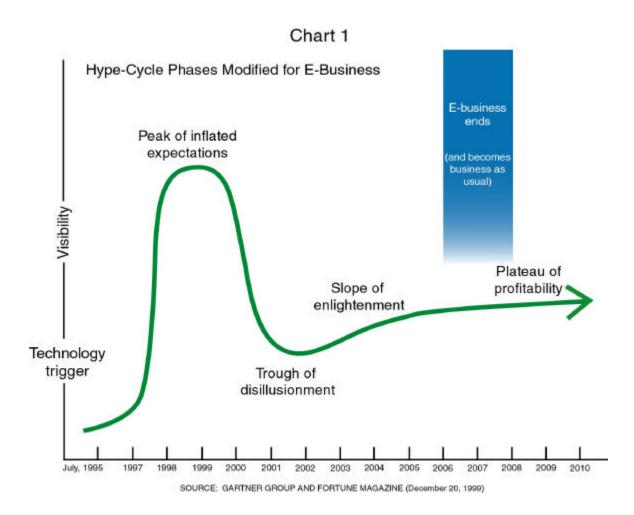
# CUMBERLAND ADVISORS INC

# Will the NASDAQ sell off become a **crash**?

A Value Perspective By David R. Kotok April, 2000



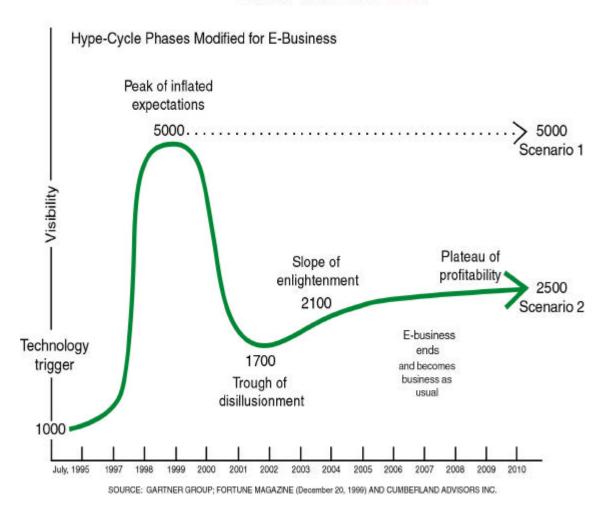
We've sensed overvaluation of the NASDAQ for some time and have received questions about what will happen next now that the NASDAQ sell off commenced.

Chart 1 was created by the Gartner Group and appeared in the December 20<sup>th</sup> issue of Fortune Magazine. Gartner suspects that "most of today's large E-Commerce projects won't finish on time or on budget and will under-deliver based on the hype that surrounds them." Gartner does not predict an end of E-business; rather, they believe that "E-business will ultimately become business as usual."

We agree. Furthermore, we think that the recent NASDAQ 5000 level may represent the "peak of inflated expectations" projected by Gartner.

We realize that it's dangerous to forecast a market with both direction and time. We'll speculate that NASDAQ 5000 was the "peak" and see if we can project the next few years using the Gartner chart to demonstrate what things might look like.

## Chart 2 - NASDAQ crash?



At the end of February the 5000 NASDAQ level consisted of about 4800 stocks worth a combined market capitalization of about \$6 trillion. Collectively, those stocks were about 240 times this year's earnings estimates.\* For perspective, we note that two stocks, Microsoft and Cisco, exceeded \$1 trillion in market cap; those two were collectively about 100 times forward estimated earnings. That means Cisco and Microsoft together brought <u>DOWN</u> the P/E of the NASDAQ.

\* Many NASDAQ issues are unprofitable and these companies are excluded from the P/E calculation.

# Scenario 1 NASDAQ gets back to 5000 in ten years

We give the benefit of the doubt to the NASDAQ, for this hypothetical valuation. We <u>ASSUME</u> that this \$6 trillion value can, in fact, grow its earnings at the rate of 20% per year for the next decade, without interruption, without recession and without diminution of the growth rate. Those are extreme and lofty assumptions but we'll use them.

