

## It's Different Enough This Time

Indexes are like important body parts: You can have too many of them. All aspects of the financial services industry have encountered this problem already. We have four different major commodity indexes - how many do you keep on your screen? - hundreds of bond indexes, most composed of thinly traded issues, and thousands of stock indexes.

Why so many? We cannot say that if indexes did not exist we would have to invent them. It is far more accurate to say that the presence of indexes created the performance management and analysis industry. This has been a rather mixed blessing for investors as it created the cult of relative performance: "Yes, we lost money, but we did beat the S&P 500 or some other benchmark." No wonder one of the latest crazes in the world of money management is something called "absolute return," which is nothing more than a recognition you cannot buy groceries with relative return.

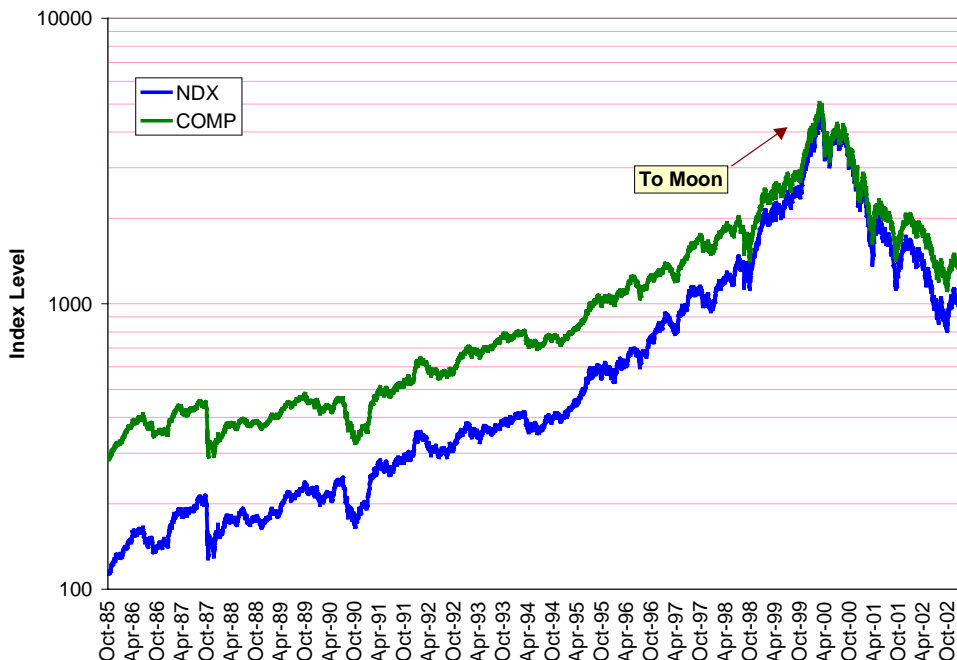
With this in mind, why is the futures industry about to launch a series of products based on the Nasdaq Composite? The Nasdaq 100 index is the basis for a successful set of futures, options, ETFs and security futures on those ETFs. Our instincts might tell us we will be launching contracts on the venerable number 6 instead of the far more reliable half-dozen.

Our instincts are wrong. The Nasdaq 100 (NDX) and the Nasdaq Composite (COMP) are far more different animals than we might suspect. Yes, it is true the NDX subsumes 60.8% of the COMP by market capitalization, but there the similarities start to end. Let's take a look at the NDX, the COMP and the spread between them.

