CYBER-INVESTING: RATIONALITY HITS THE INTERNET STOCK MARKET

By Kenneth J. Michal

What a difference a year has made for Internet stocks. The same characteristics that were ignored a couple of months ago are now closely analyzed and scrutinized. Internet players are now starting to be held accountable for their profitability.

The rise and fall of "Internet stocks" has been the investment story of the decade. But one question keeps dogging the story: Just what is an Internet stock?

A year ago, the *AAII Journal* tried to answer this question [see "Cyber-Investing: An Intro to Internet Stocks as an Investment" in the November issue]. First, boundary lines were drawn by defining groups and sub-sectors. Most Internet companies fall into one of two distinct groups—those that use the Internet as a means to sell or produce traditional goods and services, and those companies that produce a product or service that is used to construct and maintain the Internet infrastructure. Then, a set of 12 sub-sectors was created based upon the most popular business models: auctions, hardware, Internet advertising, Internet financial services, Internet publishing, Internet retailing, Internet service provider (ISP)/hosting, multimedia, portal, security, software, and training/education. The article then looked at a small sampling of 23 Internet stocks.

One year has gone by, and a lot has changed in the Internet stock industry—including Wall Street's view. This article takes a look at the dramatic changes in the Internet marketplace, and what to do about it.

LOST PRIVILEGES

Five years ago, the Internet was just a buzz word—a dynamic new medium of exchange and communication. For many today, a PC with Internet access is as central to our lives as our televisions and microwaves.

With this new development came new business ventures and the birth of a brand new world of companies. A new industry had emerged almost overnight—the Internet industry.

The first wave of Internet stocks was exalted as a collection of new economy stocks—stocks that were going to revolutionize the economy and the markets. This ideal translated into mass-market hysteria, in which irrational prices and irrational behavior reigned. No price was too great in order to get a hand on an Internet, or "dot-com," stock. These hot stocks added flair to any drab, conservative portfolio and even more pizzazz to the most aggressive ones.

It did not matter that many of these companies had not earned a dime; investors were banking on their phenomenal growth prospects and, in any case, it was an Internet company—they were different. Outsiders started to add dot-com suffixes to their names to get in on the action. Internet stocks were given considerable leeway because of their unique nature.

One such privileged stock was the on-line bookstore Amazon.com, one of the flagships of the so-called new economy. It had yet to report positive earnings, but its stock price rose higher and higher because of its established Internet foothold and strong sales growth. In early January 1999, the stock split 3-for-1 when it was around $80 on a split-adjusted basis. It peaked above $105 in late April, split again in September (2:1) and reached almost $107 by December 1999.

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Not long after this period, perceptions began to change, and Internet stocks began to lose their glow. Wall Street and individual investors alike began to look at Amazon.com for what it really was: a retail stock that just happened to be on the Internet. With this and other revelations, Internet stocks were no longer viewed as special. Yes, they were still Internet companies, but they could fit into any number of the standard industry classes. Amazon.com fit quite nicely into the tight, competitive environment of the retail catalogue and mail order segment, and it clearly did not stack up to its newly established competition.

Once Amazon.com began to be compared against other retailers, the stock was devalued and the price dwindled. The same characteristics that were ignored just a couple of months ago were now closely analyzed and scrutinized. Amazon.com and other Internet players like it began to be held accountable for their profitability. Rational, objective thinking had finally returned to the masses and Amazon.com's stock price has since stumbled, down over 50% since October 1999.

STATISTICS: THEN & NOW

The story of Amazon.com is not unique. Many of the Internet stocks in the original *AAII Journal* group faced new challenges. Some succeeded, while others faltered.

The investment performance measures in Table 1 show the diverse nature of the Internet stock sample. The average one-year cumulative price change for the group was 32.5% (shown in Table 2). However, this figure includes a 253.5% gain for Internet software pioneer Spyglass Inc., which was bought out by OpenTV Corporation on July 24, 2000.

Of the 22 stocks listed in Table 1, only 10 posted price increases, and four of those had price changes greater than 150%. Taking out some of these stocks would have substantially eroded that 32.5% figure.

