Gambling On Economic Data

Much of the history of finance and indeed of all commercial practice involves the distinctions between managing risk and gambling. Indeed, it took an Act of Parliament to enable the growth of the maritime insurance market in England; prior to that, insurance was considered a form of wagering.

Let's define gambling without any value judgments being implied as ***the artificial creation of risk for the mere purpose of assuming it***. Viewed in this light, it should be easy to categorize betting on the spin of the roulette wheel as gambling; until the roulette wheel was itself created and players agreed to participate in the game, no risk existed.

Economic Derivatives

All traders and investors are at risk to the results of economic data whether they want to be or not; the numbers move the markets irrespective whether they should or not. The risk, however, is attached to particular markets and not to the number. The selloff in the Treasury market or the rally in the dollar last Friday with the release of the employment situation report involved tradable and specific instruments with embedded risk. The headline non-farm payroll (NFP) additions, "the number," was the agent of that risk but in the absence of a tradable instrument created for the sole purpose of assuming that risk – our definition of gambling above – carried no actual risk itself.

The Chicago Mercantile Exchange (CME) has created an auction market in partnership with Goldman Sachs for economic data; this represents a formalization of an over-the-counter market in existence for several years. While the CME clears and therefore guarantees the contracts, they are not futures contracts in any sense and certainly are not suitable for most investors. You must have $5 million in liquid assets or $10 million under management to participate in these auctions. But even if you do not trade them, the information they produce can be of value.

Auctions are offered on U.S. retail sales ex-autos, the ISM's manufacturing purchasing manager index, core CPI, the Eurozone's harmonized index of consumer prices ex-tobacco, U.S. initial jobs claims, U.S. GDP, the U.S. international trade balance and the subject of the illustration below, NFP.

NFP Auction

The auctions actually are for digital calls and puts on strikes at strikes spaced 25,000 jobs apart; the most recent auction's strike range extended from a strike of zero to 250,000. Unlike regular or "vanilla" options whose payout is the difference between the asset price and the strike price, digital options have a fixed payout if the asset price – here the economic statistic - exceeds (for a call option) or falls below (for a put option) the strike price at expiration.

The prices of these digital options are used to construct prices for vanilla puts and calls. The payouts for these vanilla options are capped by the high strike for the call and by the low strike for the put.

The CME and for that matter Goldman Sachs treat the auction algorithms as proprietary. The CME literature states:

> *All prices are based on relative demand. As demand increases for a given option and participants bid up the price, other options become relatively less expensive. In this way customers can trade a market-driven price that reflects the consensus view of all participants in the auction. Prices are based on commitment of capital by all participants, and are not set by any individual market-maker. All claims that settle in-the-money are funded by those that settle out-of-the-money.*

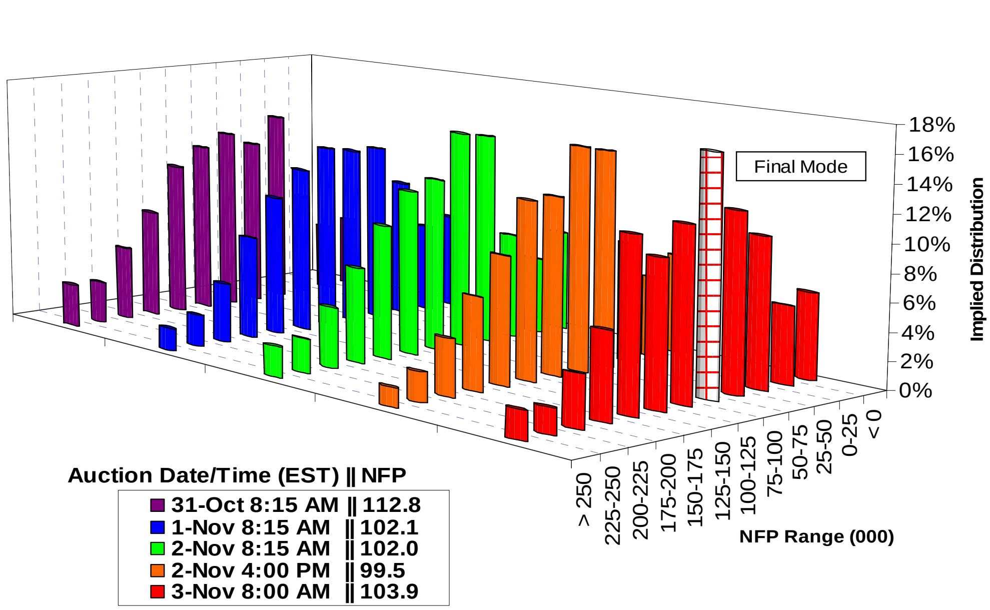
As Ronald Reagan said, "Trust, but verify." I am sure experienced racetrack bettors and those better-versed in pari-mutuel betting than I will be able to look at the real-time auction prices and sense what is going on as participants place their bets on the various digital and digital range options, but why the mystery? The answer, of course, is they do not want someone to duplicate their intellectual property. But if the market really valued the guarantees of the CME Clearing House and the transparency of Web-based price display, no one should fear trading moving off-exchange.

