

Divining The FOMC's Intentions

Modern economists have it all over the augurers of ancient times. Those priests tried to assess the gods' intentions by examining the entrails of some needlessly slaughtered goat or whatever. Let's not mince words: That had to be a pretty disgusting day at the office.

But if we could transport that clergy forward in time to watch the reaction to an employment situation report such as released last Friday and showed them a quote screen with federal funds futures and options, they would get the hang of it pretty quickly. Their gods lived on Mt. Olympus. Ours live on Constitution Avenue. While it is unlikely any current member of the Federal Reserve Board of Governors matches Zeus & Company in the rollicking good time department, mooning either group has never been advisable.

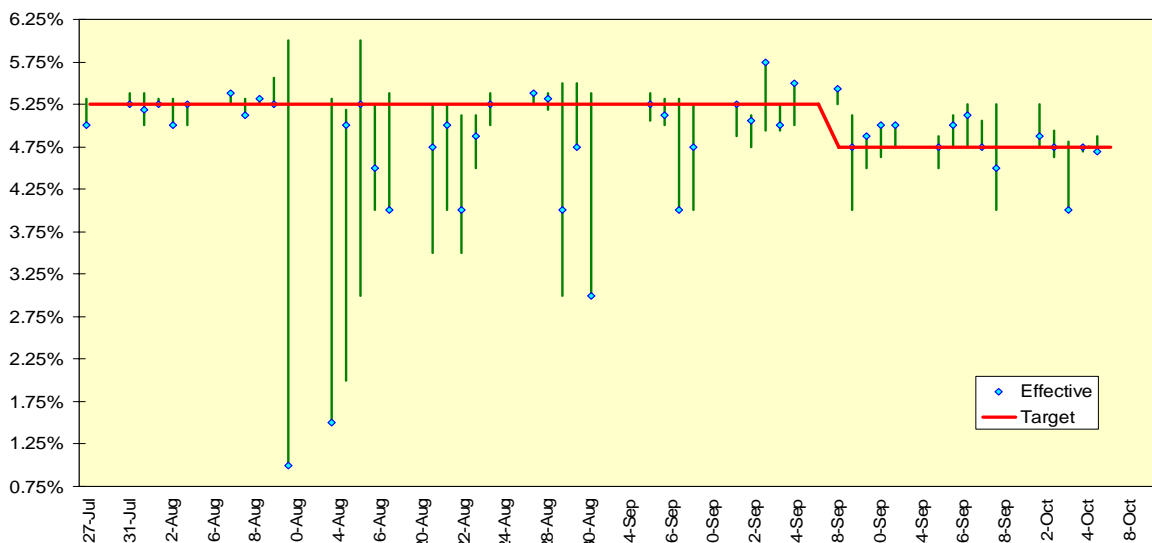
The principal tool used for years to establish the FOMC's rate-setting intentions, federal funds futures, have displayed a flaw over the past two months of which all should be aware. As the famous economist, investor and raconteur John Maynard Keynes, whom we established last [Friday](#) did not go bust in the 1929 stock market crash, said, "When the facts change, I change my mind. What do you do, sir?" The world would be a blessedly quieter place if those who persist in forecasting perdition each time the market hits new highs displayed similar common sense. Or any sense at all.

Effective Federal Funds

The federal funds futures contracts settle to the simple monthly average of the effective federal funds rate as reported daily by the Federal Reserve Bank of New York. As that bank's open market desk does a fairly good job keeping each day's trade close to the FOMC's target rate, the futures contracts have tended to settle very close to the target federal funds rate. For example, the June 2007 contract settled at 94.75, a perfect match to the 5.25% target rate set by the FOMC.

Now let's scroll forward to the period of time beginning on July 27th, when the Dow Industrials fell more than 200 points. The target rate stayed at a rock-steady 5.25% until lowered on September 18th, but take a look at the daily ranges and closes of the effective rate. The August federal funds futures contract settled at 94.98, or 5.02%, even though the target rate never budged from 5.25%.

Target And Effective Federal Funds Rates



The outcome for September deviated from the target as well. The September futures contract settled at 95.025, or 4.975%. The weighted average of the month's target rate was $(17 \text{ days} * 5.25\% + 13 \text{ days} * 4.75\%) \div 30 \text{ days}$, or 5.033%.

The moral of the story here is very simple: If the effective federal funds rate is allowed to deviate from the target federal funds rate, the efficacy of the futures in assessing the probability of FOMC action will deteriorate. This is

incontrovertible; as the futures settle to the effective federal funds rate, not to the target federal funds rate, traders will have to price in how much deviation will be allowed in addition to whatever official actions the FOMC will take.