### When You're Yelling, You Should Be Selling

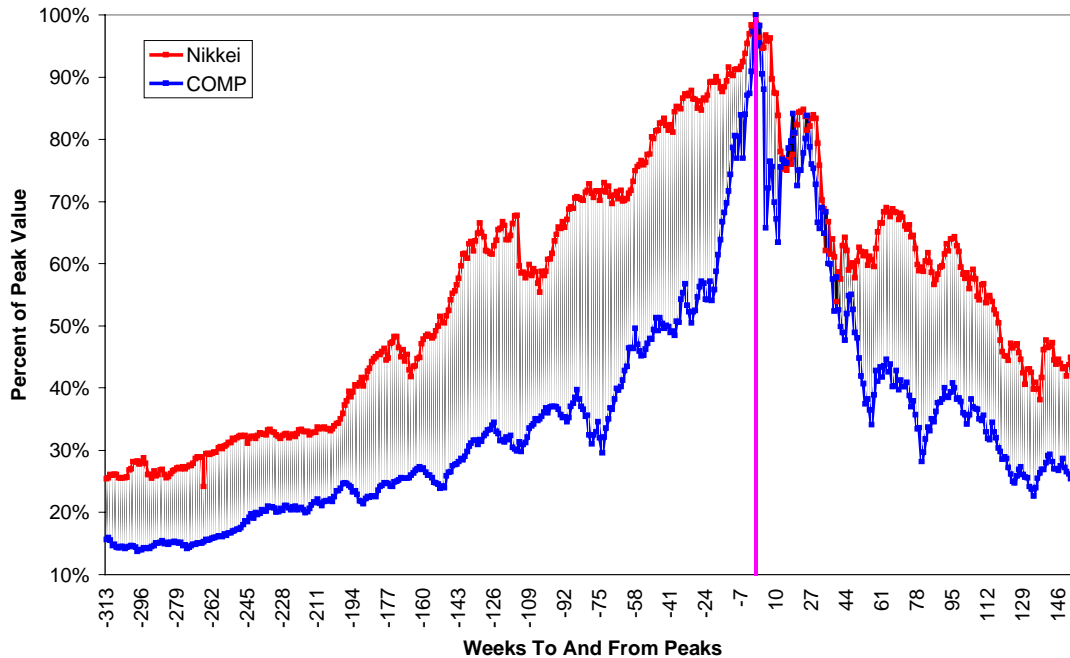
The maintenance of credibility requires acknowledgement of the obvious. The COMP, born in 1971, and its younger sibling (what, is "brother or sister" more politically correct?) born in 1985, soon became synonymous with young, rapidly growing firms, many of them centered in the booming technology and telecommunications industries. The NDX, which soon became the home of giants such as Microsoft, Intel, Dell Computer, etc., started from a lower index base but by the final moonshot was close to parity with the COMP.

### What Goes Up...



Leverage and volatility, as many of us would attest, are far more enjoyable on the way up than on the way down. Just as the COMP's 86% rise in 1999 was the largest such increase for an American index since the Dow Jones scored an 81.6% jump in 1915, the way down has been equally historic. If we compare the COMP to another famous high-speed encounter with a hard ceiling, the rise and fall of Japan's Nikkei 225 index, we see that its ascent and descent were both steeper.

