

February 20, 2018

YEAR-END COMMENTARY

A PRIMER ON VOLATILITY AND CRÈME BRULÉE

For most of 2017 and through January 2018, it appeared that the stock market could advance with little *volatility*. Almost all markets, in fact, conformed to what the ideal investing picture ought to be: steady gains with little *volatility*. In this ideal world, common stock investors would enjoy returns greater than the inflation rate, returns exceeding the returns offered by certificates of deposit and United States government obligations, and these superior common stock returns would be freed from the disquieting force of *volatility*. Indeed, in this brave new world of common stock investing, *volatility* would be outlawed, even banished from the equity arena, or at least so subjugated as to be an innocuous force.

Investors were not delusional. Markets had done well after the 2007-2008 financial crisis and there was no reason to believe that they would not continue to do well. From January 1, 2009 through December 31, 2017 the *Dow Jones Industrial Average* (the *Dow*) had appreciated 66 per cent; the other usual yardsticks used to measure economic health pointed to more of the same. Labor participation in the United States was healthy, and throughout the world, especially in Europe, economies were strengthening. Inflation and other inimical factors presented no real problems.

Never mind that valuations were generally greater than historical averages, that common appraisal

yardsticks such as price to earnings ratio and free cash flow as a percentage of revenue¹ were higher than the averages for the last five calendar years ended on December 31, 2017.

Never mind that on December 13, 2017, the Federal Reserve said that it would raise the discount rate at least three times in 2018; this promise did not seem to alarm the markets. The Federal Reserve Board of Governors, in fact, raised the discount rate from 1.5 per cent to 2.0 per cent, effective December 14, 2017, and the stock market took this raise in stride. It appeared that markets had incorporated interest rate increases in their forecasts of corporate profits.

Then, abruptly, investor sentiment turned deeply negative, *volatility* rose from the dead, and the markets fell.

On February 2, 2018, the *Dow* fell 665.75 points, or 2.54 per cent. The carnage continued on February 5, as the *Dow* declined 1,175.21 points or 4.6 per cent. On February 8, the *Dow* fell again, suffering a decline of 1,032.89 points or 4.2 percent. From February 2 to February 9, in total, the *Dow* declined a total of 1,995.81 points or 7.6 per cent.

At one point during the February 2 to February 9 period, the *Dow* had lost more than 2,400 points. Intraday market swings increased dramatically. The CBOE *Volatility* Index, known as the VIX,

businesses keep track of their revenue and expenses. Publicly traded companies suffer relentless pressure to make yearly and quarterly financial statements look better than the year before. Consequently, they are tempted to postpone cash outlays, making the free cash flow appear more luxurious than it is. Some management teams may even cut back on capital expenditures to improve yearly cash flow results, cutting back investment exactly when competitive pressures might dictate the need for plant expansion or modernization.

¹ Free cash flow is cash flow before any dividends are paid and capital is dedicated to either maintain and/or expand physical plants. To enjoy abundant and predictable free cash flow and rising dividends, it helps to have a strong competitive position, not to have a lot of debt, not to be capital intensive, and to have the intellectual firepower to be a leader or pioneer. *Intuit Inc.* (NASDAQ: INTU) for example, has displayed these traits with its steady annual improvements in software offered to file tax returns and to help

which measures investor anticipation of **volatility**, closed on February 5 at its highest level since August 2015, recording its biggest one day advance ever, rising from 17.32 to 37.32 in one day, a gain of 115.47 per cent. (From the beginning of 2016 to the end of 2017, the VIX, reflecting investors' conclusion that there was little to worry about when it came to **volatility**, had dropped more than 39 per cent.)

Why did investors pick Friday, February 2, 2018 to make clear some disquiet about the economy, to temper their enthusiasm about stock market prospects? Why did psychology abruptly change?

It is impossible to answer that question accurately. The common explanation was that high prices had called out for a "correction," but the fact is that what happened on February 2 was a random event, impossible to forecast.

