



Bradley, Foster & Sargent, Inc.

Quarterly Market Commentary

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2000 Stock Market Bubble in NASDAQ Stocks Revisited?

“The four most dangerous words in investing:
‘This time it’s different.’ ”

Sir John Templeton

During the past several years, the U.S. capital markets have become bifurcated. The U.S. bond market in 2013 produced negative returns for most fixed income instruments. One of the broadest bond market indexes – the Barclays Capital U.S. Aggregate Bond Index – had a total return of -2.02% in 2013, while the 10-year U.S. Treasury note performed significantly worse with a total return of -7.81% for the same period. Conversely, in 2013 the U.S. stock market had its best year since 1997 with the S&P 500 enjoying a total return of 32.38%. The supercharged NASDAQ had an even more spectacular year with a total return of 40.17%.

This great bull market in U.S. stocks started with the final capitulation of investors on March 6, 2009 during the last phases of the Panic of 2008/2009. On that day, the S&P 500 bottomed at 666. Powering through its previous all-time high of 1576 in April, 2013, the S&P 500 finished on March 31, 2014 at 1872. This translates into a total return of 212.65% during this 5-year bull market. The chart below shows the S&P 500 Index since the previous market high in the 4th quarter of 2007:

S&P 500 Index
September 30, 2007 – March 31, 2014



Source: Bloomberg

This bull market has been powered by a number of factors. Stock prices tend to follow earnings, and corporate earnings have rebounded nicely since 2009. The S&P 500's estimated earnings for 2014 are at an all-time high of \$118. The Federal Reserve Bank's unprecedented monetary expansion through the purchase of U.S. Government and mortgage bonds has created abundant liquidity, leading to rock bottom interest rates. Both are key factors in the stock market's run. Another foundation of the bull market has been a growing conviction that, with interest rates so low and poised to rise, the only place investors can make money is the stock market. Thus, we have seen an outflow of money from U.S. fixed income mutual funds and an inflow into U.S. equity mutual funds over the past 18 months. The stock market's rise over the past 5 years has caused some investors to believe that the current valuation of the stock market is rich or even overvalued. But the chart below shows the broader market's valuation to be closely in line with the market's average over the previous 52 years:

**S&P 500 Index P/E Ratio (Trailing EPS)
1962-2014**



Stretched NASDAQ Valuations

While most stocks in the S&P 500 appear to be selling at reasonable valuations, there appear to be a considerable number of stocks in the NASDAQ whose valuations are divorced from traditional measures of valuation. This often occurs as a powerful bull market lengthens, as many investors forget their speculative losses during the previous bear market cycle. They become less risk averse and more willing to invest in momentum stocks. And, a considerable number of institutional and retail investors have favored trendy and more speculative stocks during the latter half of 2013 and the first months of 2014. Some have even indulged in the “greater fool theory of investing.” The greater fool theory states, in essence, that one can purchase a security at an elevated price because one can usually find a greater fool willing to buy the security at an even higher price. The greatest illustration of this theory was the tulip bulb craze in the 17th century in Holland when some tulip bulbs sold at prices equal to 10 times the annual salary of a skilled Dutch workman. The chart on the following page shows that the valuation of the NASDAQ Composite is roughly twice that of the S&P 500 Index:

NASDAQ Composite P/E Ratio 1995-2014



A Brief Glance Back at the NASDAQ in 2000

In March, 2000, the NASDAQ Composite hit its all-time high of 5,049. At that level, the NASDAQ's P/E was 152. As of this writing, almost 3,700 stocks that were part of the NASDAQ in March, 2000 are no longer part of the index. Many were merged or acquired, and not a few companies failed. The following table shows the “tulip bulb” mania which characterized the “Internet bubble” and the damage in stock prices in the period that followed:

Company	Peak Price	Peak P/E	Peak to Trough Decline
Microsoft	\$ 54	73	-72%
Intel	\$ 75	62	-84%
Oracle	\$ 46	160	-84%
Dell	\$ 57	101	-86%
Qualcomm	\$ 89	225	-87%
Cisco	\$ 80	230	-89%
EMC	\$100	200	-96%
Yahoo	\$118	892	-96%
Nokia	\$ 62	79	-97%

Source: Bloomberg

2014: A Repeat of the 2000-2002 NASDAQ Bear Market?