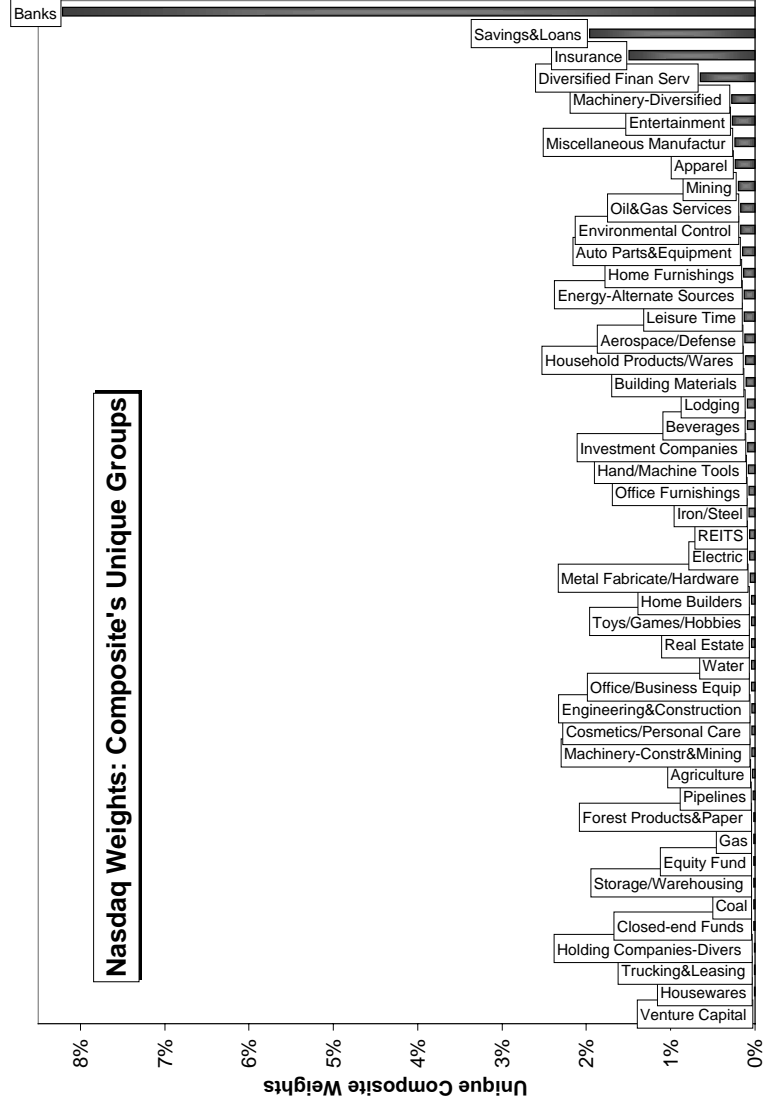
### COMP Whomp Faster Romp



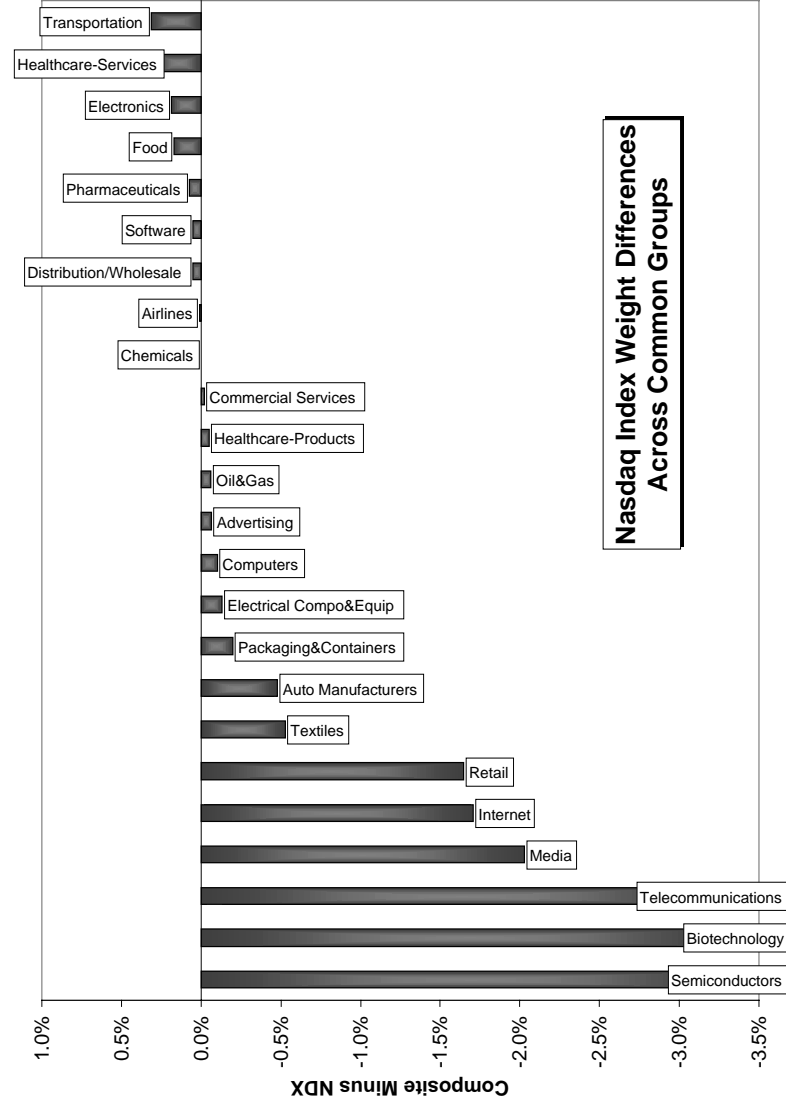
As is the case in most massacres, the carnage resulting from the post-bubble collapse is difficult to fathom. Consider this: In August 2001, fifteen months after the peak, there were still 4,724 stocks listed on the Nasdaq, down only marginally from its peak total. In March 2003, three years after the peak, listings were down to 3,501. Out of that number, the smallest 460 issues combined for only 0.06% of the index' capitalization.