Correction might be a useful word to describe what happened on February 2, if you mean that a feeling of unjustified ebullience needed to be tempered to get back to realistic views of how a market might behave and what returns and amounts of **volatility** were realistic. A correction is a purposeful action to alter a behavior or situation or dynamic, and that is not what the abrupt and significant decline of February 2 was. What happened on February 2 was an implosion.

Correction suggests that there is universal agreement on what the correct price of the **Dow** ought to be on any given day. If such an agreement had force, there would be no **volatility**. Yet significant **volatility** is a major component of market behavior. Defining a logical or reasonable price for the **Dow** is subject to millions of views and assumptions, many of them in stark contrast to each other.

We wish for certainty and clarity, and we want some price for the **Dow** to make sense. But a price that makes sense for one investor often does not make sense for another. It would be less stressful if we could look at the **Dow** and individual stock prices the way we look at a basic algebraic equation: $2x$ plus $2x$ equals $4x$. (In his classic book *The Intelligent Investor*, first published in 1949, Benjamin Graham discusses Mr. Market, a fictional character representing collective investor

sentiment, whose wild swings in moods have a profound effect on stock prices.)

Just as beauty is in the mind of the beholder, what is a logically precise or correct price of any common stock is impossible to determine. If there were such a price, it would imply that every investor gives the same weight to all measures used to decide the value or worth of a company. For example, the price of a company's operating cash flow or the price of the common stock divided by the net income per diluted share are commonly used measurements in determining the value of a company. Do all market analysts agree that these measurements are important? If analysts do agree that these factors are important, do they agree that these factors should have the same percentage weight in searching for the value of a company?

Likewise, the college admissions officer at Stanford University, where fewer than ten per cent of the applicants to the freshman class are accepted for admission, must weigh certain factors for admission. These factors include high school grade point averages, scores on the Scholastic Aptitude Test, the strength of endorsement in letters written to support the candidate's application, the factor of family presence in the Stanford alumni body, the factor of gifts made by the candidate's family, and other considerations. At Harvard, another school which selects only a small percentage of applicants for admission, the factors in play at Stanford may or may not exist, and even if the Harvard admissions office considers the same factors, the weighting, either subjectively or by arithmetic, will be different. There is no correct way to value each candidacy and there is no correct or ideal candidate.

Correction is a quick and easy answer to a complex and bewildering question. The more uncertainty in any dynamic, the more we crave a simple answer. **Volatility** is unnerving and hard to explain. Why should any company, for example, **Union Pacific Corporation (NYSE: UNP)**, move up five per cent on any day, and down four per cent the next when its competitive position remains virtually identical over these two days? To assure ourselves, especially when **volatility** comes with net declines, we look for a simple answer, and "correction" fits the bill.

Before February 2, many investors were blessed with huge amounts of dopamine, enjoying the kind of buzz you get after drinking a cup of Starbucks basic coffee brew (let alone consuming a refill) or the kind of feeling you enjoy when you have had two or three fingers of scotch on the rocks before a good dinner (or maybe after) and you experience a rush of GABA² and serotonin, or when you swim for a mile at a good pace, or sweat profusely on the elliptical machine. Euphoria is wonderful. Who does not like the euphoric or energized feeling that you experience after a strenuous workout? This feeling can even lead to a healthful addiction: without daily exercise, if you have done this for years, you feel sluggish and irritable.

The stock market is different from daily exercise highs. Because volatility is an inescapable dimension of the common stock market experience, a great day for the Dow can be followed by a tough day for the Dow.

When the brutal and sometimes disconcerting reality of stock prices governed by volatility stares the investor in the face, it is tempting to believe that there is a correct price and that it is possible to predict when the market will go up and when it will go down and how long it will stay up or down. There is a big market for dramatic forecasts, and those who can make a readable forecast can make a lot of money, catering to the human need for a quick, down-and-dirty answer to a challenging question, even if the answer is grossly oversimplified.

