

INVESTMENT PERSPECTIVES

APRIL 1, 2015

Bubbles II

Almost exactly five years ago, we wrote a piece entitled *Bubbles*, which discussed the sharp rally in stocks from the lows of early 2009 and the risks of the growing federal deficit that resulted from government bail-outs and fiscal stimulus during the financial crisis. In part, our letter was a look back at the crisis from the perspective of a year's recovery from the market's bottom and about 15 months removed from Lehman Brothers' bankruptcy. Although we expressed some worry about the long-term effects of mounting deficits, we concluded that stocks and other assets were not in bubble territory and represented good value despite what we saw as a weak economic recovery.

It's remarkable how far the markets have come in the five years since then. With the Standard & Poor's 500 Index having produced a total annualized return of 15% compounded over the period through last December (more than five percentage points above its long-term average), many investors are asking themselves if the current bull run in stocks is nearly over. Not only have U.S. stocks more than doubled, but other asset classes (with the notable exception of commodities) have provided excellent returns as well. So, it may be a good time to revisit the bubbles theme.

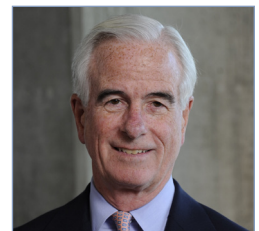
POSSIBLE SIGNS

In *Engines That Move Markets*, a 2002 book about the cycles of technology investing, Alasdair Nairn defines "bubbles" as periods when investors appear to suspend rational valuation, much as they had during the dotcom craze shortly before the book was published. Although bubbles are far easier to spot once they've occurred, responsible investing requires that we look ahead

for signs of excess and manage accordingly. Several potentially worrisome signs are beginning to appear on the horizon, but they don't appear particularly disturbing at this point, as we'll see:

- The NASDAQ Composite recently crossed 5000 for the first time since March 2000. For some, this is an indication of speculative excess, recalling the infamous "dotcom bubble," which reached its crescendo 15 years ago.
- Venture capital and leveraged buyout activity has approached new highs, and valuations have increased considerably.
- Merger and acquisition dollar volume has reached precrisis peaks.
- High-profile initial public offerings such as **Alibaba** have drawn attention to the IPO market, which has gained momentum in recent months.

These and other indicators of supposed excess are to a great extent the result of a deliberate strategy by the Federal Reserve to stimulate the U.S. economy following the financial crisis. By keeping short-term interest rates at effectively zero since 2008, the Fed has prompted investors to reach for incremental returns by buying risk assets, including stocks, high-yielding or longer-dated bonds, real estate, private equity, etc. Some might argue that the Fed's policy could trigger another crisis as asset prices become overly inflated. On the other hand, the regulatory oversight of banks and other financial intermediaries



WILLIAM L. PATERNOTTE, CFA
Senior Advisor

has been significantly strengthened over the same period, so, theoretically at least, the tools exist to stave off another similar crisis. Higher valuations in the financial sector have enabled the banking system to be recapitalized (critics might even say overcapitalized) through equity issuance, thereby reducing the need for future rescues. On balance, the benefits of higher asset prices outweigh the potential negatives, at least in terms of economic growth.

THEN AND NOW

To gain some perspective on a sector that some feel is overinflated, let's compare the NASDAQ Composite's characteristics today with 15 years ago. Perhaps most startling is the contrast between price/earnings ratios then and now. As shown in the accompanying chart, the NASDAQ sported a valuation of well over 60x earnings in early 2000, compared to a multiple of about 20x as of early March, based on the latest 12 months' earnings per share. (These calculations include only those stocks with underlying profits so as not to distort the figures. If stocks with no earnings were included, the P/E ratio in 2000 would have been much higher than shown.) In the late 1990s, robust capital markets were receptive to almost any company with ".com" in its name, and an amazing 371 technology companies went public in 1999, according to University of Florida Professor of Finance Jay Ritter. Last year, the figure was 53, a trickle by comparison, but it included several high-profile companies like **Alibaba**, **Go-Pro** and others, whose price/earnings ratios remain relatively high.