### Weights And Measures

Our task is not to lament the past, but rather to exploit the opportunities created by the different compositions of the COMP and NDX. The NDX excludes the financial stocks listed on Nasdaq; these groups (banks, savings & loans, insurance and diversified financial services) account for 12.3% of the COMP's capitalization, and these groups move entirely differently from technology and telecommunications. In all, there are 47 industry groups represented in the COMP absent entirely from the NDX.



Even among the 24 industry groups common to both groups, the weights of key groups are quite different. The NDX has a far stronger representation in the Nasdaq's signature semiconductor, biotechnology and telecommunications sectors; these groups are far more volatile than the broad market. The COMP has greater weights in less-volatile groups such as transportation, healthcare services, electronics, food and pharmaceuticals.



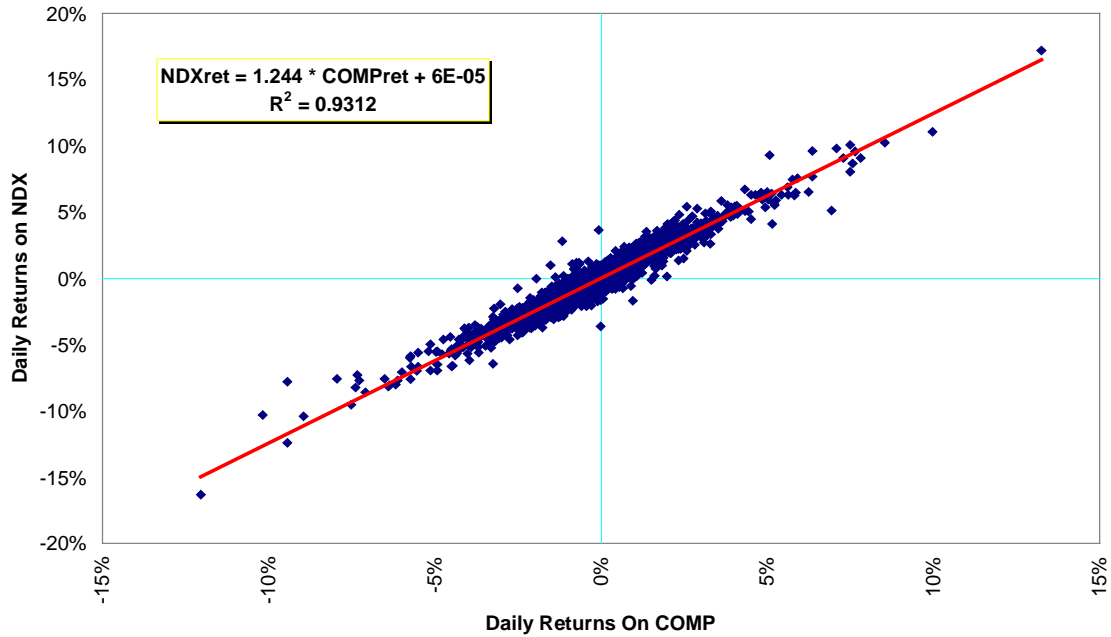
These differences create long-term trading opportunities. The technology-related groups' prolonged successes made the trade of being long the NDX and short the COMP a winner for the better part of 15 years as seen with the highlighted trendline, and how many trades ever last that long? The ugly collapse of 2001-2002 reversed this trade rather sharply, and the spread rallied back toward its Asian crisis (remember that?) level. The longer-term secular trend of technology dominance may reassert itself going forward: A hot new technology can double or triple in market value, but can we say the same for small banks and insurance companies not involved in takeovers?