While there are some similarities between individual sectors of the NASDAQ now and the entire NASDAQ at the height of the Internet bubble in 2000, the NASDAQ now is a very different animal. From its peak in 2000 to the bottom in late 2002, the NASDAQ Composite fell over 78%. The damage was almost as draconian as the Dow Jones's 86% collapse in the Great Depression between 1929 and 1933. However, the NASDAQ now has a much different make-up than it did in 2000. Information technology companies, which in 2000 represented 57% of the index, now

represent 38%. Like the bifurcated returns in 2013 between stocks and bonds, the NASDAQ now has bipolar characteristics, too: There are many great old technology companies – “stalwarts” to use the great fund manager Peter Lynch’s vocabulary – that feature in the above table that are selling at modest valuations. Companies such as Microsoft, Intel, Cisco, and Oracle have P/E ratios of as low as 11 and no higher than 15. Most of the above now pay dividends, and the stocks of some have dividend yields above 3%. Great companies such as Google, Apple, and eBay have P/E ratios of 22 or less. The P/E ratio of the NASDAQ is now at 31 – expensive but nothing like the P/E ratio in 2000 of 152. However, some sectors of the NASDAQ do have an uncanny resemblance to the NASDAQ at the turn of the decade. Once again we see speculative money pouring into the shares of companies whose business models are based on the Internet and alternative energy. And once again, some of the companies have very attractive, robust businesses with great brands and good cash flow, while others are great concept stocks with growing revenues but have neither earnings nor positive cash flow. The stocks which appear to have caught the imagination of traders, speculators, and growth investors are social media companies, firms that offer their services and products through the “cloud,” and clean energy companies. The following are examples of some of these companies which exhibit many of the features of the “Internet bubble” at the turn of the last century:

Strong Sales Growth with Low/Negative Cash Flow

Internet/Cloud

Company	Price 3/31/14	2014 EPS (Non-GAAP)	2014 P/E Ratio	2014 Price/Sales
Twitter	\$ 46.70	\$0.02	2,335	21.3
Splunk	\$ 71.50	(\$0.04)	Negative	20.8
Yelp	\$ 76.90	\$0.46	167	15.1
Zillow	\$ 88.10	\$0.05	1,762	11.8

Clean Energy

Company	Price 3/31/14	2014 EPS (Non-GAAP)	2014 P/E Ratio	2014 Price/Sales
Tesla Motors	\$208.00	\$1.59	131	7.1
Solar City	\$ 62.60	(\$2.71)	Negative	21.0
Fuelcell Energy	\$ 2.50	(\$0.13)	Negative	3.1
Plug Power	\$ 7.10	(\$0.09)	Negative	11.6
Ballard	\$ 4.40	(\$0.08)	Negative	6.0

Source: Bloomberg as of 3/31/14

The first bracket of companies have very strong brands and sound business models. Three of the four – Twitter, Yelp, and Zillow – have Internet-based products with broad consumer usage and loyalty (the fourth – Splunk – analyzes and manipulates large amounts of Internet data). Yet none of these companies will have positive GAAP earnings this year. Twitter, for example, is a global platform for public self-expression and conversation in real time. In this narcissistic age, Twitter has enormous commercial potential, but it is not forecast to achieve GAAP profitability until 2017. Was its 2013 year-end market capitalization of approximately \$38 billion justified? By the date of this publication,

its stock had fallen from a high of \$71.25 in December to \$41. How much lower will it go? If we use the last Internet bubble as a good guidepost, Twitter may well have much further to fall. Zillow is another good example. Zillow has great brand awareness. Most buyers and sellers in the U.S. residential real estate market, where more than 5 million homes are sold annually, know about Zillow. Its 2013 revenues were 69%+ greater than in 2012. This year, sales are forecast to grow 48% and from 2014 to 2015, sales are projected by analysts to grow at 35%. This is very fast growth, but it is decelerating. Perhaps Zillow can earn \$1.00 per share in 2016. If we assume its EPS growth rate drops to a robust 25% a year, and we assign a P/E of 50 – twice its PEG (P/E to EPS growth rate) – the shares will only be worth \$50 in 2016. The stock is trading today at \$93.

The second bracket of companies contains some favorites in the clean energy space. These are great concept stocks. A number of the above companies are fuel cell companies – Fuelcell Energy, Plug Power, and Ballard. These three are perennial favorites of speculators during great bull markets. From late 2013 through early April, 2014, the shares of Plug Power went on a parabolic run, appreciating more than twentyfold. But, as the table on the preceding page shows, it is forecast to lose money in 2014, and its current valuation is very expensive. The chart below shows the path of Fuelcell Energy shares during the past 19 years. Although it is difficult to see in the chart, the share price of Fuelcell Energy rose fivefold from April, 2013 to mid-March, 2014, when the air began to leak out of the clean energy bubble.

