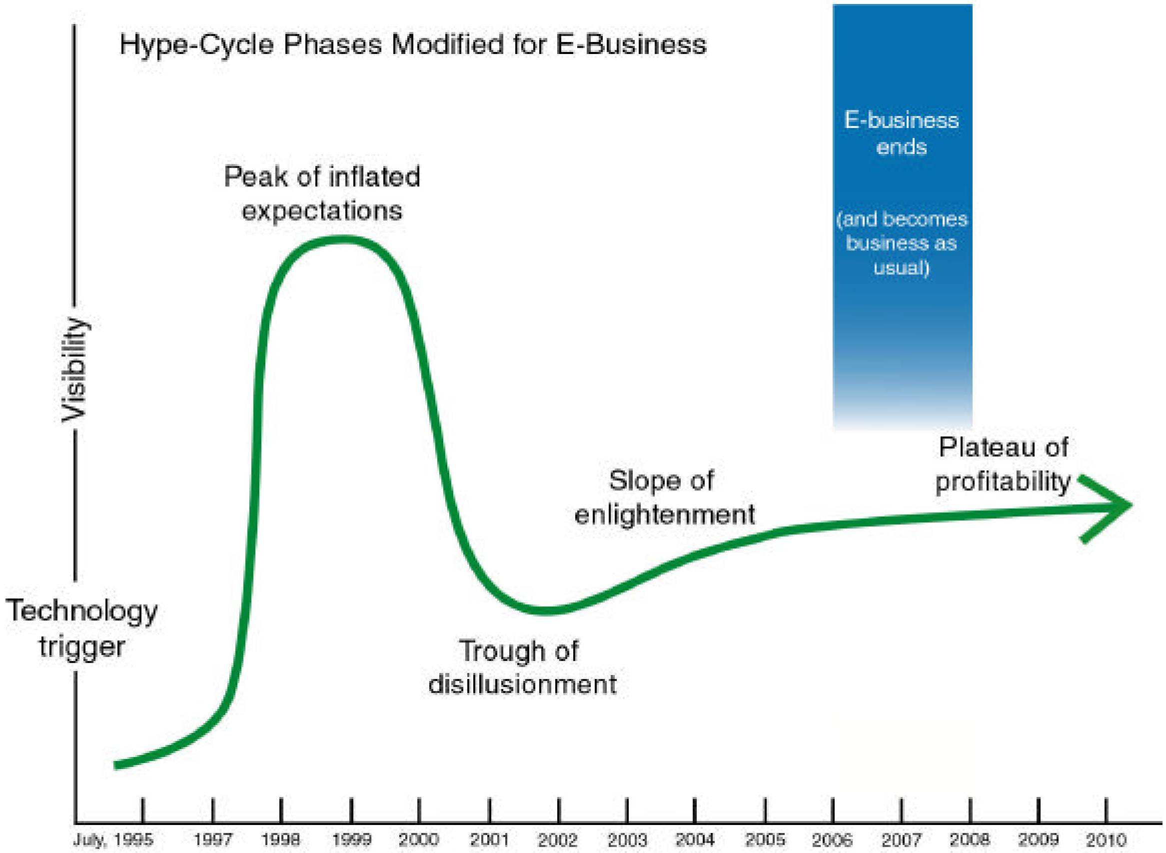
CUMBERLAND
ADVISORS
INC

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

A Value Perspective
By David R. Kotok
April, 2000

Chart 1



SOURCE: GARTNER GROUP AND FORTUNE MAGAZINE (December 20, 1999)

614 Landis Avenue • Vineland, NJ 08362-0663 • 856-692-6690 • 800-257-7013 FAX: 856-794-9113
Branch Offices: 2367 Congress Street • Portland, Maine 04102 • 207-773-3990 FAX: 207-774-3439
www.cumber.com • Cumberland Advisors, Inc. is a subsidiary of Ryan, Beck & Co. LLC Member NASD, MSRB, SIPC.