We assume that in the year 2010 the NASDAQ will be accorded a P/E of double its growth rate. In other words, we'll price the same NASDAQ ten years from now at 40 times its then earnings and we'll compound today's earnings for the entire 10 years at 20% growth. That means the NASDAQ \$25 billion earnings today will be \$155 billion then. Multiply those earnings times a 40 P/E and we derive about \$6 trillion which means the NASDAQ would be priced at 5000 ten years from now.

#### Scenario 2 The Crash

Suppose the NASDAQ grows at 15% compounded instead of 20%. This is still optimistic and double the growth rate of corporate earnings during the best long-run periods in America's history. Suppose the price earnings ratio of the NASDAQ in 2010 is 30. That \$100 billion in earnings is worth \$3 trillion and a 2500 price for the NASDAQ index.

In both scenarios 1 & 2 we assume the markets realize the valuation accorded the NASDAQ is extremely optimistic. Even as earnings grow within the NASDAQ companies, the P/E shrinks as these companies follow the path of the Gartner chart.

The numbers speak for themselves. Remember, that these are based on <u>very optimistic</u> assumptions. Are we saying that the NASDAQ is going down to 2,000? Maybe. Are we saying that the NASDAQ will be 2,500 in ten years? Maybe. Or 5000? Maybe. We have no idea how the stock market will value NASDAQ companies or at what P/E investors will purchase claims on the future earnings of those 4800 corporation.

We do know that all securities represent an exchange of present dollars for future dollars. And we know that the future dollars have to be earned.

## Scenario 3 NASDAQ matches The Low Risk Alternative

Suppose you manage a pension plan with a ten-year time horizon. Your decision today is to chose either (1) a "AAA" ten year bond strip which will double in about ten years, or (2) the NASDAQ.

In ten years the NASDAQ will have to reach \$12 trillion just to <u>match</u> the low risk threshold.

We applied our value method to the NASDAQ to derive a \$12 trillion market cap in ten years. Those 4800 companies would have to grow their collective earnings by 25%, compounded each and every year, to obtain \$232 billion in earnings. At 52 times earnings in 2010, a \$12 trillion NASDAQ would equal the low risk alternative.

# Scenario 4 New Economy wins – You fill in the numbers

Thanks to the help of Ned Davis research, we can take this Macro-value concept and reduce it to a company specific list. The March 24<sup>th</sup> Ned Davis chart on the next page speaks for itself.

#### NASDAQ SCENARIOS

|  | P/E<br>In 2010 | 10 Year Compound<br>Earnings Growth<br>Rate | NASDAQ index<br>Value in 2010 |  |
|--|----------------|---|-------------------------------|--|
| Scenario 1<br>NASDAQ gets back to<br>5000 in ten years | 40             | 20%   | 5000                          |  |
| Scenario 2<br>The crash                                | 30             | 15%   | 2500                          |  |
| Scenario 3 NASDAQ matches the low risk alternative     | 52             | 25%   | 10,000                        |  |
| Scenario 4 New Economy wins You fill in the numbers    | ?              | ?   | ?                             |  |

# STRONG NASDAQ ACTION

The NASDAQ is moving into new high territory this morning.... I was also impressed with the table below from UAS Asset Management. NDR slightly modified and updated their numbers. Even before the further surge in Cisco this morning, it is clear that the valuation on Cisco (and many other Tech/Net stocks) has already anticipated **years and years** of revenues and sales....