Likewise, certain sub-sectors clearly did better than others. The hardware (92.6%), Internet financial services (14.4%), ISP/hosting (88.4%), and security (171.5%) sectors posted the only positive price increase numbers for the group. An interesting pair are the two on-line discount brokers found in the financial services sub-group. The 14.4% average for the sub-sector was a respectable figure. However, Charles Schwab's price performance of 59.0% made up for the weak results of fellow broker E*Trade Group.

Figure 1 charts the one-year price performance of the Internet stock group. Averages of the cumulative price changes for the 23 Internet stocks included in the original article are plotted against TheStreet.com's Internet index and the S&P 500 index. As you can see, the two Internet groups are closely correlated, and there is a high degree of volatility to the group.

Table 1 also includes several fundamental variables contrasting current data to last year's data (from October 1, 1999). Performance tables often include price-earnings ratios and the ratio of price-earnings to growth (PEG ratio). However, since we are dealing with Internet stocks that lack any positive earnings, we are without the necessary earnings denominator of those ratios and therefore need to look at other performance measures.

BEHIND AMAZON.COM

Some interesting observations can be made by contrasting the "then and now" numbers generated by on-line retailer Amazon.com.

Over the course of a year, the stock's price-to-sales ratio faltered from 24.5 to 6.2, as investors are now far less willing to pay a high premium for future sales. During the period, sales doubled to over $2.1 billion, and yet the stock price lost over 50% of its value—both factors pushing the ratio down. The steep price drop is reflected in the decline of the 52-week relative strength rank, from a strong 97% in 1999 to a lowly 17% as of the end of September 2000. Compounding these events, the gamble placed on expanding growth rates failed. Sales growth remained strong, but it was halved to 115.3%, while solid earnings growth forecasts were adjusted down.

Furthermore, Amazon.com's gross margins are now highly scrutinized since it is currently viewed as a retailer where margins are traditionally low versus other industries. Its 2000 figure of 19.3% is below the 33.6% figure for that of the retail catalogue and mail order industry. Amazon.com's product costs relative to sales are just too high versus their industry, and their price-to-sales ratio is beginning to reflect that reality.

ADDITIONAL MEASURES

The Internet industry, as evident by the performance numbers of the stocks in Table 1 and the charted course of the two Internet stock indexes in Figure 1, was not a safe haven for investors last year. It has yet to be fully understood with regard to investing.

To illustrate the oddities of Internet investing, we designed several screens using traditional analysis measures. We created these screens to see how helpful they would have been in selecting stocks a year ago; the results are found in Table 2.

The first screen looked at the price-to-sales ratio. We screened the original 23 stocks and came up with the five companies with the highest and lowest price-to-sales ratios; we then calculated the average price performance numbers for both groups. When analyzing price-to-sales figures, low ratios are potentially an indication of better value. Here, this principle holds, as the five companies with the lowest price-to-