The Experience

There are five NFP auctions in the week of the release; this past week's auctions began on Tuesday and extended through Friday morning. Let's take a look at the results in two different ways. The first is the implied distribution of the bets in each 25,000 job bucket, including the bounding buckets of values less than zero or greater than 250,000. The chart below displays the progression of implied distributions over time; the final mode of the distribution was in the 75-100,000 NFP bucket, which is not bad considering the announced number was 92,000.

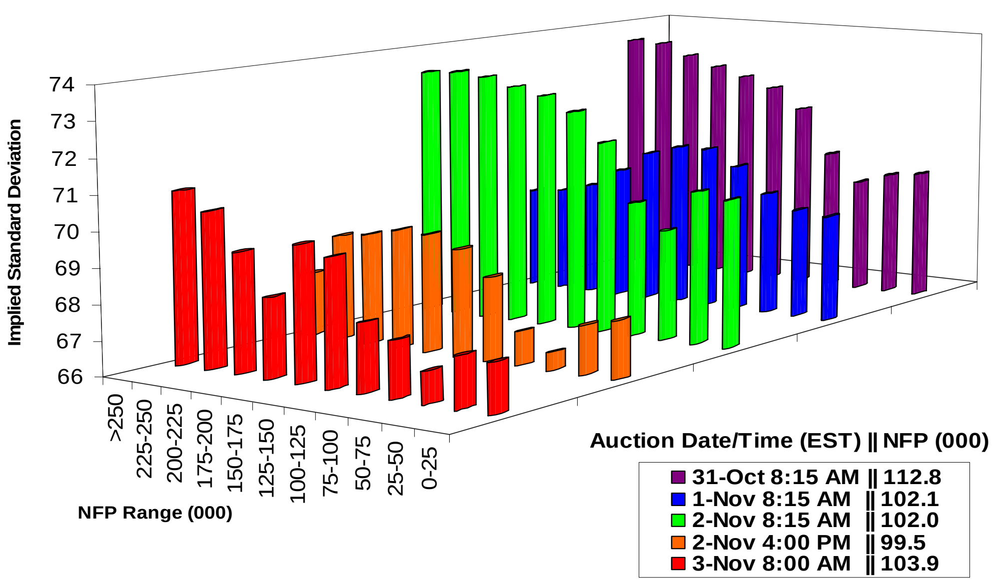
The legend contains the succession of implied forecasts over the five auctions, which began with an estimate of 112,800 and ended with 103,900.

October 2006 NFP Derivatives



The second view is of the implied standard deviations for each bucket. Recall how last week was filled with a large number of bearish economic reports. The initial auction was skewed toward a wider range of estimates at the higher-than-expected range, which is similar to saying the out-of-the-money calls were priced to insure against a surprise to the upside. By the end of the week, a secondary bias was priced into the low strike. This is an interesting insight into bettors' thought processes.

October 2006 NFP Derivatives



Now Where?

While I am on record as saying, "We cannot pool our collective ignorance and distill wisdom therefrom," I do think there is value to be gained by these economic derivatives auctions. First, it will force economists to focus on improving their data-gathering and estimation techniques. Second, the pattern of each auction's changes over time, as illustrated above, will yield insights into the market's thinking. Finally, the libertarian in me believes traders should be able to assume whatever risks they want and with whomever they want. Many of the finer things in life begin with consenting adults.

No forecasting process can ever eliminate the irreducible uncertainties in any survey process. Last Friday's employment data showed how the market could be surprised, not by the headline number but rather by the revisions to previous months' data…for the second month in a row. Maybe next month's NFP report will surprise people with the hourly wages or the unemployment rate or some other non-headline datum.

The point is you can guess the headline number and do nothing for your own risk management. In passing, a similar situation exists with many weather derivatives. In both cases you still need to have the correct position in the interest rate, currency and other markets to do that. The auctions are useful and are harmless to non-combatants, but do not let them distract you from your own task at hand.