**Price of Fuelcell Energy Shares
1995-2014**



Elon Musk – Tesla Motors and Solar City

The other two companies in the Clean Energy table on the previous page – Tesla Motors and Solar City – are connected to an entrepreneur who has the Midas touch – Elon Musk. Musk is a 43-year old, South African-born businessman who makes his home in the U.S. After emigrating from South Africa to Canada, he came to the U.S. to finish his undergraduate work at the University of Pennsylvania. Musk’s passions are the Internet, renewable energy, and outer space. Shortly after graduation, he started Zip2, a web software firm, with his brother Kimbal; he sold out to Compaq several years later, receiving \$22 million from the sale. In March, 1999, Musk co-founded X.com, which later merged with PayPal. EBay bought PayPal in October, 2002 for stock with Musk reaping \$165 million in shares from the sale. Next, Musk co-founded SpaceX – a company which develops and manufactures space launch vehicles, focusing on advancing the state of rocket technology;

NASA is its biggest client. He continues as CEO of SpaceX. Tesla Motors was co-founded by four other entrepreneurs, but in 2008, Musk, having invested in Tesla Motors, became its CEO during the financial crisis. Musk is also Chairman and the largest shareholder of Solar City, a company co-founded by his cousins. Musk describes himself as a workaholic. With his remarkable track record of success and his winsome personality, investors are willing to pay almost any price to own shares in a company of which he is the Chairman or CEO. Tesla Motors has been an amazing success. Its automobiles have captured the imagination of wealthy consumers who are clamoring to pay \$100,000 for the Tesla Model S, which combines great quality, fast acceleration, and renewable energy. In order to ramp up production to sell more cars, Musk is planning to build a \$5 billion “gigafactory” to produce 500,000 lithium-ion battery packs annually. This scale of production is needed to lower the cost of the batteries, which are a major part of the cost of manufacturing their electric cars. Since its IPO in June, 2010, Tesla has appreciated eightfold. Currently it is trading at a P/E of approximately 131 and 7 times 2014 revenues.

Solar City is a leading provider of residential solar power. It makes available to residential consumers a solar leasing model, which significantly reduces the upfront cost of installing solar power and allows many homeowners to pay less for electric power than if they were sourcing electricity from the grid. Solar City’s shares are up fivefold from its IPO at the end of 2012, although the company will not have positive GAAP earnings for 3 or more years. The shares sell at a multiple of 21 times sales.

Strong Sales Growth with Low Margins/Modest Earnings

Company	Price 3/31/14	2014 EPS (Non-GAAP)	2014 P/E Ratio	2014 Price/Sales
LinkedIn	\$184.90	\$1.60	115.6	10.4
Netflix	\$352.00	\$4.66	75.5	3.9
Salesforce.com	\$ 57.10	\$0.50	114.2	10.4
Workday	\$ 91.40	(\$0.55)	Negative	22.6

Source: Bloomberg as of 3/31/14

The companies in the group above are examples of top quality, large capitalization companies with strong brands, excellent balance sheets, and rapid sales growth. All are companies whose main businesses are “cloud” based, i.e. Internet companies. However, these companies have concentrated on delivering robust revenue growth, expanding their market share, and building a moat which cannot be easily penetrated by competitors. An example is LinkedIn – the world’s largest professional Internet network with over 150 million members in more than 200 countries. It has had extremely rapid sales growth – from \$500 million in sales in 2011 to estimated revenue of \$2 billion in 2014. But its focus on subscriber growth and market share, not earnings growth, has given it an exalted P/E ratio. Until recently, investors have not seemed to care. The stock peaked in August, 2013 at \$256; it now trades at \$165 – a 35% drop. With continuing robust revenue growth but 2014 non-GAAP earnings of only \$1.60, where might the shares trade when the “cloud” bubble has completely burst? Perhaps \$80-\$90 per share?

Two other “cloud” companies in this group deserve mention: Salesforce.com and Workday. Both are leading companies in their space with a near cult following by their clients. Salesforce.com is one of the premiere cloud-based customer relationship management companies in the world.

Founded in 1999, it had revenues of \$4 billion in 2013. After more than a decade of strong sales growth, its 2013 GAAP results were a loss of \$0.11 per share. At the end of March, the shares were selling at approximately 115 times 2014 non-GAAP earnings. Workday is a newer company. Founded in 2005 by the founder and former CEO of PeopleSoft, David Duffield, it is the cutting edge, cloud-based human capital management company. It will not turn a profit in GAAP terms until 2018 or later. Its revenues in 2013 were \$467 million. Its market capitalization at its peak in February, 2014 was \$21.3 billion – 45 times sales. Since then, the share price has fallen from \$116 to \$71 – a decline of 38%. At eight times consensus estimated 2015 sales, the shares would be worth \$47 – not far from where the shares first traded on the day of its IPO in October, 2012.

