

## The People's Stock Index Futures

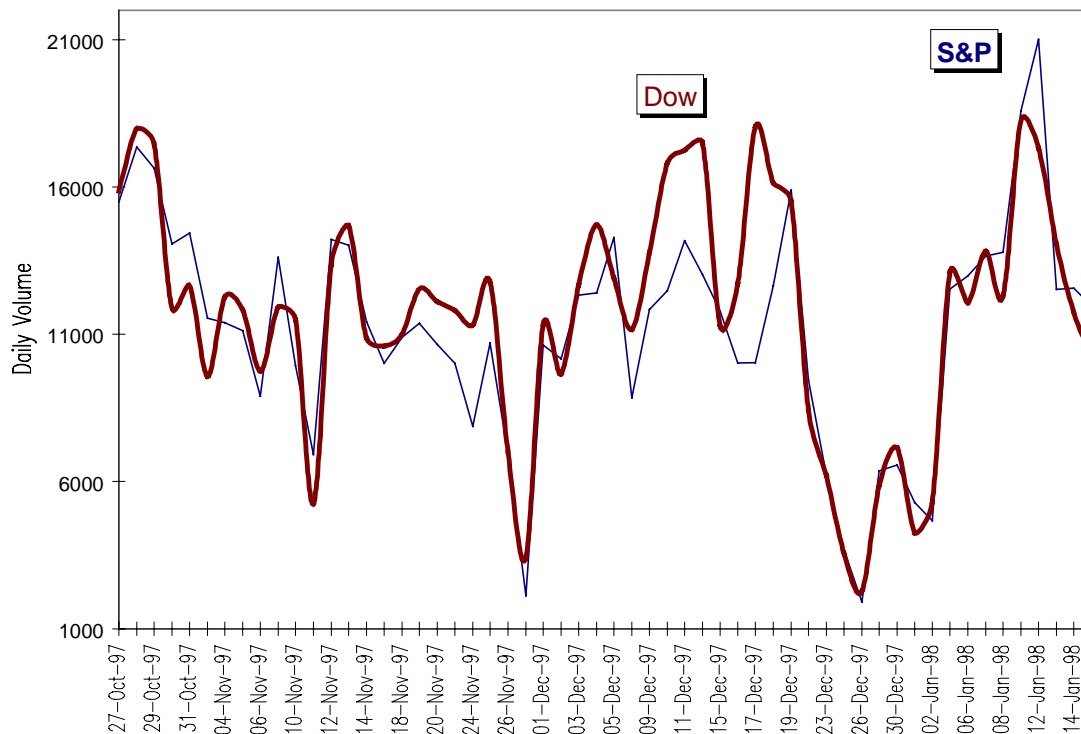
"A long black car with nobody in it drove up, and Clement Attlee got out." Thus did Winston Churchill disparage his long-time political rival. An identical sentiment overcame your loyal correspondent last October 27<sup>th</sup>, when an always too-available stock market pundit explained that day's disorder by noting the availability of the new Dow Jones futures: "For \$4,000, you can control \$80,000 worth of stock!"

Hmm. Since the introduction of the first stock index future, the Value Line in 1982, the U.S. stock market has witnessed a historically unprecedented bull market, and it doubled during the 1995-1997 period alone. Then the Chicago Board of Trade had to go and ruin it for everybody by introducing futures on the Dow Jones Industrial Average. Not that the Chicago Mercantile Exchange helped matters by introducing its "mini" future on the S&P 500 weeks earlier.

The ascent of the U.S. stock market made the original S&P 500 a tough contract for small traders; by August 1997 its total underlying value was oscillating around  $[950 * \$500]$ , or \$475,000, and its daily ranges started to average 10 index points, or \$5,000. The CME introduced the Mini as one-tenth of the original; by mid-November, the exchange split the value of the "big" contract in half and doubled the tick size on both contracts to 10 points from 5 points. The Dow Jones is worth \$10 times the underlying index.

The most interesting innovation was the limited introduction of electronic trading for the Mini. Originally, orders of 30 contracts or less would be filled electronically; this was reduced to 15 contracts following the mid-November split. A higher limit for electronic trading would have provided a rare controlled experiment in the world of finance. If open outcry is a superior price discovery mechanism, as both Chicago exchanges claim and as some anecdotal evidence from the late October period suggests, this would have been a golden opportunity for such a demonstration. However, conclusions regarding the most important strategic issue facing the industry cannot be drawn from limited competition and scattered war stories.

Both of these futures contracts and the Dow Jones options on the Chicago Board Options Exchange have been successful since their introduction. In fact, as the chart below shows, the volume of the two contracts since last October 27 is virtually identical. This is not surprising given the extraordinary name recognition of the Dow Jones indices on the one hand, and the familiarity of the trading and investment community with the S&P 500 on the other. This dual success obviates the need to comment on which product is "better", and relieves us of any need to take sides in the never-ending rivalry between the two exchanges.