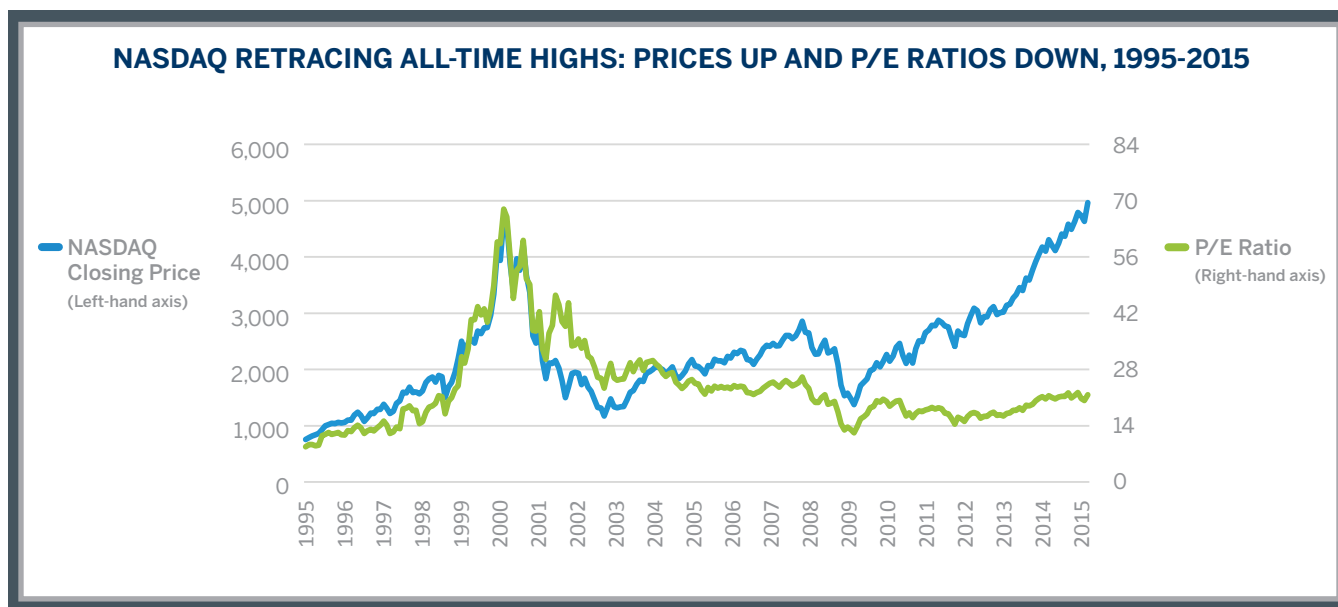
A look at the stocks with the largest market capitalizations in the NASDAQ is equally striking. In March 2000, the average price/earnings ratio of the top 10 stocks was just over 100x

trailing 12 months' earnings per share if **Yahoo** (then over 600x) is excluded. Today, excluding **Amazon** (by far the highest P/E in the top 10 at about 240x), the top 10 average 24x. In addition to highlighting valuation changes since the 2000 peak, such comparisons suggest that earnings growth over the intervening years has finally caught up with once-excessive valuations and brought them more or less back to normal.

In the private company world, total venture capital financings reached \$59 billion last year, up from about \$23 billion in 2004, according to *PitchBook's* 2015 venture industry annual report. Unsurprisingly, as volume has increased, so have valuations. *PitchBook* points out that median "pre-money" valuations (i.e., the market capitalization of companies before the injection of venture capital) of late-stage venture rounds have roughly tripled since 2009.