Strong Sales Growth with Robust Earnings

Company	Price 3/31/14	2014 EPS (Non-GAAP)	2014 P/E Ratio	2014 Price/Sales
Baidu	\$ 152.30	\$ 5.37	28.4	6.7
Facebook	\$ 60.20	\$ 1.26	47.8	13.4
Google	\$1,114.00	\$53.00	21.0	6.9
Tencent Holding	\$ 69.10	\$ 1.84	37.6	10.0
Yahoo	\$ 35.90	\$ 1.58	22.7	8.1

Source: Bloomberg as of 3/31/14

Our final group of companies includes quality, cloud-based companies with established brands, sales growth, and *robust earnings*. They are companies whose shares have, in general, participated in the second “Internet bubble.” Founded in 1998, Google has become so globally ubiquitous that the company’s name is now a verb in the English language. With revenues of over \$60 billion this year and \$57 billion of cash and investments on its balance sheet, Google is a global powerhouse, having largely attained one of its core missions of “organizing the world’s information and making it universally accessible and useful.” Having appreciated more than twelvefold from its IPO price in 2004, Google nevertheless sells at a reasonable valuation of approximately 21 times 2014 non-GAAP earnings per share. It recently split its shares 2:1. Facebook is also ubiquitous with over 1.2 billion users. After its poorly executed IPO in May, 2012, which resulted in the stock dropping more than 50% in 4 months, shares of Facebook have rebounded dramatically. The reason for this turnaround was Facebook’s ability to monetize its traffic from mobile phones. Investors’ enthusiasm for Facebook shares drove the price up to \$71 per share by March, 2014 – an extremely rich valuation, as the past month has shown. The share price has retreated to \$59 and may have further to fall. Yahoo is also well known as an Internet search company. What is not so well known is that its most valuable asset is its ownership in Alibaba, the huge Chinese e-commerce company which is planning to go public in the U.S. soon. Yahoo will be able to monetize its stake in Alibaba soon. Baidu is the largest Chinese Internet search company with a market share of over 65%. It trades on the NASDAQ and sells at a reasonable valuation; its market capitalization is approximately \$50 billion. Tencent Holding is a Chinese Internet company which trades on the Hong Kong stock market. Its business model, which is a combination of Internet social media, instant messaging, gaming, and e-commerce, has produced great sales growth and surging profitability. It has a market capitalization in U.S. dollars of \$120 billion and sells at a rich but justifiable valuation. While these three Chinese companies have great business models, good balance sheets, and robust cash flow, many investors are not comfortable with Chinese political risk and accounting issues.

The Bipolar U.S. Stock Market

The companies discussed in the preceding pages, whose stocks have participated in the recent NASDAQ mini-bubble, represent just a small sample of the overvalued companies in the NASDAQ during the first quarter of 2014. Stock prices of companies in the biotechnology industry and in 3D printing also saw a big run-up in their valuations in 2013 and early 2014 but are now selling off. Ultimately, price matters, and the NASDAQ's P/E ratio of 31 on forward earnings at the start of 2014 was very rich compared with a P/E of 14 for the Dow Jones. The table below lists a collection of blue chip companies with quite modest valuations. And they all have raised their dividends during the past several years:

U.S. Large Capitalization "Stalwart" Companies

	Price 3/31/14	2014 EPS (Non-GAAP)	2014 P/E Ratio	Dividend Yield
Apple	\$537	\$42.81	12.5	2.3%
Chevron	\$119	\$11.12	10.7	3.4%
Cisco	\$ 22	\$ 1.90	11.6	3.4%
Goldman Sachs	\$164	\$15.41	10.6	1.4%
IBM	\$192	\$17.92	10.7	2.0%
Intel	\$ 26	\$ 1.86	14.0	3.5%
JP Morgan	\$ 61	\$ 5.90	10.3	2.5%
Microsoft	\$ 41	\$ 2.80	14.6	2.7%
Travelers	\$ 85	\$ 8.18	10.4	2.4%
Wal-Mart	\$ 76	\$ 5.31	14.3	2.5%

Source: Bloomberg as of 3/31/14

Summary

The fundamental determinants of stock prices are earnings, interest rates, and liquidity. All three legs of the stock market's stool appear to be reasonably firm. However, when valuations get stretched, then it is time for the investor to take care not to get caught in a nasty correction, which ends badly. The valuations of the Dow Jones and S&P 500 appear not particularly undervalued as was the case two years ago, but also not overvalued. Certain sectors of the NASDAQ, however, are a different story. Even after the bubble in "cloud" stocks has been punctured over the past month, there is probably a lot more air left to come out of many of these stocks. To paraphrase Sir John Templeton, this time is not different. While we do not see a repeat of the collapse of the NASDAQ as in 2000-2002, the shares of companies without cash flow and earnings will likely see continued pressure until more reasonable valuations are reached. *In the meantime, we will continue to focus on preserving capital by investing in quality companies with great brands and sound business models, good balance sheets, and strong earnings.*

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