Economist's Model Forecasted Current Economic Slowdown One Year In Advance

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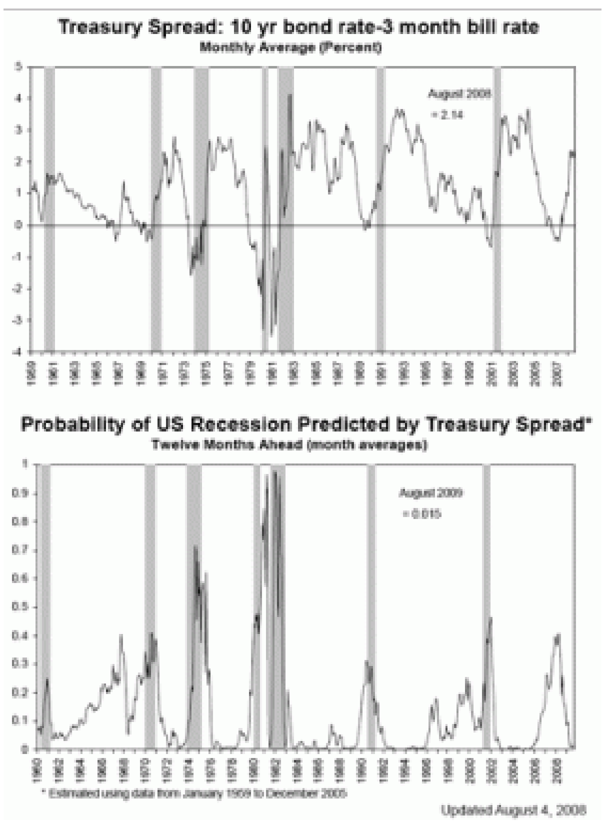

The above graphs were provided by Arturo Estrella, professor of economics and head of the economics department at Rensselaer. The graph above depicts the monthly average difference between 10-year and 3-month Treasury rates, which has turned negative (the yield curve has inverted) before every recession since the 1960s. The graph below indicates the probability of a recession, based on the yield curve twelve months earlier. When the yield curve is steep and the spread is high, the probability of a recession is close to zero. As the spread approaches zero, the probability rises more rapidly, increasing the likelihood of a recession.

(PhysOrg.com) -- An economist at Rensselaer Polytechnic Institute says that a model he developed forecasted the current economic slowdown at least one year before it became apparent to most observers. The model, which was first published in the *Journal of Finance* in June 1991, has successfully predicted every recession since 1955.

Arturo Estrella, professor of economics and new head of the economics department at Rensselaer Polytechnic Institute, and former senior vice president at the Federal Reserve Bank of New York, developed the model in 1988-89 in collaboration with Gikas Hardouvelis, professor in the department banking and financial management at the University of Piraeus in Athens, Greece.

“The surprisingly strong predictive power of the model stems from the term spread or yield curve slope, the difference between 10-year and 3-month Treasury interest rates,” Estrella said.

Estrella noted that he used the model to predict the 1990-91 and 2001 recessions in real time, and observed a strong signal regarding the present economic slowdown as early as October 2006.

“Historically, the model has predicted every major economic slowdown since 1955, including every recession and the ‘credit crunch’ of 1966-67, which Nobel Prize winning economist Milton Friedman regarded as an unclassified recession,” Estrella said.

The standard dating of recessions in the United States is determined by the National Bureau of Economic Research based on factors such as negative growth in real gross domestic product (GDP) and declines in real income, employment, industrial production, and wholesale-retail sales. Since several of those factors are currently observed, many economic experts say that the United States is actually in a recession now.

“Employment is one of the principal indicators of economic health. Increasing employment is a signal of growth in production, business activity, and personal income,” Estrella said. “Conversely, declining employment is associated with businesses holding off on investment and on the hiring of new employees, waiting for signs that the economy will improve. These factors can in turn further depress GDP growth and the income consumers need for new purchases.”

According to the U.S. Bureau of Statistics, the U.S. economy lost more than 80,000 jobs in August, and the national unemployment rate went from 5.7 percent to 6.1 percent, making for the most severe four-month rise in joblessness since 1981. So far in 2008, more than 600,000 jobs have been lost.

The problems go beyond the job market, according to the Mortgage Bankers Association. Mortgage foreclosures rose 1.2 percent in the second quarter, the sharpest rate of increase in the 29-year history of the group’s survey.

On another note, consumer spending, adjusted for inflation, declined in June and fell somewhat further in July. Chain store sales in August were also disappointing. The weakness in consumer spending—despite the receipt of tax rebate checks—is not surprising, noted the association. Consumer confidence is at levels not seen since the recession of 1990-91, according to the group’s economic commentary.

Are there brighter days ahead for the United States economy? “The Federal Reserve has a very difficult task still ahead as it juggles concerns about inflation, the health of the economy, and the stability of the financial system.” Estrella said. “Economic slowdowns and recessions generally help keep inflation under control, but it is a tough balancing act to slow economic growth just enough so as to prevent inflation without exacerbating economic and financial market problems.”

According to Estrella, the New York Federal Reserve continues to update the model he developed to forecast the probability of future recessions. To view a current graph in use, go to www.newyorkfed.org/research/ca … markets/Prob_Rec.pdf .

Estrella's research interests include empirical macroeconomic modeling, particularly forecasting associated with recessions and other trends. His research also encompasses finance, monetary policy, and bank regulation. He has published 19 papers in some of the most respected journals in his field since 2000.

Estrella has a long record of administrative leadership at the Federal Reserve Bank of New York, where he headed departments in research and bank supervision. He first joined the bank as an economist in 1983. Estrella also has experience in the academic setting, having taught previously at Columbia University, Fordham University, and the University of Puerto Rico.

He holds doctoral and master's degrees in economics from Harvard University. He also holds master's degrees in mathematics from the University of Michigan as well as the University of Puerto Rico. He received his bachelor's in philosophy from Columbia University.

Provided by Rensselaer Polytechnic Institute

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