**The COMP / NDX Spread**



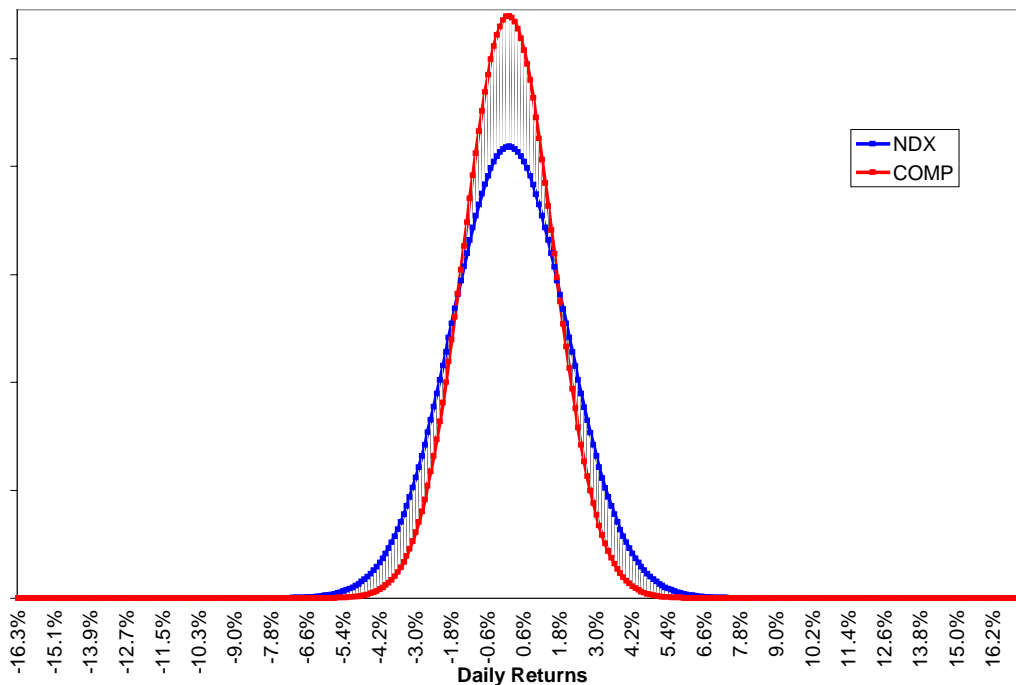
For those of you who like to trade actively, some timeframe less than 15 years, take heart. The COMP and the NDX are different even on a daily basis. If the two indexes truly were on and the same, we should never expect to see an obvious trend in the spread between them. In addition, we should expect to see a beta of 1.00 and an  $R^2$  close to 1.00 for the two. Neither is the case: The beta of the NDX to the COMP is 1.244, indicating its variance of returns is 24.4% more than that of the COMP. Moreover, its  $R^2$  is only .9312. A Student's T-test to determine whether these two are the same process returns a probability of only 68.7% that they are.