We all crave predictability, but the reality is that the only kind of certainty in common stock investing is the certainty of uncertainty. Never mind that Wall Street, playing to investor anxieties, terms the common stocks of some companies “defensive,” or that academicians move formulas around to claim that they can determine which companies are less vulnerable to market moods or volatility, recommending companies with high betas³ when strong markets are imminent and low betas when tough markets

are forecasted. High betas will not guarantee superior performance and low betas do not protect investors the way Fort Knox protects gold. The fact is that every common stock price can be brought to its knees by volatility, and sometimes, as in 2008-2009, the landscape, to use one of my favorite Oklahoma phrases, does not look pretty. All common stocks can, when things get tough, show a mercurial, unpredictable side as alarming as the most truculent, contumacious, and rebellious adolescent.

I have a confession: like all of us, I crave simple, comforting answers to a problem, and have eagerly embraced a simple answer, even if it was obvious that there was no research, logic, common sense, or proof that my answer to my problem made any sense.

When I was in my mid-twenties, I began to experience something disconcerting: I was beginning to lose the hair on the top of my head. Nevertheless, in a frantic desire to forestall or reverse what was inevitable, I searched out a dermatologist in New York City who had received much favorable publicity with respect to his boast that he could stop baldness in its tracks, and even engineer a counter attack and force baldness to retreat, bestowing upon his fortunate (and affluent) patients a fertile scalp that would produce as much hair as any man would want.

I was not affluent, but I wanted my hair back. So I called, made an appointment, and journeyed to the dermatologist’s swanky office on upper Park Avenue in Manhattan. After waiting my turn, his nurse showed me into his office. He took a look at my head, made some encouraging remarks, gave me a vitamin shot, and then gave me a bottle of scalp potion number nine. He told me to apply it twice a day and to stop by the receptionist’s desk to pay for the visit and the magic potion. I conscientiously applied the potion for months, but to my dismay the potion did not do a thing. Years later, coming to grips with the fact that my baldness would not retreat, that it was an implacable foe and it would not back down, I

² Gamma-Aminobutyric Acid (GABA) is the chief inhibitory neurotransmitter in the mammalian central nervous system. Its principal role is reducing neuronal excitability throughout the nervous system.

³ Beta is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. A higher beta indicates greater volatility.

finally adjusted to my misfortune, just as equity investors must accept the power of volatility.

In 2008, when the mortgage market became absurdly overheated, fueled by such practices as lending money to people when it was clear that they could not even make their first mortgage payment, even experienced investors were caught by surprise. As 2008's tumultuous market came to a close, investor sentiment was bearish, almost the diametric opposite of what it was in 2005 or 2006.

Between December 31, 2007 and December 31, 2008, the Dow Jones Industrial Average declined 66 per cent, from 13,264.82 to 8,776.39 points. Over the same period, the Standard & Poor's 500

declined 61.5 per cent, from 1,468.36 to 903.25 points.

Reminding ourselves that there is no guarantee of any performance in common stocks, or for that matter in any markets, let us take a look at the performance of the Standard & Poor's 500 from December 31, 2008 through December 31, 2017. The Standard & Poor's 500 experienced a total return with dividends of 258.76 per cent during this period. The average annual return of 15.25 per cent is almost thirty times the average annual return for this period of one year United States treasury obligations of 0.51 per cent, and almost nine times the average annual return for this period of five year United States treasury

PERENNIAL STRUGGLE BETWEEN VOLATILITY AND AVERAGE ANNUAL RETURN

(All numbers are in percentages)