Another gauge of speculative activity can be found in merger and acquisition (M&A) transactions, which have clearly gained momentum over the last two or three years. According to Bloomberg, total announced deals were close to \$3.6 trillion last year, roughly the same as during the 2007 peak. Unlike earlier M&A booms, however, most activity has occurred in small- to medium-sized acquisitions rather than a few blockbuster deals that tend to carry higher risk. A good example of the latter was America Online's merger with Time Warner at the crest of the dotcom craze. There is no obvious parallel today. Nor is there a concentration of activity in any one sector, as frequently happens during bubble periods. Interestingly, in an unusually large number of instances, the stock prices of the target company and the acquirer have *both* risen following a deal announcement, while typically only the target's stock price benefits. This pattern tends to suggest that the deals make sense

Exhibit 1



Source: Bloomberg.

from both perspectives—i.e., they are rational and not just the result of a feeding frenzy.

CONTINUED GAINS?

If speculation does not appear to be excessive in some of the more obvious places, what about stocks in general? Using the Standard & Poors 500 Index as a barometer, stocks today are trading at approximately 19x trailing 12 months' earnings per share, above their long-term average of 15-16x but well below the 25-30x typical of market peaks. Interestingly, when we wrote our earlier *Bubbles* letter, they were valued at 18x earnings on the same trailing basis, only slightly below today's level. Thus, since early 2010, earnings growth of close to 85% has accounted for the vast majority of the doubling in stock prices. The small valuation gain may be considered reasonable in light of growing investor confidence as the economy has recovered from the depths of 2008-2009. On the other hand, the best returns are made when the starting point is an extreme low—i.e., the point of greatest perceived risk.

It's safe to say that the growth in corporate profits over the last five years has been more rapid than most investors expected, as analysts and companies have steadily revised their earnings estimates upward. In 2010, the economic expansion was widely forecast to be weak, and indeed it turned out to be slower than in most postrecession periods. Consumer and business confidence remained fragile until recently, and the gradual unwinding of prerecession leverage served as a drag on the economy. Despite sluggish demand, however, corporate profit margins expanded as a result of the favorable combination of low interest rates, a reluctance to hire new workers (or increase the pay rates of existing ones) and depressed commodity/raw materials costs. Perhaps the most important question facing investors now is whether profits can continue to grow at a rate sufficient to sustain today's equity valuations and produce meaningful returns over the next several years. We think earnings growth will slow but still be positive.

An interesting study by Wisdom Tree Asset Management earlier this year provides historical evidence that equities will continue to perform well, although perhaps not at the same heady pace we've seen recently. The firm looked at 139 rolling five-year periods dating back to 1871 (1871-76, 1872-77, etc.), separating them into quartiles based on the returns over each five-year interval. The five years ended December 31, 2014 ranked in the top 35 of 139 observations—first quartile, but just barely. It turns out that this top-quartile group produced a median annual return in the *subsequent* five years of 9%—which is about what the return on U.S. stocks has been since the late 1920's. In short, five-year periods of unusually strong performance tend to be followed by five more years of favorable results.

Mutual fund flows also suggest that retail investors have not been caught up in the speculative fever characteristic of bubbles. Flows into U.S. equity and sector funds have been only

modestly positive, on balance, since the first half of last year, according to Morningstar. Over the same period, flows into domestic bond funds have remained robust, reflecting investors' continuing quest for yield.

POCKETS OF EXCESS

If the case can be made that the broad equity markets haven't reached bubble territory, there are certainly signs of excess in a few sectors, and it's these pockets of speculation that remind us of the virtues of diversification. A good example today is biotechnology, in which prices have more than tripled since early 2012, as measured by the S&P Biotechnology Select Industry Index. Many of these companies have no current earnings, much like the dotcom stocks of 15 years ago.

Cycles of massive innovation can cause distortions in equity valuations and consequent returns. In an interesting article by Elroy Dimson, Paul Marsh and Mike Staunton of London Business School in the *Credit Suisse Global Investment Returns Yearbook 2015*, the authors examine the relationship between a stock's "seasoning" (the time elapsed since its initial public offering) and its investment returns. Using a broad sample of United Kingdom stocks over the last 35 years, they conclude that returns increase directly with seasoning—clear evidence that it's important to maintain valuation discipline and avoid getting swept up in the euphoria of new technologies and IPOs.

