Forecasting Beyond the Credit Crisis – Part 2: The Price/Earnings Ratio

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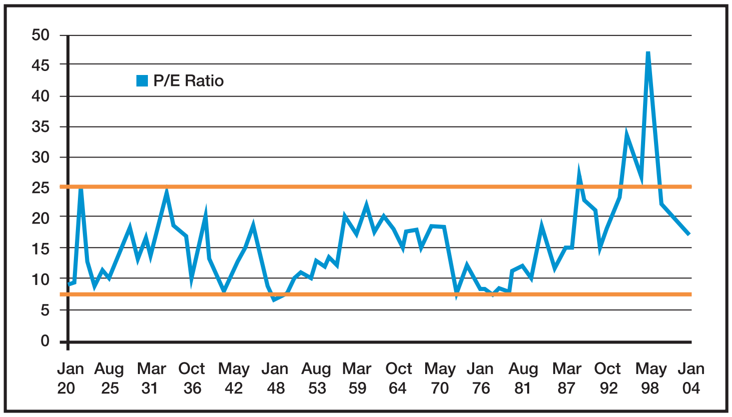
Last month, the infamous Dow/Gold ratio was discussed at length and it pointed to continued difficulties over the longer term in the financial markets, using in this case the Dow Jones Industrial Average as a proxy. The ratio, when viiewed from a historical perspective, was shown to have bottomed out at lower levels than what we see in the markets today, suggesting there is still some decline to come relative to the value of gold. As much as it would warm the hearts of investors to know that we are leaving the carnage of the credit crisis behind us very shortly, this long-established ratio seems to indicate otherwise. However, before leaping to any rash conclusions, it would be wise to sample from additional sources rather than relying on a single input, and it is to this end which Part 2 in this series now turns.

The Price/Earnings ratio of the Dow Jones Industrial Average is the second variable to be analyzed and discussed in this examination. The P/E ratio is a commonly used metric in regards to equities and stock market indices; in fact, it is perhaps the most quoted and referenced financial metric in use in the world today. The ratio essentially represents what price must be paid in order to receive one dollar of earnings from the underlying investment, whether it be an index or an individual company. For example, a P/E ratio of 20 indicates that an investor must pay twenty dollars for every one dollar in earnings on the underlying investment. In this case, the underlying investment is the Dow Jones Industrial Average, the famed weighted average of thirty of the largest industrial companies in the United States.

It is worth detailing why the P/E ratio is such an important item, specifically in regards to identifying the long-term underlying trend of the market. During periods of stock market optimism, one would expect the ratio to be relatively high. After all, such a positive outlook should mean that investors are willing to place a greater value on each dollar of earnings by a particular company or basket of companies because the rosy expectation is that the earnings will be growing in the future. The opposite should naturally be true during times of great market pessimism; given the negative sentiments towards stocks, investors as a group would likely not be willing to place much value on a firm's current earnings or the potential of the firm to grow those earnings in a meaningful way. Since secular trends, which form the undercurrent of equity markets, are driven by long-term sentiment, the P/E ratio should illustrate changes in market sentiment. These positive or negative feelings, generally speaking, indicate times of positive or negative returns to investors when expressed in real terms (and, as mentioned in Part 1, this is nearly the exact definition of secular market trends).

While it is simple and easy to calculate and quote the Price/Earnings ratio for a particular investment, strings of figures generally have little benefit, so a visual representation is most appropriate in this instance. Plotted in Figure 1 is the P/E ratio for the Dow Jones Industrial Average from 1920 through until late in 2008:

Dow Jones Industrial Average P/E Ratio: 1920-2008



Instantly, a few notable facts become apparent from this graphic representation. First, and most critical in terms of the current examination, one can see that extreme values of the P/E ratio occur at transition points between secular bull and bear markets. For example, the P/E ratio hit a low point in approximately 1950 before it continued a strong uptrend for the next fifteen years; sure enough, the period 1950-1965 marked a very strong secular bull market. Then, from 1965 through until the early 1980's, the ratio experienced a downtrend, bottoming out in the single digits; this period from 1966-1982 saw American equity markets experience a prolonged and severe secular bear market. From the early 1980's up until the turn of the current century, however, a remarkable upward progression of the ratio occurs, peaking in excess of forty-five around the year 2000. Of course, this period represented the most recent secular bull market with the apex occurring at the height of the "tech bubble".

Also included in Figure 1 are channel ranges, indicated by two solid orange lines. These represent the upper and lower bands in which the P/E ratio has generally moved over the course of the observation period. It is interesting to note that any time the ratio reached below ten, the ratio rose dramatically within a relatively short time frame. The opposite holds when the ratio reaches above twenty: a strong decrease in the ratio generally follows shortly thereafter. Given this fact, it is obvious why the stock market behaviour of the late 20th century was completely unsustainable. Only twice had the ratio reached twenty-five and both times an extremely sharp pullback occurred quite soon afterwards. Certainly, a P/E ratio of forty-five, as was experienced around the year 2000, would have serious negative consequences in the near future following such an incredible rise.

Since the year 2000, the P/E ratio has dropped steadily, sitting around thirteen for the Dow Jones Industrial Average as of the end of January 2009. This is a fairly clear indication that American equities have entered a secular bear market and, from historical experiences, it is expected that it will continue until the ratio reaches, approximately, the high single digits, though it could bottom at a point higher or lower than this.

Each of the previous three secular bear markets, ending in 1921, 1949 and 1982, concluded with the P/E ratio of the Dow Jones Industrial Average in single digits. By extension, it is not unreasonable to expect the current secular bear market to exhibit a similar characteristic. For the ratio to drop, one of two things must occur by definition: either corporate profits must rise or the level of the Dow Jones Industrial Average must fall. Given the current state of the American economy, it is less likely that corporate profits will rise in any significant fashion over the short-term, hence it is far more likely that the level of the Dow Jones Industrial Average will drop over the next few years.

Perhaps more concrete numbers will better serve the interested reader. With past market conditions at key inflection points as a guide, let us assume that the current secular bear market will end with a P/E ratio around nine. Given that the market currently sports a P/E ratio in excess of thirteen, the Dow Jones Industrial Average would have to drop by about 30% to reach such a single-digit P/E ratio, assuming that corporate profits remain constant. Bear in mind that this 30% drop would have to occur from the level of the Dow Jones Industrial Average at the end of January. It goes almost without saying that this is a level that is already severely depressed, having experienced a large loss from the top over the course of 2008. On the flip side, if one holds the current level of the Dow Jones Industrial Average constant, corporate profits would have to rise by more than 40% to manufacture a P/E ratio of nine. As with the potential future movement in the Dow/Gold ratio from last month, it is unlikely that a single input will be the driver; rather, it will likely be a combination of increased corporate profits and a lower stock market that will move the P/E ratio down.

As difficult as it may be to accept, the P/E ratio of the Dow Jones Industrial Average seems to indicate continued doom and gloom for equity investors over the long term. When viewed in addition to the argument made last month with regards to the Dow/Gold ratio, a strong case can be made for a lackluster stock market heading into the future, perhaps for as long as the next ten years if past secular bear markets are any indication. However, both metrics presented thus far have similar characteristics: both are ratios that rely on the Dow Jones Industrial Average as one-half of the inputs for calculation and both are capital market-based figures. In the next Canadian Hedge Watch article in this series, we will break from such exchange-based statistics and move towards a broader, macroeconomic variable: the money supply. Similar to the P/E and Dow/Gold ratios, there is a great deal of information regarding secular market cycles that can be derived from this seemingly innocent figure. *

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