Percentage Returns Per Period

Time Period	S&P 500 with Dividends	One Year Treasury Yield to Maturity	Five Year Treasury Yield to Maturity
12/31/2008 to 12/31/2009	26.46	0.47	2.69
12/31/2009 to 12/31/2010	15.06	0.29	2.00
12/31/2010 to 12/31/2011	2.11	0.12	0.84
12/31/2011 to 12/31/2012	16	0.15	0.73
12/31/2012 to 12/31/2013	32.39	0.13	1.75
12/31/2013 to 12/31/2014	13.69	0.25	1.65
12/31/2014 to 12/31/2015	1.38	0.65	1.76
12/31/2015 to 12/31/2016	11.96	0.81	1.92
12/31/2016 to 12/31/2017	21.83	1.73	2.21
Average Annual Return	15.25	0.51	1.73
Total Return	258.76	4.68	16.65

Note: The Yield to Maturity* data we quote in the above table comes from the Federal Reserve Board (www.federalreserve.gov). As of February 9, 2018, one year and five year treasury yields to maturity are, respectively, 1.89 per cent and 2.52 per cent.

*Yield to maturity (YTM) is the total return, coupon and any capital gain or loss, if a bond is held until it matures.

obligations of 1.73 per cent, not even considering tax effects excluded from the exercise.

The period from December 31, 2008 through December 31, 2017 was an unusually robust period for those fortunate enough to be invested in the common stocks of publicly traded United States domiciled companies. Sharp interest rate cuts and quantitative easing made common stocks exceedingly attractive in the perennial beauty contest between fixed income and common stocks. This was a time that the Federal Reserve worked night and day to vigorously restart the economy through many aggressive discount rate cuts, a strategy that did restart the economy.

MAKING PEACE WITH VOLATILITY

Common stocks do not ascend without fits and starts, without that sometimes unnerving behavior that we attribute to rebellious teenagers, a dynamic called *volatility*. We can try to remind ourselves that we cannot have our cake and eat it too. One cannot have *crème brulee* for dessert following a sumptuous main course of prime rib of beef and a baked potato loaded with sour cream and butter and expect, when weighing yourself on the scales at your health club on Monday morning, to have lost weight over the weekend. Like many dynamics that we negotiate with people important to our lives, we cannot realistically expect there are not concessions, compromises, and prices for everything we get and receive.

The common stock negotiation is a little different. Instead of bargaining with other people, we are bargaining with ourselves, in a silent but fierce struggle, deciding whether superior average annual returns outweigh any anxiety *volatility* might produce.

It is a battle between the forces of caution and discipline versus aggression and energy. The longer you keep your position, the more likely you are to outperform on a cumulative or total basis the returns that the fixed income investor will experience.

But the fixed income investor, most notably the investor in treasury obligations, is thought to enjoy something that the common stock investor will never enjoy, that is, risk free return, an almost

guaranteed return, to use the jargon of the finance textbooks.

Finance textbooks often pronounce government securities to be risk free because they have been, at least so far, able to return investors' principal and to pay any promised interest, without payment delay or default. These analysts, however, fail to mention that a one year or a five year treasury obligation is not immune to the ravages of inflation. The other problem with fixed income securities, at least those issued by the United States treasury, is the matter of taxation and the ordinary income factor. However, you can relax: I am not going to address that issue now. The effects of my Starbucks caffeination are dwindling and I have compassion for you; you have been patient as we immersed ourselves in the topic of *volatility* and you, as McDonald's said in its brilliant advertising campaign of 1971, "deserve a break today."

Sincerely,



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[Fredric E. Russell: Brief Authorized Biography](#)

[Fredric E. Russell](#) graduated from Deerfield Academy in Deerfield, MA and then earned a B.A. from [Swarthmore College](#) in Swarthmore, PA and an M.A. from [Washington University](#) in St. Louis, MO. He also holds the CPA certificate and taught accounting and finance at the university level, before realizing that he could make real money for himself and for people he knew using some of the analytical qualities that the studying and teaching of accounting and finance demanded. Consequently, he retired from academic life, which he enjoyed tremendously and which gave him everything he needed, except a comfortable amount of cash and marketable securities and the freedom to write INVESTMENT COMMENTARIES in a manner he thought would be informative and entertaining for the clients of the investment management firm he always wanted to have.