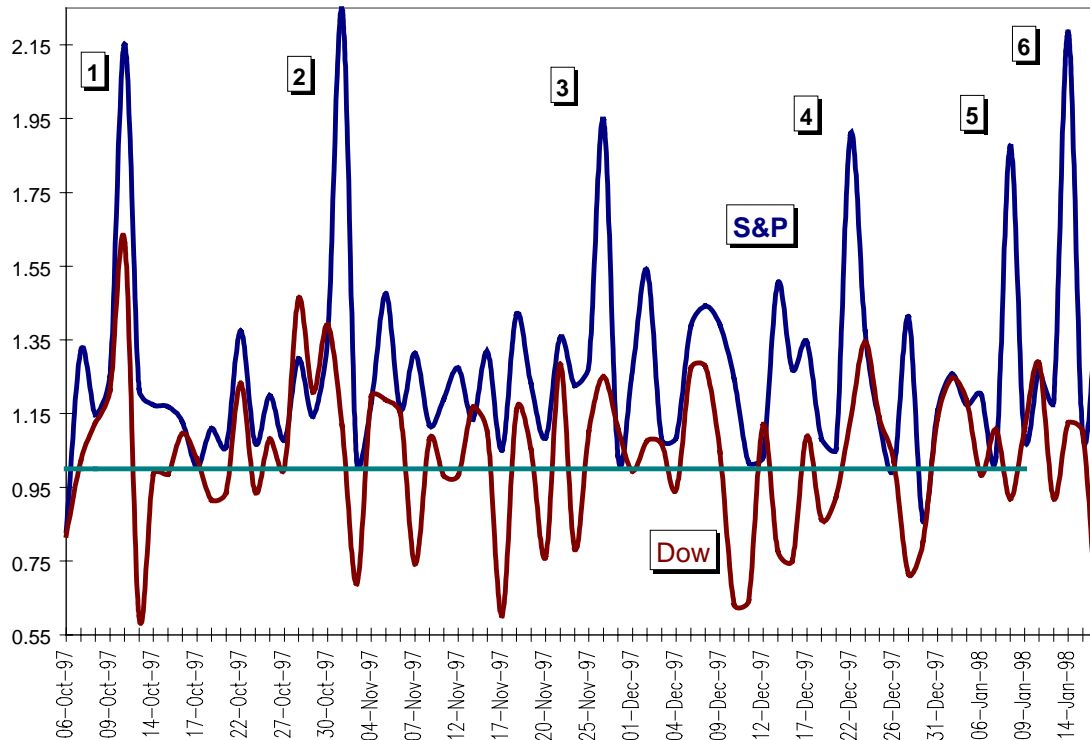


### Stock Around The Clock

If volumes are the same, and both contracts are designed to appeal to the same class of trader, then what can distinguish one from the other? It is important to remember that global investing is not a recent phenomenon. In the nineteenth century, British investors fretted about the wildest emerging market of its day, the United States, which experienced panics in 1819, 1837, 1857, 1873, 1894, and 1907, and fought a devastating civil war for good measure. The British were separated by a five-hour time difference between New York and London, and by extremely rudimentary communications. The problems seen since last summer in Asian markets duplicate this separation in time, but modern communications makes the disruptions instantly available to the entire world. As most traders know, too much information can lead to too many impulses to trade.

Since the S&P 500 futures trade virtually around the clock on the Globex system, while the Dow Jones futures trade only during the American cash market hours, we should expect the S&P 500 futures to reflect international turmoil better than the Dow Jones futures. One way of comparing this is to compare the ranges of futures and cash indices for both markets using the following formula:

$$\frac{High_{fut} - Low_{fut}}{High_{cash} - Low_{cash}}$$



Six peaks stand out in the S&P 500 ratio, each corresponding to a major global market development:

1. Germany leads a round of interest rate increases in Europe designed to facilitate monetary union;
2. First aftershocks of the Hong Kong dollar crisis affecting Korea and Japan;
3. Yamaichi Securities bankruptcy in Japan;
4. Korean election and uncertainty over compliance with IMF plan;
5. Collapse of Indonesian rupiah; and
6. Collapse of Peregrine Securities in Hong Kong.

U.S. stocks do not trade in NYSE hours alone anymore, and haven't since the early 1980s. Large blocks of stock trade over-the-counter during London morning hours, and S&P 500 futures prices reflect both these transactions and the movement of other major equity markets (see "Just The DAX, Ma'am," *Futures*, August 1997). While the Asian and European price movements have only a limited predictive value for the U.S. trading day as a whole due to the large number of economic reports issued just after the start of U.S. trading hours, these price movements do provide clues as to global confidence and sentiment.

In addition, many U.S. companies issue their earnings reports either after the close of stock exchange trading in the afternoon, or before the opening the next morning. This practice rewards those linked to third-market trading systems, such as Instinet or POSIT, at the expense of the small investor. If the stock in question is a major component of the S&P 500, or is considered an industry bellwether, the effect on Globex futures can be considerable.

### Strategic Directions

Market theory holds that successful futures contracts require the presence of both hedgers and speculators. The futures industry appears to be hedging its bets on this proposition. We have a two sizes of S&P 500 futures, each smaller than anything the CME offered prior to last fall, trading

in both a pit session and a Globex session, along with electronic execution of small orders on the Mini, a Finex “large” stock index future designed to appeal to institutional hedgers who resent the smaller CME contracts, and Dow Jones contracts designed to appeal to speculators. In an interesting twist, Dow Jones-based investment products are now appearing to take advantage of the derivative; can the presence of speculators really attract commercial hedgers?

What does the institutional investment community want? The volume history of the S&P 500 shows a contract whose appeal certainly did not match the growth in NYSE volume, overall market levels, or retail interest in equities, the recent burst in activity notwithstanding. Institutional investors need a product that provides an asset allocation vehicle, one in which they can deploy large amounts of cash rapidly and efficiently.

The Dow Jones and Mini contracts have been successful new products in an industry whose new product success rate this decade has been unimpressive. Can the volume in these contracts, ranging between 10,000 and 20,000 lots per day, increase significantly? More importantly, will institutions offset these gains by moving their risk management and asset allocation activities elsewhere? The experience of the exchanges with foreign exchange products suggests that this is a risky business indeed.

**S&P 500 Rolling Five-Day Average Volume**

