

# U.S. professor uses bond yields in 'simple' economic forecast model

By Roger Fillion

Reuters

NEW YORK — Finding an accurate method to forecast the cyclical swings of the U.S. economy is somewhat like searching for the elusive Holy Grail, but a Duke University professor claims to have found an unusually simple one that any investor can use.

Finance professor Campbell Harvey says only a pocket calculator, a newspaper and some easily available government data are necessary to use the model, which is based on the spread between interest yields on short-term and long-term U.S. Treasury bonds.

## Just one variable

"This is a model that anybody could use," Harvey said.

Harvey favors bonds over stocks to gauge future economic activity because the bond market is less volatile.

Prices of U.S. Treasury securities usually are not prone to the wide swings that stocks are, nor to events such as the 1987 stock market crash.

"They're safe," said Harvey. "It's virtually impossible for the U.S. government to default on bonds."

His formula, he said, is the first formal model based on the so-called "yield curve" between short- and long-term rates.

Harvey said his model has only one variable, the yield spread, and claims it is just as accurate as complex, private models that carry fees of thousands of dollars, use hundreds of equations and churn

out extensive industry details.

"Good models are simple," he said.

Harvey said the yield curve — a line that shows how returns vary on debt securities of different maturities — reflects individuals' expectations about the business cycle.

Consumers, he noted, account for about two thirds of U.S. gross national product and are "perhaps the most important force in the economy."

If individuals expect a slowdown or a recession, they will shift their money into longer-term investments, like bonds, as a hedge against possible wage or investment losses, driving up their price and lowering their yield.

Short-term interest rates, which usually are below yields on long-term bonds, thus advance as the long-term bond yields decline. The yield curve, as a result, flattens, or even inverts its slope, which is something of the case today.

Conversely, signs of an economic revival spur consumption. To accommodate the higher consumption, investors shift money from bonds into short-term bills. Short-term prices rise and long-term prices fall.

To use his model, Harvey said, one needs a newspaper to get yield spreads, a calculator to make simple computations, and government data on GNP. Put simply, it takes the average difference in yield between the three-month bill and the five-year note, and then multiplies that by a "risk-tolerance" factor, which is derived from analytical studies and measures the economic risk investors are willing to assume.

That sum is added to the average

economic growth rate during periods since 1953, when the yield curve was flat.

The result is a forecast of growth for the next four quarters. Given the recent inversion of the yield curve, Harvey's model is signaling growth of 1.7% from the third quarter of 1989 to the third quarter of next year. The Blue Chip economic consensus, a survey of leading economists, by comparison, projects a 1990 fourth-quarter over fourth-quarter gain of 1.9%.

## Predicted recessions

"The current yield curve suggests we're headed for a slowdown, but not a recession," said Harvey.

Harvey, whose findings will be published in the September Financial Analysts Journal, says his model is just as accurate as seven leading econometric forecasting services, including Data Resources Inc. and Chase Econometric Associates Inc.

"My model has accurately predicted the last four recessions," he said.

One private firm, however, argues that the model's simplicity is a drawback.

"The model is a black box. You put some number in and the equation spits out growth," said Cynthia Latta, senior financial economist at Data Resources.

While the yield curve has inverted before every recession, in 1966 it inverted and a recession did not follow. Harvey said that during the mid-60s, the Federal Reserve Board was keen on changing the curve as part of what was called "Operation Twist," making data from the period questionable.