--Ned

| INVES  | TMENT OPTION A                |                        |    |                 |       | INVES  | TMENT OPTION B   |                        |                  |                  |
|--------|-------------------------------|------------------------|----|-----------------|-------|--------|------------------|------------------------|------------------|------------------|
| Ticker | Company Name                  | 03/23/00<br>Market Cap |    | 1999<br>Earning | s     | Ticker | Company Name     | 03/23/00<br>Market Cap | 1999<br>Revenues | 1999<br>Earnings |
| F      | Ford Motor Co                 | 53.75                  |    | 162.56          | 7.22  | CSCO   | Cisco Sys Inc    | 541.27                 | 15.00            | 2.54             |
| TX     | Texaco Inc                    | 27.70                  |    | 35.06           | 1.15  |        |                  |                        |                  |                  |
| MER    | Merrill Lynch & Co            | 39.56                  |    | 34.88           | 2.58  |        |                  |                        |                  |                  |
| DD     | Du Pont (E I) De Nemours & Co |                        |    | 26.94           | 7.68  |        |                  |                        |                  |                  |
| AET    | Aetna Inc                     | 8.24                   |    | 26.45           | 0.69  |        |                  |                        |                  |                  |
| I P    | International Paper Co        | 16.08                  |    | 24.58           | 0.18  |        |                  |                        |                  |                  |
| SLE    | Sara Lee Corp                 | 16.42                  |    | 20.15           | 1.17  |        |                  |                        |                  |                  |
| RTN.B  | Raytheon Co – Class B         | 6.34                   |    | 20.04           | 0.40  |        |                  |                        |                  |                  |
| CAT    | Caterpillar Inc               | 14.19                  |    | 19.70           | 0.95  |        |                  |                        |                  |                  |
| AMR    | AMR Corp                      | 4.71                   |    | 19.13           | 0.99  |        |                  |                        |                  |                  |
| FDX    | Fedex Corp                    | 11.53                  |    | 17.37           | 0.63  |        |                  |                        |                  |                  |
| MMM    | Minnesota Mining & Mfg Co     | 35.03                  |    | 15.66           | 1.76  |        |                  |                        |                  |                  |
|        | McDonalds Corp                | 47.64                  |    | 13.26           | 1.95  |        |                  |                        |                  |                  |
| ADM    | Archer-Daniels-Midland Co     | 6.52                   |    | 13.21           | 0.19  |        |                  |                        |                  |                  |
| GT     | Goodyear Tire & Rubber Co     | 3.67                   |    | 12.88           | 0.24  |        |                  |                        |                  |                  |
| JPM    | Morgan (JP) & Co Inc          | 23.80                  |    | 11.82           | 2.02  |        |                  |                        |                  |                  |
| BUD    | Anheuser Busch Cos Inc        | 28.14                  |    | 11.70           | 1.40  |        |                  |                        |                  |                  |
| LLY    | Lilly (Eli) & Co              | 70.20                  |    | 9.91            | 2.72  |        |                  |                        |                  |                  |
|        | Staples Inc                   | 9.74                   |    | 8.84            | 0.33  |        |                  |                        |                  |                  |
| FOX    | FOX Entertainment Group Inc   | 18.74                  |    | 7.94            | 0.18  |        |                  |                        |                  |                  |
| ED     | Consolidated Edison Hldg Inc  | 7.02                   |    | 7.49            | 0.69  |        |                  |                        |                  |                  |
|        | Apple Computer Inc            | 22.73                  |    | 6.77            | 0.63  |        |                  |                        |                  |                  |
|        | Maytag Corp                   | 2.66                   |    | 4.32            | 0.33  |        |                  |                        |                  |                  |
| HLT    | Hilton Hotels Corp            | 2.81                   |    | 2.33            | 0.17  |        |                  |                        |                  |                  |
| DJ     | Dow Jones & Co Inc            | 6.66                   |    | 2.00            | 0.27  |        |                  |                        |                  |                  |
|        | Total                         | 541.                   | 24 | 535.00          | 36.52 |        | Total            | 541.27                 | 15.00            | 2.54             |
|        | Price / Sales                 | 1.0                    | 01 |                 |       |        | Price / Sales    | 36.08                  |                  |                  |
|        | Price / Earnings              | 14.82                  | 2  |                 |       |        | Price / Earnings | 213.10                 |                  |                  |