As an aside, the Federal Reserve's willingness to allow the federal funds rate to trade well under its 5.25% target rate meant a 25 basis point cut on September 18th would have been no cut at all. Only a 50 basis point cut would have constituted an effective lowering of short-term interest rates.

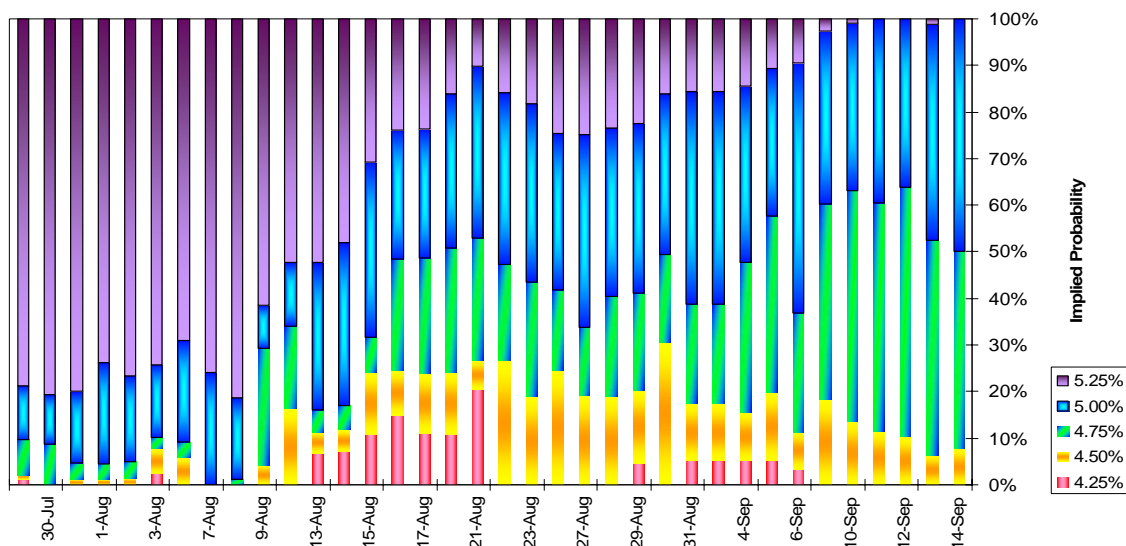
Betting On The Target Rate

There is a second tool available for assessing the probability of FOMC actions, binary options on the target federal funds rate. These options pay a fixed \$1,000 if they settle in-the-money and \$0 if the do not; more information is available at the Chicago Board of Trade [Website](#). Their prices reflect the assessed probability of the target federal funds rate exceeding (for a put option) or falling short of (for a call option) the strike price.

At settlement on September 14th, the September binary options gave a 100% probability of a rate cut, with a 49.8% probability of 25 basis points, a 42.4% probability of 50 basis points and a 7.8% probability of 75 basis points. Restated, they expected a 50.2% probability the FOMC would cut by 50 basis points or more. As late as September 6th, there was a 3.4% probability of a 100 basis point rate cut.

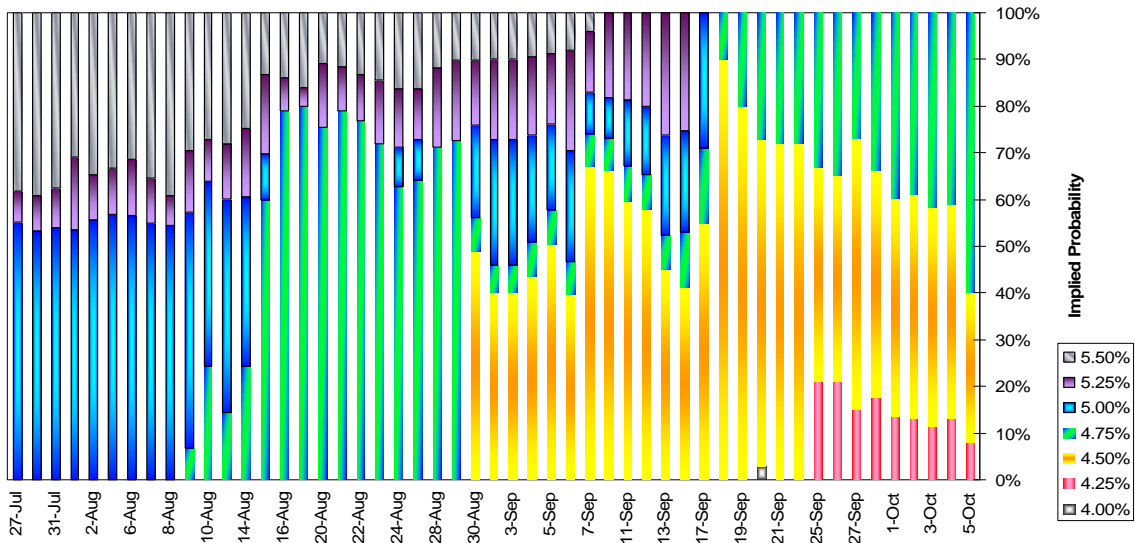
The history of that contract reflects the skittishness of the market over that period.