### Imperfect Correlation of Returns: Nasdaq 100 Vs. Composite Since 1985



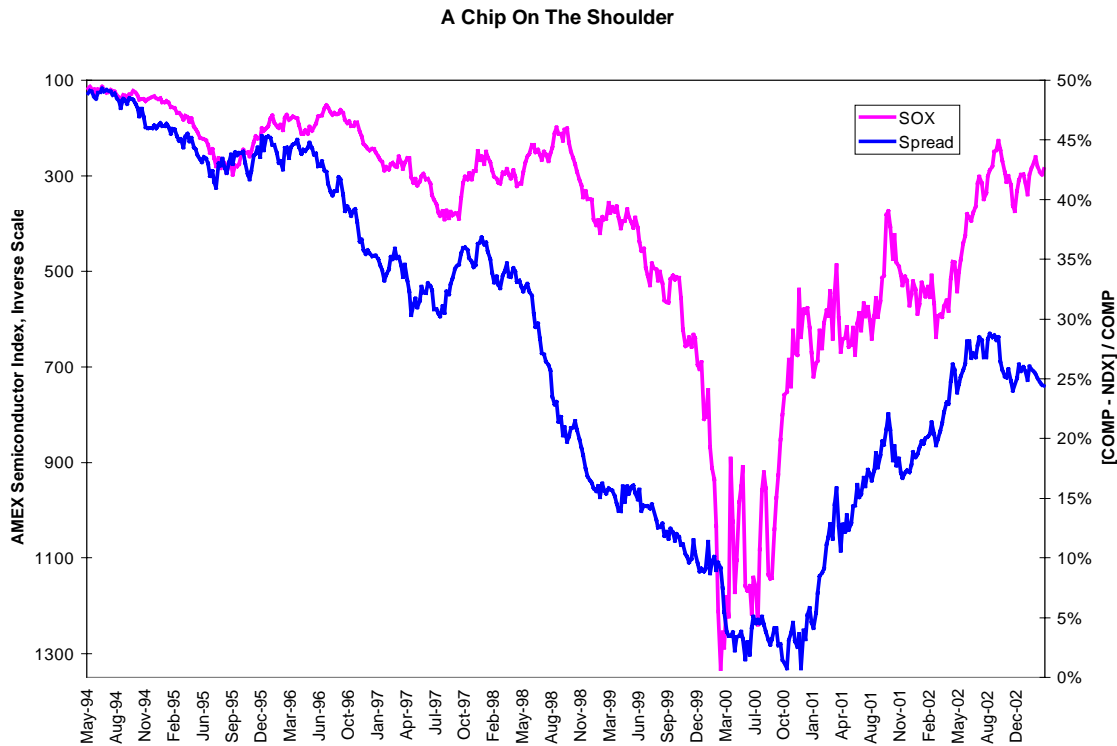
As is the case in many related spreads, (see "Think Before You Spread," *Futures*, April 2001) or stock index spreads (see "Weight Until Dark," *Futures*, October 1998, or "Every Spread Tells A Tale," *Futures*, December 2000) one leg of the spread simply is more volatile. This creates apparent embedded options, returns intrinsic to the nature of the series. The NDX is the more volatile of the two indexes, which would give an added return to being long the NDX and short the COMP in a rising market and vice versa in a falling market.

### Different Distributions of Returns



## The Joy Of SOX

When all is said and done on this trade, it comes down to an assessment of the semiconductor industry, here represented by the imperfect - it is price-weighted, not capitalization-weighted - Amex semiconductor index (SOX). The price weighting understates the contribution of Intel, the second-largest Nasdaq stock, and overstates the importance of issues such as Maxim Integrated Products and KLA-Tencor. However, the SOX is followed widely, and many of its members underlie security futures.



The presence of so many related instruments and identifiable trading opportunities should make products based on the COMP attractive from the outset. Who knows, maybe we will return someday to the "Texas spread" of just buying them both.