

## Investment Commentary—April 2010

The U.S. economic recovery continued over the last three months and seemed to pick up steam as the quarter progressed. We must admit to being impressed at the strength of recent economic indicators. In March alone, we saw:

- solid auto sales--up around 20% from March 2009, albeit at a historically low 11.8 million annualized rate;
- a positive jobs report--114,000 new jobs, excluding temporary census hires;
- a spectacular Manufacturing Purchasing Managers Index (PMI) of 59.9, the highest reading since July 2004. To appreciate just how good March was, realize that at no point in the 1990s did the index reach as high as 59.9;
- a more than respectable Non-Manufacturing PMI of 55.1.

All of this should combine to produce GDP growth on the order of 3% or so for the first quarter, and nearly 4% on average over the last three quarters. While this is on the slow side as recoveries from severe downturns go, it very likely constitutes "escape velocity," i.e. enough momentum to ensure there won't be a "double-dip recession." (We hasten to add the proviso that exogenous events could always intervene and send the economy into another tailspin. The Greek debt crisis offers a timely example; while European leaders appear to be acting rationally to engineer a rescue, one can't dismiss the possibility that the crisis spirals out of control with global ramifications.)

In spite of encouraging recent data, we remain convinced that the recovery will slow in the second half of this year or early 2011. Careful readers of past commentary should be able to recite the litany. For others: withdrawal of federal fiscal stimulus, spending cuts and tax increases enacted by deficit-riddled states and municipalities, and the effects of a still rising wave of home foreclosures (Bank of America alone is reported to be planning on ramping up its foreclosure rate from the current 7,500 per month to 45,000 per month by December) will weigh on the economy in coming quarters. On a more encouraging note, we also continue to believe that after a couple of years or so, the forces holding the economy back—consumer deleveraging, battered state and local budgets, and a housing market plagued by foreclosures and oversupply—will run their course, resulting in a gradual transition to robust growth.

If our expectations for a weak second half are correct, the stock market must have missed the memo. Or perhaps it believes that the surge in corporate profits will continue regardless. And well it might. Still, it's a bit scary to realize that the S&P 500 finished the first quarter 76% above its March 2009 lows (and 80% as of this writing) with nary a pause. And the ongoing rally seems to rest on two pillars—rock-bottom interest rates and a sturdy recovery—that can only co-exist for so long.

Some market observers would add valuation to the list of reasons to be concerned about the durability of the rally. Robert Shiller, who famously identified both the technology stock bubble of the late 1990s and the more recent housing bubble, has a simple metric for determining whether the stock market is cheap or dear. He looks at the aggregate earnings of the S&P 500 Index over the previous ten years and adjusts for inflation. He divides the current price by the average inflation-adjusted earnings to get what he calls the 10 year P/E and others call the cyclically adjusted P/E or CAPE. As of March 2010, the CAPE was 21.3<sup>1</sup>, about 30% above the historical average.

Is the market therefore 30% overvalued? After an intense bout of number crunching, we've concluded that it isn't. In fact, our analysis suggests the market is extremely close to fair value. The market still seems overdue for a correction. Nevertheless, it's comforting to think that stocks may be fairly valued even after one of the most powerful rallies on record.

So, what numbers exactly did we crunch to determine that the market is fairly valued? Unlike the S&P 500, the Dow Jones Industrials are comprised of a very manageable thirty stocks. We looked at earnings for each of these stocks over the period from 2007 to 2011--three years of actual results, with two years of forecasts. For actual results, we looked at reported earnings, a more conservative measure than operating earnings (often mocked as "earnings excluding the bad stuff"). For 2010 and 2011 forecasts, we looked at analyst estimates and took the mid-point of the lowest estimate and average estimate. While the average analyst tends to be overly optimistic, keep in mind that companies in the Dow are typically tracked by over twenty analysts; it's reasonable to think that the most bearish of the lot is overly pessimistic. We can hope that the truth lies half way between.

