

Macro Machinations

Private investors will soon be able to hedge their exposures to economic variables such as GDP, inflation and unemployment.

By John Ferry

WHAT BLOCKS AN ENTREPRENEUR from hedging the risk of a business-imperiling economic downturn? An investor from hedging the risk of a return-devouring spike in inflation? The owner of multiple homes from hedging the risk of a plunge in real estate prices? Until recently, the answer would be a lack of adequate tools. The only way to hedge against (or speculate on) movements in macroeconomic variables such as gross domestic product, inflation or housing prices was to use instruments designed to hedge exposures to markets—say, bond, commodity or stock markets—that are buffeted by those larger economic trends. Unfortunately, markets react in unpredictable ways to macroeconomic events, making market-based tools a poor fit for those seeking an effective and reliable hedge for macroeconomic risks.

In the last three years, however, financial engineers have devised technologies that allow institutional investors and some private investors to directly hedge macroeconomic risks such as a dip in GDP or a spike in inflation. Banks are now working to make these tools more widely available to private investors.

The dream of a world in which every risk—housing prices, GDP, inflation, even unemployment—can be hedged dates back to Nobel laureate Kenneth Arrow's groundbreaking work from the 1950s and has been a mainstay of Harvard professor and Nobel laureate Robert Merton. Best-selling author and Yale economist Robert Shiller, of *Irrational Exuberance* fame, championed the idea in his 2003 book, *The New Financial Order*.

The dream was first made real by Goldman Sachs and Deutsche Bank, which jointly rolled out a series of options on macroeconomic statistics, which they call "economic derivatives," in 2002. These are only traded by



institutional investors, but financial engineers are working to design investments based on these and other instruments for individuals. Another company, HedgeStreet in San Mateo, Calif., recently launched a different type of macroeconomic hedging instrument that private investors are able to trade online. (See "Flying Economy," page 94.)

A LESS DISMAL SCIENCE

The precise match between the economic derivatives and the risk to be hedged is a major advantage of these new

instruments, their backers explain. "If you are taking a fixed income position based on where you think the nonfarm payroll [statistic] is going to come out, then we would suggest that is an inefficient way of taking that position, because typically you don't have 100 percent correlation," notes Torquil Wheatley, head of economic derivatives at Deutsche Bank in London. "Why not instead focus on an instrument that gives you direct access to the number?"

Nonfarm payroll figures are a major driver of interest rate behavior, so traders seeking to hedge, or speculate on, the payroll figures would traditionally buy or sell interest rate derivatives in strategies that reflected how they expected the payroll figure to come out and its subsequent effect on interest rates. Now they can buy derivatives based exactly on what they think the figure will be.

Deutsche Bank and Goldman Sachs offer economic derivative options on several macroeconomic figures, including nonfarm payrolls, Institute for Supply Management manufacturing statistics, retail sales, initial jobless claims, GDP and the U.S. international trade balance. These instruments are based on pari-mutuel auction technology, which is similar to the mechanism that sets the betting odds at horse races. The price of the options (akin to the odds) is set by the auction participants' demand, and the "losers" fund the "winners." This pari-mutuel system solved the decades-old problem facing those who wanted to bring Arrow's dreams to fruition: There were not enough buyers and sellers to balance the market. "We have around 100 regular participants in the auctions, ranging from hedge funds, commercial banks, broker-dealers and some real money managers," explains Michael Duvally, a spokesman for Goldman Sachs in New York.

While private investors cannot yet participate in these auctions, they can view the results and see how professional traders expect the economy to grow or shrink, much like looking at the futures market for short-term interest rates gives insight into how professional traders believe rates will move in the future. "This provides up-to-the-minute views

on where the market really believes a number might come out," Wheatley explains.

However, because they only reflect what the market believes at the moment, economic hedging tools remain short term and somewhat speculative. "These are not long-term investment products," says HedgeStreet cofounder Russell Andersson. "Economic derivatives by their nature are short term. They are event based. A number comes out and the market moves."

Yet, Andersson says, the information they provide does have long-term value. "So while it may not be a product that you put a large percentage of into a portfolio, you should be participating in small size because it's a cheap, easy and effective way to bring you close to the markets."

SAFER THAN HOUSES

As these markets mature, private investors will find ways

to hedge or take exposure to economic variables. Wells Fargo, for instance, is looking at how it can sell investors structured notes with a payoff linked to HedgeStreet contracts. Gordy Holterman, San Francisco-based head of derivatives trading at Wells Fargo, says he would like to see a secondary market emerge for structured investments linked to economic indicators. "We're trying to figure out how we can be a market-maker in economic derivatives," Holterman notes. An example would be a contract that pays a positive return if a benchmark interest rate is above, say 5 percent in three years. "If you're a business owner, you care about things like that a lot," he explains.

Yet, before Holterman's vision can become a reality, a liquid primary market must emerge. HedgeStreet, the closest thing to such a market, is just getting started, and so far it has no major competitors. "As somebody in the risk management business, I think there are pretty interesting

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TOP VIEW | Economic derivatives let investors bet on specific economic variables, such as the nonfarm payroll number or GDP. They can be used either to speculate on specific announcements or as a hedging tool for other investments. While the major market for economic derivatives is currently limited to professional traders, there are emerging opportunities for individual investors seeking to gain exposure to these novel, yet promising, products.

hedging opportunities that could result if these markets get liquid, but there's no doubt that the short-term growth will probably come from those who want to speculate on different things," Holterman says.

Yale's Shiller has argued that there are numerous long-term opportunities that may prove just as interesting, and not just to speculators. He believes financial markets should develop to the extent that individuals can decide which risks they wish to take and which ones they do not. In *The New Financial Order*, Shiller says individuals should manage risk by trading in financial instruments, for example, that are based on the value of homes in their area and on economic statistics such as the unemployment rate. Andersson agrees; his company is developing derivatives contracts that let

buyers protect themselves against house-price falls.

Probably one of the largest risks that an affluent individual will face is in real estate, Andersson explains. "They may own properties and are concerned about

the value of their properties falling, or they may be making an evaluation on whether they need to buy more properties. We will very shortly be rolling out real estate products that enable people to hedge or speculate on the direction of key property indexes in major metropolitan areas."

Holterman is keen to see such products develop. Private investors can now use Real Estate Investment Trusts to take exposure to regional real estate markets, but managing those regional exposures is difficult. "I'd love to see the real estate products on HedgeStreet take off so that people could actually hedge their home value," he says.

While Arrow's, Merton's and Shiller's dream of a future in which most of the risks in an individual's life are hedgeable is drawing closer to reality, the adoption and widespread use of economic hedging products is clearly still some way off. The technology is now available, but it is not yet clear whether individuals will embrace the idea of hedging real estate price risk or the risk of a deterioration in the trade balance. Holterman is optimistic. "I think Shiller is basically right," he maintains, "and I think the level of sophistication, especially among the affluent, will continue to increase." ■

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From Your Side of the Table

Five essential questions to ask about macroeconomic hedging tools:

1. Which economic variables (for example GDP or nonfarm payroll) should I bet on?
2. What types of structured investments provide the best exposure to the Goldman Sachs/Deutsche Bank economic derivatives market? To the HedgeStreet market?
3. How can I determine the current market consensus about specific economic variables?
4. Would online trading of macroeconomic hedging tools with HedgeStreet complement my overall portfolio strategy?
5. How can I better understand the long-term potential of economic hedging tools?