These extremes pose a serious challenge for portfolio managers because they can distort the benchmark indices against which portfolios are compared. Last year, for example, Chris Berrier, portfolio manager of our small-cap growth strategy, was reluctant to increase the portfolio's exposure to biotech just to keep up with the benchmark's weighting, as the stocks looked overvalued relative to other rapidly growing companies in the small-cap universe. Tracking a benchmark's weighting is simply not consistent with our "active" investment strategy, in which we typically deviate from index weightings in an effort to create incremental returns. Given the strong performance of biotech stocks and their resultant impact on the benchmark Russell® 2000 Growth Index, it was almost inevitable that the portfolio would trail the Index during this period. The dilemma for managers is incurring the risk of subpar results in the near term while sticking to a proven long-term strategy.

DIVERSIFICATION SHOULD HELP

Predicting the performance of specific sectors or even asset classes over short periods of time is extremely challenging. So it makes sense to diversify in order to avoid overexposure to highly valued parts of the capital markets while being positioned to benefit from undervalued ones. Since the primary asset class for most American investors is domestic equities, diversification is typically focused on building positions in other asset classes that complement their exposure to U.S. stocks. Such a strategy, however, turned out to be counterproductive over the last two years, as U.S. equities were essentially the best-performing asset

class in the world during that time. Further, from early 2009 until the middle of last year, the correlations among various asset classes were unusually high, so the risk-mitigation benefit of diversification was muted. Simply stated, asset classes tended to move together: When U.S. equities went up or down, so did non-U.S. stocks, high-yield bonds, real estate, etc. The major exception was U.S. bonds, which moved inversely with stocks for much of the period. This pattern is shown in Exhibit 2.

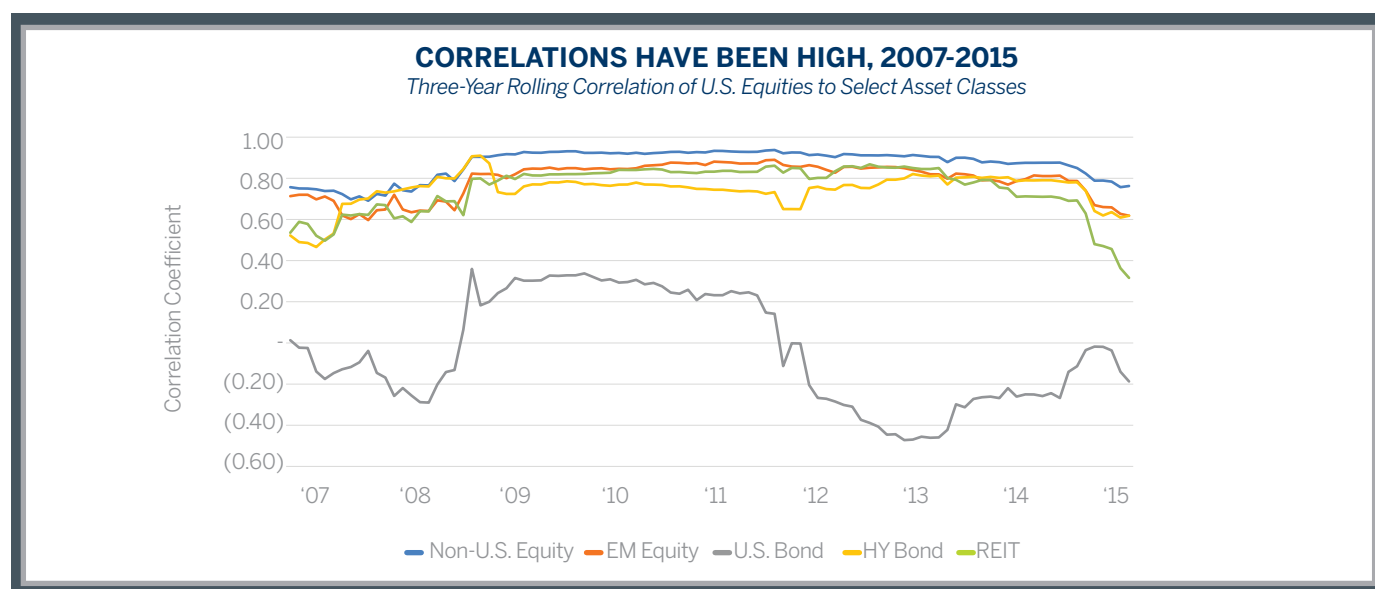
Based on how correlations have behaved over a much longer period of time, we can safely say that it's unusual for them to remain high for as long as they did in the period shown below. It's quite possible, then, that they are in the process of reverting to a more normal level. If so, diversification should once again prove beneficial.

