. Smith was tapping into a more evolved version of this model helping Sears anticipate the impact of a floating dollar. As the cost of computer power declined, forecasting models grew richer and more complex.

For a time, there were three major economic forecasting models — one used by WEFA, another by Chase Econometrics, and a third by Data Resources Inc., developed by its founder Otto Eckstein. All three of these entities later merged to become Global Insight, today the largest economic forecasting firm in the world, with 600 employees and about \$100 million in annual revenue. Leading rivals to Global Insight include Macroeconomic Advisers, founded by former Federal Reserve Governor Laurence Meyer, and Moody's Economy.com.

If you had models that could perfectly predict the future, then that would be one thing. But as Robert Lucas acknowledged with rational expectations theory, the world is an uncertain place. Changes in economic conditions can be no more easy to predict than the next roll of the dice. People are forward-looking. As government policies and economic conditions change, so do people's expectations about the future and hence their actions; moreover, people's actions respond both directly to present conditions — today's prices,

holding future expectations constant — and to expectations of the future. It is difficult to build a model capable of incorporating all these factors. Certainly, it is impossible to make predictions on measures like GDP with precision to even the tenth decimal place.

"As long as you take the model forecast for what it is, models are very useful tools," says Roy Webb, a senior economist with the Richmond Fed who has studied forecasting accuracy. "The danger is you assign these numbers more significance than you should."

There is considerable academic debate about which sort of models are the best — for various purposes one might choose among econometric models, or simpler vector autoregressive (VAR) models. Among the key differences is that structural models use economic theory to constrain the possible relationships among variables, while VARs are often considered "atheoretical" because they tend to let the data speak for themselves.

Some observers argue that all the subjective fiddling that goes onto modeling strips them of any scientific legitimacy. "Add factors" introduce an extra degree of human error into the process, inevitably fouling it up.

Despite such concerns, that's how most forecasters operate. They use a model to get a sort of baseline, and then add in factors that may not yet be either showing up in the data or for which the model may ignore. Take the U.S. macroeconomic model used at Global Insight. It has about 1,900 variables, with data points coming from national income and product accounts, price indexes, and 25 different interest rates. Then economists take over.

"Forecasts are a combination of econometrics and judgment," says Sara Johnson, a managing director and economist at Global Insight. "The econometrics help us to draw statistical relationships based on the historical record. Economists can then insert their judgment based on how current conditions might differ from the past, based on factors

that the models cannot, or do not, fully incorporate.”

Which Way?

The apparent slow of economic activity from the third to the fourth quarter led some to wonder whether the economy was approaching a turning point. This is when forecasters really earn their keep. “Whenever there’s volatility, demand for our services increases,” Johnson says. “Our clients are watching our forecasts and analyses even more closely and having more frequent contact with us.”

For an industry strategist trying to figure out what to do next, this might seem a tempting time to rely on an aggregate of multiple forecasts of the aggregate economy. That is because the average consistently beats individual forecasters. An Atlanta Fed study examined forecaster rankings in the *Blue Chip Economic Indicators Survey*. It found that the consensus forecast performed better over time than any individual forecaster — although several forecasters did quite well. “This result is a ‘reverse Lake Wobegon’ effect: none of the forecasters are better than the average forecaster,” the authors wrote. “There are superior forecasters, but no individual has access to all of the independent information from all of the forecasts that is incorporated into the consensus forecast.”

This underlines a truth that will come as no surprise to fans of *The Wisdom of Crowds* by James Surowiecki — who argues that collective information tends to be more reliable than individual assessments. And yet, some individual firms and forecasters do consistently outshine others. For example: *Blue Chip*

Economic Indicators hands out an annual award to the best forecasting record over the past four years based on projections of real GDP, the consumer price index, three-month Treasury bills, and the unemployment rate. A few firms, including Global Insight and Macroeconomic Advisers, are dependably in the upper echelons of the rankings. (Notably, the rankings don’t point out forecasters who consistently miss; there is no “Most Inaccurate Forecaster” award.)

Randell Moore, editor of the Blue Chip survey, notes that DuPont has won the annual honor three times in the past three decades — but each time with a different chief economist. “I don’t detect that any individual is particularly good over long periods of time at forecasting,” Moore says. “That’s why using the consensus appears to make the most sense.”

An interesting exception may be the Federal Reserve’s “Greenbook.” Certain economic projections from the Greenbook are released to the public after a five-year lag, and studies have shown that those projections are quite reliable compared with private forecasts. The Greenbook process is a back-and-forth between the large Federal Reserve Board model and subjective add-ons by staff experts.

In the most cited study, economists Christina Romer and David Romer with the University of California at Berkeley attributed the Greenbook’s accuracy to the finding that the Fed “appears to possess information about the future state of the economy that is not known to market participants.” Princeton University economist Christopher Sims found that the Greenbook even beats most of the Fed’s own model-based forecasts. Sims

agrees that there is some evidence, though not complete, that “the superiority of the Fed forecasts arises from the Fed having an advantage in the timing of information — even with the view that this might arise entirely from the Fed having advance knowledge of its own policy intentions.”

Shrinking Industry

For all the potential payoff that a good forecast can deliver, the business of economic forecasting has been contracting. In the heyday of the 1960s and 1970s, it was customary for big companies to keep economics departments, with several analysts reporting to a chief economist. But cost-cutting began in the 1980s, as many firms saw they could simply contract for forecasting services, or rely on published consensus forecasts. Bank mergers also led to consolidation of economic research departments.

Smith believes that businesses which give up in-house forecasters will see it reflected in their bottom line. “There’s no way to cope with all the changes that come up and have a feel for whether something is a major shift, or a tempest in a teapot that will pass, unless you have your own internal group,” Smith says. “You won’t find a consensus for steel demand, or for vehicle output, and that’s of huge importance to many industries. It’s a small investment and you only have to get a few things right to pay for themselves.”

Of course, even in-house forecasters get things wrong, as Smith readily admits about his own career. This is why Smith likes to quote perhaps his field’s oldest of axioms: “He who lives by the crystal ball must learn to love the taste of broken glass.” **RF**

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