TABLE 1. INTERNET SUB-SECTORS AND REPRESENTATIVE STOCKS

Company (Exchange: Ticker)	1 Yr Price Change* (%)	Price to Sales Ratio (X)		EPS Cont Growth 12m (%)		EPS Growth Est. (%)		Sales-Growth 12m (%)		Gross Margin 12m (%)		% Rank-Rel Strength 52-Wk (%)	
		1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
Auctions													
Bid.com International (M: BIDS)	–56.1	16.4	6.2	32.1	5.3	na	na	155.4	22.0	10.8	7.7	na	13
eBay, Inc. (M: EBAY)	–2.6	118.4	54.6	–23.1	150.0	61.1	65.5	231.6	117.8	80.8	72.9	100	53
Hardware													
Aware, Inc. (M: AWRE)	34.1	36.6	34.5	130.3	280.0	30.0	43.1	136.2	54.0	52.1	64.5	97	74
Sun Microsystems, Inc. (M: SUNW)	151.1	6.1	11.8	27.6	78.8	20.4	22.8	19.8	33.2	51.8	52.0	97	91
Internet Advertising													
24/7 Media, Inc. (M: TFSM)	–73.4	18.0	1.7	63.2	–69.4	60.0	64.2	618.0	259.9	22.8	26.8	97	7
DoubleClick, Inc. (M: DCLK)	–46.3	44.0	9.6	6.6	–168.0	60.6	56.8	108.5	192.5	43.3	55.1	100	20
Internet Financial Services													
Charles Schwab Corp. (N: SCH)	59.0	7.7	9.4	67.6	35.7	22.2	21.5	38.5	39.3	56.1	94.0	91	81
E*Trade Group, Inc.(M: EGRP)	–30.1	12.3	3.9	–276.9	0.0	38.0	35.3	95.3	128.0	53.5	61.7	98	29
Internet Publishing													
MarketWatch.com, Inc. (M: MKTW)	–83.0	50.7	2.9	na	–156.4	62.5	58.3	na	250.0	56.6	61.8	na	4
TheStreet.com, Inc. (M: TSCM)	–75.2	46.5	5.3	na	6.9	50.0	50.0	na	174.7	21.5	36.4	na	7
Internet Retailing													
Amazon.com, Inc. (M: AMZN)	–51.9	24.5	6.2	–365.0	–261.3	72.3	57.8	230.2	115.3	21.8	19.3	97	17
eToys Inc. (M: ETYS)	–92.0	114.9	3.9	–547.1	–72.7	50.0	61.7	na	346.8	19.1	19.6	na	2
ISP/Hosting													
America Online, Inc. (N: AOL)	3.1	24.7	18.1	na	48.6	50.8	47.8	54.5	42.7	44.4	49.7	97	53
Exodus Communications (M: EXDS)	173.8	52.6	42.0	64.9	–100.0	73.5	71.5	324.3	346.1	6.3	26.8	100	93
Multimedia													
Launch Media, Inc. (M: LAUN)	–43.3	14.6	3.5	–35.5	74.8	na	na	110.5	226.3	55.0	82.8	na	21
RealNetworks, Inc. (M: RNWK)	–24.2	82.1	31.3	83.3	–242.9	51.7	57.3	88.7	112.2	81.5	84.0	98	33
Portal													
At Home Corporation (M: ATHM)	–65.9	99.4	10.6	16.7	–535.8	81.9	60.0	524.3	310.7	40.9	58.0	88	9
Yahoo!, Inc. (M: YHOO)	1.4	117.1	58.3	360.0	na	53.6	50.7	181.7	119.1	85.0	84.8	93	57
Security													
RSA Security, Inc. (M: RSAS)	62.4	5.7	6.9	416.3	63.2	33.5	32.9	17.2	31.6	77.6	80.0	92	79
VeriSign, Inc. (M: VRSN)	280.5	89.2	175.8	54.2	na	107.6	51.6	140.7	167.1	56.6	65.8	99	96
Software													
Macromedia, Inc. (M: MACR)	97.3	10.0	13.0	na	325.0	32.1	34.4	40.9	78.9	90.3	89.2	92	86
Training/Education													
Prosoft Training.com (M: POSO)	276.2	6.1	14.8	22.9	108.7	na	na	11.5	124.1	–28.7	42.6	63	95
Medians for the group	**–13.4**	**30.6**	**10.1**	**29.9**	**6.1**	**51.7**	**51.6**	**110.5**	**121.6**	**52.0**	**59.9**		
Medians for all stocks	**–2.0**	**1.1**	**1.3**	**4.4**	**11.5**	**17.3**	**17.8**	**9.3**	**12.9**	**36.4**	**37.3**		

**Price change from September 30, 1999, to September 30, 2000.*

Exchange Key: N = New York Stock Exchange
A = American Stock Exchange
M = Nasdaq

Source: AAII Stock Investor Pro/*Market Guide, Inc. and I/B/E/S. Data as of October 1, 1999 and September 29, 2000.*