While U.S. equities may produce positive returns for the reasons we cited earlier, we believe it's unlikely that they will

continue as the best-performing asset class for much longer in the current cycle. So far this year, in fact, non-U.S. stocks have meaningfully outperformed domestic equities. Under such circumstances, investors with balanced holdings (but still a large proportion in U.S. stocks) would not be sacrificing relative performance by diversifying. Moreover, if correlations are indeed declining, the volatility of returns will be reduced. Diversification should therefore be an effective strategy to enhance *risk-adjusted* returns (returns per unit of risk) in the current environment.

Every client's asset allocation is a function of his or her particular situation and objectives, but diversification remains an important component in controlling risk and avoiding the possible consequences of bubbles. At this point in the market cycle, it appears to us that the bubbles that do exist are small and relatively isolated—not enough to derail the recovery.

Exhibit 2



Source: Bloomberg.

The views expressed are those of the author and Brown Advisory as of the date referenced and are subject to change at any time based on market or other conditions. These views are not intended to be a forecast of future events or a guarantee of future results. Past performance is not a guarantee of future performance. In addition, these views may not be relied upon as investment advice. The information provided in this material should not be considered a recommendation to buy or sell any of the securities mentioned. It should not be assumed that investments in such securities have been or will be profitable. To the extent specific securities are mentioned, they have been selected by the author on an objective basis to illustrate views expressed in the commentary and do not represent all of the securities purchased, sold or recommended for advisory clients or other clients. The information contained herein has been prepared from sources believed reliable but is not guaranteed by us as to its timeliness or accuracy, and is not a complete summary or statement of all available data. This piece is intended solely for our clients and prospective clients and is for informational purposes only. No responsibility can be taken for any loss arising from action taken or refrained from on the basis of this publication.

Investments may be available for accredited investors and/or qualified purchasers only. Interests in private funds may only be made available to persons who are "accredited investors" as defined under Regulation D of the Securities Act and "qualified purchasers" as defined under the Investment Company Act of 1940, as amended. Any offer or solicitation with respect to a private fund, if made, will be made only pursuant to the final private placement memorandum of the fund and other offering materials.

The S&P 500 Index represents the large-cap segment of the U.S. equity markets and consists of approximately 500 leading companies in leading industries of the U.S. economy. Criteria evaluated include market capitalization, financial viability, liquidity, public float, sector representation and corporate structure. An index constituent must also be considered a U.S. company. An investor cannot invest directly in an index.

The NASDAQ Composite Index measures all NASDAQ domestic and international based common type stocks listed on The NASDAQ Stock Market. Launched in 1971, the NASDAQ Composite Index is a broad based Index. Today, the Index includes over 3,000 securities, more than most other stock market indices. The NASDAQ Composite is calculated under a market capitalization weighted methodology index.

S&P Select Industry Indices are designed to measure the performance of narrow GICS® sub-industries. The Index comprises stocks in the S&P Total Market Index that are classified in the GICS biotechnology sub-industry.

www.brownadvisory.com