When we put all of this together and compared average earnings to closing share prices at the end of last quarter<sup>2</sup>, the average<sup>3</sup> P/E is 15.1, virtually identical to the historical stock market average P/E of around 15.0. (Interestingly, if instead of a mid-point between the lowest and average analyst estimate we had used the lowest estimate full stop, the average P/E only rises to 15.6.) As most readers well know, we favor price to free cashflow as a measure of value. The details would take us too far afield, but suffice it to say that looking at free cashflow makes the Dow stocks appear slightly inexpensive.

How is it that our analysis can suggest that the market is reasonably valued when Shiller's metric tells us that it's 30% overvalued? Is it the result of focusing on the Dow rather than the S&P 500 (as Shiller does)? Unlikely. The Dow tends to run between 7x and 10x the S&P 500;

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<sup>1</sup> This comes from data that Shiller kindly makes available online at [www.irrationalexuberance.com](http://www.irrationalexuberance.com).

<sup>2</sup> We made one adjustment to share prices; for companies whose cash and short term investments exceed debt, we subtract net cash per share from the stock price. The adjustment matters because corporate balance sheets have record amounts of cash, which earns little if any interest, but increases the value of shares. It's only fair to give companies credit for the cash they've stockpiled.

<sup>3</sup> We took a simple average; the weighted average (weighting by price, since the Dow is price-weighted) results in a slightly lower P/E.

the current ratio--a bit over 9x with the Dow and S&P 500 at 11,000 and 1,200 respectively--is on the high side of the historical range, suggesting that if anything the Dow stocks are *more* likely to be overvalued than the S&P 500, not less.

What then is the source of the 30% gap? Frankly, we don't have a complete answer. Valuation is equal parts art and science. During the late 1990s any objective observer had to conclude that stocks were significantly overvalued. There have been other extreme cases on the downside. But, much of the time reasonable observers can disagree. That said, we do see two problems with the CAPE that account for about half of the difference. First, the CAPE doesn't account for cash on corporate balance sheets, which is at record levels (see footnote 2 above for a bit of additional discussion on the subject). While the cash hoards are sizeable, this only accounts for about 2 or 3 points of the 30% discrepancy.

The other problem with CAPE and Shiller is endemic to long term historical averages. (Mathematically inclined readers can skip this paragraph!) If a statistic grows over time, then the historical average will tend to be lower than the current reading. That's why it's of little comfort to learn in July that the average daily high for the past six months was around 60°. Since earnings, like temperatures during the spring and early summer, tend to grow over time, 10 year average earnings will generally be lower than current earnings. When we divide by earnings the relationship is reversed; hence, the 10 year average price/earnings (CAPE) should (on average) be larger than the one-year P/E. And in fact, the historical norm for the CAPE is 16.3 vs. 15.0 for the one-year P/E. The fact that 16.3 is 8% higher than 15.0 is no coincidence; the 8% difference is a function of how fast real earnings per share (EPS) typically grows. But what if there were a permanent increase in the average rate of real EPS growth? In that case, the 16.3 vs. 15.0 relationship would change and the norm for the CAPE would increase. As it turns out, there *was* a permanent (so far) change in real EPS growth beginning in the early 1980s with the advent of share repurchases<sup>4</sup>. Large buybacks goose earnings growth (consider: \$10 of earnings and 10 shares results in \$1 EPS; if 5 shares are repurchased, EPS jumps to \$2)<sup>5</sup>. We'll skip the mathematics here, but we estimate that if the recent rate of share repurchases is indicative, the new norm for CAPE should be around 18½. If that's right, we can account for another 10 to 15 points of the gap.

As for the remaining gap of roughly 15%? Let's split the difference and say that the market was slightly rich at the end of the first quarter, at least based on earnings, perhaps fairly valued based on free cashflow. After an astonishing 76% rally, that's not too hard to swallow, is it?

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Boston, MA*

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<sup>4</sup> We first became aware of the acceleration of earnings in recent decades from an article by Jeremy Siegel. Siegel did not, however, isolate repurchases as the primary culprit.

<sup>5</sup> Share repurchases also result in lower dividends, which is why dividend yields have become so low in recent decades. Repurchases are a trade-off between eps growth and dividend yields.