

Market Observations

April 2018

VOLATILITY & UNCERTAINTY

Volatility and uncertainty each describe the investment environment in 2018 to date. Each can impact investor behavior with far-reaching consequences. These terms are related but different. Their practical investment impacts suggest a causal relationship. A review of market volatility and return uncertainty can provide perspective for setting and achieving investment goals.

Perspective

2018-to-date daily price changes for the Dow Jones Industrial Average (“DJIA”) are shown in **Chart I**. Daily high, low and closing prices are plotted. The uptrend of January, downtrend of February, and wide variability through March and into April are clear and notable. Also clear is the wider gap between high and low prices during the February downtrend and its general continuance to date. This picture of price volatility can impart a sense of market instability leading to lower investor risk-taking.

Table I quantifies stock market price volatility. Data is shown for the Standard & Poor’s 500 index. Longer term, intra-day (high over close) price volatility has averaged 1.4% while absolute day-over-day (close to close) volatility has averaged 0.7%. To date, 2018 volatility is not appreciably different. However, the price stability of 2017 is notable, with intra-day and day-over-day price volatility lower than long-term by 66% and 56% respectively. The proximity of low volatility and higher returns in 2017 with high volatility and low returns in 2018 to-date likely has reinforced a sense of unpredictability of market returns.

Higher volatility in the short-term can intensify uncertainty over achieving longer term investment goals. As a result, a goal such as annual retirement income could be missed if an amplified sense of insecurity in the short-term leads to less risk-taking over time. Of course, more risk-taking could be ill-advised if future portfolio return volatility exceeds expectations. **Chart II** illustrates how different levels of volatility could impact spending outcomes. This type of probability assessment can be used to render such outcomes less improbable. The focus is on the interaction of expected return, the volatility of return and clearly identified goals.

Investment Implications

Short-term stock market price swings can invigorate or frighten. The reaction to either could be an inclination to engage in ill-advised market timing with a buy-high/sell-low outcome. In the long run, the result could be falling short of an investment goal such as annual retirement income. Uncertainty of achieving such a goal can be lessened if focus on short-term volatility is minimized and attention to clear goals and the path to their achievement is maximized.

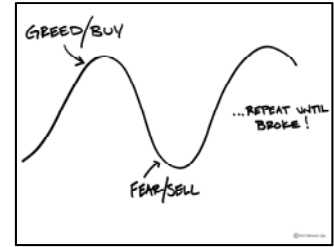


Chart I

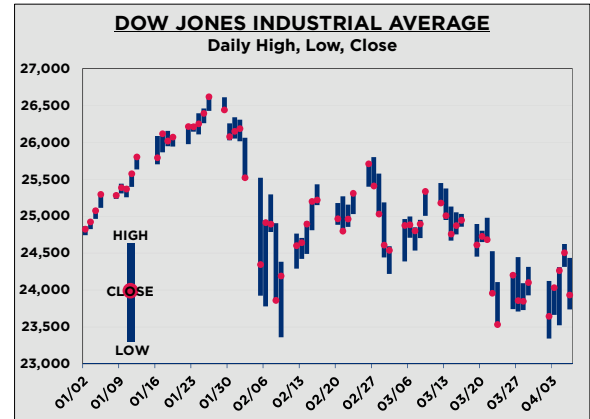


Table I

| STOCK MARKET VOLATILITY ¹ | | | | | | |
|--------------------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|
| | 2018 | | 2017 | | LONG-TERM ² | |
| | INTRA-DAY ³ | DAY-OVER-DAY ⁴ | INTRA-DAY ³ | DAY-OVER-DAY ⁴ | INTRA-DAY ³ | DAY-OVER-DAY ⁴ |
| AVERAGE | 1.5% | 0.9% | 0.5% | 0.3% | 1.4% | 0.7% |
| FREQUENCY | | | | | | |
| > 1% | 59% | 41% | 4% | 3% | 68% | 22% |
| > 2% | 19% | 12% | 0% | 0% | 17% | 5% |
| > 4% | 6% | 1% | 0% | 0% | 1% | 1% |

¹Standard & Poor’s 500 Index
²1962 - 2018
³High Over Low
⁴Absolute Change Close to Close

Chart II