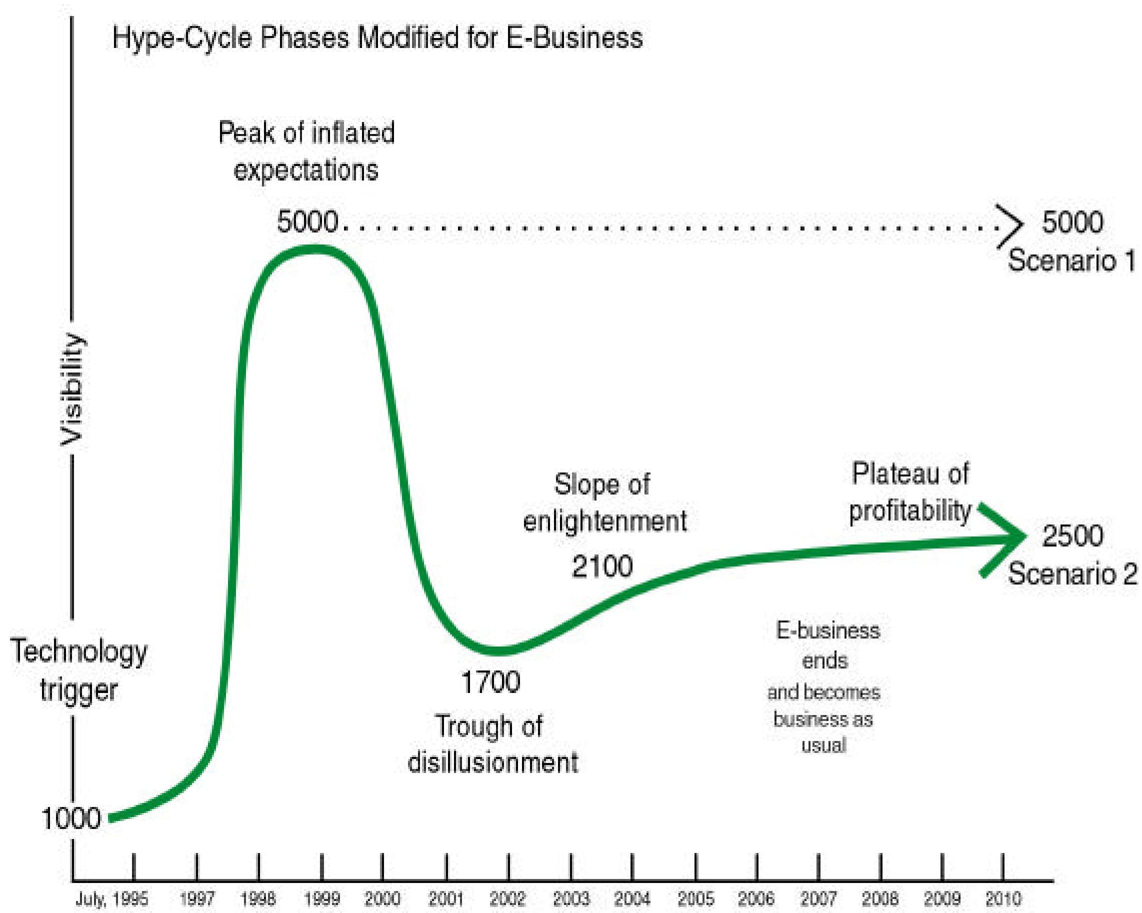
We've sensed overvaluation of the NASDAQ for some time and have received questions about what will happen next now that the NASDAQ sell off commenced.

Chart 1 was created by the Gartner Group and appeared in the December 20th 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 <u>might</u> look like.

Chart 2 - NASDAQ crash?



SOURCE: GARTNER GROUP; FORTUNE MAGAZINE (December 20, 1999) AND CUMBERLAND ADVISORS INC.

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.

So what's an investor to do?

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 match 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 24th Ned Davis chart on the next page speaks for itself.

NASDAQ SCENARIOS

	P/E In 2010	10 Year Compound Earnings Growth Rate	NASDAQ index Value in 2010
Scenario 1 NASDAQ gets back to 5000 in ten years	40	20%	5000
Scenario 2 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

INVESTMENT OPTION A

Ticker	Company Name	03/23/00 Market Cap	1999 Revenues	1999 Earnings
F	Ford Motor Co	53.75	162.56	7.22
T X	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	57.36	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
MCD	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
SPLS	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
AAPL	Apple Computer Inc	22.73	6.77	0.63
MYG	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**
	Price / Sales	**1.01**		
	Price / Earnings	**14.82**		

NOTE: All numbers in $ Billions

INVESTMENT OPTION B

Ticker	Company Name	03/23/00 Market Cap	1999 Revenues	1999 Earnings
CSCO	Cisco Sys Inc	541.27	15.00	2.54
	Total	**541.27**	**15.00**	**2.54**
	Price / Sales	**36.08**		
	Price / Earnings	**213.10**		