Binary Option Assessment Of September 18, 2007 FOMC Meeting



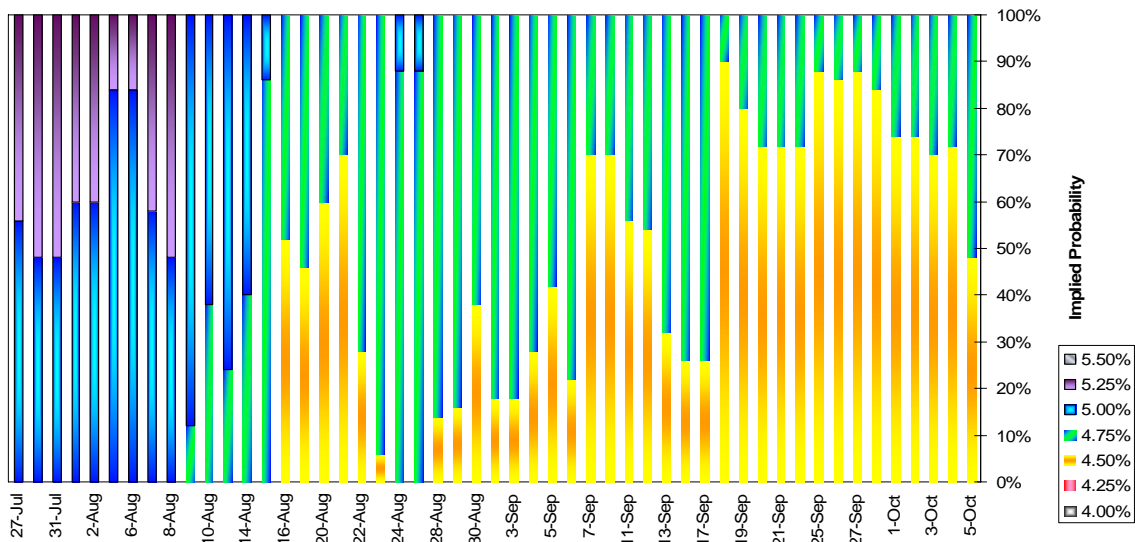
What about the October 31st FOMC meeting? As of October 5th, there is a 60% probability the target rate will remain at 4.75%, a 31.9% probability of a 25 basis point rate cut and an 8.1% probability of a 50 basis point rate cut. As recently as September 27th, the probability of a 25 basis points or higher rate cut was 73.0%. On September 20th, the probability of a further 75 basis points rate cut was a measurable, if unbelievable, 3.0%. No wonder the dollar was getting clogged during this period.

Binary Option Assessment Of October 31, 2007 FOMC Meeting



Let's contrast the binary option market's assessment with that of the federal funds futures market. Here the answer is, um, binary: There is a 52.0% probability of remaining at 4.75% and a 48.0% probability of moving to 4.50%. And in all reality, the difference between the binary options' 40% probability of a rate cut and the futures' 48% probability of a rate cut is insignificant with this many days left to the decision.

Federal Funds Futures Assessment Of October 31, 2007 FOMC Meeting



But, as noted above, the futures measure the average effective federal funds rate, which stands at 4.6875% after five trading days in October. And the binary options can provide us with an important insight into the probability of an extreme event, such as another 50 basis points rate cut. If we have learned anything in modern finance, it is markets are moved by the surprise event, not the expected event.

There is one other important lesson here, and that is the Federal Reserve's inflation-fighting credentials are in a shambles. The markets believe they will err on the side of ease. Anything dependent on easy credit and higher inflation not related to homebuilding and mortgage finance should continue to do well until the next time the Federal Reserve decides to slam the monetary brakes and put us all through the windshield.