Didn't You Used To Be The Dow?

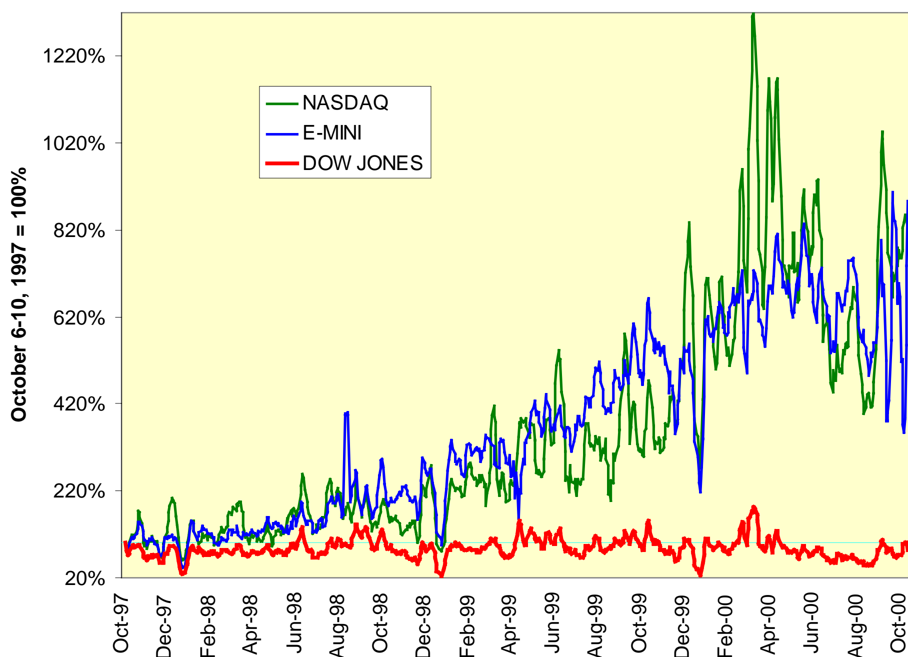
Old habits die hard, so it's necessary sometimes to poison their food and push them in front of a truck to speed the process along. Take the venerable Dow Jones Industrial Average, the Grande Dame of stock indices, please. As we'll see below, it's time to go.

Unlike the larger S&P 500 or the NASDAQ Composite, both of which are broad based and weighted by market capitalization, (number of shares outstanding times price) the DJIA is a narrowly based and price-weighted index. Since each $1 move counts equally for each stock in the DJIA, this weighting scheme gives a disproportionate weight to the higher priced stocks in the index. The highest priced stock in the DJIA, J.P. Morgan at the time of this writing, is priced almost eight times higher than the cheapest member, AT&T. On a percentage basis, therefore, AT&T would need to move almost eight times as much as J.P. Morgan to have an equal impact on the DJIA.

Dow Futures

When Dow Jones licensed these indices for futures at the Chicago Board of Trade, options at the Chicago Board Options Exchange, and exchange-traded funds at the American Stock Exchange in late 1997, all of the parties involved convinced each other of their wisdom. They were banking on brand recognition outweighing the established role of the S&P 500 as the benchmark for institutional investors and the S&P 500 contract as the focus for futures traders. This theory was at best debatable.

No one could foresee at launch time just how successful the Chicago Mercantile Exchange's E-mini S&P would become or how investor attention soon would be diverted to the NASDAQ; the CME's futures contract on the NASDAQ 100 has proven successful as well. In addition, the contract was launched at the start of the Asian crisis and 24-hour global volatility; initially, the DJIA futures did not trade in an evening session, while S&P futures did. The result has been stagnant volume for DJIA futures, especially in comparison to the CME's E-mini and NASDAQ 100 contracts.

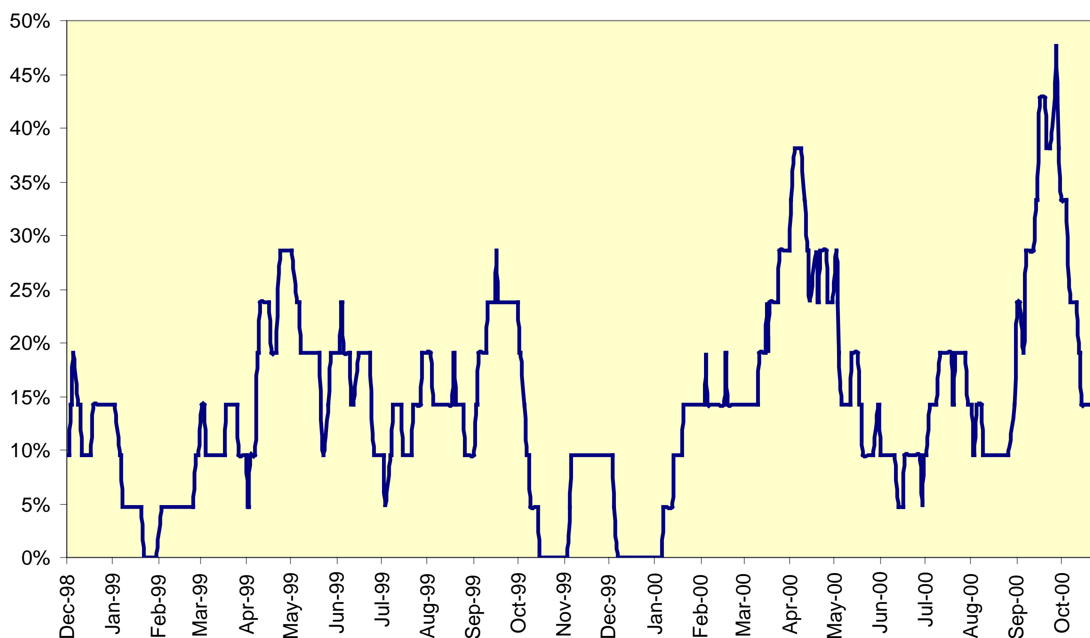


What Does It Measure?