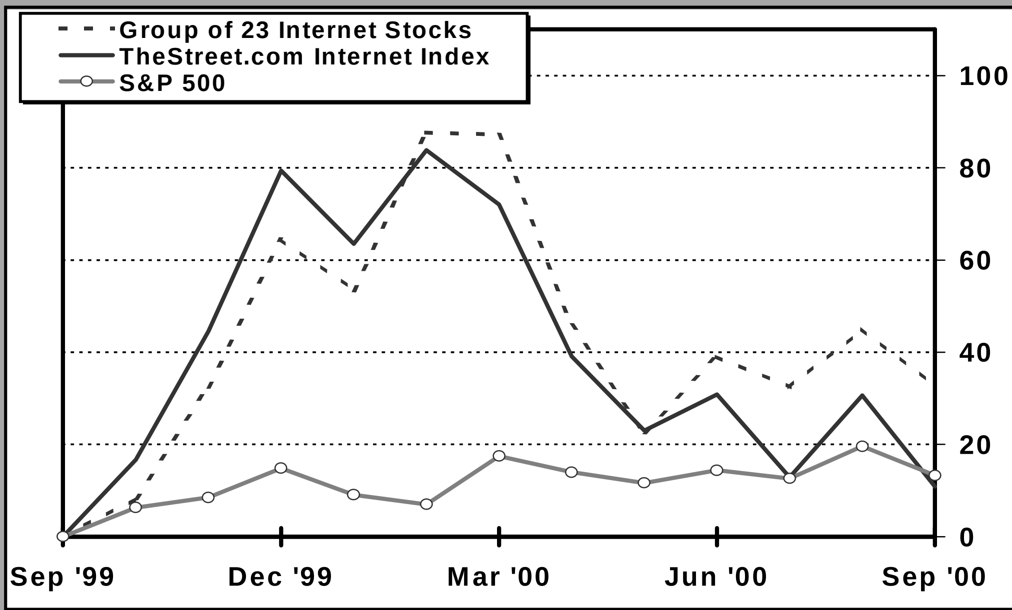
sales ratios had the better average price performance—160.4% versus 24.3%.

The second screen was for historical sales growth and, in general, investors seek higher growth rates. Here, however, the principle did not hold—the five highest growth stocks produced a negative 12.0% price performance compared to a very strong 129.2% price performance for the five lowest sales growth stocks. The lesson here is that high sales growth rates are difficult to maintain: Things tend to even out. Call it a reversion to the mean.

The third screen looked at expected earnings growth. In general, investors prefer stocks with higher expected earnings growth rates. Again, however, the principle did not hold, and the lowest expected growth stocks outperformed those with the highest expected growth rates.

Interestingly, studies tend to confirm the failure of growth

FIGURE 1. INTERNET STOCKS' RELATIVE PRICE PERFORMANCE



screens to turn up higher-performance stocks. Studies have shown that extremely high growth stocks, in terms of both historical and forecasted growth, typically underperform those stocks comprising the lower growth segment. Once again, unsustainable growth and unrealistic expectations are to blame.

The final screens looked at both the 13-week and 52-week relative strength rank numbers. These are momentum screens that seek stocks with high relative price strength in the expectation that such strength will continue into the future. With the short-term 13-week screen, the principle held—the stocks with the highest 13-week relative strength did better over the period (69.2% versus 48.2%). However, the 52-week screen picked the wrong group—the five stocks with the highest relative strength rank figures were beaten by the five with the lowest rank (76.2% versus 117.0%).

WHAT NEXT?

Although only a year has gone by, this performance year review did establish certain useful rules for investors concerning the Internet stock industry:

- No group of stocks in history—whether it be the "tronics boom" stocks in the 1950s, The Nifty Fifty stocks in the early 1970s, or the Internet craze of the late 1990s—has been able to revolutionize the markets as we understand them;
- Some stocks have been able to distort rational investment thinking over the short term, but not for an extended period of time;
- Exorbitant growth is unsustainable or likely unachievable;
- Internet stocks are not all alike and therefore need to be categorized and analyzed along proper industry and sector lines;
- Any segment or portfolio comprised of emerging industry stocks will be very volatile;
- Traditional investment methods do not always work well with emerging industry stocks;
- The Internet is still a developing industry, making investment decisions difficult.

Knowing all this, where do you go from here?

When traditional analysis is difficult to apply, and yet you still want to be in the market, your best bet is to carefully select a diversified portfolio of stocks—in this case, Internet stocks—that cuts across sub-sector lines. Individual stock selection is quite likely to be trumped by diversification. ❖

TABLE 2.
SCREEN PERFORMANCE

One-year price change September 30, 1999, through September 30, 2000.

Price to Sales	
Highest Five	24.3%
Lowest Five	160.4%
Historical Sales Growth	
Highest Five	–12.0%
Lowest Five	129.2%
Expected EPS Growth	
Highest Five	50.7%
Lowest Five	80.8%
13-Wk Rel Strength Rank	
Highest Five	69.2%
Lowest Five	48.2%
52-Wk Rel Strength Rank	
Highest Five	76.2%
Lowest Five	117.0%
Avg. of Internet Group	**32.5%**