Unlike the S&P 500 or the NASDAQ 100, whose membership is more or less defined for them by the market, membership in the DJIA is arbitrary. A committee selects each of the thirty stocks with the goal being a

representation of American industry; at present, the DJIA has a trailing P/E of 20.2, as opposed to 27.3 for the S&P 500 and 151.8 for the NASDAQ 100. Investors have been less than cooperative in their habits of deciding who is important and who is not, and as a result, the DJIA has struggled to remain representative. In October 1999, the committee removed longtime stalwarts such as Sears and Chevron, and replaced them with the first issues not listed on the NYSE, Microsoft and Intel -- just in time for the Microsoft antitrust decision to decimate the stock. Soon decisions will need to be made on replacements for Honeywell, J.P. Morgan, and AT&T, all of which are involved in merger or restructuring. The selection bias of the committee may further lower the utility of the index as a benchmark.

A representative index should not diverge from broader market measures, but this has not held for the DJIA. The degree to which the DJIA has diverged on a daily basis from the S&P 500 and the NASDAQ 100 since the end of 1998 is striking. We can take the number of days within a trading month, a 21-day rolling time frame, in which the DJIA has risen and both the SPX and NDX have fallen, or vice versa, as a percentage. While these divergences seemed to be a regular occurrence during last spring's unpleasantness, the highest degree of DJIA divergence from the other indices occurred during the September-October downturn. The divergences were at or near 0% during last winter's strong rally, which suggests the DJIA is a reasonable benchmark only during rallies.

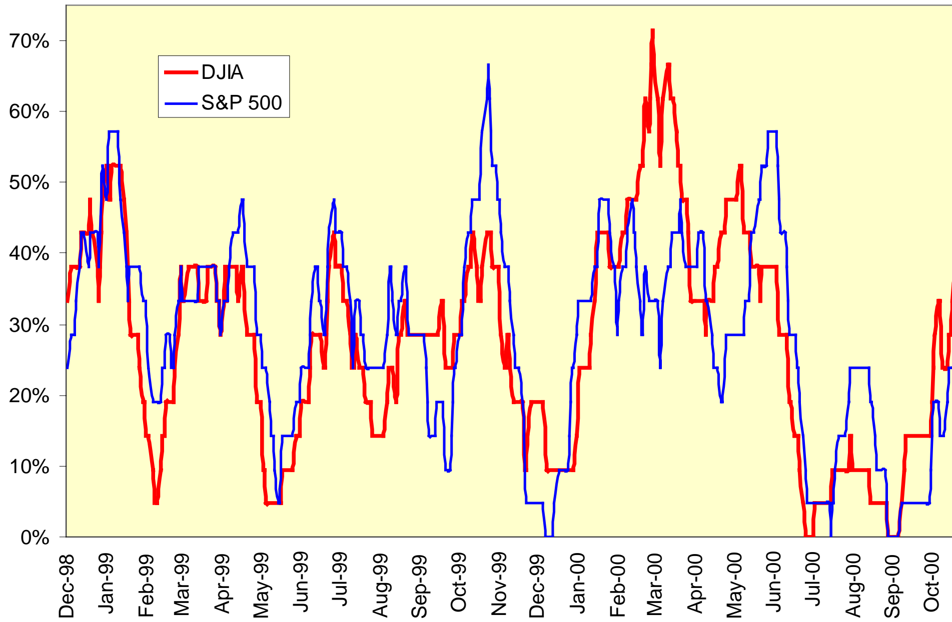


Rushing In, Rushing Out

The NYSE staged some celebrations in April 1999 when the DJIA first crossed the 10,000 mark; it has had the opportunity to repeat these festivities in both directions several times since, but has declined to do so. Since that time, the DJIA has remained in a frustrating trading range heightened by short and sudden surges in both directions, including a two-day move of nearly 800 points last March and another two-day blast of nearly 500 points at the end of October. Both of these jumps coincided with a rush to value stocks during periods of tech stock weakness.

Surprisingly, the DJIA is often more volatile than the S&P 500; nothing compares to the NASDAQ in this regard, however. During last spring's rout, the number of five-day changes in the DJIA in excess of 2.5% per rolling 21-day time frame exceeded 70%, nearly double the rate of the S&P 500. By October's end, this figure was once again over 50%.

Frequency of 2.5% Five-Day Moves:
Percentage of 21-Day Rolling Frame



Good Bye To All That

What can we say about an unrepresentative index constructed in a primitive manner that is more volatile than the broad market even as its P/E is lower and its futures contract is less active? How about thanks for a long and glorious career and best wishes for a happy retirement.